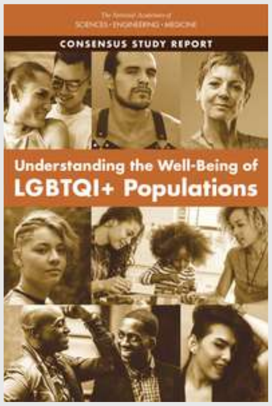

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CONTRIBUTORS

Charlotte J. Patterson, Mart n-Jos Sep lveda, and Jordyn White, Editors; Committee on Understanding the Well-Being of Sexual and Gender Diverse Populations; Committee on Population; Division of Behavioral and Social Sciences and Education; National Academies of Sciences, Engineering, and Medicine

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Understanding the Well-Being of LGBTQI+ Populations

Committee on Understanding the Well-Being of Sexual and
Gender Diverse Populations

Charlotte J. Patterson, Martín-José Sepúlveda, and Jordyn White,
Editors

Committee on Population

Division of Behavioral and Social Sciences and Education

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COMMITTEE ON UNDERSTANDING THE STATUS AND WELL-BEING OF SEXUAL AND GENDER DIVERSE POPULATIONS

CHARLOTTE J. PATTERSON (*Cochair*), Department of Psychology, University of Virginia
MARTÍN-JOSÉ SEPÚLVEDA (*Cochair*), Health Systems and Policy Research, IBM Corporation (*retired*); CLARALUZ Consulting LLC
M.V. LEE BADGETT, Department of Economics, University of Massachusetts Amherst
MARLON M. BAILEY, Department of Women and Gender Studies, School of Social Transformation, Arizona State University
KATHARINE B. DALKE, Department of Psychiatry and Behavioral Health and Humanities, Pennsylvania State University College of Medicine
ANDREW R. FLORES, Department of Government, School of Public Affairs, American University
GARY J. GATES, *retired*
ANGELIQUE C. HARRIS, Department of Medicine, Boston University Medical Campus, Boston University
MARK L. HATZENBUEHLER, Department of Psychology, Harvard University
NAN D. HUNTER, Georgetown University Law Center
TONIA C. POTEAT, Department of Social Medicine, University of North Carolina Chapel Hill
SARI L. REISNER, Brigham and Women's Hospital, Harvard Medical School, Harvard T.H. Chan School of Public Health, and Fenway Health
STEPHEN T. RUSSELL, Department of Human Development and Family Sciences, University of Texas at Austin
DEBRA J. UMBERSON, Population Research Center, University of Texas at Austin

JORDYN WHITE, *Study Director*
KELLAN BAKER, *Consultant*, *Bloomberg School of Public Health, Johns Hopkins University*
KENNE DIBNER, *Senior Program Officer*
TARA BECKER, *Program Officer*
MARY GHITELMAN, *Senior Program Assistant*
MALAY K. MAJMUNDAR, *Director, Committee on Population*

COMMITTEE ON POPULATION

KATHLEEN MULLAN HARRIS (*Chair*), Department of Sociology, Carolina Population Center, and National Longitudinal Study of Adolescent to Adult Health, University of North Carolina at Chapel Hill
DEBORAH BALK, Marxe School of Public and International Affairs, and CUNY Institute for Demographic Research, Baruch College of the City University of New York
NANCY BIRDSALL, Center for Global Development, Washington, DC
ANN K. BLANC, Population Council, New York, NY
COURTNEY C. COILE, Department of Economics, Wellesley College
VICKI A. FREEDMAN, Institute for Social Research, University of Michigan
DANA A. GLEI, Georgetown University
ROBERT A. HUMMER, Department of Sociology, and Carolina Population Center, University of North Carolina at Chapel Hill
HEDWIG (HEDY) LEE, Department of Sociology, Washington University in St. Louis
JENNIFER J. MANLY, Taub Institute for Research on Alzheimer's Disease and the Aging Brain, Department of Neurology, Columbia University
EMILIO A. PARRADO, Department of Sociology and Population Studies Center, University of Pennsylvania
ANNE R. PEBLEY, Department of Community Health Sciences, Department of Sociology, California Center for Population Research, Bixby Center on Population and Reproductive Health, University of California, Los Angeles
ISABEL V. SAWHILL, The Brookings Institution, Washington, DC
REBECA WONG, University of Texas Medical Branch at Galveston

MALAY K. MAJMUNDAR, *Director*

Acknowledgments

In 2011 the Institute of Medicine of the U.S. National Academies of Sciences, Engineering, and Medicine (National Academies) published *The Health of Lesbian, Gay, Bisexual, and Transgender People*, a landmark report about the health of this population. The report discussed the existing body of research about the health of lesbian, gay, bisexual, and transgender (LGBT) people, identified opportunities for further research, and made recommendations for actions to improve the health of LGBT people. By mid-2020 the report had been downloaded more than 15,000 times, and it had been used by researchers, educators, attorneys, health care professionals, government workers, journalists, community groups, and many others. It has influenced the work of the National Institutes of Health, the Centers for Disease Control and Prevention, and other governmental and nongovernmental organizations.

Since 2011 much has changed. Some of the challenges identified in the 2011 volume have been met, but others certainly remain. Research on LGBT health has burgeoned, but there is still much to learn. In 2019, the National Academies convened a committee to assess the current state of knowledge about the status and well-being of sexual and gender diverse people to identify important gaps in knowledge and to recommend research and research infrastructure actions to help fill these gaps. The committee's work was supported by the Robert Wood Johnson Foundation, the Gilead Foundation, the Sexual and Gender Minority Research Office at the National Institutes of Health, the TAWANI Foundation, and the Tegan and Sara Foundation.

The task set for the committee was broader than the one addressed by the 2011 report. The committee was charged with reviewing data on people with differences of sex development (sometimes called "intersex"), as well as those who could, by virtue of their identities, behaviors, or attractions, either identify or be seen as LGBT. In undertaking its work, the committee was asked to address not only the mental and physical health of these populations, but also additional aspects of well-being in their lives as lived in families, communities, and in the context of cultural, legal, educational, economic, and religious institutions. The committee undertook to provide an overview of both existing evidence and of future research needs in these areas.

Thus, this report presents a considerable body of information across a wide array of topics and disciplines. The report was made possible by a year of discussion, information gathering, review, and deliberation among committee members, aided by a dedicated staff. We thank all of the committee members for their dedication and spirit as well as for their invaluable expertise.

In addition to the invited guests, reviewers, and members of the public who contributed to this report, and on behalf of the entire committee, we want to thank the National Academies staff members who made this report possible. In particular, we extend our sincere thanks to Jordyn White, study director; Kenne Dibner, senior program officer; Tara Becker, program officer; Kellan Baker, project consultant; Mary Ghitelman, senior program assistant; and Malay K. Majmundar, director of the Committee on Population. We would also like to thank Daniel Desautels for his contribution during his time at the National Academies as a Christine Mirzayan Science and Technology Policy Graduate Fellow. Without the constant support and guidance from these individuals, the report could not have been completed.

This Consensus Study Report was reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this independent review is to provide candid and critical comments that will assist the National Academies of Sciences, Engineering, and Medicine in making each published report as sound as possible and to ensure that it meets the institutional standards for quality, objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process.

We thank the following individuals for their review of this report: Walter O. Bockting, Program for the Study of LGBT Health, Columbia University Irving Medical Center; Christopher (Kitt) S. Carpenter, Vanderbilt LGBT Policy Lab, Vanderbilt University; Laura E. Durso, executive director and chief learning officer, Whitman-Walker Institute; Heath Fogg Davis, Gender, Sexuality and Women's Studies, Political Science, Temple University; Donald Haider-Markel, Kentucky University; Jennifer S. Hirsch,

Department of Sociomedical Sciences, Mailman School of Public Health, Columbia University; Trevon D. Logan, Department of Economics, Ohio State University; Christy Mallory, School of Law, University of California, Los Angeles; Wendy D. Manning, Department of Sociology, Bowling Green State University; Jae M. Sevelius, Department of Medicine, Division of Prevention Science, University of California, San Francisco; and Russell Toomey, Family Studies and Human Development, University of Arizona.

Although the reviewers listed above provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations of this report, nor did they see the final draft before its release. The review of this report was overseen by Marshall H. Chin, Department of Medicine, University of Chicago, and Sara Rosenbaum, Department of Health Policy and Management, Milken Institute School of Public Health, George Washington University. They were responsible for making certain that an independent examination of this report was carried out in accordance with the standards of the National Academies and that all review comments were carefully considered. Responsibility for the final content rests entirely with the authoring committee and the National Academies.

Charlotte J. Patterson and Martín-José Sepúlveda, *Cochairs*
Committee on Understanding the Status and Well-Being of
Sexual and Gender Diverse Populations

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Summary

At more than 11 million, the number of self-identified lesbian, gay, bisexual, and transgender (LGBT) individuals living in the United States is roughly equivalent to the population of Ohio. The LGBT population has increased substantially over the past decade, with much of this growth driven by younger generations, women, bisexual people, and racial and ethnic minorities. In a shift from prior years, a majority of Americans now approve of same-sex relationships and support legal protections to ensure fundamental civil liberties on the basis of sexual orientation and gender identity.

The laws, too, have changed: in 2015 the U.S. Supreme Court ruling in *Obergefell v. Hodges* (576 U.S. 644) extended marriage equality for same-sex couples nationwide. In 2020, the Supreme Court ruled in *Bostock v. Clayton County* (140 S. Ct. 1731) that the prohibition of sex discrimination in Title VII of the Civil Rights Act protects individuals from discrimination based on sexual orientation or gender identity in employment. Many states, municipalities, and private corporations have expanded nondiscrimination protections in workplaces, health care settings, and schools to include sexual orientation and gender identity. The demographic shifts observed in LGBT populations challenge researchers and policy makers to collect more and better data and to consider the degree to which research questions, media discussions, and policy decisions reflect the most pressing needs of these populations and the contemporary challenges they face (Conclusions 3-1, 3-2).

As the population evolves, so do the terms used to describe individuals who identify as or exhibit attractions to people outside of the traditional male-female gender binary. The acronym LGBTQ is often used in place of LGBT, in which the "Q" may refer to queer or questioning. In some contexts, the acronym is expanded further to include "I" for intersex, "A" for asexual or ally, or "+" as an acknowledgment of the diversity of non-binary and gender-nonconforming individuals.

Throughout this report, the phrase "sexual and gender diverse" is used to describe individuals who identify as lesbian, gay, bisexual, transgender, queer, intersex, non-binary, or who exhibit attractions and behaviors that do not align with heterosexual or traditional gender norms. The committee acknowledges that no term is perfect or completely inclusive, and our intention is not to promote the phrase or its acronym, SGD, for widespread use. Instead, the goal is to highlight the variety of identities and communities within SGD populations and the need for greater understanding of the differences that exist within and between them.

A GROWING NEED FOR ENHANCED DATA COLLECTION

Despite the population trends, many current national surveys and other data collection instruments lack measures of sexual orientation, gender identity, and sexual behavior and attraction, which makes it difficult to accurately report the size and other characteristics of SGD populations. Questions about sexual orientation and gender identity that do appear in data collection instruments are presented inconsistently with differing terms and are often separated from other demographic measures (Conclusion 4-1). Gaps in gender identity data collection preclude insights into trends in transgender population size over time, and population-level data about people with intersex traits are not available at all. In addition, little research has been conducted on sexual attraction and behaviors, and almost no population-level data exist for people with intersex traits (Conclusion 4-2).

To address the lack of broad and consistent data, the National Academies of Sciences, Engineering, and Medicine convened a committee of experts to review the available evidence and identify future research needs related to the well-being of sexual and gender diverse populations across the life course. The committee focused on eight domains of well-being: the effects of various laws and the legal system on SGD populations; the effects of various public policies and structural stigma; community and civic engagement; families and social relationships; education, including school climate and level of attainment; economic experiences (e.g., employment, compensation, and housing); physical and mental health; and health care access and gender-affirming interventions. The well-being of an individual can be thought of as an outcome of experiences with family and personal relationships, as well as interactions with many societal sectors and such systems as education, employment, and government.

CHANGES TO THE LEGAL LANDSCAPE

SGD populations come into contact with the law in a variety of contexts, including employment, health care, housing, public accommodations, interactions with the criminal justice system, and government-administered systems, such as foster care, adoption, and immigration. In some of these realms, there have been important reforms that have enhanced the quality of life for SGD people; in others, mistreatment and discrimination remain frequent occurrences, especially for marginalized groups within SGD populations. In the face of changing public attitudes as well as evolving law, the effect of the legal system on the well-being of these groups is uneven and, at times, contradictory (Conclusion 5-1). Approximately 50 percent of the U.S. population lives where there is a state law that explicitly protects SGD people from at least one form of discrimination. The laws pertaining to such issues as gender markers on essential documents, family proceedings, and religious exemptions from anti-discrimination laws vary greatly in scope between levels of government and across states (Conclusion 5-2).

Mistreatment during interactions with the police and the prison system is a common experience for SGD people (Conclusion 5-3). The criminalization of HIV exposure and the criminalization of sex work disproportionately affect homeless youth and transgender women, especially transgender women of color. Data suggest that sexual orientation and gender identity bias and hate crimes have increased since 2013, and although they account for a small share of all hate crimes, they tend to be more violent and result in severe bodily injury.

EFFECTS OF PUBLIC POLICY AND STIGMA

Policies seldom change without outside social forces organizing to create that change. Policy advocates and social movements can activate public opinion by drawing attention to social problems. Recently, the attitudes of adults in the United States have undergone a massive shift in accepting SGD populations and on numerous policies that would further the well-being of SGD people. However, the pursuit of policies likely to garner public favorability can potentially stigmatize or erase certain SGD groups, such as bisexual and transgender people (Conclusion 6-1). The attitudes of the general public affect public policies both directly and indirectly. In general, the emergence of more inclusive laws and policies is often perceived as a signal that society has changed to be less stigmatizing of SGD populations (Conclusion 6-2).

The well-being of SGD populations is affected by stigma, which can occur at individual, interpersonal, and structural levels. The concept of stigma helps explain how dominant cultural beliefs and differences in access to power can lead to labeling, stereotyping, separation, status loss, and discrimination for those who do not align with societal norms. Structural stigma—which includes institutional policies and practices, as well as public attitudes—is an important mechanism that contributes to inequalities for SGD populations across numerous domains that are essential for living healthy, productive, and fulfilling lives, including socioeconomic well-being, physical and mental health, and physical safety (Conclusion 6-3).

There is now a growing body of evidence that structural stigma affects the health and well-being of people of diverse sexualities and genders, but there has been little research on the ways in which structural stigma develops and evolves over the life course. Furthermore, most structural stigma research has focused on gay men and lesbian women and has not considered intersectional characteristics such as race, ethnicity, gender identity, geography, and socioeconomic status (Conclusion 6-4).

COMMUNITY AND CIVIC ENGAGEMENT

SGD communities represent a variety of racial, ethnic, and cultural identities and experiences. Over the past several years, spaces for public convening and engagement in social, cultural, and personal activities have diminished substantially for SGD people. Online SGD communities often arise out of the need for information, connection, and support. Because access to space is linked to participation in public culture, which is also influenced by the intersections of race, gender, sexuality, and social class, less visible and marginalized SGD groups, as well as SGD people of color, do not always have access to the same spaces as do SGD people of other races and classes (Conclusion 7-1).

The past several years have seen the insurgence of LGBTQ+-affirming churches, denominations, and non-institutional spiritual practices, as well as gay-straight alliances on school, college, and university campuses. Community connectedness has been shown to help SGD people address health disparities by connecting them to important resources (Conclusion 7-2).

In civic affairs, lesbian, gay, and bisexual adults tend to be more civically and politically engaged than heterosexual adults (Conclusion 7-3). In addition, transgender people are registered to vote at higher rates than the cisgender population. Connectedness to other SGD people is a strong predictor of sociopolitical involvement.

FAMILIES AND SOCIAL RELATIONSHIPS

Close, supportive, and stable relationships foster health and well-being, and relationships early in life have implications for the quality and stability of social ties in adolescence and adulthood. SGD youth are at higher risk of depressive symptoms, anxiety, and suicidality than other similarly situated youth. Parental acceptance of their SGD youth is associated with positive adjustment; conversely, parental rejection is associated with a range of emotional and behavioral health problems. Supportive teachers are among the most important nonfamily adults in the lives of contemporary SGD youth. Maintaining friendships throughout and following the coming out process supports positive adjustment for SGD youth.

Romantic relationships in youth are also supportive in many cases, although the risk of intimate partner violence is higher for SGD youth than for other youth (Conclusion 8-1). Throughout adulthood, people who are more socially connected have better mental and physical health and lower mortality than those who are more socially isolated. Friends and chosen family members may also play an important role in SGD communities.

The legal status of romantic unions is associated with the health and well-being of SGD populations, as well as other markers of advantage and disadvantage—particularly socioeconomic status (Conclusion 8-2). Those of higher socioeconomic status are more likely to marry, and marriage itself may also provide economic benefits. As with different-sex couples, legally recognized same-sex relationships are less likely than others to dissolve over time.

Lesbian, gay, and intersex individuals are less likely than heterosexual individuals to become parents. Less is known about the prevalence of parenthood among bisexual and transgender people. Both children and adolescents have been found to enjoy supportive relationships with lesbian and gay parents, and children of lesbian and gay parents have shown the typical development of other children (Conclusion 8-3). Additional research is needed on relationship development in adolescence, adult family formation among SGD (especially bisexual, transgender, and intersex) people, as well as family processes and couple dynamics among older SGD individuals and families.

EDUCATIONAL ENVIRONMENTS

Experiences that SGD students have in school are important not only because negative experiences undermine personal well-being, but also because school experiences set the groundwork for educational attainment, future occupational achievement, and socioeconomic status (Conclusion 9-1). Although most research has focused on secondary schools, similar patterns of discriminatory behavior, bullying, and victimization have been documented for sexual minority and transgender students in higher education. Because SGD youth are coming out at younger ages than in previous years, research on school experiences that extends to elementary schools and continues through higher education could help researchers gain a clearer understanding of the way these experiences affect students over their life course.

Although no federal law explicitly prohibits discrimination in education based on sexual orientation, gender identity or expression, or intersex characteristics, federal courts and agencies have found that such discrimination may be covered under the federal ban on sex discrimination. State and local K–12 education policies with clear language regarding protection of SGD students from bullying and discrimination (including sexual orientation and gender identity) are associated with positive school climates and with student well-being and success (Conclusion 9-2). In schools with such policies, teachers are also seen as being more supportive of LGBT students and are more likely to intervene in bullying.

Several small studies of same-sex couple families have shown that they may experience homophobia expressed by teachers and that teachers may exclude those parents from activities or events (Conclusion 9-4). Schools can adopt such strategies as professional education and training for teachers, administrators, and other personnel (e.g., bus drivers, cafeteria workers) to improve school experiences and promote a positive school climate for all students (Conclusion 9-3). Students with access to LGBTQ-related resources are more likely to believe that adults care about them and that teachers are fair.

ECONOMIC STABILITY

Evidence suggests that transgender people—and possibly bisexual people—have lower incomes and higher poverty than lesbian, gay, and cisgender heterosexual people (Conclusion 10-1). Research on individual earnings suggests that, after controlling for differences in income-related characteristics, gay and bisexual men earn less than heterosexual men, while lesbian and bisexual women earn less than heterosexual men but more than heterosexual women. Lesbian women and gay men may have mitigated some of the effects of discrimination on earnings and household income through adaptive strategies in education, occupations, and family decisions, but they still face discrimination in the labor force.

Poverty and economic insecurity are more common among LGBT people than among cisgender heterosexual people. Among self-identified single and coupled LGBT people, bisexual and transgender people are more at risk of poverty than lesbian and gay people are at equal risk of poverty compared to self-identified heterosexual cisgender people of the same sex. Some groups within the LGBT population are at greater risk of poverty or low-income status: unmarried people, people with children, Black people, people living in rural areas, and people over age 50.

Studies based on self-report data show that many LGBT people believe that they have been treated unequally in the workforce (Conclusion 10-2). Many individual employers have created their own nondiscrimination policies, but these are voluntary. SGD populations have also experienced compensation and benefit discrimination in the workplace. In 2020, the Supreme Court held in *Bostock v. Clayton County* that discrimination based on sexual orientation or gender identity is prohibited by Title VII, the federal law that is part of the 1964 Civil Rights Act. The efficacy of this nationwide anti-discrimination protection will depend on how well federal and state agencies and courts carry out its mandate.

There is a greater risk of homelessness among LGBTQ youth than other youth, with elevated risk for LGBTQ youth of color. Adult homelessness may be particularly acute among transgender and gender-nonconforming populations. There are four main factors associated with LGBTQ homelessness: stigma, discrimination, and exclusion; mental health issues and substance use; sexual risks and vulnerability; and a lack of access to interventions and supports.

Some research finds that LGBT populations have lower homeownership rates than cisgender heterosexual people, which may point to discrimination in mortgage lending practices (Conclusion 10-3). SGD populations may also face barriers in the markets for credit and rental housing. Nearly a quarter of respondents to the 2015 U.S. Transgender Survey said they had experienced housing discrimination in the past year. There is also evidence of differential and discriminatory treatment among men in same-sex couples compared with women in same-sex couples.

More research is needed to assess the economic well-being of transgender people, non-binary people, and people with intersex traits. There is also much more to be understood about how certain economic conditions affect SGD populations—particularly for groups identified as having bigger economic challenges, such as people in rural areas, older SGD people, and SGD people of color.

PHYSICAL AND MENTAL HEALTH

The physical and mental health of SGD populations is substantially affected by external influences that include discrimination, stigma, prejudice, and other social, political, and economic determinants of health. In addition to health disparities related to sexual orientation, gender identity, and intersex status, many SGD people also experience health disparities related to intersecting aspects of identity that include but are not limited to race and ethnicity (Conclusion 11-1).

Lesbian and bisexual women have higher odds of risk factors for cardiovascular disease, such as hypertension and diabetes, and they also have more risk factors for breast cancer than heterosexual women. Transgender adults may have more elevated rates of cardiovascular disease and myocardial infarction than their cisgender counterparts. LGBT people and people with intersex traits are at risk of violence from family members, peers, intimate partners, and strangers as a result of their sexual orientation, gender identity, or intersex status. Some of the highest risks of violence affect bisexual women and transgender people, particularly transgender women of color. Black transgender women are also disproportionately affected by HIV, as are cisgender gay and bisexual men and other men who have sex with men.

Mental health disparities in SGD populations include heightened anxiety and depressive symptoms and greater suicidality among LGBT people in comparison with heterosexual or cisgender individuals. Substance use and behavioral health disparities include greater use of tobacco, alcohol, and other drugs among LGBT people than among heterosexual or cisgender individuals. Sexual minority individuals are also less likely than their heterosexual counterparts to report healthy sleep, and similar disparities may exist for transgender people.

Because both clinical and population research studies rarely include measures of sexual orientation, gender identity, and intersex status, the full scope and magnitude of physical and mental health disparities and their differential effects across and within SGD populations is not known (Conclusion 11-2). There is a particular lack of longitudinal research, as well as a relative dearth of data on intersections with other aspects of identity such as race, ethnicity, age, and disability.

The disparities affecting SGD populations are driven by experiences of minority stress, which include both structural and interpersonal stigma, prejudice, discrimination, violence, and trauma (Conclusion 11-3). Another important concept in relation to minority stress is resilience, which is the ability to maintain normal physical and psychological functioning when stress and trauma occur. More research is needed to elucidate the origins, pathways, and health consequences of minority stress and factors that support resilience among SGD populations.

Evidence-based interventions are needed to prevent and address health inequities (Conclusion 11-4). These interventions need to address the root causes and multilevel factors driving SGD health disparities. Leveraging resilience, including building on strategies SGD people have used to resist societal oppression, is an important part of optimizing SGD health and well-being.

COVERAGE, ACCESS, AND UTILIZATION OF HEALTH CARE

Access to comprehensive, affirming, and high-quality health care services is a human right for all people. Laws that guarantee access to health care services, health insurance coverage, and public health programs for all, regardless of sexual orientation, gender identity, and intersex status, are critical to the health and well-being of SGD people. Similarly, laws and policies that provide affordable, comprehensive health insurance coverage could combat health risks, such as uninsurance and poverty, among SGD populations.

It is important to provide culturally responsive and clinically appropriate care for SGD populations. Health services and procedures that are particularly important for the health and well-being of SGD populations include but are not limited to pre- and post-exposure prophylaxis for HIV; HIV treatment and care; abortion, fertility, and other reproductive health services; affirming mental and behavioral health care services; and gender-affirming care for transgender people. SGD people also need access to timely and anatomically appropriate preventive screenings (Conclusion 12-1).

Gender-affirming care for transgender, non-binary, and other gender diverse people is an essential intervention to improve health and well-being (Conclusion 12-2). Provision of this care needs to be individualized and conducted in partnership between patients and their providers. Insurance coverage of gender-affirming services and procedures by public and private payers is necessary to facilitate access to these services and to avoid discrimination on the basis of sex and gender identity.

Conversion therapy to change sexual orientation or gender identity can cause significant trauma (Conclusion 12-3). Elective genital surgeries on children with intersex traits who cannot participate in consent can be similarly detrimental to health and well-being.

RESEARCH RECOMMENDATIONS

Though trends in SGD population data collection have shifted, the data that exist and the research methodologies behind current study measures are not sufficient to capture and convey the richness of SGD communities or to underscore the varied effects that unique and intersecting identities have on health and well-being outcomes for SGD people. The 2011 report of the Institute of Medicine on the health of LGBT populations noted that these populations are often considered a single monolithic group, which obscures important differences among individuals and communities. This committee emphasizes an urgent need for robust scientific evidence that includes not just lesbian, gay, bisexual, and transgender people, but also intersex people, people with same-sex or same-gender attractions or behaviors, and people who identify as asexual, Two Spirit, queer, or other terms under the SGD umbrella.

In the wake of social change and ongoing legal developments regarding protections for SGD people in employment, health care, military service, family formation, and other key areas of life, it is increasingly important to understand how the provision or the denial of access to opportunities and resources affects SGD people over the entire life course. A varied, comprehensive, and inclusive research infrastructure for SGD populations is essential in understanding the unique and shared challenges these individuals and communities face and for guiding actions to improve their well-being across domains, including social justice and legal equality, health and health care, employment, education, and housing.

Effectively addressing disparities related to sexual orientation, gender identity, and intersex status will require collaborative and coordinated efforts among federal, state, and private stakeholders. In addition, it will be important to involve SGD communities themselves, including SGD people of color, in all aspects of the research process. Meaningful community participation is a critical way that SGD population research can retain accountability and accurately reflect the lives and experiences of the communities that are under study. In all research activities, SGD communities should be treated as partners rather than solely as research subjects, and all data should be collected and analyzed in ways that ensure respondent privacy and confidentiality and provide robust protections from discrimination.

The committee's recommendations aim to identify opportunities to advance understanding of how individuals experience sexuality and gender and how sexual orientation, gender identity, and intersex status affect SGD people over the life course. Our recommendations are in five categories: (1) population data; (2) measurement challenges related to understanding SGD populations; (3) critical data gaps; (4) improvement of the research community's ability to use these data; and (5) application of data to the development of high-quality, evidence-based interventions and programs. In each category, the committee makes efforts to identify specific actors that are best positioned to respond to particular aspects of the research landscape. The committee has concluded that investing in research infrastructure and in a robust and comprehensive program of research in the ways described below will support the development of stronger, evidence-based policies and practices in the areas addressed in this report.

POPULATION DATA

In order to make valid claims about the status of SGD populations in the United States, researchers, policy makers, and practitioners need accurate, consistent, and representative population-level data that describe SGD populations in all their complexity.

RECOMMENDATION 1: Entities throughout the federal statistical system; other federal agencies; state, local, and tribal departments and

agencies; private entities; and other relevant stakeholders should consider adding measures of sexual orientation, gender identity, and intersex status to all data collection efforts and instruments, such as population-based surveys, administrative records, clinical records, and forms used to collect demographic data.

In response to Recommendation 1, the Office of Management and Budget should reconvene the Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys and charge it with developing government-wide standards for the collection of data on sexual orientation, gender identity, and intersex status. The establishment of measurement standards could bolster high-priority data collection activities throughout the relevant entities.

MEASUREMENT CHALLENGES

Because of the complicated ways that race, class, sex, gender identity, sexual orientation, and other factors interact to create people's experiences, current measures do not always sufficiently reflect the lived experiences of these populations.

RECOMMENDATION 2: Federal statistical agencies; state, local, and tribal departments and agencies; private entities; and other relevant stakeholders should fund and conduct methodological research to develop, improve, and expand measures that capture the full range of sexual and gender diversity in the population—including but not limited to intersex status and emerging sexual and gender identities, sexual behaviors, and intersecting identities—as well as determinants of well-being for sexual and gender diverse populations.

The routine inclusion of sexual orientation, gender identity, and intersex status questions on federally supported surveys and in other research can also advance the generation and use of measures that help researchers understand how factors such as stigma and disclosure affect the health and well-being of SGD populations across the life course.

CRITICAL DATA GAPS

When focusing on underrepresented groups, it is sometimes necessary to employ alternative methods that capture adequate samples of the population in question for effective study. Some data gaps could be addressed through observational studies of specific populations, while others might require experimental studies, qualitative explorations of specific topics, or other methods.

> **RECOMMENDATION 3: Public and private funders should support, and researchers should conduct, studies using a variety of methods and sampling techniques—driven by the questions under study—in order to examine family and other social relationships, community, health, education, economic, and legal issues that will enhance understanding of sexual and gender diverse populations.**

Data needs of this kind are particularly important for the study of small groups, such as transgender women of color, Native American Two Spirit people, and people with intersex traits.

DATA USE

Once comprehensive, accurate data are collected, it is critical that researchers have the ability to access these data to address emerging research questions. By improving the research community's ability to access, link, and use existing data, stakeholders could substantially advance the relevance and impact of research.

> **RECOMMENDATION 4: The U.S. Office of Management and Budget should convene federal, state, and private funders, as well as other relevant stakeholders, to address significant problems in linking data from different datasets to facilitate research on the health status and well-being of sexual and gender diverse people. These stakeholders will differ by content area but could include researchers, legal advocacy groups, research institutions and centers, think tanks, policy-tracking groups, health, and surveillance organizations.**

The goal of this recommendation is to allow data that have been housed within specific agencies or industries to be linked in ways that provide the research community a more complete picture of the prevalence, distribution, and lived experiences of SGD populations.

EVIDENCE-BASED PROGRAMMING AND INTERVENTIONS

The ultimate goal of collecting more accurate and relevant data should be to enhance understanding of the mediating factors that can highlight the positive differences and close the disparities that exist between SGD and heterosexual or cisgender populations. Comprehensive and accurate population-level data can play a critical role in the development, implementation, and evaluation of programs, services, and interventions that support the health and well-being of SGD populations. The data deficits described throughout this report have led to a relative dearth of programming to address the specific needs of these populations, as well as an absence of evidence-based processes to evaluate programs.

> **RECOMMENDATION 5: Public and private research funders, together with federal statistical agencies, should prioritize research into the development, implementation, and evaluation of evidence-based services, programs, and interventions that promote the well-being of SGD populations.**

Placing scientific evidence at the forefront of program planning will allow researchers, policy makers, and public and private stakeholders to develop services and interventions that will directly benefit SGD communities.

CONCLUSION

The increase in prevalence and visibility of SGD populations illuminates the need for greater understanding of the ways in which current laws, systems, and programs affect their well-being. Individuals who identify as lesbian, gay, bisexual, asexual, transgender, non-binary, queer, or intersex, as well as those who express same-sex or -gender attractions or behaviors, will have experiences across their life course that differ from those of cisgender and heterosexual individuals. Characteristics such as age, race and ethnicity, and geographic location intersect to play a distinct role in the challenges and opportunities SGD people face. This report underscores the need for researchers to seek to understand disparities and advance equity both within and across SGD populations.

PART I

BACKGROUND AND CONTEXT

Prologue

As this report was nearing completion, the enormous impact of the COVID-19 pandemic battering the United States was becoming clear, transforming lives and affecting every sector of society. At the time of this writing, more than 5 million Americans have been diagnosed with the infection, and more than 200,000 have died. Tens of millions of people have lost their jobs, and aspects of health, economic status, and social life have changed drastically for families and communities across the country. Black, Hispanic/Latinx, Native American, and other disadvantaged populations have been disproportionately affected by the COVID-19 pandemic, due largely to inequities in social determinants of health, such as poverty and health care access.[1]

There are many reasons to believe that lesbian, gay, bisexual, transgender, queer, intersex, and non-binary people (LGBTQI+) might also be at high risk for COVID-19. There are LGBTQI+ groups that have higher rates of cardiovascular disease, respiratory disease, and HIV; that have higher poverty rates; and that lack adequate health insurance coverage (Alzahani et al., 2019; Caceres et al., 2017; Williams Institute, 2019). Little is known about COVID-19 rates of transmission, morbidity, or mortality among individuals who identify as LGBTQI+: currently, only California, Pennsylvania, Nevada, and the District of Columbia collect sexual orientation and gender identity data in context of the coronavirus pandemic, and even these states have not yet reported those data. Because LGBTQI+ identities are

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[1] See https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html.

seldom recorded in public health surveillance and medical records, sexual and gender diverse people often remain essentially invisible in context of the COVID-19 pandemic.

In May 2020, deep into the pandemic, an unarmed Black man named George Floyd was taken into police custody on the streets of Minneapolis and suffocated by a white police officer who knelt on his neck for more than eight minutes, until he was dead. The grief and outrage that followed led to an international outpouring of protest and activism and underscored the ways in which racial, ethnic, and other identities can have a dramatic effect on health and well-being in the United States (NASEM, 2016). Then in June 2020, which is commonly regarded as LGBTQI+ pride month, at least five transgender people of color—Dominique "Rem'mie" Fells, Merci Mack, Riah Milton, Brian "Egypt" Powers, and Brayla Stone—were brutally murdered.[2] These events highlight the ways in which violence has historically been and continues to be used as a tool of suppression towards LGBTQI+ populations and populations of color within the United States.

These two sets of events—the COVID-19 pandemic and the demonstrations of violent racism—point to the need for heightened awareness of the social and structural inequities that exist for LGBTQI+ people and for people of color and, especially, for sexual and gender diverse people of color. Too often, inequities cannot be identified because of failures to collect and measure sexual orientation and gender identity information. The systematic application of standardized measures of sexual and gender diverse status in governmental and health care delivery data systems would be a critical step towards promoting much-needed research on the health and well-being of LGBTQI+ populations.

REFERENCES

Alzahani, T., Nguyen, T., Ryan, A., Dwairy, A., McCaffrey, J., Yunus, R., Forgione, J., Krepp, J., Nagy, C., Mazhari, R., and Reiner, J. (2019). Cardiovascular disease risk factors and myocardial infarction in the transgender population. *Circulation: Cardiovascular Quality and Outcomes,* 4.

Caceres, B.A., Brody, A.A., Luscombe, R.E., Primiano, J.E., Marusca, P., Sitts, E.M., and Chyun, D. (2017). A systematic review of cardiovascular disease in sexual minorities. *American Journal of Public Health*, *107*(4), e13–e21.

National Academies of Sciences, Engineering, and Medicine. (2016). *Framing the Dialogue on Race and Ethnicity to Advance Health Equity: Proceedings of a Workshop*. Washington, DC: The National Academies Press. doi: 10.17226/23576.

Williams Institute. (2019). *LGBT Poverty in the United States*. UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/National-LGBT-Poverty-Oct-2019.pdf.

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[2] For information on the individual events, see https://www.hrc.org/resources/violence-against-the-trans-and-gender-non-conforming-community-in-2020.

1

Introduction

BACKGROUND

More than 11 million lesbian, gay, bisexual, and transgender (LGBT) individuals live in the United States according to 2019 estimates. The past decade has brought remarkable changes in the social, political, and legal status of these individuals. A majority of Americans approve of same-sex relationships and support legal protections to ensure fundamental civil liberties on the basis of sexual orientation and gender identity, representing a dramatic shift from prior years (Gallup, 2018; Pew Research Center, 2017).[1]

In addition to shifts in public opinion, the laws have changed. The 2015 ruling of the U.S. Supreme Court in *Obergefell v. Hodges* (576 U.S. 644) extended marriage equality for same-sex couples nationwide. In 2020, the Supreme Court ruled that the prohibition of sex discrimination in Title VII of the Civil Rights Act protects individuals from discrimination based on sexual orientation or gender identity in employment (*Bostock v. Clayton County,* 140 S. Ct. 171). The logic of the ruling would apply to other federal anti-discrimination laws as well, in such fields as housing, education, and credit. Similarly, many states and municipalities, as well as numerous private corporations, have expanded nondiscrimination protections in workplaces, health care settings, and schools to

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[1] Information retrieved from data analyses of the General Social Survey by Gary Gates in 2018, using the Survey Documentation and Analysis online tool maintained by the Institute for Scientific Analysis, San Francisco, CA, under a licensing agreement with the University of California. Tool is available at https://sda.berkeley.edu/sdaweb/analysis/?dataset=gss18.

include sexual orientation and gender identity. With regard to intersex individuals, a federal court of appeals decision in 2020 ordered the State Department to reconsider its refusal to provide a non-binary gender code for the passport of an intersex individual (*Zzyym v. Pompeo,* No. 18-1453, 10th Cir. 2020).

Despite increased visibility and social acceptance of sexual and gender diverse (SGD) populations, discriminatory policies and practices remain. Many people who are members of SGD populations—particularly those who are also members of other marginalized populations, such as racial and ethnic minorities—continue to experience stigma, discrimination, and violence where they live, work, play, and pray. In fact, recent evidence among lesbian, gay, and bisexual youth shows more reports of discriminatory experiences in adolescence than for earlier cohorts (Toomey and Russell, 2013), as well as disparities that are growing rather than narrowing for several key health indicators (Fish et al., 2017).

In 2016, the National Institutes of Health (NIH) formally designated sexual and gender minorities as a health disparity population. Researchers have recently begun to explore the relationship between the health disparities affecting the lesbian, gay, and bisexual (LGB) population and specific state- and local-level policy changes using a range of methods, including observational studies, quasi-experimental study designs, field experiments, and laboratory studies (Hatzenbuehler, 2016).

While research on LGBT populations has burgeoned in recent years, much remains to be learned about the status and well-being of these individuals and the ways in which their experiences may differ from those of the general population across many areas, such as physical and mental health, education, relationships, the workforce, and civic participation. Though an increasing number of nationwide surveys include questions about sexual orientation, gender identity, and same-sex partnerships, the extent to which empirical data accurately reflect the communities in question hinges on individuals' willingness to participate in and disclose their sexual orientation or gender identity on such surveys.

In a major report that described the status of health research on LGBT populations, the Institute of Medicine (2011) identified several challenges to describing and studying the population in question. These challenges included the multifaceted nature of sexual orientation and gender identity, the complexities of defining and operationalizing those constructs, and the resources required for obtaining probability samples of small populations whose members might be reluctant to answer questions about their sexual orientation or gender identity due to concerns about discrimination and victimization. In addition to the lack of standardized, inclusive methods to capture and measure this diverse population, the definitions and analysis of demographic processes, such as fertility and family formation, are predicated on presumed relationships between cisgender, heterosexual individuals. Finally, identifying intersex people in population surveys can be difficult because individuals with differences of sex development may not refer to themselves as "intersex" or see intersex as a social identity (GenIUSS Group, 2014).[2]

This work highlights the need to understand more fully how current U.S. legal, social, and cultural shifts are affecting LGB people, their families, and their communities. There is a dearth of research on how transgender, non-binary, and intersex individuals are affected by changes to state and local policies.

In response to these challenges, the National Academies of Sciences, Engineering, and Medicine convened an ad hoc committee to explore what is currently known about lesbian, gay, bisexual, transgender, queer, and intersex populations—in families and in environments such as school, work, and civic groups; at the ballot box; and in legal and health care systems—and to identify the gaps in knowledge around their experiences and consider how their well-being might be enhanced with improved research across several different domains. This report is designed to describe the opportunities and challenges facing these populations and to offer recommendations about future research.

CHARGE TO THE COMMITTEE

The Committee on Understanding the Status and Well-Being of Sexual and Gender Diverse Populations, convened in 2019, was composed of expert professionals from many disciplines, including human development, psychology, sociology, demography, economics, law, medicine, public health, and gender and sexuality studies. They were asked to prepare a report examining the available data on and significant research needs relevant to persons of diverse sexualities and genders and persons with differences in sex development across multiple dimensions over the life course; see Box 1-1 for the complete statement of task.

Considered as a whole, the findings of this report are intended to describe the current status of sexual and gender diverse populations and to offer recommendations about ways in which research can be improved to advance the health and well-being of those populations. It builds not only on the 2011 report of the Institute of Medicine but also on previous studies and activities related to these populations; see Appendix A.

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[2] Intersex people are individuals born with any of several variations in sex characteristics, including chromosomes, gonads, sex hormones, or genitals; see below for more information on why intersex individuals are included in this report.

BOX 1-1
Statement of Task

The Committee on Population (CPOP) of the National Academies of Sciences, Engineering, and Medicine will undertake a consensus study that will review the available data and future research needs on persons of diverse sexualities and genders (e.g., LGBTQ+ and MSM), as well as persons with differences in sex development (sometimes known as intersex), along multiple intersecting dimensions across the life course. Areas of focus will include, but are not limited to, the following:

- Families and social relationships
- Patterns of stigma, violence, and victimization
- Role of community, cultural, educational, healthcare, and religious organizations and institutions
- Civic engagement, political participation, and military service
- Socioeconomic status/stratification, housing, and workforce issues
- Justice and legal systems
- Social change and geographic variations in public attitudes and public policies
- Population health and well-being

KEY TERMS AND DEFINITIONS

This report uses numerous terms to describe sexual and gender diverse groups of people, some which might be unfamiliar to some readers or which may have varying colloquial or contextual meanings. This section describes how the committee understands these terms and how they are used in this report.

Many studies we reference in this report refer to LGBT individuals. The first three terms—*lesbian*, *gay*, and *bisexual*—refer to sexual orientation, which is understood by researchers to have three distinct components: sexual attraction, sexual behavior, and self-identification. Sexual attraction refers to the gender(s) of the people to whom someone feels physically or romantically attracted. The delineation between sexual orientation and sexual attraction is often particularly important for people who may not be sexually active. Sexual behavior refers to the gender(s) of one's sexual partners. Self-identification refers to how people describe their own sexual orientation.

Lesbian and *gay* are commonly used to refer to people whose attraction, behavior, and identities are oriented toward people of the same gender. *Bisexual* refers to people whose attraction, behavior, or both is toward people of both the same and different genders. Other terms that describe sexual orientation include *heterosexual* or *straight*, which refer to people whose attraction and behavior are oriented toward people of a different gender; *men who have sex with men* (often referred to as MSM), which refers to men who may or may not identify as gay or bisexual but who have male sexual partners; and *asexual*, which refers to people who do not experience sexual attraction. People who are not heterosexual or straight may also identify using terms that reflect specific cultural or age groups. For example, *same-gender-loving* is often used in Black communities to describe non-heterosexual relationships, *queer* is more common among younger people as a description of non-binary or non-heterosexual identity, and *Two Spirit* is used in many Native American communities to denote the fluidity of gender.[3]

The term *transgender* refers to gender identity, which is distinct from sexual orientation. *Transgender* is a broad term that describes people who identify as a sex or gender different from the sex they were assigned at birth. For example, a transgender woman is a woman who was assigned male at birth, and a transgender man is a man who was assigned female at birth. Other terms, such as *non-binary, agender, bigender, genderqueer*, *gender fluid*, and *gender-nonconforming*, refer to people who identify outside the categories of male or female. People who embrace these identities may or may not identify as transgender. Some people also use the terms *Two Spirit* and *queer* to describe gender identity as well as sexual orientation. People who are not transgender are *cisgender*. Like cisgender people, transgender people can be of any sexual orientation.

Concepts and terminology related to sexual orientation and gender identity are constantly in flux. For instance, many community members and researchers now prefer to replace the acronym LGBT with LGBTQ, in which the Q may refer to *queer* or *questioning*, which is a particularly important concept for those on the path to developing or exploring an LGBTQ-related identity, especially in adolescence. In some contexts, the acronym is expanded further to include "I" for *intersex*, "A" for *asexual* or *ally*, or "+" as an acknowledgment of the diversity of non-binary and gender-nonconforming individuals. Other newer terms related to sexual orientation include *monosexual*, which means people who are attracted to only one gender, such as straight, gay, and lesbian people; *non-monosexual*, which describes people attracted to more than one gender (including bisexual people), and *pansexual*, which refers to people attracted to several genders.

Intersex and *differences of sex development* are terms that describe people born with primary or secondary sex characteristics that do not

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[3] Two Spirit is also used in some Native American cultures to describe people who fulfill a traditional third-gender ceremonial role in their communities.

fit binary medical definitions of male or female reproductive or sexual anatomy. Intersex traits are widely heterogeneous and include variations in number of sex chromosomes, structure or function of gonadal tissue, synthesis or action of sex hormones, appearance of external genitalia, and patterns of secondary sex traits. The prevalence of intersex traits ranges depending on the specific definition used. For instance, as few as 1 in 2,000–4,500 people are born with external genitals that lie somewhere between binary male or female genitalia, but as many as 17 in 1,000 people are born with any variation in their physical reproductive or sexual characteristics.

The language used to describe these traits, and the people born with them, is complex and shifting. For example, in recognition of leaps in understanding of the physiology of intersex traits, a consensus group of researchers and providers in 2006 developed the phrase "*disorders of sex development*" to replace what had been an inconsistent, confusing, and stigmatizing array of terms. Although some clinicians have suggested that use of the term "disorders" helps underscore serious health concerns that may accompany an intersex trait, others argue that "disorders" is stigmatizing and pathologizing. Increasingly, clinicians, researchers, and advocates have adopted the term *differences of sex development* (DSD). DSD is frequently used in medical literature, and some individuals find that this language offers the opportunity to identify as having, rather than being, a medical condition. Others, including most advocacy groups, prefer the less medical term, *intersex* or *intersex traits*.

In one clinical survey, *intersex* and *differences of sex development* were about equally preferable. Some advocates and providers are increasingly using the term *endosex* to describe people whose reproductive or secondary sex characteristics align with medical binaries, just as the term *cisgender* is used in parallel with the term *transgender*. Since people who describe themselves as LGBT or intersex are numerically minority populations in the United States, researchers thus sometimes describe these populations as *sexual and gender minorities*. The Sexual and Gender Minority Research Office at the National Institutes of Health defines sexual and gender minority populations as including, but not being limited to, "individuals who identify as lesbian, gay, bisexual, asexual, transgender, Two Spirit, queer, and/or intersex. Individuals with same-sex or -gender attractions or behaviors and those with a difference in sex development are also included."[4] While in a research context the word "minority" points to the prevalence of a group within a population, in nonclinical contexts the word can carry a connotation of "lesser than" and can denote "a part of a population differing from others in some characteristics

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[4] See https://grants.nih.gov/grants/guide/notice-files/NOT-OD-19-149.html.

and often subjected to differential treatment."[5] As the community grows and becomes more diverse, the language that is used to refer to it will undoubtedly shift.

These and other terms will continue to evolve and take on different forms and meanings across different cultures and age groups, and it is important for researchers and other stakeholders working with these populations to be aware of and open to changing trends in terminology.

Just as there are different ways to think of sexual and gender diverse people, there are also different ways of describing the positions they occupy in society and the unique difficulties they may face because of their identity. Sociologist Erving Goffman (1963) defined *stigma* as an attribute, behavior, or reputation that is socially discrediting in a particular way. Societies generally apply value to certain normalized traits while devaluing others, such as sexual and gender diversity, and thereby assigning those people to an inferior social status. *Sexual prejudice* is another term to describe the negative view of sexual and gender diverse people held by individuals who have internalized the aforementioned social stigma.

Discrimination describes the negative treatment of sexual and gender diverse people compared to their heterosexual or cisgender counterparts. Discrimination can be interpersonal, such as denial of services based on sexual orientation or gender identity, and it can also be structural, such as laws or policies that systematically disadvantage sexual or gender diverse individuals in such areas as employment and education.

Even in the absence of active discrimination or recognizable social stigma, there are occasions in which sexual and gender diverse people do not have the same access to opportunities and achievement of outcomes as others. *Inclusion*, in this context, defines an individual's access to opportunity and ability to fully participate in social institutions, such as the labor force, the health care system, and civic and political processes. *Exclusion* refers to situations in which sexual and gender diverse people do not have the same opportunities or access. Sometimes exclusion happens as a result of the way sexual and gender diverse people are relegated to less important positions in society or made to feel powerless against the mainstream—a phenomenon called *marginalization*.

Finally, the terms *homophobia*, *biphobia*, and *transphobia* refer to societal bias and internalized fear of LGBT people; they can denote the presence of stigma, prejudice, discrimination, or violence toward LGBT people, as well as a denial of access to opportunity.

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[5] See https://www.merriam-webster.com/dictionary/minority.

ADDRESSING THE CHARGE

Sexual and Gender Diverse Populations

As discussed above, contemporary understandings of sexual orientation and gender identity continue to evolve, as does the terminology used to describe individuals who do not align with the male-female dichotomy or who exhibit attractions to people of the same sex or outside of the traditional gender binary—a factor that complicates scholarly attempts to identify these populations for effective study. In this report, when discussing these populations at large, the phrase *sexual and gender diverse* (SGD) is used to acknowledge the broad spectrum of natural human variation in sexual orientation, gender identity, and sex development. Other designations or terms encompassing multiple population groups of SGD people—such as LGB, LGBT, LGBTQ, and others—are used when discussing data and evidence based on those specific designations.

The committee acknowledges that no term is perfect or completely inclusive; the beauty of individuality is that self-expression, as well as personal and romantic choices, can manifest in a multitude of ways. Furthermore, the intention is not to promote the phrase *sexual and gender diverse* (or SGD) as terminology for widespread use. Instead, the committee's goal is to draw the attention of researchers, practitioners, policy makers, and society to the diversity of these groups and the need for greater understanding of differences that exist within and between them.

Inclusion of Intersex People

Little is known about the population health or well-being of people with intersex traits. The vast majority of research exploring the health of people with intersex traits is conducted in clinical samples. Intersex status is almost never queried in population surveys, and the stigma associated with having intersex traits may inhibit people from self-identifying. Moreover, because medical providers until recently did not routinely educate intersex patients about their traits, many people have limited awareness of their own medical history in this area. Fortunately, researchers and advocates have identified questions that can be used to assess intersex status in population surveys.

The medical impact of these traits varies widely and usually with the specific trait: for instance, people with congenital adrenal hyperplasia may require lifelong hormonal treatment for cortisol deficiency. Similarly, individuals with gonadal dysgenesis, who are born with gonads that do not produce hormones, are at markedly elevated risk of gonadal cancer and may benefit from removal of gonadal tissue in early adolescence.[6] As discussed in detail later in the report, however, there is an emerging body of knowledge documenting significant adverse consequences from irreversible interventions performed in early childhood primarily to align sex characteristics with gender assignment.

Understanding intersex as a medical problem might suggest that intersex populations should not be included in a report on the health and well-being of SGD populations, which are more commonly understood to be defined by non-normative identities. Indeed, not all people with intersex traits or DSD will identify as intersex; instead, they may identify as having a medical condition. Many people with intersex traits have cisgender experiences and identify as heterosexual. Moreover, some adults or parents of children with intersex traits may explicitly wish to distance themselves from SGD communities and any words that imply atypical gender or sexuality. There is also concern that simply adding "I" to the LGBTQ acronym may imply that intersex is monolithic, thereby obscuring the diversity of intersex-related health care needs and concerns of this population (Callens et al., 2012).

However, the committee found that there is sufficient overlap with other SGD populations to justify the inclusion of intersex in this report. First, many people with intersex traits do identify as non-heterosexual or non-cisgender, with evidence that the rates of non-heterosexuality and non-cisgender experiences are significantly higher than among endosex populations (Almasri et al., 2018). People with intersex traits/DSD were identified as a health disparity population by NIH, as well as by the American Association of Medical Colleges; both of these groups noted that intersex people may experience difficulties in accessing expert medical and psychosocial care similar to those encountered by SGD people.

Intersex health disparities appear to be driven in large part by the medical approach to intersex traits, which has been informed by the same stigmas experienced by SGD populations. Starting in the 1950s, infants born with intersex traits were exposed to medical and surgical interventions to align their anatomy with male or female (endosex) anatomy, with the explicit goal of rearing a cisgender, heterosexual child. Surgical decision making was often driven by the priority of creating genitals capable of penovaginal intercourse. Fearful that children might otherwise question their gender or sexuality, diagnostic information was routinely withheld from children and often even from their families. This model of care has reinforced cultural stigmas around sex and gender atypicality in an attempt to ensure sex and gender normalization (Dreger, 1998).

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[6] A full account of the medical and surgical support of specific intersex traits is far beyond the scope of this report; Chapter 12 provides additional information.

Still today, a desire to avoid the stigma of a non-normative sexual body is a stated goal of genital surgery for intersex children (see discussion in Chapter 12). Accordingly, intersex advocates have drawn parallels between normalizing genital surgery and sexuality and gender identity conversion therapy. However, little research has explored the effects of stigma within intersex populations.

Finally, while the committee recognizes the risk of obfuscating the unique individualities of intersex bodies, it also acknowledges that recent SGD research has illuminated the diversity of those populations. Just as research on the health of men who have sex with men validates and reinforces the difference between sexual identity and behavior, transgender health research has illuminated the spectrum of affirming medical and surgical procedures. It well may be that disparities in health and well-being among the intersex population are wholly distinct from those of other SGD populations, but given the intersections with SGD experiences and the absence of robust intersex population health research, it is difficult to justify the exclusion of intersex populations from our study.

Understanding Well-Being

The concept of well-being embodies both how people feel and how they function. The way a person feels is informed by the person's physical health, mental health, and emotions (e.g., happiness, contentment, anger), as well as personal judgments about one's life (e.g., purpose and satisfaction); the way a person functions, on both personal and social levels, incorporates such elements as sense of competency, agency and ability to act autonomously, and sense of being connected to others (New Economics Foundation, 2012). As health is a key component to well-being, so is well-being to health; the two concepts are closely related regarding states of human existence. The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1948). The concepts of well-being and health will be explored in this report with respect to sexual and gender diverse populations.

The determinants of health and well-being for every sexual and gender diverse individual vary over the course of a lifetime (life course) and include factors related to each person, people (social spheres of influence), and the environment (social systems). Person-level factors include contributors to identity such as age, race, ethnicity, military status, disability, socioeconomic position, and involvement in the criminal justice system. People-level factors are a person's social spheres of influence, meaning peers, family, social networks, and community. Environmental-level determinants of health and well-being are related to the structures, processes, and behaviors of societal systems, sectors, and institutions (or agents) toward sexual and gender diverse people. Together, these determinants interact with one another in ways that can intensify or ameliorate barriers to good health and a positive sense of well-being. For example, an SGD youth who experiences bullying and physical violence from classmates in a school system that lacks policies, training, and practices to prevent and address these behaviors may later struggle with depression, anxiety, self-injury, suicide attempts, and other physical and mental health conditions, but avoid seeking health care because of prior experiences with stigma and discrimination in the health care delivery system. These three elements—personal identities, social spheres of influence, and interacting societal systems—and other core frameworks are further developed in Chapter 2.

In this report the committee focuses on eight domains of well-being: the effects of various laws and the legal system on SGD populations; the effects of various public policies and structural stigma; community and civic engagement; families and social relationships; education, including school climate and level of attainment; economic experiences (e.g., employment, compensation, and housing); physical and mental health; and health care access and gender-affirming interventions.

People with different sexual orientations and gender identities have different experiences in each of these domains over the course of their lives. For example, one study found that in the labor market, gay men face a large negative wage gap, lesbian women earn higher wages than similarly situated heterosexual women, and bisexual men and women appear to be the most economically disadvantaged (Mize, 2016). Other studies show that transgender people face higher rates of discrimination and poverty than LGB people. Furthermore, when considering the opportunities and disadvantages for SGD individuals in each domain, one must also acknowledge intersectionality of identities—conditions that, when combined, can create unique outcomes for individuals. Those intersections include race and ethnicity, age, military status, incarceration, disability, and the ways in which the person is perceived by others. Frameworks such as these can yield important variations both within and across SGD groups (Goldberg and Conron, 2018).[7]

COMMITTEE'S APPROACH TO THE STUDY

The committee took a multipronged approach toward gathering and analyzing the necessary evidence for its work. In addition to reviewing published literature, the committee also heard testimony from relevant experts in a variety of topic areas and held a number of open-session conversations to engage in person with stakeholders and community leaders.

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[7] Intersectionality and other frameworks are discussed further in Chapter 2.

At the first meeting, the committee heard from the report's sponsors in order to get a clear sense of the goals of this project: David Adler of the Robert Wood Johnson Foundation; Karen Parker of the Sexual and Gender Minority Research Office at the National Institutes of Health; Darwin Thompson of Gilead Foundation; and Kika Chatterjee, Szena Dayo, and Faiza Riaz of the Tegan and Sara Foundation all shared with the committee their organizations' priorities for this work. At that same meeting, the committee also heard from Cecilia Chung of the Transgender Law Center, Ellen Kahn of the Human Rights Campaign, and Sandy James of FreeState Justice[8] in an attempt to better understand the potential value and utility of this report for the communities to whom it pertains. Additionally, committee members Angelique Harris and Stephen Russell briefed attendees on the content and findings of two meetings held in 2018 and 2019 at the National Academies of Sciences, Engineering, and Medicine that helped to lay the foundation for this consensus study (see Appendix A).

At the second in-person committee meeting, the committee organized a large public seminar in order to engage this project's relevant constituent communities. The committee held panels on culture, representation, and community frameworks; intersex individuals and families; non-binary and plurisexual[9] identities; sexual and gender diversity law and policy; and civic engagement. See the agenda for this seminar in Appendix B. In its closed meetings, the committee reviewed multiple sources of evidence, evaluated the methodologies of research studies, and discussed possible interpretations. Throughout these deliberative processes, committee members were asked to apply their expertise in their respective fields. In addition to its four in-person meetings, the committee held two online meetings to ensure sufficient discussion and to advance progress on the study.

METHODS AND APPROACH TO THE EVALUATION OF EVIDENCE

This report draws on evidence from a number of sources of empirical research on SGD populations. One important dimension of these sources is the crossing of disciplinary boundaries. Because of the broad focus of its charge, the committee reviewed the relevant bodies of knowledge from a number of academic disciplines—public health, medicine, psychology, economics, sociology, gender studies, history, law, demography, and political science—along with interdisciplinary fields, such as African American studies, each of which has different standards of evidence. Over the last few decades, research on SGD populations has expanded in each of these disciplines and fields, pro-

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[8] James is now working at the U.S. Department of Health and Human Services.

[9] The term "plurisexual" is used to describe individuals who are attracted to more than one gender.

viding a basis for understanding more about the lives of people of diverse sexualities, genders, and with differences in sex development.

The committee sought out research published in peer-reviewed academic publications (journals and books) and supplemented that with research from other sources, such as government agencies, nongovernmental organizations, and think tanks. The committee also took care to ensure that for each area of focus, the work engaged with the lived experience of individuals representing SGD populations: because of the deeply personal nature of this work, the committee centered the expert testimony of members of the communities affected by the results of this work. In all cases, the committee evaluated how effectively the research adhered to broadly accepted research norms, such as whether a study included an adequate reporting of data, methods, and analysis to allow assessment of the quality and accuracy of the conclusions drawn by the authors. Those foundations provided a basis for judgments and conclusions about what is known about SGD populations.

In terms of the published literature, the committee believes it is critical to draw particular attention to three general methodological considerations that affect the conclusions that can be drawn from existing research: the nature of the data and samples used; the research designs used; and the use of sources other than survey or experimental data for the study of some areas. Much of the research reviewed for this report has been made possible by the inclusion of questions about sexual orientation and gender identity in surveys of probability samples of the U.S. population (see Chapter 4 for a list of those surveys). Data generated by probability-based sampling methods are likely to be representative of the populations and subgroups in question, allowing generalizations to be made from those samples. That representativeness is essential for making comparisons across diverse sexual and gender populations in order to, e.g., compare rates of a particular health condition among lesbian, gay, and bisexual people to that of heterosexual people or to compare transgender people to cisgender people.

However, the fact that the SGD populations studied in this report, such as lesbian, gay, bisexual, transgender, and intersex people, are relatively small means that only large samples of the whole population will include sizable numbers of people in sexual and gender diverse groups as usually defined. This situation has a number of consequences for researchers, such as limiting the ability to use probability samples for comparisons of detailed racial, ethnic, age, or geographic groups of LGBT people, for example, or to study in detail rare health or economic outcomes. In addition, the underlying surveys are not likely to have questions that relate to important aspects of SGD people's lives, even when the surveys capture sexual and gender diversity for respondents, unless the questions also happen to be relevant for the lives of the population at large.

Partly because of such limitations, studies using non-probability-based sampling methods, such as community recruitment or snowball sampling, are common in many disciplines and can provide important insights. In this report, the committee exercised care in interpreting the relevance of findings from such samples to apply to the broader SGD population. For example, clinical studies might involve samples of individuals with poorer health who are not representative of the larger population. Convenience sampling techniques might result in biases toward certain groups, such as those with higher-than-average levels of income or education. Administrative datasets, such as health insurance claims or discrimination charge filings, reduce concerns about sampling bias but still require an assessment of who had access to the services that resulted in the creation of the administrative records.

The second important consideration is research design. The committee acknowledges that all research designs have strengths and weaknesses for answering the questions defined in its statement of task. Many studies reviewed for this report are observational studies—that is, those studies made comparisons based on observed differences in sexual orientation or gender identity in a sample, usually holding other observed characteristics constant. This general approach is appropriate for assessing whether there is a statistical association between being a member of a sexual or gender diverse group and a specific health, economic, or other social outcome. However, drawing a causal conclusion about whether and how having an SGD status or identity affects a research outcome is difficult because of the ways in which unobserved characteristics could vary by groups or by individuals and therefore affect outcomes. For example, the wage gap between lesbian and heterosexual women could be a byproduct of lesbian women having more labor market experience, but there is a lack of data on that particular issue.

Another issue for many studies is that they are cross-sectional, focusing on data collected on individuals at only one point in time. Thus, it may not be possible to know when a variable of interest—such as an experience of stigma—occurred in relation to the outcome being studied. Longitudinal surveys that collect data on the same people over time can help with both issues, allowing researchers to assess the role of personal characteristics and to examine whether changes in important variables are associated with changes in outcomes. Though they have increased in recent years, such datasets are still rare in research on SGD populations.

Experimental research methods are designed to allow more conclusive assessments of causal connections, since an exposure or intervention is varied randomly across groups and researchers then test for differences in outcomes by group. However, there are limitations in the application of those methods to the issues of interest in this report. In particular, it is obviously not possible to randomly assign a particular sexual orientation or gender identity to individual people, or to randomly assign an experience of stigma, and then to compare outcomes across groups. Some studies have used experimental and quasi-experimental methods to answer other questions about the effects of policies, interventions, or other possible experiences of SGD populations. Since those policies or other conditions are different across time and place, researchers can study whether particular effects are present or are stronger in those places that are "treated" by a particular policy than in those places without the "treatment."

The third issue concerns research that is rooted in methods other than surveys or experiments, as referenced particularly in the chapters on communities, law, and public policy. Some of the research on development of communities draws on ethnographic and historical research methods. Such studies may involve archival research, observations, interviews, or the analysis of cultural phenomena (e.g., art, literature, and film). The chapters on law and public policy include some studies using quantitative methods, but they also include the review of case law, statutes, and legal institutions, as well as legal scholarship.

Given the above considerations and the varying sources of the findings discussed in this report, wherever possible the committee sought findings that are consistent across different datasets and research methods—an established procedure for assessing validity (Campbell and Fiske, 1959). The committee also notes strengths and weaknesses of various research methods described in this report.

Lastly, when reviewing many studies, including those that demonstrate an adherence to scientific rigor, the committee was frequently reminded that the heteronormativity of common research designs (collecting data on males, females, and heterosexual relationships; not accounting for alternate identities and romantic relationships) may not enable data collection that provides detail on less prominent SGD groups or characteristics. When pertinent data do not exist or are not presented in ways that advance the understanding of SGD populations, the committee makes recommendations on how to collect new data or to analyze existing data in ways that could advance that understanding.

REFERENCES

Almasri, J., Zaiem, F., Rodriguez-Gutierrez, R., Tamhane, S.U., Iqbal, A.M., Prokop, L., Speiser, P.W., Baskin, L.S., Bancos, I., and Murad, M.H. (2018). Genital reconstructive surgery in females with congenital adrenal hyperplasia: A systematic review and meta-analysis. *Journal of Clinical Endocrinology and Metabolism, 103*(11), 4089–4096. doi: 10.1210/jc.2018-01863.

Callens, N., van der Zwan, Y.G., Drop, S.L.S., Cools, M., Beerendonk, C.M., Wolffenbuttel, K.P., and Dessens, A.B. (2012). Do surgical interventions influence psychosexual and cosmetic outcomes in women with disorders of sex development? *ISRN Endocrinology, 2012*, 1–8. doi: 10.5402/2012/276742.

Campbell, D.T., and Fiske, D.W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56,* 81–105.

Dreger, A.D. (1998). A history of intersexuality: From the age of gonads to the age of consent. *Journal of Clinical Ethics*, *9*(4), 345–355.

Fish, J.N., Watson, R.J., Porta, C.M., Russell, S.T., and Saewyc, E.M. (2017). Are alcohol-related disparities between sexual minority and heterosexual youth decreasing? *Addiction*, *112*(11), 1931–1941. doi: 10.1111/add.13896.

Gallup. (2018). *Gay and Lesbian Rights*. Available: http://news.gallup.com/poll/1651/gay-lesbian-rights.aspx.

GenIUSS Group. (2014). Executive summary. In J.L. Herman (Ed.), *Best Practices for Asking Questions to Identify Transgender and Other Gender Minority Respondents on Population-Based Surveys*. Los Angeles, CA: Williams Institute.

Goffman, E. (1963). *Stigma*. Alexandria, VA: Alexander Street Press.

Goldberg, S.K. and Conron, K.J. (2018). Demographic characteristics of lesbian, gay, bisexual, and transgender adults in the United States: Evidence from the 2015–2017 Gallup Daily Tracking survey. In W. Swan, (Ed.), *The Routledge Handbook of L.G.B.T.Q. Administration and Policy.* New York: Routledge.

Hatzenbuehler, M.L. (2016). Structural stigma: Research evidence and implications for psychological science. *American Psychologist, 71,* 742–751.

Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: The National Academies Press. doi: 10.17226/13128.

Mize, T.D. (2016). Sexual orientation in the labor market. *American Sociological Review*, *81*(6), 1132–1160.

New Economics Foundation. (2012). *Measuring Well-being: A Guide for Practitioners*. London: Centre for Well-Being, New Economics Foundation. Available: https://b.3cdn.net/nefoundation/8d92cf44e70b3d16e6_rgm6bpd3i.pdf.

Pew Research Center. (2017). Changing Attitudes on Gay Marriage. Available: http://www.pewforum.org/fact-sheet/changing-attitudes-on-gay-marriage.

Toomey, R.B., and Russell, S.T. (2013). The role of sexual orientation in school-based victimization: A meta-analysis. *Youth and Society*, *48*(2), 176–201.

World Health Organization. (1946). Preamble to the Constitution of the World Health Organization. *Official Records of the World Health Organization*. Available: https://www.who.int/governance/eb/who_constitution_en.pdf.

2

Health and Well-Being in Diverse Populations: Frameworks and Concepts

Sexual and gender diverse (SGD) people experience the world in different ways than their heterosexual, monosexual, endosexual, or cisgender counterparts. They also have varied experiences both across and within sexual orientation, gender identity, and intersex groups. It cannot be assumed that lesbian and bisexual women face the same environmental and societal challenges, nor can it be assumed that two gay men of different ethnicities and social statuses have similar experiences simply because they share a sexual orientation. An individual's health and well-being over the life course are determined by a combination of experiences, opportunities, and decisions that are influenced by their social relationships as well as their interactions with institutions and social structures, such as education, health care, government, public safety, housing, immigration, criminal justice, the military, and employment.

The identities and lived experiences of SGD individuals are complex, multidimensional systems. By applying a complex systems perspective in our work, the committee acknowledges the dynamic nature of human development, individuals' immediate environments, and the broader contexts in which they live their lives. In a complex system, each element interacts with and provides feedback to others and to the individual, potentially leading to changes in behaviors, roles, and functions that may result in nonlinearity or disproportionality (small effects in one area and large effects in another), novelty (yielding unexpected outcomes or responses), or time discordance (having delayed effects): see Figure 2-1.

This report reflects the committee's awareness that multiple systems simultaneously affect opportunities and outcomes for SGD communities. The

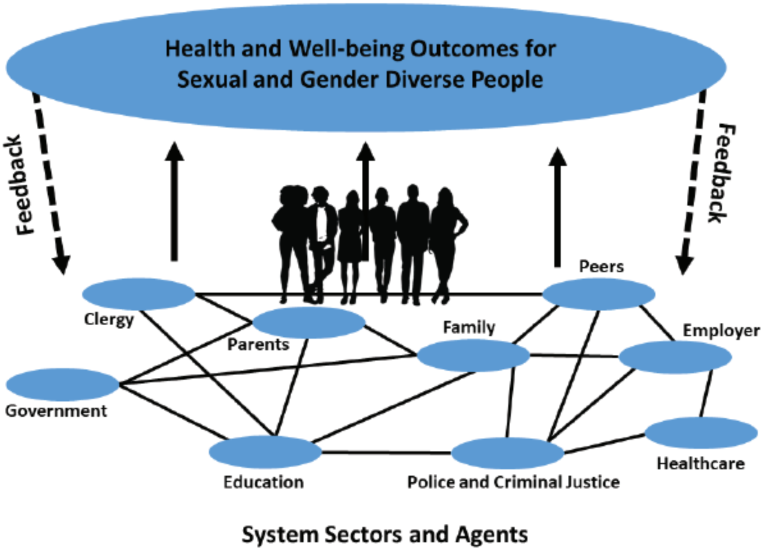

FIGURE 2-1 Complex systems illustration.

committee used the following frameworks to organize its thinking around these systems and their complex interactions:

- social ecology—how individuals are embedded in families, communities, societies, and the environment;
- social constructionism—how individuals experience their own lives and identities and the meaning they and others give to experiences and events;
- identity affirmation—how people become aware of, express, and affirm their sexual orientation, gender identity, and other aspects of identity;
- stigma—how dominant cultural beliefs and differences in access to power can lead to labeling, stereotyping, separation, status loss, and discrimination for those who do not align with societal norms;
- life course—how experiences from early to late in life accumulate and affect health and well-being at different ages and stages of development; and
- intersectionality—how multiple forms of structural inequality and discrimination, such as racism, sexism, and classism, combine to produce complex, cumulative systems of disadvantage for people who live at the intersections of multiple marginalized groups.

The frameworks are intended to provide readers with a depth of understanding of the influences and dynamics of multiple systems on the health and well-being of sexual and gender diverse people. They are not tools by which to evaluate an individual's or group's experiences and identity; rather, the frameworks act as lenses through which one can see how these systems combine to produce novel and nonlinear outcomes that can affect an individual's well-being. Though all the frameworks and concepts are not equally pertinent to the content of this report, understanding this scholarly landscape allows the committee to situate the specific issues addressed throughout this report in broader theoretical contexts.

SOCIAL ECOLOGY

The social ecological approach enhances understanding of how human well-being is shaped by multiple interacting levels of influence between individuals, their immediate environment, and larger contexts (Bronfenbrenner, 1979; Bronfenbrenner and Ceci, 1994). These levels are interconnected, reciprocal, and complex, and they include

- individual-level factors, such as age, race, ethnicity, sex, gender identity, intersex status, and genetics;
- interpersonal-level factors such as relationships with partners, family members, friends, and peers;
- community-level factors such as schools, workplaces, community spaces, and religious institutions;
- societal-level factors such as laws, policies, and cultural and social norms; and
- environmental-level factors such as the natural environment and large-scale historical trends.

In this approach, people are embedded in families, communities, societies, and broader environments, and the interplay across and between these factors influences the health and well-being of individuals and populations (Institute of Medicine, 2011; Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020 [hereafter, Secretary's Advisory Committee], 2010). At each level, SGD populations experience unique stressors and sources of resilience related to sexual orientation, gender identity, and intersex status. This constellation of stressors and resources shapes their well-being across all domains, such as education, economics, relationships, and health. The social ecology model also recognizes that the experiences of SGD populations at each level vary as a function of gender, race, ethnicity, and other intersecting aspects of identity.

The social ecology approach is important in understanding patterns and etiology of risk and resilience, and it also offers a framework for developing strategies at multiple levels to support the well-being of SGD populations. There is substantial evidence that multilevel interventions have more potential for success than those that concentrate only on a single level (Sallis, Owen, and Fisher, 2008; Secretary's Advisory Committee, 2010). The Secretary's Advisory Committee 2010 report for *Healthy People 2020* states, "Motivating people to change health-related behaviors when social and physical environments are not supportive often leads to weak, temporary change" (p. 29). Thus, if SGD populations are at greater risk for a behavior such as substance use, policies or interventions to address this disparity are more likely to be successful if they address not only individual behavior but also factors at interpersonal (e.g., family rejection), community (e.g., bullying in schools), and societal (e.g., employment discrimination based on sexual orientation and gender identity) levels. The social ecology approach is also useful for synthesizing diverse sources of data and research methods to understand how multiple levels of influence shape the well-being of SGD populations across different domains.

SOCIAL CONSTRUCTIONISM

Social forces influence people's shared understandings of reality. The theoretical framework called social constructionism examines the ways in which individuals, groups, cultures, and societies perceive social issues and problems. Social constructionism is often used to explore the influences of culture, society, and history on the ways in which individuals experience their own lives and the meanings that they give to these experiences. This perspective also suggests that facts and knowledge must be understood in the context of the particular culture or society that generated them, and it maintains that knowledge is influenced by and made tangible through social interactions.

A key tenet of social constructionism is the effect that socially constructed concepts and ideas have on individuals and the role that those in power have in constructing ideas, concepts, and even realities. For example, instead of focusing solely on the effect of a disease on people's bodies, social constructionism emphasizes the meaning that the illness has for the affected individuals and for those around them and how that shapes their experiences (Lupton, 2000). Likewise, it emphasizes the role that those in power have to construct how society, as a whole, understands diseases and illnesses and the context that is applied to certain groups. As such, social constructionism is frequently used as a framework to explain why some health issues, such as HIV/AIDS, obesity, and cancer, are stigmatized, and to examine societal responses to those stigmatized health issues. Beyond the objective condition of a disease state, social understandings, reactions, and beliefs about a disease shape how a person understands or experiences the disease.

Symbols and shared group meanings also play a central role in conceptualizations of individual identity and social and group interactions. The meanings behind the power and privileges given to traits, behaviors, and identities attributed to particular groups are constructed aspects of culture that can be questioned. For example, understanding concepts such as "race"; racial categories; and privileges associated with skin complexion, hair color, facial features, and nation of origin as culturally constructed illuminates the ways that race is not a biological category but rather a social construct. Similarly, feminist scholars have questioned the meanings and privileges associated with gender roles in different cultures around the world and throughout history.

The approach of social constructionism highlights social and cultural forces that affect how gender and sexuality are perceived by different individuals, groups, and societies. This perspective may illuminate the effect that social issues and problems have on specific groups, particularly those most marginalized. For example, research on health and wellness among gay and bisexual men often describes them using the term "men who have sex with men." A social constructionist approach reveals that the emphasis on their behavior, which is typically described as "risky," erases the sexualities and identities of these men. Similarly, social constructionism is an important lens for understanding limits to the universal applicability of specific terms used to define and categorize sexual and gender diversity, which can vary within and between communities, societies, geographies, and time periods; it can help people better understand the power, privileges, and resources to which these groups have access.

STIGMA

Since Goffman's pioneering book, *Stigma: Notes on the Management of Spoiled Identity* (1963), social scientists have sought to identify the causes and consequences of stigma. Many definitions of stigma have been offered, which has led to some confusion about the meaning of this term. In part to address this confusion, Link and Phelan (2001, p. 367) advanced a highly influential conceptualization of stigma, which defines stigma as follows:

> In our conceptualization, stigma exists when the following interrelated components converge. In the first component, people distinguish and label human differences. In the second, dominant cultural beliefs link labeled persons to undesirable characteristics—to negative stereotypes. In the

> third, labeled persons are placed in distinct categories so as to accomplish some degree of separation of "us" from "them." In the fourth, labeled persons experience status loss and discrimination that lead to unequal outcomes. Stigmatization is entirely contingent on access to social, economic and political power that allows the identification of differentness, the construction of stereotypes, the separation of labeled persons into distinct categories and the full execution of disapproval, rejection, exclusion and discrimination. Thus, we apply the term stigma when elements of labeling, stereotyping, separation, status loss and discrimination co-occur in a power situation that allows them to unfold.

There are several important aspects to the conceptualization of stigma. First, it is important to distinguish between the related, though distinct, concepts of stigma and discrimination. While discrimination is a constitutive feature of stigma—in fact, the term stigma "cannot hold the meaning we commonly assign to it" when discrimination is left out (Link and Phelan, 2001, p. 370)—stigma is broader because it incorporates several other elements in addition to discrimination, such as labeling and stereotyping (Phelan, Link, and Dovidio, 2008). Moreover, stigma produces negative consequences even in the absence of discrimination and even without another person present in the immediate situation (Link and Phelan, 2001; Major and O'Brien, 2005). Thus, the concept of stigma captures numerous pathways that produce disadvantage outside of discriminatory action.

Second, stigma is dependent on power. Link and Phelan's (2001) definition illuminates the idea that power is present whenever stigmatization occurs. Power is necessary for people who stigmatize others (i.e., "stigmatizers") to achieve the ends they desire. As summarized by Phelan and colleagues (2008), the ends that are attained by stigmatization include "keeping people down" (exploitation/dominance), "keeping people in" (norm enforcement), and "keeping people away" (disease avoidance). In each instance, the dominant group gets something they want by stigmatizing others—that is, there are motives or interests that underlie and perpetuate stigmatization (Link and Phelan, 2001).

Stigma-driven motives are exercised through individual, interpersonal, and structural mechanisms, each of which contributes to negative outcomes for the stigmatized (Hatzenbuehler, 2016; Link and Phelan, 2001). *Individual forms of stigma* refer to the cognitive, affective, and behavioral processes in which individuals engage in response to stigma, such as (1) identity concealment, or hiding aspects of one's stigmatized status/condition/identity to avoid rejection and discrimination (e.g., Pachankis, 2007); (2) self-stigmatization, or the internalization of negative societal views about one's own group (Corrigan, Sokol, and Rüsch, 2013); and (3) rejection sensitivity, or the tendency to anxiously expect, and readily perceive, rejection based on one's stigmatized status/identity/condition (e.g., Mendoza-Denton et al., 2003).

In contrast, *interpersonal stigma* refers to interactional processes that occur between stigmatized and non-stigmatized people. These interpersonal processes include both intentional, overt actions (e.g., bias-based hate crimes; Herek, 2009), as well as unintentional, covert actions (e.g., micro-aggressions; Sue et al., 2007). *Structural stigma*, which refers to processes that occur above the individual and interpersonal levels, is defined as "societal-level conditions, cultural norms, and institutional policies that constrain the opportunities, resources, and well-being of the stigmatized" (Hatzenbuehler and Link, 2014, p. 2). Examples include laws and policies that disadvantage specific groups, such as marriage bans for same-sex couples or differential sentencing for crack as opposed to powdered cocaine for racial and ethnic minorities.

INTERSECTIONALITY

Intersectionality is a term that describes how categories such as race, class, gender, and sexuality create and maintain forms of structural inequality and discrimination. Kimberlé Williams Crenshaw coined the term intersectionality (Crenshaw, 1989) to describe the experience of living under interlocking systems of oppression—particularly around race, gender, and class—about which she and other Black feminists had theorized. An intersectional lens frames systemic influences in a broad context, emphasizing the complexity and variety of individual experiences in an effort to understand the workings of privilege and power (Tomlinson and Baruch, 2013). Other categories of social identity and vectors of power often examined through an intersectional lens are ethnicity, nationality/migration, ability/disability, and HIV disease status (Crenshaw, 2017).

While many early Black feminist thinkers advanced intersectional analyses of the social location and conditions of Black women, some especially important work was done by the Black lesbian feminists of the Combahee River Collective (CRC) beginning in the 1970s. The CRC used the idea of intersectionality to illustrate how multiple oppressions reinforce each other to create new categories of human suffering (May, 2015; Taylor, 2017). The CRC made it clear that race, class, gender, and sexuality are vectors of power as well as social identity categories. They argued that social categories are not independent and unidirectional; rather, they are co-constitutive and interdependent. The CRC and other scholars also argued that individual social categories reflect larger structural forms of inequality, such as racism, patriarchy, homophobia, and class oppression (Bowleg, 2013).

In her research on intersectionality, feminist Evelyn Nakano Glenn (2002) emphasized how categories of identity are often constructed using opposites and dichotomies rather than integrated and relational terms. She argued that this requires suppressing variability within categories so that dominant characteristics, such as whiteness, maleness, and heterosexuality, are normalized. In other words, white appears raceless, man appears genderless, and heterosexuality appears to be void of sexualization (Glenn, 2002). In this way, the powerful or dominant elements in society are not questioned.

The concept of intersectionality has influenced how scholars, activists, advocates, artists, and policy makers conceptualize individual and group identities, how they craft and sustain political alliances, and how they analyze and address systems that produce and maintain social inequities (May, 2015). It suggests an analytic framework that assists in examining the nature and workings of forms of interlocking structural stigma, inequality, and discrimination. It functions as a heuristic that reveals and highlights specific dynamics that privilege binary distinctions and single-axis thinking (May, 2015). Intersectionality is an approach to inquiry and a way to organize knowledge. For example, Berger and colleagues (2001) suggest that "intersectional stigma" is a complex process by which, in their study, women of color—who are already experiencing race, class, and gender oppression—are also labeled, judged, and given inferior treatment because of their status as drug users, sex workers, or HIV-positive women. For women who are lesbian, bisexual, transgender, intersex, or otherwise members of SGD communities, discrimination and disadvantage based on sexual orientation, gender identity, or intersex status may add additional layers of oppression. Writing from an intersectional perspective attends to the complex nature of power and how its intersectional qualities inform the experiences of SGD communities.

IDENTITY AFFIRMATION

The processes by which members of SGD communities come to explore, understand, declare, and affirm aspects of their identities related to sexual orientation, gender identity, or intersex status are complex. Each aspect of one's identity has distinct characteristics and follows different developmental pathways; at the same time, however, they are deeply intertwined (Doreleijers and Cohen-Kettenis, 2007). Processes of "coming out" and affirming one's identity vary widely by factors such as stage of life, family circumstances, and socioeconomic and political influences. There has been a long-standing predominant research focus on adolescence because of the well-documented vulnerabilities of lesbian, gay, bisexual, transgender, and questioning youth (Russell and Fish, 2016) and because individual knowledge and awareness of one's own sexual orientation, gender identity, or intersex status often emerges with the biopsychosocial changes associated with puberty (Herdt and McClintock, 2000). Yet many young people are aware of differences in their thoughts and feelings associated with sexuality earlier in childhood, and for many transgender and other gender diverse youth, transgender identity awareness emerges in very early childhood (Levitt and Ippolito, 2014). Both psychosocial and biological factors influence gender identity development, yet most research approaches these areas of influence in isolation, so little is known about the complex dynamics among psychosocial and biological influences (Steensma et al., 2013). In addition, there are diverse expressions of differences in sexual development, which raise a range of developmental questions for how people with intersex characteristics come to understand and express various aspects of their identities (Roen, 2019).

Gender affirmation has been broadly defined as an interpersonal and shared process through which a person's identity is socially recognized (Sevelius, 2013). More specifically, it refers to the process by which people are affirmed or recognized in their gender identity (Reisner, Radix, and Deutsch, 2016). Gender affirmation can be conceptualized as having four core facets: psychological, social, medical, and legal (Reisner et al., 2016):

1. psychological gender affirmation, such as self-actualization and validation;
2. social gender affirmation, such as gender roles and use of appropriate names and pronouns that correspond with the person's gender identity;
3. medical gender affirmation, such as use of puberty suppression, hormone therapy, and gender-affirming surgeries; and
4. legal gender affirmation, such as nondiscrimination protections and accessibility of legal processes to change names and gender markers on identity documents.

Gender affirmation sometimes, but not always, conforms to binary categories of being female or male. Gender affirmation does not require following a discrete or linear series of "transition" events; on the contrary, it can be conceptualized as an evolving process throughout a person's life course.

There is no single path to gender affirmation—no one pathway that describes how or when people affirm their gender. For many transgender people, awareness and expression of one's own gender identity is further complicated by having to affirm that identity in both personal and social contexts. Gender affirmation has thus emerged as an important framework for understanding transgender health.

Increasing evidence suggests that gender affirmation is a key determinant of health and well-being for transgender people. Some transgender individuals do not seek any medical interventions; others use hormones and do not seek surgery, and some undergo surgical interventions. Medical gender affirmation therapies (e.g., hormones and surgical interventions) have been found to improve psychological functioning and quality of life for transgender people (Murad et al., 2010; Nguyen et al., 2018; Rowniak, Bolt, and Sharifi, 2019; Wernick et al., 2019; White Hughto and Reisner, 2016). Social, psychological, and medical gender affirmation were found to be associated with lower levels of depression and higher self-esteem in a community sample of transgender women (Glynn et al., 2016). There is also evidence supporting gender affirmation as a target of intervention to improve viral suppression for transgender women of color living with HIV (Sevelius et al., 2019). Among Black transgender women with and without HIV infection, gender affirmation has further been associated with increased personal competence and acceptance of self and life (resiliency) and decreased perceived stress, anxiety, depression, and suicidal ideation (Crosby, Salazar, and Hill, 2016). In Black transgender youth, gender affirmation was shown to moderate the association between anticipated stigma and health care avoidance: anticipated stigma around health care treatment and subsequent avoidance decreased for youth who had undergone gender affirmation (Goldenberg et al., 2019). The gender affirmation matrix and its psychological, social, medical, and legal contexts and implications have been useful tools to advance understandings of the health and well-being of sexual and gender diverse people, but additional research utilizing this framework is needed.

LIFE COURSE

A life course perspective offers a framework for understanding how experiences accumulate over the life course, from early through late life, to shape advantage and disadvantage in health and well-being across diverse populations. Some population groups experience more disadvantage than others due to their identities, social locations, or sociohistorical contexts. Social patterns accumulate over time (Elder, Johnson, and Crosnoe, 2003) and can be affected by variation in stressors and resources across groups. The life course experiences of SGD populations further vary in relation to such factors as race, ethnicity, and socioeconomic status (Kim and Fredriksen-Goldsen, 2016). There is more research on some SGD populations than on others; for example, more studies have focused on gay and lesbian populations than on bisexual, transgender, and intersex populations (Reczek, 2020).

Time and place are central to a life course perspective. Life course experiences and individual development are shaped by historical and geographic contexts (Hammack et al., 2018). Because sexual and gender diversity is now more openly portrayed in popular culture than in previous eras, and because public attitudes around LGBTQ+ individuals and relationships have shifted, SGD youth may be more likely to come out during adolescence (Floyd and Bakeman, 2006). In the case of intersex people, there have been significant shifts in recent decades in cultural awareness and understanding of differences of sex development, as well as advances in patient-centered medical approaches to supporting the health and well-being of people with intersex traits (Roen, 2019). Individual development and life course experiences also vary geographically—both in terms of rural or urban areas and across states or localities. For example, prior to the nationwide expansion of marriage equality in 2015, lesbian, gay, and bisexual individuals who lived in states that enacted more supportive policies for SGD populations (e.g., civil union legislation) experienced higher levels of psychological well-being and lower rates of hazardous drinking than those in states with more restrictive policies (Everett, Hatzenbuehler, and Hughes, 2016).

Across the life course, members of SGD populations face many unique stressors in their social environments that are directly attributable to their sexual orientation, gender identity, or intersex status—a phenomenon called "minority stress" (Brooks, 1981; Meyer, 2003). For many years, few people learned they were intersex or came out as lesbian, gay, bisexual, or transgender before adulthood. In recent years, however, many young people have begun to come out in adolescence. Those who self-identify as LGBTQI+ at a younger age may experience more minority stressors related to their sexual orientation, gender identity, or intersex status, such as conflict within their families or hostile school environments (Russell and Fish, 2016). In addition, adults who are members of SGD communities may face stigma and discrimination in their social networks, workplaces, and health care settings. Exposure to increased stress can activate biological processes (e.g., cardiovascular arousal), psychosocial processes (e.g., anxiety, depression, sleep problems), and behavioral processes (e.g., substance use, isolation) that take a toll on one's health and well-being.

Protective or resilience factors over the life course can buffer the effects of stress, reduce stress exposure, and, on their own, contribute to cumulative advantage in well-being. A key concept here is that of "linked lives," which refers to social connections, particularly close and supportive social relationships. In childhood, parents and families of origin can offer highly salient and important resources that promote well-being. For example, parental rejection is particularly undermining for the well-being of lesbian, gay, bisexual, and transgender youth (Ryan et al., 2009), while parental support can mitigate stress for children and adolescents at high risk of discrimination based on sexual orientation and gender identity (Thomeer, Paine, and Bryant, 2018). Peer and school ties can be an important resource through adolescence (Martin-Storey et al., 2015; Watson, Grossman, and Russell, 2019), and intimate partner and other chosen family ties are important throughout the life course (Donnelly, Robinson, and Umberson, 2019).

In contrast to stressors that undermine health and well-being, protective factors can activate biopsychosocial processes that contribute to cumulative advantage in health and well-being over the life course. A life course approach emphasizes the power of social contexts to influence individual development and well-being, but it also emphasizes individual agency in the choices individuals make to shape their life experiences and affect their social contexts.

A life course perspective attends to developmental processes across the entire life course, as well as to variation in development across historical and geographic contexts. Life course experiences spill over from one life stage to the next—a process that results in cumulative advantage or disadvantage over a person's life (Umberson and Thomeer, 2020). Early life course exposure to discrimination and stigma based on sexual orientation, gender identity, or intersex status can thus have lifelong consequences. For example, substantial empirical research shows that exposure to high levels of stress and adversity in childhood sets in motion distinct developmental changes that can undermine health and well-being years and even decades later (Shonkoff et al., 2012). First, childhood adversity associated with discrimination and stigma may be the beginning of a long process of repeated insults to health and well-being that take place over a period of years. Second, childhood may be a sensitive period in the life course, during which significant stress exposure triggers patterns of heightened psychological and physiological reactivity to stress (e.g., hypervigilance, anxiety, cardiovascular arousal) that are detrimental to health. Thus, early life course experiences can set trajectories of health and well-being into motion that may be exacerbated by subsequent exposures to discrimination or interrupted by subsequent exposures to protective factors.

Little research has been conducted on how outcomes for aging SGD populations differ from those experienced by cisgender and heterosexual populations. Because marriage is associated with improved economic status and better health outcomes (see Chapter 8), it could become increasingly important to health and well-being as aging spouses experience declining health. There is a dearth of research on illness, caregiving, and end-of-life issues among SGD populations. Further study is needed to determine the effects of various experiences on the life course of aging populations and what types of social and economic support would improve outcomes for this population.

SUMMARY

In a complex system, elements interact with and provide feedback to other elements and to the individual at the center of the system, potentially leading to changes in behaviors, roles, and functions that yield unique effects. By applying a complex systems perspective in this report, the committee acknowledges that an individual's health and well-being emerge from dynamic interactions involving many subsystems or sectors in society.

Three key components of a complex social system are social ecology (how an individual's social spheres influence health and well-being), social constructionism (how culture, society, and history influence the ways in which individuals experience life and the meanings they derive from these experiences), and stigma (how dominant cultural beliefs and the distribution of power can lead to labeling, stereotyping, separation, status loss, and discrimination). Additional concepts that are particularly relevant to understanding sexual and gender diverse communities are intersectionality (how categories such as race, ethnicity, gender, sexuality, socioeconomic class, and HIV/disease status create and maintain forms of structural inequality and discrimination); identity affirmation (how people affirm their sexual orientation, gender identity, and other aspects of identity); and life course (how experiences over an entire lifetime accumulate and affect health and well-being at different ages and stages of development).

These theories and concepts can serve as lenses through which multidisciplinary forms of research evidence can be interpreted: they are included in this report to provide readers with depth of understanding of these influences and dynamics on the health and well-being of sexual and gender diverse people. In the following chapters, the committee uses these ideas where applicable to inform analyses of various domains of well-being.

REFERENCES

Berger B.E., Ferrans, C.E., and Lashley, F.R. (2001). Measuring stigma in people with HIV: Psychometric assessment of the HIV stigma scale. *Research in Nursing and Health*, *24*, 518–529.

Bowleg, L. (2013). "Once you've blended the cake, you can't take the parts back to the main ingredients": Black gay and bisexual men's descriptions and experiences of intersectionality. *Sex Roles, 68*(11-12), 754–767.

Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U., and Ceci, S.J. (1994). Nature-nurture reconceptualized: A bioecological model. *Psychological Review, 101*, 568–586.

Brooks, V.R. (1981). *Minority Stress and Lesbian Women*. Lexington, MA: Lexington Books.

Corrigan P.W., Sokol, K.A., and Rüsch, N. (2013). The impact of self-stigma and mutual help programs on the quality of life of people with serious mental illnesses. *Community Mental Health Journal, 49*(1), 1–6.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum,* 1989(1), Article 8. Available: http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8.

Crenshaw, K. (2017). *On Intersectionality: Essential Writings*. New York: The New Press.

Crosby, R.A., Salazar, L.F., and Hill, B.J. (2016). Gender affirmation and resiliency among Black transgender women with and without HIV infection. *Transgender Health, 1*(1), 86–93. Available: https://www.ncbi.nlm.nih.gov/pubmed/29159300.

Donnelly, R., Robinson, B.A., and Umberson, D. (2019). Can spouses buffer the impact of discrimination on depressive symptoms?: An examination of same-sex and different-sex marriages. *Society and Mental Health, 9*(2), 192–210. doi: 10.1177/2156869318800157.

Doreleijers, T.A., and Cohen-Kettenis, P.T. (2007). Disorders of sex development and gender identity outcome in adolescence and adulthood: Understanding gender identity development and its clinical implications. *Pediatric Endocrinology Reviews, 4*(4), 343–351.

Elder, G.H., Jr., Johnson, M.K., and Crosnoe, R. (2003). The emergence and development of life course theory. In J.T. Mortimer and M.J. Shanahan (Eds.), *Handbook of the Life Course* (pp. 3–19). New York: Kluwer Academic/Plenum Publishers.

Everett, B.G., Hatzenbuehler, M.L., and Hughes, T.L. (2016). The impact of civil union legislation on minority stress, depression, and hazardous drinking in a diverse sample of sexual-minority women: A quasi-natural experiment. *Social Science & Medicine*, *169*, 180–190. doi: 10.1016/j.socscimed.2016.09.036.

Floyd, F.J., and Bakeman, R. (2006). Coming-out across the life course: Implications of age and historical context. *Archives of Sexual Behavior*, *35*(3), 287–296.

Glenn, E.N. (2002). *Unequal Freedom: How Race and Gender Shaped American Citizenship and Labor*. Cambridge, MA: Harvard University Press.

Glynn, T.R., Gamarel, K.E., Kahler, C.W., Iwamoto, M., Operario, D., and Nemoto, T. (2016). The role of gender affirmation in psychological well-being among transgender women. *Psychology of Sexual Orientation and Gender Diversity, 3*(3), 336–344. Available: https://www.ncbi.nlm.nih.gov/pubmed/27747257.

Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, NJ: Prentice Hall.

Goldenberg, T., Jadwin-Cakmak, L., Popoff, E., Reisner, S.L., Campbell, B.A., and Harper, G.W. (2019). Stigma, gender affirmation, and primary healthcare use among Black transgender youth. *The Journal of Adolescent Health, 65*(4), 483–490. Available: https://www.ncbi.nlm.nih.gov/pubmed/31303554.

Hammack, P.L., Frost, D.M., Meyer, I.H., and Pletta, D.R. (2018). Gay men's health and identity: Social change and the life course. *Archives of Sexual Behavior, 47*(1), 59–74.

Hatzenbuehler, M.L. (2016). Structural stigma: Research evidence and implications for psychological science. *American Psychologist*, *71*(8), 742–751. doi: 10.1037/amp0000068.

Hatzenbuehler, M.L., and Link, B.G. (2014). Introduction to the special issue on structural stigma and health. *Social Science and Medicine, 103*, 1–6.

Herdt, G., and McClintock, M. (2000). The magical age of 10. *Archives of Sexual Behavior*, *29*(6), 587–606.

Herek, G.M. (2009). Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence, 24*(1), 54–74.

Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: The National Academies Press. doi: 10.17226/13128.

Kim, H.-J., and Fredriksen-Goldsen, K.I. (2016). Disparities in mental health quality of life between Hispanic and non-Hispanic white LGB midlife and older adults and the influence of lifetime discrimination, social connectedness, socioeconomic status, and perceived stress. *Research on Aging, 39*(9), 991–1012. doi: 10.1177/0164027516650003.

Levitt, H.M., and Ippolito, M.R. (2014). Being transgender: The experience of transgender identity development. *Journal of Homosexuality*, *61*(12), 1727–1758.

Link, B.G., and Phelan, J.C. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27*(1), 363–385.

Lupton, D. (2000). The social construction of medicine and the body. In G. Albrecht, R. Fitzpatrick, and S. Scrimshaw (Eds.), *Handbook of Social Studies in Health and Medicine* (pp. 50–63). Thousand Oaks, CA: SAGE Publishing. doi: 10.4135/9781848608412.

Major, B., and O'Brien, L.T. (2005). The social psychology of stigma. *Annual Review of Psychology, 56*, 393–421. doi: 10.1146/annurev.psych.56.091103.070137.

Martin-Storey, A., Cheadle, J.E., Skalamera, J., and Crosnoe, R. (2015). Exploring the social integration of sexual minority youth across high school contexts. *Child Development, 86*(3), 965–975.

May, V. (2015). *Pursuing Intersectionality, Unsettling Dominant Imaginaries*. New York: Routledge. doi: 10.4324/9780203141991.

Mendoza-Denton, R., Downey, G., Purdie, V.J., Davis, A., and Pietrzak, J. (2003). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal of Personality and Social Psychology, 83*(4), 896–918.

Meyer, I.H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697.

Murad, M.H., Elamin, M.B., Garcia, M.Z., Mullan, R.J., Murad, A., Erwin, P.J., and Montori, V.M. (2010). Hormonal therapy and sex reassignment: A systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clinical Endocrinology, 72*(2), 214–231. Available: https://www.ncbi.nlm.nih.gov/pubmed/19473181.

Nguyen, H.B., Chavez, A.M., Lipner, E., Hantsoo, L., Kornfield, S.L., Davies, R.D., and Epperson, C.N. (2018). Gender-affirming hormone use in transgender individuals: Impact on behavioral health and cognition. *Current Psychiatry Reports, 20*(12), 110. Available: https://www.ncbi.nlm.nih.gov/pubmed/30306351.

Pachankis, J.E. (2007). The psychological implications of concealing a stigma: A cognitive–affective–behavioral model. *Psychological Bulletin, 133*(2), 328–345.

Phelan, J., Link, B., and Dovidio, J.F. (2008). Stigma and prejudice: One animal or two? *Social Science and Medicine, 67*, 358–367.

Reczek, C. (2020). A decade of research on gender and sexual minority families. *Journal of Marriage and Family, 82*(1).

Reisner, S.L., Radix, A., and Deutsch, M.B. (2016). Integrated and gender-affirming transgender clinical care and research. *Journal of Acquired Immune Deficiency Syndrome, 72*(Suppl 3), S235–S242. Available: https://www.ncbi.nlm.nih.gov/pubmed/27429189.

Roen, K. (2019). Intersex or diverse sex development: Critical review of psychosocial health care research and indications for practice. *Journal of Sex Research*, *56*(4-5), 511–528.

Rowniak, S., Bolt, L., and Sharifi, C. (2019). Effect of cross-sex hormones on the quality of life, depression and anxiety of transgender individuals: A quantitative systematic review. *JBI Database of Systematic Reviews and Implementation Reports, 17*(9), 1826–1854. Available: https://www.ncbi.nlm.nih.gov/pubmed/31021971.

Russell, S.T., and Fish, J. (2016). Mental health in LGBT youth. *Annual Review of Clinical Psychology, 12,* 465–487. doi: 10.1146/annurev-clinpsy-021815-093153.

Ryan, C., Huebner, D., Diaz, R.M., and Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics*, *123*(1), 346–352.

Sallis, J.F., Owen, N., and Fisher, E.B. (2008). Ecological models of health behavior. In K. Glanz, B.K. Rimer, and K. Viswanath (Eds.), *Health Behavior and Health Education: Theory, Research, and Practice*, *4* (pp. 465–486). San Francisco, CA: John Wiley & Sons, Inc.

Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. (2010). *Healthy People 2020: An Opportunity to Address Societal Determinants of Health in the U.S.* Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Available: https://www.healthypeople.gov/sites/default/files/SocietalDeterminantsHealth.pdf.

Sevelius, J.M. (2013). Gender affirmation: A framework for conceptualizing risk behavior among transgender women of color. *Sex Roles, 68*(11–12), 675–689. Available: https://www.ncbi.nlm.nih.gov/pubmed/23729971.

Sevelius, J., Chakravarty, D., Neilands, T.B., Keatley, J., Shade, S.B., Johnson, M.O., Rebchook, G., and HRSA SPNS Transgender Women of Color Study Group. (2019). Evidence for the model of gender affirmation: The role of gender affirmation and healthcare empowerment in viral suppression among transgender women of color living with HIV. *AIDS and Behavior.* Available: https://www.ncbi.nlm.nih.gov/pubmed/31144131.

Shonkoff, J.P., Garner, A.S., Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, Section on Developmental and Behavioral Pediatrics, Siegel, B.S., Dobbins, M.I., Earls, M.F., Garner, A.S., McGuinn, L., Pascoe, J., and Wood, D.L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, *129*(1), e232–e246. doi: 10.1542/peds.2011-2663.

Steensma, T.D., Kreukels, B.P., de Vries, A.L., and Cohen-Kettenis, P.T. (2013). Gender identity development in adolescence. *Hormones and Behavior*, *64*(2), 288–297.

Sue, D.W., Capodilupo, C.M., Torino, G.C., Bucceri, J.M., Holder, A.M.B., Nadal, K.L., and Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist, 62*(4), 271.

Taylor, K.-Y. (2017). *How We Get Free: Black Feminism and the Combahee River Collective*. Chicago: Haymarket Books.

Thomeer, M.B., Paine, E.A., and Bryant, C. (2018). Lesbian, gay, bisexual, and transgender families and health. *Sociology Compass*, *12*, e12552. doi: 10.1111/soc4.12552.

Tomlinson, Y., and Baruch, M. (2013). *Framing Questions on Intersectionality*. U.S. Human Rights Network. Available: https://ushrnetwork.org/uploads/Resources/framing_questions_on_intersectionality_1.pdf.

Umberson, D., and Thomeer, M.B. (2020). Family matters: Research on family ties and health, 2010 to 2020. *Journal of Marriage and Family, 82*(1). doi: 10.1111/jomf.12640.

Watson, R.J., Grossman, A.H., and Russell, S.T. (2019). Sources of social support and mental health among LGB youth. *Youth and Society*, *51*(1), 30–48.

Wernick, J.A., Busa, S., Matouk, K., Nicholson, J., and Janssen, A. (2019). A systematic review of the psychological benefits of gender-affirming surgery. *The Urologic Clinics of North America, 46*(4), 475–486. Available: https://www.ncbi.nlm.nih.gov/pubmed/31582022.

White Hughto, J.M., and Reisner, S.L. (2016). A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. *Transgender Health, 1*(1), 21–31. Available: https://www.ncbi.nlm.nih.gov/pubmed/27595141.

PART II

UNDERSTANDING SEXUAL AND GENDER DIVERSE POPULATIONS

3

Demography and Public Attitudes of Sexual and Gender Diverse Populations

This chapter reviews demographic patterns and trends among sexual and gender diverse (SGD) populations. In any assessment of the demographic characteristics of these groups, visibility and the coming out process are critical considerations in interpretations of findings, particularly those focused on historical trends. Nearly all research in this area has focused on sexual orientation or same-sex sexual behavior or relationships. More recently and to a lesser extent there has been demographic research on transgender populations. There are still almost no demographic data on people with differences of sex development (DSD) in the general population or on people who might identify as intersex. This is a significant gap in terms of identifying and understanding the well-being of intersex populations.

This chapter focuses on overall prevalence estimates of sexual and gender diverse populations and provides some detail on geographic variation, age, race and ethnicity, and child-rearing practices of these populations. This does not represent an exhaustive list of important demographic traits. Information relating to economic status, immigration status, disability, and religion are discussed in greater detail in other chapters in this report.

The decision to disclose one's sexual orientation, gender identity, or intersex status in any data collection setting can be affected by factors that include a sense of social acceptance, the presence of nondiscrimination protections, and perceptions of confidentiality and privacy. In the absence of affirming and protective environments, policies, and practices, some who consider themselves to be lesbian, gay, bisexual, or transgender (LGBT), who have intersex traits/DSD, or who otherwise identify as not cisgender or heterosexual may decide not to disclose details of their sexual orientation, gender identity, or intersex status. Those decisions introduce a potentially inherent bias into assessments of SGD communities. Thus, it is important to understand that knowledge of the demographic characteristics of SGD populations is largely limited to information about those willing to disclose aspects of identity, behavior, or medical history that have been or still are stigmatized as non-normative.

PREVALENCE

Findings from both the General Social Survey (GSS) and Gallup show substantial increases in LGBT identification over the last decade. In combined GSS data for 2008–2012, 3.0 percent of adults identified as lesbian, gay, or bisexual. That figure increased by 60 percent, to 4.8 percent, in combined data for 2014–2018. In 2012, Gallup reported that 3.5 percent of U.S. adults identified as LGBT. That figure increased by almost 30 percent, to 4.5 percent, in the 2017 Gallup data. The GSS and Gallup figures imply that an estimated 11.4–12.2 million U.S. adults identify as LGBT: see Figure 3-1.[1] This number is roughly equivalent to the population of Ohio. Analyses of Gallup data suggest that virtually all of the change in LGBT identification is among younger age cohorts.[2]

Findings from 10 states using population-based data from the state-level Youth Risk Behavior Surveillance System show increases in adolescents aged 14–18 identifying as non-heterosexual, from 7.3 percent in 2009 to 14.3 percent in 2017. These data also show increases in same-sex sexual contact, from 7.7 percent in 2009 to 13.1 percent in 2017 (Raifman et al., 2020).

A lack of historical data on the transgender population limits the ability to consider changes to population estimates over time. In studies that rely on clinical records, primarily from Europe, estimates of the transgender population size range between 1 and 30 people per 100,000 (0.001 to 0.03 percent) (Goodman et al., 2019). Studies that focus instead on self-report among nonclinical populations find estimates that range between 0.1 and 2.0 percent (Goodman et al., 2019). A 2016 nationwide estimate using population data from the Behavioral Risk Factor Surveillance System (BRFSS) estimated that 0.6 percent of U.S. adults identify as transgender (Flores et al., 2016), along with 0.7 percent of adolescents aged 13–17 (Herman et

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[1] These numbers are based on a calculation by Gary J. Gates using Census Bureau estimates that there are nearly 254,000,000 adults aged 18 and older in the United States (see https://www.census.gov/data/tables/time-series/demo/popest/2010s-national-detail.html), of whom 4.5–4.8 percent are LGBT.

[2] See https://news.gallup.com/poll/201731/lgbt-identification-rises.aspx.

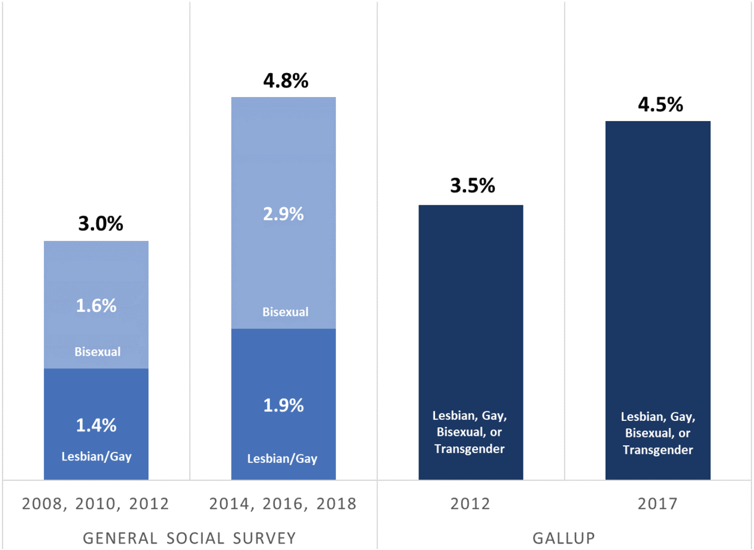

FIGURE 3-1 Lesbian, gay, bisexual, and transgender identification.
SOURCE: Data from the General Social Survey and Gallup Poll, 2008–2017.

al., 2017). This estimate implies that approximately 1.4 million adults[3] and 150,000 adolescents aged 13–17 identify as transgender in the United States (Herman et al., 2017). A meta-analysis of multiple data sources from 2007 to 2015 found a similar estimate of approximately 1 million transgender people (0.39 percent of the U.S. population), with higher proportions among younger age groups (Meerwijk and Sevelius, 2017). In California, findings from a population-based sample of high school students found that 1.1 percent identified as transgender (Perez-Brumer et al., 2017). Of note, many surveys that ask about gender identity simply add a “transgender” option to an existing binary (male/female) sex question, which has been shown to result in substantial undercounts of transgender individuals in comparison with a two-step question design that asks about both current gender identity and sex assigned at birth (Tate, Ledbetter, and Youssef, 2013; Tordoff et al., 2019).

Increases have also been found in reported same-sex sexual behavior, though more so among women. In the 2002 National Survey of Family

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[3] This figure is based on a calculation by Gary J. Gates using Census Bureau estimates that there are nearly 254,000,000 adults age 18 and older in the United States (see https://www.census.gov/data/tables/time-series/demo/popest/2010s-national-detail.html), of whom 0.6 percent are transgender.

Growth (NSFG), 11.2 percent of women aged 15–44 reported having had same-sex sexual contact (Mosher, Chandra, and Jones, 2005); in the 2011–2015 NSFG, that figure had increased to 17.6 percent.[4] That pattern does not hold for men. Among men aged 15–44, 6.0 percent reported any same-sex anal or oral sexual activity in the 2002 NSFG (Mosher, Chandra, and Jones, 2005), compared with 5.1 percent in 2011–2015.[5] Findings from the GSS show increases across birth cohorts in the proportion of adults who have had sex with both men and women since age 18: among those born prior to 1965, less than 5 percent of both men and women report such sexual activity; among those born between 1984 and 2000, the figure is more than 20 percent for women and 12 percent for men (Mishel et al., 2020).

The NSFG has also reported increases in same-sex sexual attraction. Among women aged 18–44 in the 2006–2010 data, 4.4 percent report being equally attracted to both men and women or mostly or exclusively attracted to women. In the 2011–2015 data, that figure was 5.5 percent. Women who said they were mostly rather than exclusively attracted to men also increased, from 12.1 percent to 12.7 percent. Among men aged 18–44, those who reported equal attraction to men and women or mostly or exclusively attracted to men increased in the two surveys from 2.7 percent to 3.1 percent. The proportion of men who said they were mostly rather than exclusively attracted to women increased from 3.5 percent to 4.0 percent.[6]

Recent estimates from the Current Population Survey (CPS) suggest that there are 1,012,000 same-sex couples in the United States, of whom 543,000 (54%) are married (U.S. Census Bureau, 2019). In comparison, estimates from the 2010 census found approximately 650,000 same-sex couples (O’Connell and Feliz, 2011).[7] Estimates based on Gallup data from June 2016 to June 2017 suggest that 23.3 percent of all LGBT-identified adults are married, with 10.2 percent married to a same-sex spouse and 13.1 percent married to a different-sex spouse. An additional 10.8 percent are cohabiting with a partner: 6.6 percent are cohabiting with a same-sex partner and 4.2 percent with a different-sex partner (Jones, 2017). It is important to note that many bisexuals, who account for more than half of adults who identify as LGBT, report cohabitation with different-sex partners and spouses, likely accounting for many of the LGBT adults who report living with different-sex partners or spouses.

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[4] See https://www.cdc.gov/nchs/nsfg/key_statistics/s.htm#sexualfemales.

[5] See https://www.cdc.gov/nchs/nsfg/key_statistics/s.htm#oralanal.

[6] Key Statistics from the National Survey of Family Growth: see https://www.cdc.gov/nchs/nsfg/key_statistics/s.htm#sexualattraction.

[7] Of note, there are methodological differences in how the CPS and the 2010 census identify same-sex couples. Also, the 2010 figure is adjusted from original census tabulations to account for measurement error due to potential sex miscoding among different-sex couples.

Increases in LGBT identification are likely a result of more people in SGD populations being willing and able to self-identify and be visible. Analyses of several population-based data sources, however, show that these increases are not uniform by sexual orientation identity, age, race, or ethnicity. In particular, the evidence suggests that increases in LGBT identification are more prominent among bisexual people, women, younger adults, and racial and ethnic minorities.[8] Unfortunately, research explaining why particular groups have become more willing to disclose their LGBT identification remains sparse.

THE ROLE OF PUBLIC ATTITUDES

Historic trends in national LGBT prevalence estimates offer evidence of a link between social acceptance and LGBT identification. In 1972 the GSS reported that 73 percent of American adults believed that homosexuality was always wrong, while 11 percent believed that homosexuality was not wrong at all. In 2008, only a small majority, 52 percent, said such relationships were always wrong, while 38 percent said that same-sex sexual relationships are not wrong at all. By 2018, only 32 percent said homosexuality was always wrong, and 58 percent said it was not wrong at all (Gates, 2017): see Figure 3-2.

Gallup analyses show similar trends. In 2008, 55 percent of U.S. adults thought that gay and lesbian relationships between consenting adults should be legal. By 2019, that figure had risen to 73 percent (Gallup, 2019). There

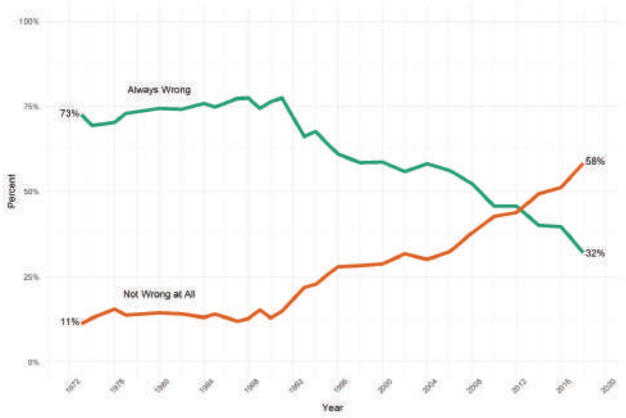

FIGURE 3-2 Approval of homosexuality, 1972–2018.
SOURCE: Data from the General Social Survey cumulative data file, 1972–2018.

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[8] See https://news.gallup.com/poll/201731/lgbt-identification-rises.aspx.

are insufficient longitudinal data to draw conclusions about historical trends in public attitudes about transgender people, but the growing visibility of transgender people in the media and in public life over the past 10 years may indicate a social climate of growing acceptance. For example, Jones and colleagues (2019b) found that, from 2017 to 2019, people favorable attitudes toward transgender rights markedly increased. Almost half (49%) of U.S. adults across all age groups and partisan affiliations in a 2020 poll from the Kaiser Family Foundation (KFF) believed U.S. society had not gone far enough in accepting people who are transgender, compared with only 15 percent who said society has gone too far (Kirzinger et al., 2020). The percentage who say society has not gone far enough has increased by 10 points since a similar poll conducted in 2017 (Horowitz, Parker, and Stepler, 2017).[9]

In a 2019 poll, 63 percent of all respondents said that lesbian, gay, and bisexual people experience "a great deal" or "a fair amount" of discrimination in the United States today, and 69 percent said the same about transgender.[10] In a recent poll, large majorities of the American public said that there is at least some discrimination against lesbian, gay, and bisexual people (74%) and transgender people (79%) in the United States today, which is comparable to the proportion who believe discrimination exists against Black (84%) and Hispanic people (77%) (Kirzinger et al., 2020). In the KFF poll, the proportion of respondents who said there is "a lot" of discrimination against transgender people in the United States today was comparable to those who said the same about Black people (45% and 53%, respectively) (Kirzinger et al., 2020).

In tandem with awareness of ongoing discrimination against SGD people, there is also widespread support for policies that address discrimination. A recent study found that 71 percent of U.S. adults supported nondiscrimination protections for LGBT people in employment, public accommodations, and housing (Jones et al., 2019a). Although support varied by partisan and individual demographic characteristics, it is rare to find less than a majority of any demographic group supporting nondiscrimination protections. For example, 56 percent of Republicans, 70 percent of Mormons, 60 percent of Muslims, 54 percent of white evangelical Protestants, and 65 percent of Southerners supported broad nondiscrimination protections (Jones et al., 2019a). In a 2016 poll on education, 86 percent said they believed laws should be in place to protect transgender children from bullying (Taylor et al., 2018). Public attitudes about transgender people

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[9] See https://www.pewresearch.org/fact-tank/2017/11/08/transgender-issues-divide-republicans-and-democrats/.

[10] See https://d25d2506sfb94s.cloudfront.net/cumulus_uploads/document/x3neaunoh2/econTabReport.pdf.

serving openly in the military tend to also be broadly supportive: a 2016 survey found 68 percent of adults favored allowing transgender people to serve openly (Taylor et al., 2018; see also Lewis et al., 2017). Among active-duty military personnel, 66 percent supported transgender military service (Dunlap et al., 2020). In health care, a 2020 poll found that large majorities said it should be illegal for doctors and other health care providers to refuse to treat people because they are lesbian, gay, or bisexual (89 percent) or transgender (88%) (Kirzinger et al., 2020). Eighty-five percent of respondents agreed that health insurance companies should not be able to discriminate against transgender people in health insurance coverage (Kirzinger et al., 2020).

The public appears more divided on other policies, such as including gender identity protections in public accommodations (e.g., public restrooms), and whether businesses and others should be allowed to deny services to LGBT people on the grounds of a sincerely held religious belief (Taylor et al., 2018). In a recent poll, however, majorities of the public opposed allowing a range of entities to invoke religious exemptions to avoid serving gay and lesbian people, including small business owners (5%), licensed professionals (67%), adoption agencies (60 percent), and companies providing wedding services (55%) (Jones et al., 2019b). In a 2015 poll, two-thirds of respondents agreed that government officials should be obligated to serve everyone the same regardless of their religious beliefs.[11] Adults were ambivalent about permitting transgender people to participate in sex-segregated sports according to their current gender identity: a 2015 survey found that about one-third approved of transgender people playing sports in accordance with their gender identity, about one-third disapproved, and about one-third did not approve or disapprove (Flores et al., 2020).

Acceptance has not grown uniformly among American adults. A variety of studies have shown that five demographic characteristics and personal experiences lead people to be more accepting than others (Baunach, 2011, 2012). One factor that contributes to an individual's accepting attitudes about SGD people and their rights is demographic characteristics (lesbian women and gay men: Baunach, 2011, 2012; Becker, 2012; Becker and Scheufele, 2011; transgender people: Flores, 2015; Norton and Herek, 2013; Taylor et al., 2018). A second factor is values, such as egalitarianism, traditionalism, and authoritarianism (lesbian women and gay men: Brewer, 2003a, 2003b, 2007; Gaines and Garand, 2010; transgender people: Miller et al., 2017; Taylor et al., 2018). A third factor is religion (lesbian women

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[11] See https://theharrispoll.com/as-kentuckys-rowan-county-clerk-kim-davis-may-now-realize-most-americans-believe-that-government-officials-should-not-allow-their-religious-beliefs-to-stand-in-the-way-of-issuing-marriage-li/.

and gay men: Olson, Cadge, and Harrison, 2006; transgender people: Taylor et al., 2018). A fourth factor is emotional predispositions (lesbian women and gay men: Gadarian and van der Vort, 2018; Harrison and Michelson, 2017; transgender people: Michelson and Harrison, 2020; Miller et al., 2017). The fifth factor is personal experiences, such as knowing individual SGD people (lesbian women and gay men: Herek and Capitanio, 1996; Lewis, 2011; transgender people: Jones et al., 2018; Tadlock et al., 2017). Table 3-1 presents a summary of these patterns. It is worth noting that adults in the United States tend to more often report they personally know at least one LGB person (82%; MTV, 2017) than they know at least one transgender person (36%; Kirzinger et al., 2020).

TABLE 3-1 Characteristics that Relate to Attitudes toward Sexual and Gender Diverse Populations

Trait	Less Support	More Support	Citation
		Demographic Characteristics	
Sexual Orientation	Heterosexuals	Lesbians, Gay Men, and Bisexuals	Haider-Markel and Miller (2017)
Gender Identity	Cisgender	Transgender	Flores et al. (2020)
Age	Older individuals	Younger Individuals	Garretson (2015)
Gender	Males	Females	Herek (2002)
Educational Attainment	High School or less	College degree or more	Flores (2015)
Race	Indeterminate	Indeterminate	Abrajano (2010); Lewis et al. (2017)
Ethnicity	Indeterminate	Indeterminate	Abrajano (2010); Lewis et al. (2017)
		Values	
Moral Traditionalism	More traditionalist	Less traditionalist	Flores et al. (2020); Gaines and Garand (2010)
Authoritarianism	More authoritarian	Less authoritarian	Flores et al. (2020); Miller et al. (2017)
Religion	Evangelical Christians	Agnostics and Atheists	Olson, Cadge, and Harrison (2006); Taylor et al. (2018)
Religiosity	Strong adherents	Weak adherents	Olson, Cadge, and Harrison (2006)
		Emotion	
Disgust	More sensitive	Less sensitive	Gadarian and van der Vort (2018); Miller et al. (2017)
		Context	
Region	Residing in the South	Residing not in the South	Lewis and Galope (2014)
LGB Population Density	Fewer LGB People	More LGB People	Flores (2014)

GEOGRAPHIC VARIATION

Assessments of geographic differences in LGBT identification also offer evidence of the associations among social acceptance, legal protections, and willingness to disclose. Even with changing public attitudes about SGD populations, there remain regional differences in levels of acceptance. Rural locations, locations with smaller SGD populations, and locations with larger socially conservative religious communities all show higher levels of stigma and less acceptance (Eldridge, Mack, and Swank, 2006; Flores, 2014; Snively et al., 2004; Taylor, Lewis, and Haider-Markel, 2018; Taylor et al., 2018). A Williams Institute analysis of 2017 data from Gallup showed that LGBT identification was higher in the Northeast and along the West coast, which are areas that tend to have higher levels of social acceptance and legal protections for SGD populations: see Figure 3-3.

Although there may be some differences in the mobility patterns of LGBT individuals—for example, some LGBT people with the ability and resources to relocate may disproportionately move to places with greater social acceptance and legal protections—evidence from the GSS suggests that this likely does not account for most of the geographic differences observed in the Gallup data. Analysis of combined GSS data from 2014, 2016, and 2018 suggests that 37 percent of respondents who identified as

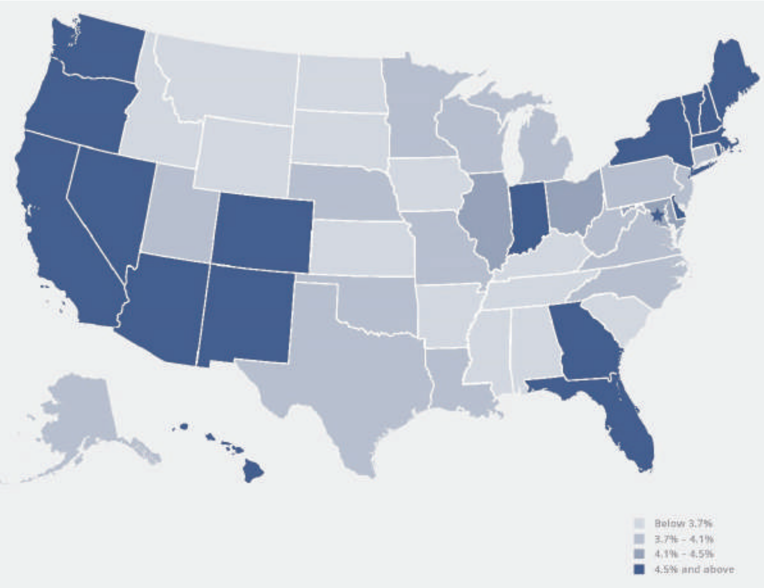

FIGURE 3-3 Proportion of adults age 18 and older identifying as LGBT, by state.
SOURCE: Williams Institute. (2019). *LGBT Demographic Data Interactive*. UCLA School of Law.

lesbian, gay, or bisexual say that they live in a state that differs from the state where they lived when they were 16 years old, which is not statistically different from the 35 percent of heterosexual respondents with the same response.[12] Even if the mobility patterns of lesbian, gay, and bisexual people differ from those of heterosexuals, the similarity between the two groups in the probability of moving likely means that there is not enough mobility among the former group to explain substantial state-level variation in LGBT population sizes. It is more likely that higher levels of social acceptance and legal protections are associated with increased willingness among LGBT people to identify as such on surveys.

In a statewide estimate of support for legal marriage recognition for same-sex couples, Flores and Barclay (2015) found that each state increased in level of support between 1992 and 2014, though some states are far more accepting than others: see Figure 3-4. In 2014 the District of Columbia was notably the most favorable at 86 percent, while southern states such as Alabama remained less approving at 35 percent. Thus, regional differences in

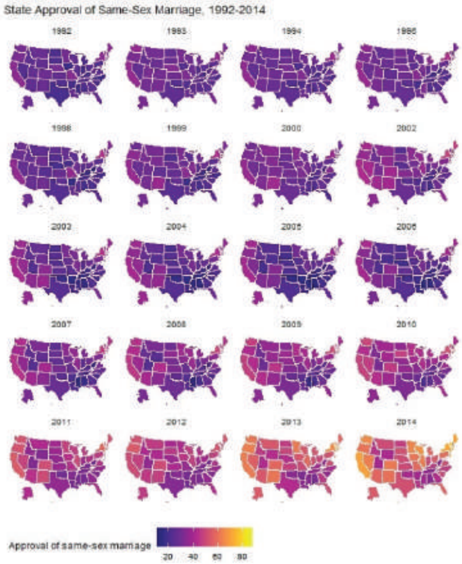

FIGURE 3-4 State approval of same-sex marriage, 1992–2014.
SOURCE: Created by committee with data from Flores and Barclay (2015).

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[12] Information retrieved from analyses of General Social Survey data by Gary Gates in 2018, using the Survey Documentation and Analysis online tool maintained by the Institute for Scientific Analysis, San Francisco, CA, under a licensing agreement with the University of California. Tool is available at https://sda.berkeley.edu/sdaweb/analysis/?dataset=gss18.

societal stigma and acceptance both at the state and local levels characterize the variety of contexts in which SGD populations live. In 2019, however, the majority of residents in every state supported sexual orientation and gender identity nondiscrimination protections in employment, accommodations, and housing (Jones et al., 2019a).

GENDER AND SEXUAL ORIENTATION

Analyses of data from the GSS and the National Health Interview Study (NHIS) show a consistent pattern in which increases in lesbian, gay, and bisexual identification have been more pronounced among women and bisexual people: see Figure 3-5. In the 2008–2012 GSS, women comprised 59 percent of the sample of such self-identified adults, with 37 percent of the LGB sample identifying as bisexual women. In the 2014–2018 data, the share of women increased to 66 percent, with 46 percent of the LGB adult sample identifying as bisexual women. The pattern is similar in the NHIS, although the changes are somewhat more modest. In 2013, 53 percent of self-identified lesbian, gay, and bisexual adults on the NHIS were female; by 2018, that proportion had increased to 56 percent. The proportion of NHIS respondents identifying as bisexual also increased over the 5-year

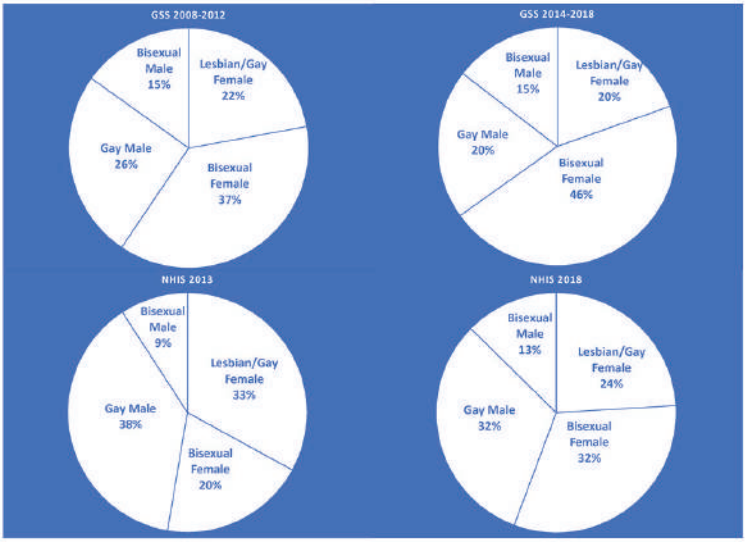

FIGURE 3-5 Sexual orientation identity and gender among lesbian, gay, and bisexual adults age 18 and older.
NOTES: GSS, General Social Survey; NHIS, National Health Interview Survey.

period, from 20 percent to 32 percent among women and from 9 percent to 13 percent among men. Women also represent a majority of same-sex couples. Analyses of Census Bureau data show that 54 percent of cohabiting same-sex couples are female (Williams Institute, 2019).

Among transgender people, 46 percent of all transgender respondents on the 2015–2016 California Health Interview Study (CHIS) reported that they were assigned female at birth, and 54 percent were assigned male. Among all transgender respondents, 7 percent identified their current gender as male, 32 percent as female, 46 percent as transgender, and 15 percent indicated that they identified as a gender not listed (Herman, Wilson, and Becker, 2017). Analyses of multiyear pooled BRFSS data from the jurisdictions that fielded the sexual orientation and gender identity module between 2014 and 2016 indicate that approximately half (48%) of transgender BRFSS respondents identified as transgender women, almost one-third (31%) identified as transgender men, and one-fifth (20 percent) identified as gender nonconforming (Downing and Przedworski, 2018).

In the BRFSS sample, 74.6 percent of transgender women identified as heterosexual, compared with 69.8 percent of transgender men and 52.3 percent of gender-nonconforming respondents. The group with the highest proportion of bisexual respondents was gender-nonconforming people (22.9%) compared with 11.5 percent of transgender women and 10.2 percent of transgender men. Among transgender women, 4 percent identified as lesbian or gay, compared with 11.1 percent of transgender men and 2.0 percent of gender-nonconforming respondents.

In the 2015 U.S. Transgender Survey (USTS), a nationwide purposive sample of almost 28,000 transgender and non-binary adults, 57 percent of respondents said they were assigned female at birth, and 43 percent were assigned male at birth (James et al., 2016). Gender identity was assessed differently on the CHIS, the BRFSS, and the USTS, but in the USTS, 29 percent of respondents identified as transgender men, 33 percent as transgender women, 35 percent as non-binary, and 3 percent as crossdressers. Among USTS respondents, 21 percent identified their sexual orientation as queer; 18 percent as pansexual; 16 percent as gay, lesbian, or same-gender-loving; 15 percent as straight; 14 percent as bisexual; and 10 percent as asexual.

AGE

Increases in LGBT identification are more pronounced in younger age cohorts. Gallup analyses show that virtually all the growth in the proportion of the U.S. population identifying as LGBT between 2012 and 2017 can be attributed to increases among those born between 1980 and 1999, often called the millennial generation. The proportion of that group identifying as LGBT was 5.8 percent in 2012 and 8.2 percent in 2017. Other age cohorts were virtually unchanged (Newport, 2018). In the 2013 NHIS, 1.9 percent of those aged 18–44 identified as lesbian or gay, and 1.1 percent identified as bisexual. In the 2018 NHIS, those figures were 1.8 percent and 2.2 percent, respectively. Among those aged 45–64, there was virtually no change: in 2013, 1.8 percent identified as lesbian or gay and 0.4 percent identified as bisexual; in 2018 the percentages were 1.8 percent and 0.6 percent, respectively.[13]

Analyses of the GSS data show similar patterns. Among those born between 1980 and 1999, 1.7 percent identified as lesbian or gay, and 2.8 percent identified as bisexual in combined data from 2008, 2010, and 2012. In the 2014, 2016, and 2018 combined data, those figures rose to 2.8 percent and 5.4 percent, respectively. Among all other respondents, the proportions went from 1.4 percent lesbian or gay and 1.2 percent bisexual in the earlier data to 1.5 percent lesbian or gay and 1.5 percent bisexual in the later data, a much more modest increase.

The prevalence of transgender identity is also slightly higher in younger populations, although age differences are less pronounced than for sexual orientation. Estimates from the BRFSS show that 0.7 percent of both 13- to 17-year-olds and 18- to 24-year-olds identify as transgender, compared with 0.6 percent of those aged 25–64 and 0.5 percent of those aged 65 and older (Flores et al., 2017).

RACE AND ETHNICITY

In general, the racial and ethnic characteristics of the LGBT population are similar to those of the general population, and changes over the last decade have mirrored changes in the general population. Data from the 2010 census showed that 36.3 percent of individuals in same-sex couples identified their race or ethnicity as something other than non-Hispanic white (Humes, Jones, and Ramirez, 2011). That figure had increased to 39.6 percent in 2018 (U.S. Census Bureau, 2018). In the 2012 Gallup data, 33 percent of LGBT-identified respondents indicated they were something other than non-Hispanic white. That figure increased to 42 percent in the 2017 Gallup data.[14] In the GSS, the proportion changed from 34 percent to 38 percent between the combined 2008–2012 data and the 2014–2018 data. In the NHIS data, the numbers were 31 percent in 2013 and 34 percent in 2018 (Gates, 2018).[15] By comparison, Census Bureau statistics from

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[13] See https://www.cdc.gov/nchs/nhis/data-questionnaires-documentation.htm.

[14] See https://news.gallup.com/poll/201731/lgbt-identification-rises.aspx.

[15] Information retrieved from data analyses of the General Social Survey by Gary Gates in 2018, using the Survey Documentation and Analysis online tool maintained by the Institute for Scientific Analysis, San Francisco, CA, under a licensing agreement with the University of California. Tool is available at https://sda.berkeley.edu/sdaweb/analysis/?dataset=gss18.

2019 show that 39.6 percent of the U.S. population identifies as something other than non-Hispanic white.[16]

In general, data providing detail on the race and ethnicity of sexual and gender diverse populations remain rare, often due to small sample sizes. One exception is Gallup data, which in 2016 showed higher rates of LGBT identification among non-Hispanic Black (4.6%), Hispanic (5.4%), non-Hispanic Asian (4.9%), and non-Hispanic individuals of other races (6.3%), than among non-Hispanic whites (3.6%).[17]

Analyses of the 2014 BRFSS data suggest that transgender adults in the United States are more likely to be nonwhite than the general population: 55 percent of transgender adults identified as white, compared with 66 percent in the general adult population. On a more detailed level, 16 percent of transgender adults identified as African American or Black, 21 percent as Hispanic or Latino, and 8 percent as another race or ethnicity. In the general population, the corresponding numbers are 12 percent, 15 percent, and 8 percent, respectively (Flores, Brown, and Herman, 2016).

CHILD REARING

Based on analyses of 2014–2018 GSS data, an estimated 37 percent of lesbian, gay, and bisexual individuals report having ever had a child. By comparison, 74 percent of heterosexual adults in those data report the same, making heterosexuals twice as likely to report having a child (Gates, 2018).[18] This dynamic is discussed further in Chapter 8.

Estimates from 2017 Gallup data suggest that 29 percent of LGBT adults aged 25 and older are currently living with a child under age 18 (Williams Institute, 2019). Among same-sex couples, 2010 Census Bureau data suggest that 19 percent are raising a child under age 18 (Gates, 2013). The comparable figure for different-sex couples was 41 percent.[19] LGBT-identified women and women in same-sex couples in Gallup and U.S. Census Bureau data, respectively, are much more likely than their male counterparts to be raising children (Gates, 2013). A review of 51 studies focused on transgender parenting suggests that between a quarter and a half of transgender individuals report parenthood. This compares with 65 percent of adult males and 74 percent of adult females in the U.S. general

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[16] See https://www.census.gov/quickfacts/fact/table/US/PST045219.

[17] See https://news.gallup.com/poll/201731/lgbt-identification-rises.aspx.

[18] Information retrieved from data analyses of the General Social Survey by Gary Gates in 2018, using the Survey Documentation and Analysis online tool maintained by the Institute for Scientific Analysis, San Francisco, CA, under a licensing agreement with the University of California. Tool is available at https://sda.berkeley.edu/sdaweb/analysis/?dataset=gss18.

[19] See https://www2.census.gov/programs-surveys/demo/tables/same-sex/time-series/ssc-house-characteristics/ssex-tables-2011.xls.

population (Stotzer, Herman, and Hasenbush, 2014). There are no statistics available on parenting among the intersex population.

SUMMARY AND CONCLUSIONS

The available data on sexual and gender diverse populations show a picture of dynamic and rapidly evolving populations. SGD populations are becoming younger, more female, and more racially and ethnically diverse, and they include an increasing proportion of bisexual individuals. Many lesbian, gay, and bisexual people also have children. It seems possible that similar trends are occurring among transgender and other gender diverse populations, though data to track population-wide trends among these groups are not yet available. Population-based data on intersex populations are generally not available at all.

One challenge in assessing SGD population demographics is that many currently used demographic data collection instruments do not measure sexual orientation, gender identity, or intersex status at all. Instruments that do measure sexual orientation tend to assess only sexual orientation identity; they do not cover other important aspects of sexual diversity, most notably sexual attraction and sexual behavior. Moreover, instruments that measure gender identity tend to use a single-item approach that may result in undercounts of transgender respondents.

Social acceptance of sexual and gender diversity has been increasing. A majority of Americans approve of same-sex relationships and support federal discrimination protections for LGBT people. Taken together, the available evidence suggests that changes in LGBT populations may be a product of factors that include growing societal awareness and acceptance of diverse sexual and gender identities; expansion of laws, policies, and practices that protect and support communities and individuals regardless of sexual orientation or gender identity; and an increasing willingness and ability among LGBT and other SGD populations to self-identify or disclose their transgender identity or same-sex attraction, behavior, identity, or relationship.

> **CONCLUSION 3-1: Demographic analyses of sexual and gender diverse populations are complicated by the fact that visibility among these groups is rapidly changing, with a generally improving but fluctuating social climate.**

Although the possibility that the underlying distribution of SGD people has changed or is changing cannot be ruled out, it is clear that the evolving societal and political context has created new possibilities for diverse sexual and gender identities to be understood and claimed by growing numbers of people. The demographic shifts observed in SGD populations challenge researchers and policy makers to collect more and better data and to consider the degree to which research questions, media discussions, and policy proposals reflect the most pressing needs of these populations and the contemporary challenges they face.

> **CONCLUSION 3-2: Understanding the changing demography of sexual and gender diverse populations is important for guiding policy efforts and the allocation of often limited resources to address health, economic status, and other disparities that affect these populations.**

REFERENCES

Abrajano, M. (2010). Are Blacks and Latinos responsible for the passage of Proposition 8? Analyzing voter attitudes on California's proposal to ban same-sex marriage in 2008. *Political Research Quarterly, 63*(4), 922–932. doi: 10.1177/2F1065912910373555.

Baunach, D.M. (2011). Decomposing trends in attitudes toward gay marriage, 1988-2006. *Social Science Quarterly, 92*(2), 346–363. doi: 10.1111/j.1540-6237.2011.00772.x.

Baunach, D.M. (2012). Changing same-sex marriage attitudes in American from 1988 through 2010. *Public Opinion Quarterly, 76*(2), 364–378. doi: 10.1093/poq/nfs022.

Becker, A.B. (2012). What's marriage (and family) got to do with it? Support for same-sex marriage, legal unions, and gay and lesbian couples raising children. *Social Science Quarterly, 93*(4), 1007–1029. doi: 10.1111/j.1540-6237.2012.00844.x.

Becker, A.B., and Scheufele, D.A. (2011). New voter, new outlook? Predispositions, social networks, and the changing politics of gay civil rights. *Social Science Quarterly, 92*(2), 324–345. doi: 10.1111/j.1540-6237.2011.00771.x.

Brewer, P.R. (2003a). The shifting foundations of public opinion about gay rights. *Journal of Politics, 65*(4), 1208–1220. doi: 10.1111/1468-2508.t01-1-00133.

Brewer, P.R. (2003b). Values, political knowledge, and public opinion about gay rights: A framing-based account. *Public Opinion Quarterly, 67*(2), 173–201. doi: 10.1086/374397.

Brewer, P.R. (2007). *Value War: Public Opinion and the Politics of Gay Rights*. Lanham, MD: Rowman & Littlefield Publishers, Inc.

Downing, J.M., and Przedworski, J.M. (2018). Health of transgender adults in the U.S., 2014–2016. *American Journal of Preventive Medicine*, *55*(3), 336–344. doi: 10.1016/j.amepre.2018.04.045.

Dunlap, S.L., Holloway, I.W., Pickering, C.E., Tzen, M., Goldbach, J.T., and Castro, C.A. (2020). Support for transgender military service from active duty United States military personnel. *Sexuality Research and Social Policy*. doi: 10.1007/s13178-020-00437-x.

Eldridge, V.L., Mack, L., and Swank, E. (2006). Explaining comfort with homosexuality in rural America. *Journal of Homosexuality, 51*(2), 39–56.

Flores, A.R. (2014). Reexamining context and same-sex marriage: The effect of demography on public support for same-sex relationship recognition. *International Journal of Public Opinion Research, 26*(3), 283–300.

Flores, A.R. (2015). Attitudes toward transgender rights: Perceived knowledge and secondary interpersonal contact. *Politics, Groups, and Identities, 3*(3), 398–416. doi: 10.1080/21565503.2015.1050414.

Flores, A.R., and Barclay, S. (2015). *Trends in Public Support for Marriage for Same-Sex Couples by State*. Williams Institute, UCLA School of Law. Available: https://escholarship.org/content/qt7d66v2mt/qt7d66v2mt.pdf.

Flores, A.R., Brown, T.N.T., and Herman, J.L. (2016). Race and ethnicity of adults who identify as transgender in the United States. Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Race-and-Ethnicity-of-Transgender-Identified-Adults-in-the-US.pdf.

Flores, A.R., Herman, J.L., Brown, T.N.T., Wilson, B.D.M., and Conron, K.J. (2017). *Age of Individuals Who Identify as Transgender in the United States*. Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/TransAgeReport.pdf.

Flores, A.R., Herman, J.L., Gates, G.J., and Brown, T.N.T. (2016). How many adults identify as transgender in the United States? Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/How-Many-Adults-Identify-as-Transgender-in-the-United-States.pdf.

Flores, A.R., Haider-Markel, D.P., Lewis, D.C., Miller, P.R., Tadlock, B.L., and Taylor, J.T. (2020). Public attitudes about transgender participation in sports: The roles of gender, gender identity conformity, and sports fandom. *Sex Roles, 83*, 382–398. doi: 10.1007/s11199-019-01114-z.

Gadarian, S.K., and van der Vort, E. (2018). The gag reflex: Disgust rhetoric and gay rights in American politics. *Political Behavior, 40*(2), 521–543. doi: 10.1007/s11109-017-9412-x.

Gaines, N.S., and Garand, J.C. (2010). Morality, equality, or locality: Analyzing the determinants of support for same-sex marriage. *Political Research Quarterly, 63*(3), 553–567. doi: 10.1177%2F1065912909333132.

Gallup. (2019). *Gay and Lesbian Rights*. Available: https://news.gallup.com/poll/1651/gay-lesbian-rights.aspx.

Garretson, J.J. (2015). Exposure to the lives of lesbians and gays and the origin of young people's greater support for gay rights. *International Journal of Public Opinion Research, 27*(2), 277–288. doi: 10.1093/ijpor/edu026.

Gates, G.J. (2013). *LGBT Parenting in the United States*. Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/LGBT-Parenting-US-Feb-2013.pdf.

Gates, G.J. (2017). *In U.S., More Adults Identifying as LGBT.* Gallup. Available: https://news.gallup.com/poll/201731/lgbt-identification-rises.aspx.

Goodman, M., Adams, N., Corneil, T., Kreukels, B., Motmans, J., and Coleman, E. (2019). Size and distribution of transgender and gender nonconforming populations. *Endocrinology and Metabolism Clinics of North America, 48,* 303–321.

Haider-Markel, D.P., and Miller, P.R. (2017). Equality of transformation? LGBT political attitudes and priorities and the implications for the movement. In M. Brettschneider, S. Burgess, and C. Keating (Eds.), *LGBTQ Politics: A Critical Reader* (pp. 270–294). New York: NYU Press.

Harrison, B.F., and Michelson, M.R. (2017). What's love got to do with it?: Emotion, rationality, and framing LGBT rights. *New Political Science, 39*(2), 177–197. doi: 10.1080/07393148.2017.1301311.

Herek, G.M. (2002). Gender gaps in public opinion about lesbians and gay men. *Public Opinion Quarterly, 66*(1), 40–66. doi: 10.1086/338409.

Herek, G.M., and Capitanio, J.P. (1996). "Some of my best friends": Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin, 22*(4), 412–424. doi: 10.1177/0146167296224007.

Herman, J.L., Wilson, B.D.M., and Becker, T. (2017). Demographic and health characteristics of transgender adults in California: Findings from the 2015–2016 California health interview survey. Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/CHIS-Transgender-Adults-Oct-2017.pdf.

Horowitz, J.M., Parker, K., and Stepler, R., 2017. Wide Partisan Gaps in U.S. Over How Far the Country Has Come on Gender Equality. Available: https://www.pewsocialtrends.org/2017/10/18/wide-partisan-gaps-in-u-s-over-how-far-the-country-has-come-on-gender-equality/

Humes, K.R., Jones, N.A., and Ramirez, R.R. (2011). Overview of race and Hispanic origin: 2010. *2010 Census Briefs*. U.S. Census Bureau, U.S. Department of Commerce, Economics and Statistics Administration. Available: https://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf.

James, S.E., Herman, J.L., Rankin, S., Keisling, M., Mottet, L., and Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality. Available: https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf.

Jones, J.M. (2017). *In U.S., 10.2% of LGBT Adults Now Married to Same-Sex Spouse*. Gallup. Available: https://news.gallup.com/poll/212702/lgbt-adults-married-sex-spouse.aspx.

Jones, P.E., Brewer, P.R., Young, D.G., Lambe, J.L., and Hoffman, L.H. (2018). Explaining public opinion toward transgender people, rights, and candidates. *Public Opinion Quarterly, 82*(2), 252–278. doi: 10.1093/poq/nfy009.

Jones, R.P., Najle, M., Bola, O., and Greenberg, D. (2019a). *After Stonewall, Widespread Support for LGBT Issues: Findings from the 2018 American Values Atlas*. Washington, DC: Public Religion Research Institute. Available: https://www.prri.org/wp-content/uploads/2019/03/PRRI-Mar-2019-American-Values-Atlas.pdf.

Jones, R.P., Jackson, N., Najle, M., Bola, O., and Greenberg, D. (2019b). *America's Growing Support for Transgender Rights*. Public Religion Research Institute. Available: https://www.prri.org/research/americas-growing-support-for-transgender-rights.

Kirzinger, A., Kates, J., Dawson, L., Muñana, C., and Brodie, M. (2020). *Majorities Support Policies Banning Discrimination Against LGBTQ Individuals' Health Care Access*. Kaiser Family Foundation. Available: https://www.kff.org/other/poll-finding/majorities-support-policies-banning-discrimination-against-lgbtq-individuals-health-care-access.

Lewis, D.C., Flores, A.R., Haider-Markel, D.P., Miller, P.R., Tadlock, B.L., and Taylor, J.K. (2017). Degrees of acceptance: Variation in public attitudes toward segments of the LGBT community. *Political Research Quarterly, 70*(4), 861–875.

Lewis, G.B. (2011). The friends and family plan: Contact with gays and support for gay rights. *Policy Studies Journal, 39*(2), 217–238. doi: 10.1111/j.1541-0072.2011.00405.x.

Lewis, G.B., and Galope, R.V. (2014). Support for lesbian and gay rights: How and why the South differs from the rest of the country. *American Review of Politics, 34*, 271–297. doi: 10.15763/issn.2374-779X.2014.34.0.271-297.

Meerwijk, E.L., and Sevelius, J.M. (2017). Transgender population size in the United States: A meta-regression of population-based probability samples. *American Journal of Public Health, 107*(2), e1–e8. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5227946.

Michelson, M.R., and Harrison, B.F. (2020). *Transforming Prejudice: Identity, Fear, and Transgender Rights*. New York: Oxford University Press.

Miller, P.R., Flores, A.R., Haider-Markel, D.P., Lewis, D.C., Tadlock, B.L., and Taylor, J.K. (2017). Transgender politics as body politics: Effects of disgust sensitivity and authoritarianism on transgender rights attitudes. *Politics, Groups, and Identities, 5*(1), 4–24. doi: 10.1080/21565503.2016.1260482.

Mishel, E., England, P., Ford, J., and Caudillo, M.L. (2020). Cohort increases in sex with same-sex partners: Do trends vary by gender, race, and class? *Gender and Society*, *34*(2), 178–209. doi: 10.1177/0891243219897062.

Mosher, W., Chandra, A., and Jones, J. (2005). Sexual behavior and selected health measures: Men and women 15–44 years of age, United States, 2002. *Advance Data from Health and Vital Statistics, No. 362*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Available: https://www.cdc.gov/nchs/data/ad/ad362.pdf.

MTV. (2017). MTV Poll: July 2017 (Version 2) [Dataset]. Ithaca, NY: Cornell University, Roper Center for Public Opinion Research.

Newport, F. (2018). *In U.S., Estimate of LGBT Population Rises to 4.5%*. Gallup. Available: https://news.gallup.com/poll/234863/estimate-lgbt-population-rises.aspx.

Norton, A.T., and Herek, G.M. (2013). Heterosexuals' attitudes toward transgender people: Findings form a national probability sample of U.S. adults. *Sex Roles, 68*(11–12), 738–753. doi: 10.1007/s11199-011-0110-6.

O'Connell, M., and Feliz, S. (2011). *Same Sex Couple Household Statistics from the 2010 Census. Working Paper Number 2011-26*. Social, Economic and Housing Statistics Division, U.S. Bureau of the Census. Available: https://www.census.gov/library/working-papers/2011/demo/SEHSD-WP2011-26.html.

Olson, L.R., Cadge, W., and Harrison, J.T. (2006). Religion and public opinion about same-sex marriage. *Social Science Quarterly, 87*(2), 340–360. doi: 10.1111/j.1540-6237.2006.00384.x.

Perez-Brumer, A., Day, J.K., Russell, S.T., and Hatzenbuehler, M.L. (2017). Prevalence and correlates of suicidal ideation among transgender youth in California: Findings from a representative, population-based sample of high school students. *Journal of the American Academy of Child and Adolescent Psychiatry, 56*(9), 739–746.

Raifman, J., Charlton, B.M., Arrington-Sanders, R., Chan, P.A., Rusley, J., Mayer, K.H., Stein, M.D., Austin, S.B., and McConnell, M. (2020). Sexual orientation and suicide attempt disparities among U.S. adolescents: 2009–2017. *Pediatrics 145*(3), e20191658. doi: 10.1542/peds.2019-1658.

Snively, C.A., Kreuger, L., Stretch, J.J., Watt, J.W., and Chadha, J. (2004). Understanding homophobia: Preparing for practice realities in urban and rural settings. *Journal of Gay and Lesbian Social Services, 17*(1), 59–81.

Stotzer, R.L., Herman, J.L., and Hasenbush, A. (2014). *Transgender Parenting: A Review of Existing Research*. Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/transgender-parenting-oct-2014.pdf.

Tadlock, B.L., Flores, A.R., Haider-Markel, D.P., Lewis, D.C., Miller, P.R., and Taylor, J.K. (2017). Testing contact theory and attitudes on transgender rights. *Public Opinion Quarterly, 81*(4), 956–972. doi: 10.1093/poq/nfx021.

Tate, C.C., Ledbetter, J.N., and Youssef, C.P. (2013). A two-question method for assessing gender categories in the social and medical sciences. *Journal of Sex Research*, *50*(8), 767–776. doi: 10.1080/00224499.2012.690110.

Taylor, J.K., Lewis, D.C., and Haider-Markel, D.P. (2018). *The Remarkable Rise of Transgender Rights*. Ann Arbor: University of Michigan Press.

Taylor, J.K., Lewis, D.C., Haider-Markel, D.P., Flores, A.R., Miller, P.R., and Tadlock, B.L. (2018). The factors underlying public opinion of transgender rights. In J.K. Taylor, D.C. Lewis, and D.P. Haider-Markel (Eds.), *The Remarkable Rise of Transgender Rights* (pp. 61–86). Ann Arbor: University of Michigan Press.

Tordoff, D.M., Morgan, J., Dombrowski, J.C., Golden, M.R., and Barbee, L.A. (2019). Increased ascertainment of transgender and non-binary patients using a 2-step versus 1-step gender identity intake question in an STD clinic setting. *Sexually Transmitted Diseases*, *46*(4), 254–259. doi: 10.1097/OLQ.0000000000000952.

U.S. Census Bureau. (2018). *Quick Facts, United States*. U.S. Census Bureau, U.S. Department of Commerce. Available: https://www.census.gov/quickfacts/fact/table/US/IPE120218.

U.S. Census Bureau. (2019). U.S. Census Bureau releases CPS estimates of same-sex households. *Release Number CB19-TPS.51*. U.S. Census Bureau, Department of Commerce. Available: https://www.census.gov/newsroom/press-releases/2019/same-sex-households.html.

Williams Institute. (2019). *LGBT Demographic Data Interactive*. UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/visualization/lgbt-stats/?topic=LGBT#density.

4

Current State of Data Collection

Data collection on such demographic characteristics as sexual orientation, gender identity, and intersex status is a critical component of improving the well-being of sexual and gender diverse (SGD) populations across all domains of life. Recognizing the central role of consistent, high-quality data in understanding and addressing disparities, the Institute of Medicine (2011) report on LGBT health recommended the routine collection of data on sexual orientation and gender identity in federally funded surveys and electronic medical records (EMRs), as well as the development and standardization of measures of sexual orientation and gender identity. Since that report, there has been significant progress in the development, standardization, and deployment of relevant metrics. These efforts parallel the evolution of measures to assess other aspects of identity that are equally important in understanding disparities affecting SGD populations, such as race, ethnicity, primary language, and disability.[1]

Most of the existing research on the demography of SGD populations has focused on sexual orientation identity (e.g., self-identification as gay, lesbian, bisexual, heterosexual, or another sexual orientation) and same-sex sexual behavior and attraction. Another important dimension is measurement of same-sex partnered and marital relationships. More recently, demographic research has also begun to include such measures of gender identity as current gender identity, sex assigned at birth, gender expression, and transgender status. There are no large-scale demographic data available on people who have intersex traits (differences of sex development [DSD])

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[1] See https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=53.

or others who might identify as intersex, which is a significant barrier to understanding and improving the well-being of intersex populations.

TYPES OF DATA COLLECTION

In 2015 the U.S. Office of Management and Budget convened the Federal Interagency Working Group Improving Measurement of Sexual Orientation and Gender Identity to consider topics related to sexual orientation and gender identity data collection throughout the federal statistical system. According to a 2016 report from this working group (Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys [hereafter, Federal Interagency Working Group], 2016a), as well as the report from an expert meeting on methods and measurement in SGD populations convened by the Sexual and Gender Minority Research Office (SGMRO) (2018b) at the National Institutes of Health (NIH), data elements that are particularly relevant to SGD population research include but are not limited to

- sexual orientation identity
- sexual behavior
- sexual attraction
- gender composition of partnered and marital relationships
- gender identity
- sex assigned at birth
- gender expression
- transgender status
- intersex status

Although these data elements are often assumed to be associated solely with LGBT, intersex, and other SGD populations, it is important to note that these elements apply equally to all people. Every person has a sexual orientation, a gender identity, and physical sex characteristics, and partnered and marital relationships are a fundamental part of life for many people. Thus, these data elements are relevant for any data collection instrument, system, or activity that includes demographic characteristics.

Similarly, concerns about respondents' experiences of discrimination as a result of disclosing personal demographic information are not unique to sexual orientation, gender identity, or intersex status. It is essential to ensure that all data collection efforts advance in tandem with laws, policies, and practices that ensure respondent privacy and confidentiality, do not require disclosure of personal demographic information to access programs or services, and provide robust protections from discrimination. It is also important to remember that collecting data about the experiences of people who may be targeted for discrimination on the basis of such personal characteristics as sexual orientation, gender identity, or intersex status is a crucial component of establishing and enforcing effective nondiscrimination protections.

There are at least three broad domains in which it is important to collect sexual orientation, gender identity, and intersex status data:

1. survey research, including population surveys, needs assessments, and other survey efforts fielded or supported by private entities or any level of government;
2. nonsurvey research, such as clinical trials, biomedical research, program evaluations, and paired testing to assess discrimination in employment, housing, and other areas; and
3. administrative and program data systems, including intake forms, applications for programs, such as Medicaid and Temporary Assistance for Needy Families, and data generated during enforcement processes related to civil rights or criminal justice.

In the health context, these data should also be collected in EMRs and other forms of clinical recordkeeping (Institute of Medicine, 2013). Federal interoperability standards for health information technology have required certified EMR systems to have the capacity to record, change, and access structured data on sexual orientation and gender identity since 2018, and it is incumbent on health care organizations and providers to ensure these fields are active in their EMRs, to seek training on collecting these data in a culturally competent manner, and to incorporate the collection and use of these data in routine clinical workflows[2] (Cahill et al., 2016). These federal criteria do not require data collection about intersex status, which stymies efforts to assess and improve the health of people with intersex traits.

Data on sexual orientation, gender identity, and intersex status are becoming more available as federally supported surveys and other systems begin to collect them. Table 4-1, although not exhaustive, identifies several large and widely used surveys and other data sources that include some or all of these measures. There are many examples of publicly and privately sponsored data collection activities, however, in which these data are not yet collected. The well-being of SGD populations across the United States could be improved by the addition of sexual orientation, gender identity, and intersex status measures to a wide variety of data collection instruments, including but not limited to those listed in Table 4-1. More detailed descriptions of the types of questions referenced in this table are discussed below.

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[2] See https://www.healthit.gov/isa/section/sex-birth-sexual-orientation-and-gender-identity.

TABLE 4-1 State of Data Collection on Sexual Orientation, Gender Identity, and Intersex Status in Federally Supported Surveys and Other Data Systems

Instrument	Lead Sponsor Agency or Organization	Most Recent Year with Relevant Data[a]
All of Us Research Program	National Institutes of Health (HHS)[*]	Present
American Community Survey (ACS)	Census Bureau (DOC)	N/A
American National Election Studies (ANES)	Stanford University and University of Michigan	2016
American Time Use Survey (ATUS)	Bureau of Labor Statistics (DOL)	N/A
Behavioral Risk Factor Surveillance System (BRFSS)	National Center for Health Statistics (CDC, HHS)	Present
Common Clinical Data Set (CCDS)	Office of the National Coordinator for Health Information Technology (HHS)	N/A
Consumer Assessment of Healthcare Providers and Systems (CAHPS)	Agency for Healthcare Research and Quality and Centers for Medicare & Medicaid Services (HHS)	N/A
Current Population Survey (CPS)	Bureau of Labor Statistics (HHS)	N/A
Daily Tracking Survey	Gallup	Present
Decennial Census	Census Bureau (DOC)	N/A
Early Career Doctorates Survey (ECDS)	National Center for Science and Engineering Statistics (NSF)	N/A
General Social Survey (GSS)	National Opinion Research Center (NORC) at the University of Chicago	Present
Government Performance and Results Act (GPRA) Plans and Metrics	U.S. Executive Branch agencies	Varies
Growing Up Today Study (GUTS)	Harvard University	Varies
The Health and Retirement Survey (HRS)	University of Michigan	Present
Health Center Patient Survey[d] (HCPS)	Health Resources and Services Administration (HHS)	2014

Relevant Data		
Sexual Orientation	Gender Identity	Intersex Status
Identity	Sex assigned at birth; gender question includes transgender options	Sex assigned at birth includes intersex option
No	No	No
Identity	No	No
No	No	No
Identity[b]	Transgender status[b]	No
No	No	No
No	No	No
No	No	No
Identity	Transgender combined with lesbian, gay, and bisexual	No
No	No	No
No	No	No
Identity, behavior	No	No
Rare	Rare	No
Identity and attraction combined, behavior	Gender question includes transgender options, gender expression	No
Identity	No	No
Identity	Modified two-step	No

continued

TABLE 4-1 Continued

Instrument	Lead Sponsor Agency or Organization	Most Recent Year with Relevant Data[a]
High School Longitudinal Study of 2009 (HSLS:09)	National Center for Education Statistics (ED)	2018
Interoperability Standards Advisory for Health Information Technology	Office of the National Coordinator for Health Information Technology (HHS)	Present
Medical Expenditure Panel Survey (MEPS)	Agency for Healthcare Research and Quality (HHS)	N/A
Medicare Current Beneficiary Survey (MCBS)	Centers for Medicare & Medicaid Services (HHS)	N/A
National Alcohol and Tobacco Survey (NATS)	National Center for Health Statistics (CDC, HHS)	2014
National Crime Victimization Survey (NCVS)	Bureau of Justice Statistics (DOJ)	Present
National Epidemiologic Survey of Alcohol and Related Conditions (NESARC)	National Institutes of Health (HHS)	2013
National Health Interview Survey (NHIS)	National Center for Health Statistics (CDC, HHS)	Present
National Health and Nutrition Examination Survey (NHANES)	National Center for Health Statistics (CDC, HHS)	Present
National HIV Behavioral Surveillance System (NHBS)	Division of HIV/AIDS Prevention (CDC, HHS)	Present
National Inmate Survey (NIS)	Bureau of Justice Statistics (DOJ)	2012
National Intimate Partner and Sexual Violence Survey (NISVS)	National Center for Injury Prevention and Control (CDC, HHS)	2010
National Longitudinal Study of Adolescent to Adult Health (Add Health)	University of North Carolina	2019
National Longitudinal Surveys (e.g., NLSY97)	Bureau of Labor Statistics (DOL)	N/A
National Social Life, Health, and Aging Project (NSHAP)	NORC at the University of Chicago	2016
National Survey of College Graduates (NSCG)	National Center for Science and Engineering Statistics (NSF)	N/A
National Survey of Drug Use and Health (NSDUH)	Substance Abuse and Mental Health Services Administration (HHS)	Present

Relevant Data		
Sexual Orientation	Gender Identity	Intersex Status
Identity	Gender question includes transgender options	No
Identity, attraction	Gender identity, sex assigned at birth	No
No	No	No
No	No	No
Identity	Modified two-step	No
Identity	Two-step	No
Identity, attraction, behavior	No	No
Identity	No	No
Identity, behavior	No	No
Identity, behavior	Two-step[f]	Sex assigned at birth includes intersex option
Identity, behavior	Gender question includes transgender option	No
Identity	No	No
Identity, attraction, behavior	Two-step, gender expression	No
No	No	No
Identity, behavior	No	No
No	No	No
Identity, attraction	No	No

continued

TABLE 4-1 Continued

Instrument	Lead Sponsor Agency or Organization	Most Recent Year with Relevant Data[a]
National Survey of Family Growth (NSFG)	National Center for Health Statistics (CDC, HHS)	Present
National Survey of Older Americans Act Participants (NSOAAP)	Administration for Community Living (HHS)	Present
National Survey of Veterans (NSV)	National Center for Veterans Analysis and Statistics, U.S. Department of Veterans Affairs	N/A
National Violent Death Reporting System (NVDRS)	National Center for Injury Prevention and Control (CDC, HHS)	Present[c]
Nurses' Health Studies (NHS, NHS II)	Harvard University	N/A
Panel Study of Income Dynamics (PSID)	University of Michigan	N/A
Population Assessment of Tobacco and Health (PATH)	Food and Drug Administration and National Institutes of Health (HHS)	Present
School Survey on Crime and Safety (SSCS)	National Center for Education Statistics (ED)	Present
Survey of Doctorate Recipients (SDR)	National Center for Science and Engineering Statistics (NSF)	N/A
Survey of Earned Doctorates (SED)	National Center for Science and Engineering Statistics (NSF)	N/A
Survey of Income and Program Participation (SIPP)	Census Bureau (DOC)	N/A
Uniform Crime Reporting System (UCR)	Federal Bureau of Investigation (DOJ)	Present
Uniform Data System (UDS)	Health Resources and Services Administration (HHS)	Present
Youth Risk Behavior Surveillance System (YRBS)	Division of Adolescent and School Health (CDC, HHS)	Present

NOTES: CDC, Centers for Disease Control and Prevention; DOC, U.S. Department of Commerce; DOJ, U.S. Department of Justice; DOL, U.S. Department of Labor; ED, U.S. Department of Education; HHS, U.S. Department of Health and Human Services; NSF, National Science Foundation; VA, U.S. Department of Veterans Affairs.

[a] Data on sexual orientation, gender identity, or intersex status.

[b] This topic is not part of the national survey core measures, but 37 jurisdictions have used a CDC-sponsored question module to gather data about sexual orientation and gender identity; several other states assess sexual orientation or gender identity using their own question designs.

[c] More detailed sexual orientation and gender identity fields are available in a form that scene investigators may use when reporting a violent death (see https://www.lgbtmortality.com/resources).

Relevant Data		
Sexual Orientation	Gender Identity	Intersex Status
Identity, attraction, behavior	No	No
Identity	No	No
No	No	No
Identity	Transgender status	No
No	No	No
No	No	No
Identity, attraction	Transgender status	No
Hate crime victimization on basis of sexual orientation	Hate crime victimization on basis of gender identity	No
No	No	No
No	No	No
No	No	No
Identity	Gender question includes transgender options	No
Identity	Gender question includes transgender options	No
Identity, behavior	Transgender status[e]	No

[d] As of August 2020, not being fielded.

[e] A gender identity measure was piloted by 19 jurisdictions (10 states and 9 school districts) on the 2017 survey.

[f] The NHBS-Trans was conducted in 2019–2020 among transgender women in seven states.

METRICS AND MEASUREMENT

General Methodological Considerations

Over the last two decades, numerous studies have assessed the construct validity of sexual orientation and gender identity measures and investigated their performance in the field. Several validated questions, which are described in more detail below, exist and can be readily used to assess sexual orientation and gender identity (Sexual Minority Assessment Research Team [SMART], 2009; Gender Identity in US Surveillance [GenIUSS] Group, 2014; Federal Interagency Working Group, 2016a, 2016b). Aspects of performance that have been evaluated include respondent comprehension, survey breakoff, language considerations, mode effects, and proxy reporting.

Cognitive testing shows that concepts related to sexual orientation and gender identity are broadly comprehensible for the general U.S. population, though it is important to ensure that translations into languages other than English are accurate and culturally appropriate (Clark, Armstrong, and Bonacore, 2005; Ingraham, Pratt, and Gorton, 2015; Ridolfo, Miller, and Maitland, 2012; Stern et al., 2016; NORC at the University of Chicago, 2016). Incidents of survey breakoff (premature termination of the survey by the respondent) in relation to sexual orientation and gender identity questions are infrequent, and item nonresponse is low, ranging from less than 1 percent to just over 6 percent (Case et al., 2006; Conron, Mimiaga, and Landers, 2010; Dahlhamer et al., 2014; Grant and Jans, n.d.; Grant et al., 2015; Ortman et al., 2017; Ridolfo, Miller, and Maitland, 2012; VanKim et al., 2010). This is significantly better than the nonresponse rates for some common demographic questions: for instance, income can have a nonresponse rate of more than 20 percent (Atrostic and Kalenkoski, 2002). Research on mode (e.g., computer-assisted personal interview compared with audio computer-assisted self-interview) has found no main effects of mode on item nonresponse (Dahlhamer, Galinsky, and Joestl, 2019).

In 2016, researchers from the Bureau of Labor Statistics and the Census Bureau conducted cognitive interviews and exploratory focus groups to consider the inclusion of sexual orientation and gender identity questions on the Current Population Survey (CPS), which uses proxy reporting. Most participants did not consider sexual orientation or gender identity questions to be particularly difficult or sensitive either for themselves or for others in their households, and few objected to answering such questions on the survey. The researchers did find that some LGBT individuals, particularly transgender participants, expressed concern that the range of answer options was too narrow (Ellis et al., 2018). This project, however, demonstrated the feasibility of asking sexual orientation and gender identity questions on surveys that use proxy reporting. Of note, the United Kingdom has included sexual orientation measures in one of its large household surveys using proxy responses since 2014 (U.K. Office of National Statistics, 2020).

Other important considerations in research around sexual orientation and gender identity include the potential fluidity of identity, particularly from the perspective of developmental stages and the life course; probability versus nonprobability sampling; and recruiting techniques, particularly methods for recruiting samples large enough to permit robust analyses of SGD populations by intersecting demographic characteristics, such as race or disability status (Federal Interagency Working Group, 2016c; SGMRO, 2018b).

Another major question is how to balance the need for sufficiently comprehensive response options with the need to work within survey space constraints and to maintain adequate statistical power for analyses. This question relates to the evolving nature of terminology in SGD populations, such as the growing popularity of identities such as “queer” among young people in particular (Federal Interagency Working Group, 2016c; Goldberg et al., 2020); it also reflects the need for response options that can identify groups within SGD populations that are small but may be at high risk of experiencing disparities, such as asexual people (Borgogna et al., 2019), and response options that are culturally specific, such as Two Spirit in Native American communities and same-gender-loving among African Americans (Battle et al., 2002; Bauer et al., 2017). There is also a serious lack of methodological research into how to measure intersex status.

All these methodological questions require exploration in order to optimize the process of collecting, analyzing, and using data on sexual orientation, gender identity, and intersex status to improve the well-being of SGD populations. The need for continued methodological research, however, does not mean that these data should not be collected using tools that are currently available: continuous improvement and refinement of sampling techniques and question designs is a normal and necessary iterative process in any type of demographic data collection (Hughes et al., 2016).

Sexual Orientation

Reliable and validated measures of sexual orientation identity, same-sex attraction, and same-sex sexual behavior are readily available. The 1992 National Health and Social Life Survey, which was conducted by the independent National Opinion Research Center (NORC) at the University of Chicago with support from a variety of private foundations, was one of the earliest U.S. population-based surveys to measure all these traits (Laumann et al., 2008). The National Survey of Family Growth, overseen by the National Center for Health Statistics (NCHS) at the U.S. Department of Health and Human Services, has also included all these measures since 2002 (Mosher, Chandra, and Jones, 2005). In 2009, Williams Institute at the School of Law of the University of California at Los Angeles (UCLA) convened an expert panel of scholars that produced a consensus report on best practices for measuring sexual orientation in population-based surveys (SMART, 2009).

Following calls for data on sexual orientation and other disparities in Healthy People 2020, the Affordable Care Act, and the 2011 Institute of Medicine report, NCHS conducted extensive testing to develop a sexual orientation question for the National Health Interview Survey (NHIS).[3] Successful completion of that testing resulted in inclusion of a sexual orientation identity question on the annual NHIS survey beginning in 2013 (National Center for Health Statistics, 2014). This question format is also used on the National Crime Victimization Survey under the auspices of the U.S. Department of Justice (Truman et al., 2019). Questions relating to sexual attraction and behavior have also become increasingly standardized. The NIH Sexual and Gender Minority Research Office and the Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity have both collected and made available examples of questions that can be used to measure sexual orientation identity, attraction, and behavior (as well as gender identity, which is discussed below) (Federal Interagency Working Group, 2016b; SGMRO, 2018a). Of note, it has been recommended that NIH expand its "planned enrollment" policy to include the requirement that NIH-funded research proposals outline how sexual orientation and gender identity data will be measured in the study population or explain why these variables are omitted (Sell, 2017). Such a requirement from NIH and other major research funders would significantly advance the degree to which SGD demographic data are collected in major longitudinal surveys and other types of research.

Gender Identity

In 2014 Williams Institute convened a panel of scholars that produced consensus recommendations for measuring gender identity in population-based surveys (GenIUSS Group, 2014). This report served as a guide for researchers at the UCLA Center for Health Policy Research in conducting extensive testing in order to measure gender identity on the California Health Interview Survey (CHIS), which is a large probability sample of California residents (Grant et al., 2015). The CHIS measure assesses both sex assigned at birth (i.e., on a respondent's original birth certificate) and

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[3] See https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=57.

current gender identity as male, female, or some other gender. This "two-step" question was developed based on community-driven research in Philadelphia in the 1990s and has since been adopted by such users as the Centers for Disease Control and Prevention (CDC) on its HIV/AIDS adult case report form.

The two-step question is considered better than a single-question design that merely adds transgender response options to an existing binary question about sex or gender (e.g., a single question that asks respondents to indicate whether their gender is male, female, or transgender). In fact, research indicates that the two-step question can result in almost five times more identifications of transgender people than this single-item design (Tordoff et al., 2019). The two-step question allows for transgender people to be identified in either of two ways. First, individuals may indicate that they currently describe their gender identity as "transgender." Alternatively, individuals may endorse an assigned sex that is different from their current gender identity. The two-step question captures people who identify as a gender different than the one that they were assigned at birth but who may not use the term "transgender" to describe themselves.

The two-step question is also often preferred to a single-item "transgender status" question (e.g., "are you transgender?" with yes/no/not sure response options), though a transgender status question may be more appropriate in contexts where sex assigned at birth is not an important variable. In administrative contexts, limited research has looked at tracking changes to recorded gender over time, for example, in Social Security records (Cerf, 2015). This is not a reliable means of ascertaining self-identification, however, and directly asking the two-step question or a single-item "transgender status" question are the preferred means of incorporating gender identity data in administrative records.

Very little evidence on ordering effects for the two-step question is available. It is important to note, however, that the respondent's answer to the current gender identity component is of primary importance and is what should inform how fields such as name, gendered honorific, pronoun, and sex are populated. The sex assigned at birth component should be used only to aid in identification of transgender respondents who identify simply as male or female. In clinical settings, sex assigned at birth may also underpin such decision support algorithms as preventive screening indications, but anatomical inventories may be used instead of assigned sex data to inform clinical decision support (Deutsch et al., 2013).

Some studies have also begun to explore measures of gender expression, meaning perceptions of the masculinity or femininity of a person's appearance, behavior, and mannerisms. Gender expression is an external manifestation of gender identity that has aspects of both self-perception and the perceptions of others (Wylie et al., 2010). In this sense, it draws from work done by Camara Jones and others around self- and social perceptions of individuals' race and ethnicity (Jones et al., 2008). Gender expression measures are most often used in the context of research with youth, reflecting the importance of assessing sexual orientation and gender identity at various development stages (Roberts et al., 2013). A measure of socially assigned gender nonconformity has been validated among 18- to 30-year-olds for health research purposes (Wylie et al., 2010).

Intersex Status

Measures to assess intersex status in large-scale demographic studies have been proposed but not yet consistently validated. The 2014 GenIUSS Group report recognized three challenges facing researchers in assessing intersex status: some people with intersex traits do not identify as being intersex; some people who identify as intersex do not have intersex traits; and "intersex" is not a legal assigned sex in the United States. The report therefore recommended that intersex not be included as an option for assigned sex at birth. It also proposed two possible questions that could be the subject of future research:

1. "Have you ever been diagnosed by a medical doctor with an intersex condition or a difference of sex development, or were you born with (or developed naturally in puberty) genitals, reproductive organs, or chromosomal patterns that do not fit standard definitions of male or female?"
2. "Some people are assigned male or female at birth, but are born with sexual anatomy, reproductive organs, or chromosome patterns that do not fit the typical definition of male or female. This physical condition is known as intersex. Are you intersex?"

A community-based group of researchers qualitatively assessed the first question in an online survey of 111 intersex adults (Tamar-Mattis et al., 2018). Overall, 72 percent of participants responded that the question was accessible and important to include in surveys; some responded that the language was too medicalizing and may exclude people who have not had access to care. Further research is needed to assess the validity of population-based measures for intersex status.

Relationship Status

Relationship status is another important component of demographic data collection about SGD populations. Although identifying the gender composition of couples provides a sample of a subset of SGD populations, it is important to note that this does not actually provide direct information about either sexual orientation or gender identity. The 1990 decennial census was the first U.S. census to include "unmarried partner" as a possible relationship status for individuals in a household. Combining information about relationship and gender of the partner made it possible for the first time to identify same-sex unmarried couples. In general, same-sex couples are identified when the householder (the reference person who fills out the census form) identifies another person in the household as a spouse or unmarried partner and that person is the same sex as the householder. Census Bureau procedures have varied, however, for tabulating responses from same-sex couples in decennial censuses and in the annual American Community Survey (ACS), which replaced the long-form census in 2005. For example, in the 2000 census, the Bureau also included same-sex couples who indicated that they were spouses in counts of same-sex unmarried couples (at that time, marriages of same-sex couples were not legal in the United States). A wide range of federal surveys use this method to identify inter-household relationships, introducing even further variation in measurement approaches. Some of this variation has unfortunately exacerbated problems with measurement and comparability over time and across surveys related to how same- and different-sex couples are enumerated.

In addition to measurement issues raised by how the Census Bureau classifies household composition, small errors in the sex responses of different-sex couples resulted in a large proportion of reported same-sex couples (mostly those who identified as spouses) likely being mis-identified as different-sex couples. Census Bureau analyses suggest that 28 percent of reported same-sex couples in the 2010 census were likely miscoded different-sex couples. The estimated error was even higher in the 2000 census data (O'Connell and Feliz, 2011). Following extensive analyses and testing, the Census Bureau altered possible responses to the relationship to householder question in the 2017 CPS, the 2019 ACS, and the 2020 census to allow respondents to separately identify different- (the surveys use the term "opposite-sex") and same-sex spouses and unmarried partners. These changes are designed to substantially improve accuracy in measurement of same-sex married and unmarried couples (Kreider, Bates, and Lofquist, 2016).

SUMMARY AND CONCLUSIONS

SGD demographic data collection efforts to date have focused largely on sexual orientation identity. There are a few national surveys that also include measurements of sexual behavior (e.g., the General Social Survey) or both sexual behavior and attraction (e.g., the National Survey of Family Growth). However, even among surveys that include measurement of sexual attraction and behavior, survey questions largely remain dependent on binary assessments of gender. Research gaps remain in how best to include gender fluidity in the measurement of sexual orientation identity, behavior, and attraction.

> **CONCLUSION 4-1: Sexual orientation and gender identity questions are presented inconsistently across data collection tools, are often separated from other demographic measures, and frequently use binary assessments of gender, which do not effectively capture gender diversity.**

Surveys measuring gender identity have increasingly adopted a two-step approach that measures both gender identity and sex assigned at birth, but population-based data on gender diversity remain rare. There are currently no national population-based data that allow for assessment of the demographics of intersex populations. Measurement of SGD populations on longitudinal surveys also remains scarce. These data gaps limit the ability to understand how sexual orientation and gender identity develop over the life course and the roles that these aspects of identity, along with intersex status, play in affecting the well-being of SGD people.

> **CONCLUSION 4-2: Point-in-time and longitudinal demographic data on sexual orientation, gender identity, and intersex status are needed to drive research agendas, monitor population trends, guide the equitable distribution of funding and other resources, and inform policies to advance equity by effectively addressing disparities affecting sexual and gender diverse populations.**

The standardization of measures at the federal level would promote the well-being of SGD populations by advancing the collection of these data both throughout the federal statistical system and in other public and private data collection activities.

REFERENCES

Atrostic, B., and Kalenkoski, C. (2002). *Item Response Rates: One Indicator of How Well We Measure Income*. Washington, DC: National Center for Education Statistics. Available: https://nces.ed.gov/FCSM/pdf/IHSNG_ASA02_finalrad9A6D5.pdf.

Battle, J., Cohen, C., Warren, D., Fergerson, G., and Audam, S. (2002). *Say It Loud: I'm Black and I'm Proud: Black Pride Survey 2000*. New York: The Policy Institute of the National Gay and Lesbian Task Force.

Bauer, G.R., Braimoh, J., Scheim, A.I., and Dharma, C. (2017). Transgender-inclusive measures of sex/gender for population surveys: Mixed-methods evaluation and recommendations. *PLoS ONE*, *12*(5). doi: 10.1371/journal.pone.0178043.

Borgogna, N.C., McDermott, R.C., Aita, S.L., and Kridel, M.M. (2019). Anxiety and depression across gender and sexual minorities: Implications for transgender, gender nonconforming, pansexual, demisexual, asexual, queer, and questioning individuals. *Psychology of Sexual Orientation and Gender Diversity*, *6*(1), 54–63. doi: 10.1037/sgd0000306.

Cahill, S.R., Baker, K., Deutsch, M.B., Keatley, J., and Makadon, H.J. (2016). Inclusion of sexual orientation and gender identity in Stage 3 Meaningful Use guidelines: A huge step forward for LGBT health. *LGBT Health*, *3*(2), 100–102. doi: 10.1089/lgbt.2015.0136.

Case, P., Austin, B., Hunter, D., Willett, W., Malspeis, S., Manson, J., and Spiegelman, D. (2006). Disclosure of sexual orientation and behavior in the Nurses' Health Study II. *Journal of Homosexuality*, 51(1), 13–31. doi: 10.1300/j082v51n01_02.

Cerf, B. (2015). *Likely Transgender Individuals in U.S. Federal Administrative Records and the 2010 Census* [Preprint]. SocArXiv. doi: 10.31235/osf.io/fj8y8.

Clark, M., Armstrong, G., and Bonacore, L. (2005). Measuring sexual orientation and gender expression among middle-aged and older women in a cancer screening study. *Journal of Cancer Education, 20*(2), 108–112.

Conron, K.J., Mimiaga, M.J., and Landers, S.J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health*, *100*(10), 1953–1960. doi: 10.2105/AJPH.2009.174169.

Dahlhamer, J., Galinsky, A., Joestl, S., and Ward, B. (2014). Sexual orientation in the 2013 National Health Interview Survey: A quality assessment. *Vital and Health Statistics: Series 2, Data Evaluation and Methods Research, 169*, 1–32.

Dahlhamer, J.M., Galinsky, A.M., and Joestl, S.S. (2019). Asking about sexual identity on the National Health Interview Survey: Does mode matter? *Journal of Official Statistics*, *35*(4), 807–833. doi: 10.2478/jos-2019-0034.

Deutsch, M.B., Green, J., Keatley, J., Mayer, G., Hastings, J., Hall, A.M., Deutsch, M.B., Keatley, J., Green, J., Allison, R., Blumer, O., Brown, S., Cody, M.K., Fennie, K., Hall, A.M., Hastings, J., Mayer, G.S., Moscoe, G., St Claire, R., Stone, M.R., Wilson, A., and Wolf-Gould, C. (2013). Electronic medical records and the transgender patient: Recommendations from the World Professional Association for Transgender Health EMR Working Group. *Journal of the American Medical Informatics Association*, *20*(4), 700–703. doi: 10.1136/amiajnl-2012-001472.

Ellis, R., Virgile, M., Holzberg, J.L., Nelson, D.V., Edgar, J., Phipps, P., and Kaplan, R. (2018). Assessing the feasibility of asking about sexual orientation and gender identity in the Current Population Survey: Results from cognitive interviews. *Research Report Series: Survey Methodology #2018-06*. Center for Survey Measurement, Research and Methodology Directorate, U.S. Census Bureau. Available: https://www.census.gov/content/dam/Census/library/working-papers/2018/adrm/rsm2018-06.pdf.

Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys. (2016a). *Current Measures of Sexual Orientation and Gender Identity in Federal Surveys*. Washington, DC: National Center for Education Statistics. Available: https://nces.ed.gov/FCSM/pdf/current_measures_20160812.pdf.

———. (2016b). *Evaluations of Sexual Orientation and Gender Identity Survey Measures: What Have We Learned?* Washington, DC: National Center for Education Statistics. Available: https://nces.ed.gov/FCSM/pdf/Evaluations_of_SOGI_Questions_20160923.pdf.

———. (2016c). *Toward a Research Agenda for Measuring Sexual Orientation and Gender Identity in Federal Surveys: Findings, Recommendations, and Next Steps*. Washington, DC: National Center for Education Statistics. Available: https://nces.ed.gov/FCSM/pdf/SOGI_Research_Agenda_Final_Report_20161020.pdf.

GenIUSS Group (Gender Identity in U.S. Surveillance Group). (2014). *Best Practices for Asking Questions to Identify Transgender and Other Gender Minority Respondents on Population-Based Surveys*. J.L. Herman (Ed.). Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://escholarship.org/uc/item/3qk7s1g6.

Goldberg, S.K., Rothblum, E.D., Russell, S.T., and Meyer, I.H. (2020). Exploring the Q in LGBTQ: Demographic characteristic and sexuality of queer people in a U.S. representative sample of sexual minorities. *Psychology of Sexual Orientation and Gender Diversity*, *7*(1), 101–112. doi: 10.1037/sgd0000359.

Grant, D., and Jans, M. (n.d.). *Assessing Sexual Identity and Behavior in California's Diverse Population.* Los Angeles, CA: UCLA Center for Health Policy Research.

Grant, D., Jans, M., Park, R., Ponce, N., Kil, J., Gates, G., Wilson, B.D.M., and Herman, J.L. (2015). Putting the "T" in LGBT: A pilot test of questions to identify transgender people in the California Health Interview Survey. *Proceedings of the American Association for Public Opinion Research*. American Statistical Association. Available: http://www.asasrms.org/Proceedings/y2015/files/234234.pdf.

Hughes, J.L., Camden, A.A., Yangchen, T., and College, A.S. (2016). Rethinking and updating demographic questions: Guidance to improve descriptions of research samples. *Psi Chi Journal of Psychological Research*, *21*(3).

Ingraham, N., Pratt, V., and Gorton N. (2015). Counting trans patients: A community health center case study. *Transgender Studies Quarterly, 2*(1), 136–147.

Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: The National Academies Press. doi: 10.17226/13128.

———. (2013). *Collecting Sexual Orientation and Gender Identity Data in Electronic Health Records: Workshop Summary.* Washington. DC: The National Academies Press. doi: 10.17226/18260.

Jones, C.P., Truman, B.I., Elam-Evans, L.D., Jones, C.A., Jones, C.Y., Jiles, R., Rumisha, S.F., and Perry, G.S. (2008). Using "socially assigned race" to probe white advantages in health status. *Ethnicity & Disease*, *18*(4), 496–504. Available: https://www.ncbi.nlm.nih.gov/pubmed/19157256.

Kreider, R.M., Bates, N.A., and Lofquist, D. (2016). *Improving Measurement of Same-Sex Couple Households in Census Bureau Surveys: Presentation at AAPOR, May 2016*. U.S. Census Bureau. Available: https://www.census.gov/library/working-papers/2016/demo/AAPOR_Kreideretal.html.

Laumann, E.O., Gagnon, J.H., Michael, R.T., and Michaels, S. (2008). *National Health and Social Life Survey, 1992*. Inter-university Consortium for Political and Social Research. doi: 10.3886/ICPSR06647.v2.

Mosher, W.D., Chandra, A., and Jones, J. (2005). Sexual behavior and selected health measures: Men and women 15–44 years of age, United States, 2002. *Advance Data from Health and Vital Statistics, No. 362*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Available: https://www.cdc.gov/nchs/data/ad/ad362.pdf.

National Center for Health Statistics. (2014). *2013 National Health Interview Survey, Public Use Data Release: A Brief Quality Assessment of the NHIS Sexual Orientation Data*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Health Interview Statistics. Available: https://www.cdc.gov/nchs/data/nhis/qualityso2013508.pdf.

NORC at the University of Chicago. (2016). *Testing Alternative Response Options for Spanish Translations of Sexual Identity Items for National Surveys*. Available: https://wwwn.cdc.gov/qbank/report/Milesi_2017_NORC_NHIS.pdf.

O'Connell, M., and Feliz, S. (2011). *Same-Sex Couple Household Statistics from the 2010 Census: Working Paper Number SEHSD-WP2011-26*. U.S. Census Bureau. Available: https://www.census.gov/library/working-papers/2011/demo/SEHSD-WP2011-26.html.

Ortman, J.M., Bates, N., Brown, A., and Sawyer, R.C. (2017). *Optimizing Self and Proxy Response to Survey Questions on Sexual Orientation and Gender Identity*. Paper presented at the Annual Conference of the Population Association of America, Chicago, IL. Available: https://paa.confex.com/paa/2017/mediafile/ExtendedAbstract/Paper13962/Ortman%20Bates%20Brown%20Sawyer%20PAA%202017.pdf.

Ridolfo, H., Miller, K., and Maitland, A. (2012). Measuring sexual identity using survey questionnaires: How valid are our measures? *Sexuality Research and Social Policy: A Journal of the NSRC, 9*(2), 113–124. doi: 10.1007/s13178-011-0074-x.

Roberts, A.L., Rosario, M., Slopen, N., Calzo, J.P., and Austin, S.B. (2013). Childhood gender nonconformity, bullying victimization, and depressive symptoms across adolescence and early adulthood: An 11-year longitudinal study. *Journal of the American Academy of Child & Adolescent Psychiatry*, *52*(2), 143–152. doi: 10.1016/j.jaac.2012.11.006x.

Sell, R. (2017). LGBTQ health surveillance: Data = power. *American Journal of Public Health 107*, 843–844. doi: 10.2105/AJPH.2017.303798.

SGMRO (Sexual and Gender Minority Research Office). (2018a). *Examples of Sexual Orientation and Gender Identity (SOGI) Questions*. National Institutes of Health. Available: https://dpcpsi.nih.gov/sgmro/measurement/questions.

———. (2018b). *Methods and Measurement in Sexual and Gender Minority Research*. National Institutes of Health. Available: https://dpcpsi.nih.gov/sites/default/files/MethodsMeasures_Paper_508_FV.pdf.

SMART (Sexual Minority Assessment Research Team). (2009). *Best Practices for Asking Sexual Orientation and Gender Identity on Surveys*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/SMART-FINAL-Nov-2009.pdf.

Stern, M.J., Michaels, S., Milesi, C., Viox, M.H., and Morrison, H. (2016). *Task 1.32.a: Develop and Test Sexual and Gender Minority Status (LGBT) Items Final Summary Report*. Available: https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Research-Report-sexual-gender-minority-status-items.pdf.

Tamar-Mattis, S., Gamarel, K.E., Kantor, A., Baratz, A., Tamar-Mattis, A., and Operario, D. (2018). Identifying and counting individuals with differences of sex development conditions in population health research. *LGBT Health*, *5*(5), 320–324. doi: 10.1089/lgbt.2017.0180.

Tordoff, D.M., Morgan, J., Dombrowski, J.C., Golden, M.R., and Barbee, L.A. (2019). Increased ascertainment of transgender and non-binary patients using a 2-step versus 1-step gender identity intake question in an STD clinic setting. *Sexually Transmitted Diseases*, *46*(4), 254–259. doi: 10.1097/OLQ.0000000000000952.

Truman, J.L., Morgan, R.E., Gilbert, T., and Vaghela, P. (2019). Measuring sexual orientation and gender identity in the National Crime Victimization Survey. *Journal of Official Statistics*, *35*(4), 835–858. doi: 10.2478/jos-2019-0035.

U.K. Office of National Statistics. (2020). *Sexual Orientation Quality and Methodology Information*. Available: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/sexuality/methodologies/sexualidentityukqmi.

VanKim, N., Padilla, J., Joseph, L., and Goldstein, A. (2010). Adding sexual orientation questions to statewide public health surveillance: New Mexico's experience. *American Journal of Public Health*, *100*(12), 2392–2396.

Wylie, S.A., Corliss, H.L., Boulanger, V., Prokop, L.A., and Austin, S.B. (2010). Socially assigned gender nonconformity: A brief measure for use in surveillance and investigation of health disparities. *Sex Roles*, *63*(3-4), 264–276. doi: 10.1007/s11199-010-9798-y.

PART III

DOMAINS OF WELL-BEING

5

Law and Legal Systems

Law can enhance or impede people's economic security, physical safety, and capacity to participate in almost all dimensions of life; for these reasons, it is an important social determinant of health and well-being (Burris et al., 2010). For many years, the legal system functioned largely in ways that undermined the health and well-being of sexual and gender diverse (SGD) populations. Criminal laws were used to harass, imprison, and ruin the lives of those who were considered sexual or gender deviants. Immigration laws forbade them from entering the country. They were subject to being fired from their jobs, evicted from their homes, and less than honorably discharged from military service without legal redress. Their family relationships were not recognized as legitimate, much less protected from interference. SGD people were forced to live in a world of ubiquitous state-enforced hostility.

The legal landscape has now changed dramatically, even if not completely. In an extraordinarily successful example of the American civil rights narrative, LGBT rights advocates have secured protection from most of the past forms of negative treatment.

However, as one can see from the examples of women and people of color, the achievement of broad formal equality under law does not automatically stop the kinds of mistreatment that can diminish a person's capacity for well-being. For SGD people, legal equality is still new and somewhat precarious. Many U.S. institutions and individuals continue to undermine new norms of fairness. Enforcement of legal protections can be uneven. Multiple chapters in this report document recent and continuing forms of negative treatment, some of which may now be the product more of custom than of law but which nonetheless can be devastating to the people affected.

In addition, the policies and practices that continue to harm SGD people have a disproportionate effect on those within the community who also face income insecurity, racial bias, and transphobia. A transgender Latinx woman or a Black lesbian couple raising children have to contend with additional marginalization that results from intersecting axes of disadvantage and stigma. As a result, they face radically different life circumstances than cisgender white people.

In the realm of law, the primary site for compounded stigma is criminal law. The punitive aspects of the criminal justice system—such as the criminalization of certain behaviors, the likelihood of arrest and detention, and hostile treatment within institutions such as prisons—produce burdens experienced overwhelmingly by SGD people of color, transgender women, and those who lack regular or sufficient incomes (Goldberg et al., 2019; Meyer et al., 2017).

This chapter summarizes the changes that have occurred in recent years, describes continuing challenges posed by the legal system to the well-being of SGD people, and provides basic legal information related to the particular domains of life that are analyzed in greater detail throughout this book. The chapter concludes with a description of what is likely to be an increasingly important question: the extent to which businesses and individuals can secure an exemption from anti-discrimination laws on the basis of their religious beliefs. Because current legal change in this field has been substantial and rapid, the reader should keep in mind that this summary can offer only a snapshot of the legal status of SGD populations as this report goes to press.

THE NEW BASELINE

In June 2020 the Supreme Court ruled in *Bostock v. Clayton County* (140 S. Ct. 1731) that workplace discrimination based on either sexual orientation or gender identity constitutes a form of sex discrimination. The decision means that the federal law which prohibits discrimination in the workplace based on sex—Title VII of the 1964 Civil Rights Act—also prohibits job discrimination based on sexual orientation or gender identity. With this decision, the Court put into place the final component of what has become the new baseline for the law's treatment of SGD people: nationwide protection for LGBT people with respect to employment, marriage, intimate sexual conduct in a domestic setting, and, partially, military service (this is explained in further detail below). Twenty years ago, none of these federal protections existed (Eskridge, Hunter, and Joslin, 2018). The ripple effects from each of these examples of progress illustrate how important the legal system is to everyday quality of life for members of minority groups.

For example, in 2003 the Supreme Court ruled that states could not criminalize private consensual sexual acts between two people of the same sex in *Lawrence v. Texas* (539 U.S. 558). One of the most consequential results of this decision was the elimination of secondary aspects of criminalization, meaning the use of such laws to categorize LGB people as presumptive criminals in the context of child custody and visitation rights disputes; eligibility for certain jobs, especially in law enforcement; and for some occupational licenses (Eskridge, Hunter, and Joslin, 2018).

In 2010 Congress ended the "Don't ask, don't tell" policy regarding LGB Americans in military service. Since that time, LGB people have served openly in all branches of the armed forces. Aside from the dignity that comes from not being considered unfit for military service, the experience has opened up job training and other professional opportunities for countless people who formerly would have been excluded. However, a ban on enlistment by transgender people remains in place.

In 2015, the Supreme Court ruled in *Obergefell v. Hodges* (135 S. Ct. 2584) that all states are required to allow same-sex couples to marry. Because marital status is determinative of more than 1,000 rights and obligations under federal law alone, securing access to marriage allowed couples to change their legal status for purposes of Social Security and insurance benefits, taxation, parental relationships, and eligibility for "family" status in a variety of public and private programs and services.

In the most recent example, noted above, the sex discrimination ruling in *Bostock v. Clayton County* is especially important because it will apply to all federal statutes that prohibit sex discrimination. Such laws cover education (Title IX), housing (Title VIII), credit (the Equal Credit Opportunity Act), and access to health care and health insurance coverage (the Affordable Care Act). In all these arenas, SGD people now have federal protections against discrimination.

These developments represent the achievements of reform efforts on behalf of LGBT rights, and they are remarkable. However, they do not constitute the entire story. The following section describes the legal problems still remaining.

CONTINUING GAPS IN LEGAL PROTECTION

There are many reasons that SGD people continue to experience adverse treatment in the legal system. In some areas of law, there are no or very few anti-discrimination laws as such. Criminal law, family law, policies regarding identity documents, and the rules governing military service are examples. In areas of law where anti-discrimination laws do apply, federal coverage is limited by the size or type of the entity subject to it. State laws may fill in the missing protections, but only about half the states have explicit coverage for sexual orientation and gender identity, and the scope of sex discrimination under most state laws has not been determined. Even in situations in which there are now protective laws, the degree of enforcement varies.

The following summaries of existing law are intended to give the reader context for the discussions of the different domains of health and well-being in the remainder of this report. They describe the background framework for understanding the research into discrimination that has been published in particular fields. More details are provided in the chapters that address a particular context, such as education (Chapter 9), employment (Chapter 10), and health care (Chapters 11 and 12).

The rest of this section addresses legal topics in two major areas: laws that apply to those situations in which an individual's physical liberty is at stake, and anti-discrimination laws of various kinds. The following two major sections of this chapter address areas of law in which explicit protections against discrimination usually do not exist and the increasingly important question of whether religious liberty can form the basis for an exception to anti-discrimination law.

The Possible Loss of Physical Liberty

Individuals who are brought within the jurisdiction of the criminal law system, including juvenile detention, and those who are caught up in the immigration system face potential loss of liberty in the literal sense that they may be incarcerated.

Criminalization

The Supreme Court decriminalized most private consensual adult sexual conduct in its 2003 decision in *Lawrence v. Texas* (539 U.S. 558). However, SGD people continue to be subject to heightened surveillance and engagement with police for a variety of other criminalized behaviors because of intersecting factors, such as gender-nonconforming appearance and the high rate of homelessness among LGBT youth (Goldberg et al., 2019). In addition, the ruling in *Lawrence v. Texas* did not extend to two types of criminalized conduct that disproportionately affect SGD people: sex involving payment and behavior that may cause exposure to HIV.

Every state continues to criminalize sex for which one party pays another (with the exception of some counties in Nevada). High rates of unemployment and homelessness contribute to a high rate of sex work among transgender women, especially transgender women of color, and homeless youth (Forge and Ream, 2014; Nadal, 2014; Ream, Barnhart, and Lotz, 2012; Van Leeuwen et al., 2006). One in five respondents to the 2015 U.S. Transgender Survey (USTS) reported working in the underground economy, defined to include sex work (James et al., 2016). A local study in New York found that transgender people of color were twice as likely to be arrested for sex work as white transgender people (Goldberg et al., 2019). Mistreatment during interactions with the police is also a common experience for sex workers (Platt et al., 2018). Thus, although these laws are neutral on their face, in practice they have a disproportionate impact on some of the most vulnerable SGD groups.

In a systematic literature review of studies about the associations between the legal system and the health of people who engage in sex work, researchers found that harsh enforcement policies, such as violent or abusive behavior by police, are associated with increased risk of HIV infection or sexually transmitted disease and the risk of violence by other actors (Platt et al., 2018). The pathways linking police practices and health risks include the disruption of sex workers' own harm reduction activities, such as negotiating with clients, carrying condoms (which are sometimes used as evidence against them), and avoidance of isolated locations (Platt et al., 2018). Secondary risks of arrest include increased possibility of eviction, loss of other work, and barriers to access to health and other services (Hanssens et al., 2014; Platt et al., 2018).

The second category of criminalized conduct of special interest to SGD people consists of laws that criminalize behavior that may cause exposure to HIV. All but seven states and the District of Columbia have such a law (including laws allowing sentence enhancement for violations of other crimes if the defendant is HIV positive). Some applicable laws are HIV specific; others also cover other transmissible infections. In most states, no proof of actual transmission or intent to transmit is required. People of color are disproportionately arrested and prosecuted for these offenses (Center for HIV Law and Policy, 2019).

Both the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Justice (DOJ) have recommended that states reexamine the basis for these laws and modify their statutes to align punishment with risk (Centers for Disease Control and Prevention, 2014; Lehman et al., 2014). Four states—Iowa, California, Michigan, and North Carolina—have done so (Sears, Goldberg, and Mallory, 2020). Currently, laws in 23 states criminalize behavior that carries no risk or "effectively no risk" of transmitting HIV (as determined by the CDC). In 33 states, the crimes are classified as felonies; in eight states, they are misdemeanors; and in three states, prosecutions may invoke a sentence enhancement law. In some states, the law carries greater penalties for exposure to HIV than for exposure to diseases for which there is a much greater risk of transmission (Center for HIV Law and Policy, 2019). A study of enforcement in Missouri from 1990 to 2019 found that the state spent at least $10.2 million during that period for costs of incarcerating people convicted of HIV-related crimes, not counting the expenses related to arrest, prosecution, probation, and parole (Sears, Goldberg, and Mallory, 2020). This is the first study that has measured the costs of these laws.

There is a strong association between the criminalization of HIV exposure and the criminalization of sex work. Hundreds, perhaps thousands, of people are arrested each year for HIV exposure-related crimes, a large number of whom are also arrested for sex work (Hasenbush et al., 2017). A study of HIV-related arrests in California found that approximately 95 percent occurred in the context of solicitation for sex (Goldberg et al., 2019). This enforcement pattern disproportionately affects transgender women, gay and bisexual men, and people of color (Baskin, Ahmed, and Forbes, 2016; Sears, Goldberg, and Mallory, 2020). There is widespread agreement among public health professionals that decriminalization of sex work would contribute significantly to the effort to combat the spread of HIV (Das and Horton, 2015).

Treatment in the Criminal Law System

Studies have repeatedly found routine mistreatment of SGD people by police officers and prison staff (Goldberg et al., 2019). While incarcerated, sexual minorities are more likely than heterosexual inmates to encounter sexual assault. (Meyer et al., 2017; Wilson et al., 2017). In the 2015 USTS, 58 percent of respondents who interacted with police officers reported experiencing verbal harassment, physical or sexual assault, or other forms of mistreatment. Meyer and colleagues (2017) found that sexual minority inmates encountered administrative segregation more frequently than others—in part because consensual sexual contact was punished, but also because sexual minority inmates have higher rates of psychological distress than heterosexual inmates.

For women, rates of incarceration are higher than for non-SGD women. In both adult and juvenile facilities, lesbian and bisexual women and girls are overrepresented (Meyer et al., 2017; Wilson et al., 2017). In one study of women in jails, 35.7 percent were sexual minorities, while the comparable rate for sexual minority men in jail was 6.2 percent; similarly, for women in prison, 42.1 percent were sexual minorities, compared with 9.3 percent of men in prison (Meyer et al., 2017).

The federal Prison Rape Elimination Act (PREA) requires DOJ to collect data, develop standards, and disseminate information in an effort to deter sexual violence in prisons. Regulations issued pursuant to PREA provide national standards applicable to state and federal prisons, including a model screening process for assessing the likelihood of victimization of inmates and an individualized risk assessment that includes provision of safe housing for SGD inmates (28 C.F.R. 115.41–115.43). In a guidance document issued in 2018, the Bureau of Prisons changed the standards, including by directing that the initial facility assignment will be based on the inmate's "biological sex," changing the prior policy in which housing was based on the person's self-identified gender identity. The 2018 rules stated that placement based on "the inmate's identified gender would be appropriate only in rare cases."[1]

The enforcement status of PREA, including the new regulations, is unclear. The law requires audits of the institutions to which it applies, but it lacks a mechanism for effective independent oversight of prison conditions (Deitch, 2010). Independent external oversight is considered an essential tool for preventing violence in prison, especially for vulnerable populations, such as inmates who are susceptible to sexual assault (Deitch, 2010). In a conference of the Commission on Safety and Abuse in America's Prisons (2006), more than 100 correctional experts from inside and outside the United States endorsed the need for such oversight.[2]

Immigration

Prior to 1990, immigration law was used to exclude people classified as "sexual deviants," which included SGD people (Eskridge, Hunter, and Joslin, 2018). Currently, the most urgent immigration issue for SGD populations is the treatment of detainees. The Associated Press has reported that approximately 300 individuals who identify as transgender entered Immigration and Customs Enforcement (ICE) custody between 2003 and 2019 (Bryan, 2019). Widespread abuse and mistreatment of SGD detainees and poor medical care in ICE facilities has been well documented; in 2018–2019, two transgender women died in ICE custody (Evans, 2020; Gruberg, 2018; Hanssens et al., 2014; Oztaskin, 2019).

Because PREA covers all federal and state prisons, jails, and detention facilities, it also applies to immigration detention facilities run by the U.S. Department of Homeland Security (DHS). DHS has the responsibility to develop and implement procedures to prevent sexual violence in its detention facilities. In January 2020, after continuing reports of abuse and a congres-

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[1] *Bureau of Prisons Change Order: Transgender Offender Manual.* May 11, 2018. Available: https://www.documentcloud.org/documents/4459297-BOP-Change-Order-Transgender-Offender-Manual-5.html.

[2] See https://www.vera.org/projects/commission-on-safety-and-abuse-in-americas-prisons/learn-more.

sional letter demanding release of transgender people in ICE custody, ICE closed one facility for transgender women and transferred them to other units housing transgender people (Evans, 2020). It is unclear whether ICE places transgender detainees only in facilities that meet health and safety standards for that population (Evans, 2020).

Anti-Discrimination Laws

Federal, state, and local laws prohibit some forms of discrimination based on sexual orientation or gender identity, but coverage can be inconsistent depending on the scope of each law. A typical anti-discrimination statute enumerates the protected characteristics (such as race or sex) and the arenas in which the laws apply (such as employment or housing). Most anti-discrimination laws apply to both public- and private-sector entities; if the alleged discriminator is a public agency, then the provisions of the Constitution also apply.

States' anti-discrimination laws can differ from federal law in various ways. In general, federal laws provide stronger remedies than state and local laws. With regard to coverage, however, state laws tend to include smaller employers and more types of public accommodations than do federal laws. Approximately 50 percent of the U.S. population lives where there is a state law explicitly protecting SGD people from at least one form of discrimination (Conron and Goldberg, 2019). Several hundred municipalities also have such laws.

Employment

Federal, state, and local laws provide protection against employment discrimination, as do the internal policies of many employers. By far the most important source of protection is the federal statute, Title VII of the Civil Rights Act of 1964, which applies to all workplaces with 15 or more employees. Although federal courts and agencies had begun to apply Title VII to LGBT cases several years prior to the 2020 Supreme Court's decision in *Bostock v. Clayton County* (140 S. Ct. 1731), coverage was not certain until the Court definitively interpreted the scope of "discrimination because of sex" to include sexual orientation and gender identity. "Discrimination" includes issues of hiring, firing, promotion, pay, and harassment; however, the Court left undecided the question of how employees' access to bathrooms or locker rooms will be analyzed under the rubric of sex discrimination. That issue may return to the Supreme Court if there is disagreement about it in future cases in the lower courts.

With the question as to inclusion under Title VII resolved, the primary utility of state laws will be for cases involving employers with fewer than 15 employees, many of which are covered by state anti-discrimination law (the threshold for coverage varies from state to state). In 22 states and the District Columbia, statutes explicitly prohibit discrimination in employment on the basis of sexual orientation or gender identity. One state—Wisconsin—specifies only sexual orientation. The remaining state laws, like Title VII, prohibit sex discrimination in employment. Several states have issued regulatory guidance that interprets the prohibition of sex discrimination in state law to include sexual orientation and gender identity (Movement Advancement Project, 2020b). For the remaining states, it will be up to state courts to decide whether to interpret state anti-discrimination laws such that "sex" encompasses sexual orientation and gender identity. As a result, for SGD people who work at small employers in roughly half of the United States, there is no certainty of legal protection against job discrimination.

Public Accommodations

The phrase "public accommodations" refers to entities that provide goods and services to the public: it can include everything from retail stores to concerts to the YMCA. This is the arena in which there is the greatest difference between federal and state anti-discrimination laws. The federal law, also enacted as part of the 1964 Civil Rights Act, was drafted narrowly to address the most outrageous examples of discrimination suffered by people of color traveling in the United States. It prohibits discrimination based on race and religion, but it does not prohibit discrimination based on sex. Thus, there is no basis under the *Bostock* decision to incorporate protection for SGD people in public accommodations under the umbrella of sex discrimination. The federal law is also narrow in its definition of "public accommodations": it primarily covers hotels, restaurants, and theaters.

This gap in federal law makes the issue of public accommodations most important in the context of state-level anti-discrimination protection. Most state public accommodations laws include sex as a protected characteristic, and they also often cover more goods and services than does the federal law, largely because they tend to have been enacted or amended more recently than 1964. In 21 states and the District of Columbia, public accommodations statutes explicitly cover both sexual orientation and gender identity. As with employment, one state law covers only sexual orientation, and two other states have interpreted their own laws against sex discrimination to also include these two characteristics (Movement Advancement Project, 2020b).

The scope of public accommodations coverage is the context for many concerns regarding use of public restrooms, locker rooms, and changing rooms by transgender people (Flores and Herman, 2020; Hart, 2014; Hasenbush, Flores, and Herman, 2019; Taylor et al., 2018). There are no laws that prohibit transgender people from using the bathroom of the sex with which they identify, but the issue remains active in public debate, so the absence of anti-discrimination protection is significant. Opponents of such coverage argue that including gender identity as a protected characteristic would permit predators claiming to be transgender to access opposite-sex bathrooms (Westbrook and Schilt, 2014), but an empirical assessment of such claims has not identified any changes in victimization rates due to the implementation of inclusive policies (Hasenbush, Flores, and Herman, 2019).

Data from the 2015 USTS suggest that transgender people experience significant anxiety regarding these issues: for example, 59 percent of respondents reported sometimes or always avoiding using a public restroom in the past year out of safety concerns or other problems they may encounter, and 26 percent reported being denied access to, having their presence questioned in, or being harassed or assaulted in public restrooms. The survey also found that 31 percent of transgender people who visited a place of public accommodation in the previous year reported being mistreated if employees knew or believed that they were transgender (James et al., 2016).

Education

In 1972, Congress enacted Title IX of the Education Amendments to the Civil Rights Act, which barred sex-based discrimination in educational programs and activities (at all levels) that receive federal funding.[3] Here again, the logic of the Supreme Court's 2020 ruling in *Bostock v. Clayton County* is expected to apply, so that discrimination based on sexual orientation or gender identity will be included within the scope of the prohibition of discrimination based on sex. Although, as noted above, the Court in *Bostock* did not address issues related to bathroom access, two federal appeals courts have ruled that denying students access to bathrooms consistent with their gender identity violates the Title IX prohibition against sex discrimination (*Whitaker v. Kenosha Unified School District*, 838 F.3d 1034 (7th Cir. 2017); *Adams v. School Board of St. Johns County*, WL 4561817 (11th Cir. 2020).

Another undecided issue concerns participation in athletics by transgender students. Most sports have traditionally been sex segregated, and Title IX permits sex-segregated athletic teams, which has produced policies that have been implemented through sex testing and verification (Ha et al., 2014). Arguments concerning transgender students' participation in athletics often bring up fairness concerns driven by the average physiological differences between those whose assigned sex at birth was male and

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[3] See https://www.justice.gov/crt/title-ix-education-amendments-1972.

those whose assigned sex was female (Carroll, 2014; Davis, 2017; Jones et al., 2017). It is not yet clear how federal Title IX protections will address gender diverse students in athletics. The National Collegiate Athletic Association implemented gender eligibility requirements in 2011 that focus primarily on the use or administration of hormone treatments (Taylor et al., 2018). Some states, sporting leagues, and school districts have adopted guidelines to address these questions (Flores et al., 2020; Taylor et al., 2018). No consensus as to best practices has emerged, however, and litigation on this issue is likely to continue.

In addition to Title IX, there are also some state laws that address issues affecting SGD students in K–12 educational systems. In 17 states and the District of Columbia, laws explicitly prohibit sexual orientation and gender identity discrimination (Movement Advancement Project, 2020a). In 24 states and the District of Columbia, laws or regulations prohibit bullying motivated by a person's sexual orientation or gender identity. Remarkably, however, two states (Missouri and South Dakota) prohibit the inclusion of sexual orientation or gender identity in their schools' anti-bullying and nondiscrimination policies (Movement Advancement Project, 2020b).

There are also conflicting state laws with respect to curriculum and activity restrictions. Alabama, Louisiana, Mississippi, Oklahoma, South Carolina, and Texas prohibit discussion of same-sex relationships in sex education (Movement Advancement Project, 2020b), although a federal trial court recently ruled that the South Carolina statute is unconstitutional (*Gender and Sexuality Alliance v. Spearman*, WL 1227345, 2020). In at least three states, by contrast, policies require inclusion of LGBT history in curricular materials.[4]

Access to Health Care and Health Insurance Coverage

Most omnibus anti-discrimination laws, such as the 1964 Civil Rights Act, do not include health care or health insurance as covered fields; those contexts are addressed in a mix of federal and state laws specific to the health sector. The three most important federal laws (or sets of laws) in the health care field are the Affordable Care Act (ACA); the Social Security Act Amendments of 1965, which created Medicare and Medicaid; and the Americans with Disabilities Act of 1990 (ADA).

Section 1557 of the ACA created the first comprehensive anti-discrimination provision applicable to the delivery of health care and access to health insurance throughout the United States. It prohibits health

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[4] See https://www.usnews.com/news/best-states/articles/2019-08-14/states-that-require-schools-to-teach-lgbt-history.

programs or facilities that receive federal funds from discriminating based on sex and other characteristics. An individual cannot be excluded from participation in, denied the benefits of, or subjected to discrimination on these bases by any health program or activity of which any part receives federal financial assistance. Shortly before the Supreme Court's June 2020 ruling in *Bostock v. Clayton County*, the U.S. Department of Health and Human Services (HHS) issued a regulation that excluded gender identity and sex stereotyping from the sex anti-discrimination protections of Section 1557 (HHS, 2016). As this report goes to press, litigation challenging the validity of this regulation is pending. As in the case of anti-discrimination protections in education under Title IX, however, courts are likely to interpret the scope of sex discrimination in Section 1557 to ban discrimination on the basis of sexual orientation and gender identity.

Of note while the question of federal protections continues to evolve, the scope of public accommodations protections in state law has sometimes been interpreted to include medical services. SGD plaintiffs have successfully used a California law to challenge the denial of alternative reproductive technology and of a hysterectomy by health care facilities (*North Coast Women's Care Medical Group v. Superior Court*, 189 P.3d 959 (2008); *Minton v. Dignity Health*, 252 Cal. Rptr. 3d 616 (Ct. App., 1st Dist. 2019)).

The Medicare program provides federal health insurance coverage to all Americans aged 65 and older, as well as to individuals with certain disabling conditions. Medicaid is a joint federal–state health insurance program offered primarily to low-income people. Both Medicare and Medicaid are covered by ACA Section 1557, and HHS has also promulgated a variety of regulations under the ACA and other federal statutes to prohibit discrimination on the basis of sexual orientation and gender identity (see Chapter 12). The 2020 regulations reinterpreting Section 1557 sought to eliminate these provisions as part of what were called "conforming amendments,"[5] but this action also appears to be in conflict with *Bostock*.

The ADA prohibits discrimination against people who are qualified to perform a job or participate in an activity but who have a physical or mental impairment that substantially limits a major life activity. Two of its provisions—one positive, one negative—are of particular relevance to SGD people. First, the ADA includes HIV infection as a covered impairment, meaning that individuals with HIV are protected from discrimination. Second, in Section 12211(b) of the law, Congress stated that "'disability' shall not include transvestism, transsexualism . . . [or] gender identity disorders not resulting from physical impairments." Whether the ADA may

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[5] See https://www.federalregister.gov/documents/2019/06/14/2019-11512/nondiscrimination-in-health-and-health-education-programs-or-activities.

nonetheless cover gender dysphoria is a question that has been answered affirmatively by at least two federal judges, but the issue has not yet been considered by a federal court of appeals.

State law also provides some protection against discrimination in access to health insurance: 14 states, Puerto Rico, and the District of Columbia prohibit health insurance discrimination based on sexual orientation and gender identity, and 7 states prohibit gender identity-based discrimination (Movement Advancement Project, 2020a). In 24 states and the District of Columbia, exclusion of gender-affirming care by private health insurance plans is prohibited. Many states also prohibit transgender exclusions in their Medicaid programs, but 10 states still explicitly exclude coverage for gender-affirming care under Medicaid, despite the fact that the anti-discrimination requirements of ACA Section 1557 apply to state Medicaid programs (Movement Advancement Project, 2020b; Taylor et al., 2018). See Chapter 12 for more details about insurance coverage of gender-affirming care for transgender people.

In addition to the general coverage questions that arise under the ACA, Medicare, Medicaid, and the ADA, there are particular treatment issues that affect SGD people. The most controversial use of "treatment" for sexual orientation and gender identity is conversion therapy, in which a medical provider attempts to change a person's sexual orientation or gender identity (see Chapter 12). Presently, 19 states and the District of Columbia prohibit conversion therapy for minors, and one state bans public funds for conversion therapy services but does not prohibit licensed medical providers from engaging in conversion therapy (Movement Advancement Project, 2020b).

Another controversial example of medical care arises in the context of children born with differences in sex development (intersex traits) (see Chapter 12). Surgery on newborns raises serious questions of informed consent (Tamar-Mattis, 2006). Although no anti-discrimination statutes explicitly include intersex people as a protected class, it is possible that laws that prohibit discrimination based on sex and the ADA could be applied to such surgery.

Housing and Credit

In light of the reasoning of *Bostock v. Clayton County*, the prohibitions of sex discrimination in the Fair Housing Act and the Equal Credit Opportunity Act can now be interpreted to include sexual orientation and gender identity (Fair Housing and Equal Opportunity, 2019). State-level protections specific to sexual orientation and gender identity also exist for housing (22 states) and credit (15 states) (Movement Advancement Project, 2020b).

AREAS OF LAW THAT LACK PROTECTIONS AGAINST DISCRIMINATION

Military Service

As this report was being completed, the 2019 ban on enlistment for military service by transgender people remained in effect but had been challenged in federal court (*Trump v. Karnoski*, 139 S. Ct. 950, 2019; *Trump v. Stockman*, 139 S. Ct. 946, 2019). Social science research has found no medical or force readiness bases for the exclusion (Elders and Steinman, 2014; Schaefer et al., 2016). The authority for the ban is a Department of Defense policy, which could be changed by a new executive branch policy, congressional action, or a judicial finding that it is unconstitutional.

Documentation of Identity

Proper identity documents are necessary for a broad range of life activities: access to important public goods, services, shelters, or other facilities; acquiring benefits; travel; financial transactions; registering to vote; and securing employment. Some identity documents (e.g., birth certificates) are prerequisites to the acquisition of other identity documents (e.g., passports).

Identity documents present urgent issues for SGD people because the sex markers or names recorded on essential documents often differ from their gender identity or expression (Taylor et al., 2018). Only 11 percent of the transgender respondents in the USTS had updated all their identity documents to reflect their current gender identity or expression, and 68 percent had updated none of their identity documents (James et al., 2016). Not having identity documents that align with a person's gender identity or expression can result in mistreatment by state officials and others (Taylor et al., 2018), and 32 percent of the respondents in the USTS whose documents did not match their gender identity or expression reported having experienced verbal harassment, denial of services or benefits, or assault (James et al., 2016). These patterns are more pronounced for gender diverse people of color (James et al., 2016). The financial costs associated with updating identity documents based on the USTS data can range from nothing to more than $2,000, with more than half of respondents reporting costs of at least $100 (James et al., 2016).

Passports, which are issued by the U.S. Department of State, require a sex designation of either male or female based on a person's birth certificate, which is required in an application for a passport. Changing the gender marker on a passport requires that a physician certify that the individual has received medically appropriate treatment (Taylor et al., 2018). There is no non-binary gender marker option for passports, but the U.S. Court of Appeals for the Tenth Circuit has ruled that the State Department must reconsider its policy (*Zzyym v. Pompeo*, 958 F.3d 1014 (10th Cir. 2020).

Almost all children born in the United States receive a Social Security number at birth through a Social Security Administration (SSA) program that allows parents to request a birth certificate and Social Security number at the same time. Because the SSA requires a record of birth that contains a gender marker of either male or female before issuing a Social Security number, the parents of an intersex infant who do not wish to immediately designate a gender for their child are effectively barred from obtaining a Social Security number. To later secure a change in the gender marker associated with a Social Security number requires submission of a corrected birth certificate, a court order showing the new gender, or a medical certification of the change in a person's gender (Taylor et al., 2018). The Selective Service System and U.S. Citizenship and Immigration Services require similar documentation to change a gender marker (Taylor et al., 2018).

For birth certificates, the requirements to change gender markers vary significantly by state (Taylor et al., 2018). In 17 states, there are surgical requirements in order to change birth certificates. In 22 states, the District of Columbia, and New York City, gender markers can be updated without surgery or a court order. Two states, Ohio and Tennessee, do not permit birth certificates to be amended. In all but 10 states, birth certificates must contain either male or female as a gender marker; there is no third option for intersex or other gender diverse people (Movement Advancement Project, 2020b).

For updating driver's licenses, the requirements to change gender markers tend to be less cumbersome than for birth certificates, although the laws also vary from state to state (Taylor et al., 2018). Applicants trying to change their driver's license gender marker may be required to submit a single form (18 states and the District of Columbia); a form plus certification from among a range of licensed professionals (10 states); a form plus certification from a narrower range of licensed professionals (3 states); or certification specifically from a licensed medical or mental health provider (6 states). Nine states require proof of surgery, a court order, or an amended birth certificate. In several states, the process is unclear. In seven states and the District of Columbia, individuals can also choose a third gender marker, such as an "X" (Movement Advancement Project, 2020b).

Name changes are obtained at the state level, almost always by court order (Movement Advancement Project, 2020b; Taylor et al., 2018). Federal agencies will change a person's name on receipt of a legal document, such as the court order issued in a proceeding for a name change or from divorce or marriage records (Taylor et al., 2018).

Family Law

Family law issues related to equal treatment are dealt with almost entirely at the state level and are usually addressed in subject-specific statutes or in case law. Several issues raise particular concerns for SGD populations: youth in foster care; the child welfare system; child custody and adoption; and recognition of birth parents.

SGD youth are overrepresented in the foster care system: Fish and colleagues (2019) found that lesbian, gay, bisexual, and same-sex-attracted youth were about 2.5 times more likely than heterosexual youth to be in the foster care system. Several studies have documented disparities in the well-being of SGD youth in the child welfare system compared with cisgender, heterosexual youth (Baams, Wilson, and Russell, 2019; Choi and Wilson, 2018; Fish et al., 2019; Wilson and Kastanis, 2015).

There are a range of protections or lack of protections across the states: 30 states and the District of Columbia have policies or regulations that prohibit sexual orientation and gender identity discrimination against youth in the child welfare system; 7 other states have policies or regulations that prohibit sexual orientation discrimination; and 12 states have explicit guidelines for placing transgender youth who are in the child welfare system in sex-segregated housing assignments based on their gender identity, and they also require that child welfare staff or foster parents receive cultural competency training on SGD youth (Movement Advancement Project, 2020b).

Parental involvement in the child welfare system arises in several ways. Same-sex couples may become parents through adoption (by a parent or parents of a nonbiological child or by a nonbirth parent of the partner's biological child) or through the use of alternative reproductive technologies. When one partner gives birth and the person's spouse seeks recognition on a birth certificate as the other parent, the Supreme Court has ruled that the state must permit it (*Pavan v. Smith*, 137 S. Ct. 2075, 2017). An individual married to a child's birth parent (including in same-sex couples) can petition for adoption of a child in every state. In 15 states and the District of Columbia, second-parent adoptions can be obtained regardless of marital status. In 24 states and the District of Columbia, adoption agencies cannot discriminate against people seeking to adopt on the basis of sexual orientation and gender identity, and 4 other states cover only sexual orientation. In the remaining states, discriminatory actions may be prohibited by laws banning sex discrimination. Eleven states permit child welfare agencies to decline to serve SGD people and same-sex couples based on religious belief (Movement Advancement Project, 2020a). (See below for more discussion of religious liberty defenses.)

For LGBT birth parents, there may be increased risk that their children will be removed from their custody and placed in foster care. In one study of low-income Black mothers, the 21 percent who identified as lesbian or bisexual were four times more likely than those who identified as heterosexual to have lost their children to the state in child welfare proceedings. The mothers whose children had been placed in state custody (and were eligible for foster care and, potentially, adoption) were three times more likely to identify as lesbian or bisexual than the mothers who were still raising their children (Harp and Oser, 2016). These findings suggest that more attention is needed to protect SGD birth parents from child removal proceedings, in addition to the equal treatment concerns of SGD people who seek to adopt.

In the event of parental divorce, courts apply a "best interests of the child" standard in deciding issues of custody and visitation. Although it used to be common for courts to assume that SGD parents were unfit or less fit than non-SGD parents to parent their children, that presumption has given way to a rule that there must be evidence that a parent's sexual orientation or gender identity would negatively affect the child in order for it to be considered (Eskridge, Hunter, and Joslin, 2018). The vagueness of the "best interests" standard renders it susceptible to claims that harm could result from prejudice against the children of SGD parents, but fewer such cases have arisen in recent years than previously. Family courts have increasingly relied on scientific experts in their adjudication of cases in which one or both parents are SGD, which has increased fairness in the adjudication process by providing a broad overview of what social science research suggests about SGD parents (George, 2016).

Protection Against Violence

The federal Matthew Shepard and James Byrd Jr. Hate Crimes Prevention Act (2009) criminalizes willfully causing or attempting to cause bodily injury with a deadly weapon because of the actual or perceived gender, sexual orientation, or gender identity of the victim if the crime is linked to interstate or foreign commerce (e.g., the victim or defendant was in transit or a weapon was used that had moved in interstate commerce). In addition, 35 states and the District of Columbia have laws that punish hate crimes committed because of sexual orientation or gender identity (Movement Advancement Project, 2020b).

In 2017 there were 1,303 reported sexual orientation victimizations and 131 gender identity victimizations according to the Uniform Crime Reports (UCR). From 2013 to 2017, 17.7 percent of hate crimes in the UCR and 25.7 percent of hate crimes in the National Crime Victimization Survey (NCVS) were related to sexual orientation bias.[6] Gender identity hate crimes have increased in recent years, with victims more likely to

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[6] See https://www.bjs.gov/content/pub/pdf/hcs1317pp.pdf.

be transgender people of color than white transgender people (Taylor et al., 2018). The National Coalition of Anti-Violence Programs (NCAVP) documented 1,036 incidents of violence or harassment against LGBTQ people in 2016, 41 percent of which were reported to the police.[7] Of the 28 homicides documented in the 2016 NCAVP report, 19 of the victims were transgender or gender-nonconforming people, and all the victims except one were people of color.

The CDC found that bisexual women encounter intimate partner violence at higher rates than other SGD populations; 46.1 percent reported being raped in their lifetime, and 74.9 percent reported being victims of sexual violence other than rape (Walters, Chen, and Breiding, 2013). In the 2015 USTS, more than half of respondents reported having experienced intimate partner violence; 47 percent reported lifetime sexual assault; and 10 percent reported having been sexually assaulted in the past year. In many cases, victimization rates were greater for transgender respondents of color than for white transgender people (James et al., 2016).

The inclusion of sexual orientation and gender identity questions in federally sponsored surveys, such as the NCVS, represents progress toward expanding data collection efforts. In addition, the U.S. Office of Management and Budget in 2016 convened the Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys to review existing federal data collection efforts, identify best practices, and articulate a research agenda for conceptual and methodological topics around collecting sexual orientation and gender identity data on federal surveys (see Chapter 4).

RELIGIOUS LIBERTY EXCEPTIONS TO ANTI-DISCRIMINATION LAWS

An increasingly important question involving civil rights law is whether and under what circumstances individuals, organizations, and businesses can assert religious beliefs as a legitimate basis for noncompliance with anti-discrimination laws or reproductive rights protections. This area of law presents complex questions that the Supreme Court is likely to continue to address in future cases (Eskridge, Hunter, and Joslin, 2018). This section focuses on the two contexts in which SGD people are most likely to encounter religious liberty issues: employment and public accommodations, the latter either as customers in the marketplace or as clients of social service agencies.

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[7] See http://avp.org/wp-content/uploads/2017/06/NCAVP_2016HateViolence_REPORT.pdf.

Employment

The Supreme Court has interpreted the Constitution to give religious organizations an absolute exemption from all anti-discrimination laws in matters that involve the employment of clergy or other people whose job involves religious instruction or conducting of services or ceremonies (*Our Lady of Guadalupe School v. Morrissey-Berru*, WL 3808420, 2020). In addition, under the provisions of Title VII, religious organizations are allowed to give preference in hiring to people of the same faith as the organization, including for jobs that do not involve duties related to the faith (*Corporation of Presiding Bishop v. Amos*, 483 U.S. 327, 1987).

Applying the federal Religious Freedom Restoration Act (RFRA),[8] the Supreme Court ruled that a for-profit business that is closely held (i.e., owned by a small number of people) could assert the religious beliefs of its owners as a defense against enforcement of the requirement that workplace health insurance plans include coverage for contraceptives (*Burwell v. Hobby Lobby*, 573 U.S. 682, 2014). The Court found that Hobby Lobby satisfied the two-part RFRA test: that requiring the business to comply with the contraceptive law would substantially burden the owners' ability to exercise their religion and that, although the government's interest in providing employees with access to birth control through their workplace health insurance was compelling, mandating all businesses to comply was not the least restrictive way to satisfy that interest.

Under the RFRA standard, courts must assess in each case whether a neutral and generally applicable federal statute, such as Title VII, imposes a substantial burden that is necessary to satisfy a compelling government interest. No case has yet come before the Supreme Court in which a small business has sought to use the religious beliefs of its owners to justify adverse employment decisions against SGD people with respect to issues such as hiring, firing, recognition of a marriage, or coverage of particular medical services, such as transition-related care in a workplace health insurance plan.

It is likely that a state anti-discrimination law would be at issue in an employment case only if Title VII is inapplicable, usually because the business had fewer than 15 employees. For the analysis that would apply in that situation, see the following section on public accommodations laws.

Public Accommodations

As noted above, there is no federal law that bans discrimination in public accommodations based on sex, sexual orientation, or gender identity, so

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[8] See https://www.congress.gov/bill/103rd-congress/house-bill/1308.

religious liberty defenses regarding access to goods and services arise only when there is an applicable state or local civil rights law. In some states, such laws exist but religiously affiliated providers are exempt from compliance (Mallory and Sears, 2020). For commercial providers or in the absence of such an exemption, in 21 states there is a state religious freedom law that directs courts to apply the same case-by-case test as for federal law. In addition, the defendant in such a case could argue that compelling it to provide the services in question would violate the free exercise clause of the First Amendment. The most common contexts for such lawsuits have been either weddings or child adoptions.

Wedding-related goods and services tend to involve for-profit businesses, such as bakers, photographers, florists, or printers. In *Masterpiece Cakeshop, Ltd. v. Colorado Civil Rights Commission* (138 S. Ct. 1719, 2014), the Supreme Court stopped short of ruling whether a First Amendment defense could bar an anti-discrimination claim, because the Court found that the evaluation by the Colorado Civil Rights Commission of the business owner's reasons for declining to make a wedding cake for a same-sex couple was colored by an anti-religious bias. A number of other similar cases are pending in which the Court may reach the merits of a religious liberty defense. State courts that have addressed this question have ruled that commercial businesses must comply with an anti-discrimination law (Mallory and Sears, 2020).

Adoption services are usually provided by state-licensed agencies, often affiliated with a religious faith group. In 11 states, the law includes an explicit exemption for child welfare agencies that permits them to refuse service to LGBT individuals or same-sex couples if doing so would conflict with their religious beliefs (Mallory and Sears, 2020; Movement Advancement Project 2020). In *Fulton v. City of Philadelphia* (922 F.3d 140 (3d Cir. 2019)), the Supreme Court will decide whether the First Amendment bars the city from terminating its contract with Catholic Social Services (CSS) for foster care placement services because CSS refused to consider applications from same-sex couples to become foster parents. The Court is expected to announce its decision by June 2021. The ruling in *Fulton* is likely to determine or at least influence similar cases pending in the lower courts.

SUMMARY AND CONCLUSIONS

SGD people come into contact with the law in a wide range of life contexts, including employment; health insurance and health care; housing; public accommodations; interactions with police and other parts of the criminal justice system; and access to and participation in government programs and government-administered systems, such as foster care, adoption, and immigration. In several of these realms, there have been important reforms that have enhanced quality of life for SGD people. But in others, mistreatment and discrimination remain frequent occurrences, especially for marginalized groups within the SGD population. In the face of changing public attitudes as well as evolving law, the effect of the legal system on the well-being of these groups is uneven and, at times, contradictory.

> **CONCLUSION 5-1: Overall, the treatment of sexual and gender diverse people in the legal system has improved during the last 20 years, but equality and fairness across all domains remains incomplete. Moreover, the remaining gaps in the law tend to disproportionately harm people of color, low-income people, and transgender people.**

Federal law now protects against discrimination based on sexual orientation and gender identity in employment, a principle that is likely to be extended to education, housing, credit, and access to health care and health insurance. However, in some realms, such as public accommodations, federal law does not offer such protections. In addition, the question of whether denial of access to bathrooms or school athletics programs based on one's gender identity counts as discrimination has not been definitively resolved.

In situations in which federal law does not provide relief, approximately 50 percent of the U.S. population lives where there is a state law that explicitly protects SGD people from at least one form of discrimination. These laws vary greatly in their scope.

The laws regulating modifications of the gender marker on essential documents also vary widely among federal and state authorities. Identity documents present urgent issues for gender diverse people because the sex markers or names recorded on essential documents often differ from their gender identity or expression, subjecting those individuals to adverse treatment.

Family law issues are almost entirely dependent on state rather than federal or local laws and vary widely, which results in unevenness and lack of uniformity. SGD youth are overrepresented in the foster care system and are especially vulnerable to its shortcomings. The treatment of LGBT birth parents in child removal proceedings and of LGBT people who seek to adopt merits more study and monitoring.

Laws related to religious exemptions from anti-discrimination laws are uneven and likely to change further as the Supreme Court and legislatures continue to consider the issue. In higher education, Title IX is likely to be interpreted to ban sexual orientation and gender identity discrimination, but it is not yet clear how Title IX protections will affect questions related to gender diverse students in athletics.

CONCLUSION 5-2: The U.S. legal system does not require uniformly equal treatment of sexual and gender diverse people. Different sources of legal authority—federal, state, and local—result in discrimination being both prohibited and permitted, depending on the context and location.

Mistreatment during interactions with the police is a common experience for SGD people. The criminalization of HIV exposure and criminalization of sex work disproportionately affect homeless youth and transgender women, especially transgender women of color. There is widespread agreement among public health professionals that decriminalization of sex work would contribute significantly to the effort to combat the spread of HIV. Both CDC and DOJ have recommended that states reexamine the basis for laws that criminalize exposure to HIV and modify their statutes to align punishment with risk.

The enforcement status of the national standards for prevention of sexual violence in prison is unclear. Federal law does not provide a mechanism for effective independent oversight of prison conditions. Independent external oversight is considered to be an essential tool for preventing violence in prison, especially for vulnerable populations, including inmates who are susceptible to sexual assault.

CONCLUSION 5-3: Sexual and gender diverse people suffer greater levels of violence than other groups in their interactions with police and prison officials. Bias crimes related to sexual orientation and gender identity have increased in recent years. Such assaults tend to disproportionately victimize sexual and gender diverse people of color and transgender people.

Statistics from the Uniform Crime Reports suggest that sexual orientation hate crimes have increased since 2013. While gender identity victimizations comprise a small share of all hate crimes, they tend to be more violent and result in severe bodily injury. SGD populations are at a higher risk of criminal victimizations beyond hate crimes, including intimate partner violence, verbal harassment, and physical or sexual assault.

REFERENCES

Baams, L., Wilson, B.D.M., and Russell, S.T. (2019). LGBTQ youth in unstable housing and foster care. *Pediatrics*, *143*(3), doi: 10.1542/peds.2017-4211.

Baskin, S., Ahmed, A., and Forbes, A. (2016). Criminal laws on sex work and HIV transmission: Mapping the laws, considering the consequences. *Denver Law Review*, *93*, 355.

Bryan, S.M. (2019). U.S. considers more options for detaining transgender migrants. *AP News*, June 13, 2019. Available: https://apnews/com/6272e6876e4c473adbeae363a606f13.

Burris, S., Wagenaar, A., Swanson, J., Ibrahim, J., Wood, J., and Mello, M. (2010). Making the case for laws that improve health: A framework for public health law research. *Milbank Quarterly*, *88*(2), 169–210.

Carroll, H. (2014). Joining the team: The inclusion of transgender students in United States school-based athletics. In J. Hargreaves and E. Anderson (Eds.), *Routledge Handbook of Sport, Gender and Sexuality* (pp. 367–375). New York: Routledge.

Center for HIV Law and Policy. (2019). *HIV Criminalization in the United States: A Sourcebook on State and Federal HIV Criminal Law and Practice*. Available: http://www.hivlawandpolicy.org/sourcebook.

Centers for Disease Control and Prevention. (2014). Prevalence and public health implications of state laws that criminalize potential HIV exposure in the United States. Available: https://pubmed.ncbi.nlm.nih.gov/24633716.

Choi, S.K., and Wilson, B.D.M. (2018). Gender diversity and child welfare research: Empirical report and implications of the Los Angeles County Foster Youth Study. *Child Welfare*, *96*(1), 79–101.

Commission on Safety and Abuse in America's Prisons. (2006). *Confronting Confinement*. Available: www.prisoncommission.org/pdfs/Confronting_Confinement.pdf.

Conron, K.J., and Goldberg, S.K. (2019). *LGBT Protections from Discrimination: Employment and Public Accommodations*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/NonDiscrimWorkPubAccom.pdf.

Das, P., and Horton, R. (2015). Bringing sex workers to the centre of the HIV response. *The Lancet*, *385*(9962), 3–4. doi: 10.1016/S0140-6736(14)61064-3.

Davis, H.F. (2017). *Beyond Trans: Does Gender Matter*? New York University Press.

Deitch, M. (2010). Special populations and the importance of prison oversight. *American Journal of Criminal Law*, *37*(3), 101–125.

Department of Health and Human Services. (2016, May 18). Nondiscrimination in health programs and activities. 45 CFR Part 92, *Federal Register*, *81*(96), 31376–31473. Available: https://www.govinfo.gov/content/pkg/FR-2016-05-18/pdf/2016-11458.pdf.

Elders, J., and Steinman, A.M. (2014). *Report of the Transgender Military Service Commission*. Available: https://www.palmcenter.org/publication/report-of-the-transgender-military-service-commission.

Eskridge, W.N., Hunter, N.D., and Joslin, C.G. (2018). *Sexuality, Gender, and the Law*. St. Paul, MN: Foundation Press.

Evans, A. (2020). ICE detaining transgender individuals despite widespread calls for their release. *Boulder Weekly*. Available: https://www.boulderweekly.com/news/ice-detaining-transgender-individuals.

Fair Housing and Equal Opportunity. (2019). *Housing Discrimination and Ppeople Identifying as LGBTQ*. Fair Housing and Equal Opportunity, U.S. Department of Housing and Urban Development. Available: https://www.hud.gov/program_offices/fair_housing_equal_opp/housing_discrimination_and_people_identifying_lgbtq.

Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys. (2016). *Toward a Research Agenda for Measuring Sexual Orientation and Gender Identity in Federal Surveys: Findings, Recommendations, and Next Steps*. Washington, DC: Federal Committee on Statistical Methodology. Available: https://nces.ed.gov/FCSM/pdf/SOGI_Research_Agenda_Final_Report_20161020.pdf.

Fish, J.N., Baams, L., Wojciak, A.S., and Russell, S.T. (2019). Are sexual minority youth overrepresented in foster care, child welfare, and out-of-home placement? Findings from nationally representative data. *Child Abuse & Neglect*, *89*, 203–211.

Flores, A.R., and Herman, J.L. (2020). Including gender identity as a protected class in public accommodations laws does not increase victimization rates: A statewide and countywide assessment. *Journal of Policy Analysis and Management*.

Flores, A.R., Haider-Markel, D.P., Lewis, D.C., Miller, P.R., Tadlock, B.L., and Taylor, J.K. (2020). Public attitudes about transgender participation in sports: The roles of gender, gender identity conformity, and sports fandom. *Sex Roles*. doi: 10.1007/s11199-019-01114-z.

Forge, N., and Ream, G. (2014). Homeless lesbian, gay, bisexual and transgender (LGBT) youth in New York City: Insights from the field. *Social Work Faculty Publications*. Available: https://scholarworks.gsu.edu/ssw_facpub/61.

George, M. (2016). The custody crucible: The development of scientific authority about gay and lesbian parents. *Law and History Review*, *34*(2), 487–529. doi: 10.1017/S0738248016000018.

Goldberg, N., Mallory, C., Hasenbush, A., Stemple, L., and Meyer, I. (2019). Police and the criminalization of LGBT people. In T.R. Lave and E.J. Miller (Eds.*), The Cambridge Handbook of Policing in the United States* (pp. 374–391). doi: 10.1017/9781108354721.020.

Gruberg, S. (2018). *ICE's Rejection of Its Own Rules Is Placing LGBT Immigrants at Severe Risk of Sexual Abuse*. Available: https://www.americanprogress.org/issues/lgbtq-rights/news/2018/05/30/451294/ices-rejection-rules-placing-lgbt-immigrants-severe-risk-sexual-abuse.

Ha, N.Q., Dworkin, S.L., Martinez-Patino, M.J., Rogol, A.D., Rosario, V., Sanchez, F.J., Wrynn, A., and Vilain, E. (2014). Hurdling over sex? Sport, science, and equity. *Archives of Sexual Behavior*, *43*(6), 1035–1042.

Hanssens, C., Moodie-Mills, A., Ritchie, A., Spade, D., and Vaid, U. (2014). *A Roadmap for Change: Federal Policy Recommendations for Addressing the Criminalization of LGBT People and People Living with HIV*. New York: Center for Gender and Sexuality Law at Columbia Law School. Available: http://www.hivlawandpolicy.org/sites/default/files/Roadmap_For_Change_full_report.pdf.

Harp, K., and Oser, C. (2016). Factors associated with two types of child custody loss among a sample of African American mothers: A novel approach. *Social Science Research*, *60*, 283–296.

Hasenbush, A., Wilson, B.D.M., Miyashita, A., and Sharp, M. (2017). *HIV Criminalization and Sex Work in California*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/research/health-and-hiv-aids/hiv-criminalization-sex-work-ca/.

Hasenbush, A., Flores, A.R., and Herman, J.L. (2019). Gender identity nondiscrimination laws in public accommodations: A review of evidence regarding safety and privacy in public restrooms, locker rooms, and changing rooms. *Sexuality Research and Social Policy*, *16*(1), 70–83.

James, S.E., Herman, J.L., Rankin, S., Keisling, M., Mottet, L., and Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. Washington, DC: National Center for Transgender Equality. Available: https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF.

Jones, B.A., Arcelus, J., Bouman, W., and Haycraft, E. (2017). Sport and transgender people: A systematic review of the literature relating to sport participation and competitive sport policies. *Sports Medicine*, *47*(4), 701–716.

Lehman, J., Gray, S., Mermin, J., Carr, M., Nichol, A., Ruisanchez, A., Knight, D., and Langford, A. (2014). *Prevalence and Public Health Implications of State Laws that Criminalize Potential HIV Exposure in the United States*. Available: https://www.ada.gov/hiv/HIV-criminalization-paper.htm.

Mallory, C., and Sears, B. (2020). LGBT discrimination, subnational public policy, and law in the United States. *Oxford Research Encyclopedia of Politics*. doi: 10.1093/acrefore/9780190228637.013.1200.

Meyer, I.H., Flores, A.R., Stemple, L., Romero, A.P., Wilson, B.D., and Herman, J.L. (2017). Incarceration rates and traits of sexual minorities in the United States: National inmate survey, 2011–2012. *American Journal of Public Health*, *107*, 267–273. doi: 10.2105/AJPH.2016.303576.

Movement Advancement Project. (2020a). *Snapshot: LGBTQ Equality by State*. Available: https://www.lgbtmap.org/equality-maps.

Movement Advancement Project. (2020b). *Mapping LGBTQ Equality: 2010 to 2020*. Available: www.lgbtmap.org/2020-tally-report.

Nadal, K.L. (2014). Transgender women and the sex work industry: Roots in systemic, institutional, and interpersonal discrimination. *Journal of Trauma and Dissociation*, *15*(2), 169–183.

Oztaskin, M. (2019). The harrowing two-year detention of a transgender asylum seeker. *The New Yorker*, October 31, 2019. Available: https://www.newyorker.com/news/dispatch/the-harrowing-two-year-detention-of-a-transgender-asylum-seeker.

Platt, L., Grenfell, P., Meiksin, R., Elmes, J., Sherman, S.G., Sanders, T., Mwangi, P., and Crago, A-L. (2018). Associations between sex work laws and sex workers' health: A systematic review and meta-analysis of quantitative and qualitative studies. *PLoS Medicine*, *15*(12), e1001680. doi: 10.1371/journal.pmed.1002680.

Ream, G.L., Barnhart, K.F., and Lotz, K.V. (2012). Decision Processes about Condom Use among Shelter-Homeless LGBT Youth in Manhattan. *AIDS Research and Treatment, 2012*, article 659853. doi: 10.1155/2012/659853.

Schaefer, A.G., Iyengar, R., Kadiyala, S., Kavanagh, J., Engel, C.C., Williams, K.M., and Kress, A.M. (2016). *Assessing the Implications of Allowing Transgender Personnel to Serve Openly*. Santa Monica, CA: The RAND Corporation. Available: https://www.rand.org/pubs/research_reports/RR1530.html.

Sears, B., Goldberg, S., and Mallory, C. (2020). *The Criminalization of HIV and Hepatitis B and C in Missouri: An Analysis of Enforcement Data 1990 to 2019*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/publications/hiv-criminalization-mo.

Tamar-Mattis, A. (2006). Exceptions to the rule: Curing the law's failure to protect intersex children. *Berkeley Journal of Gender, Law and Justice*, *21*, *59*.

Taylor, J.K., Lewis, D.C., Haider-Markel, D.P., Flores, A.R., Miller, P.R., and Tadlock, B. (2018). The factors underlying public opinion about transgender rights. In J.K. Taylor, D.C. Lewis, and D.P. Haider-Markel (Eds.), *The Remarkable Rise of Transgender Rights* (pp. 87–106). Ann Arbor: University of Michigan Press.

Van Leeuwen, J.M., Boyle, S., Salomonsen-Sautel, S., Baker, D.N., Garcia, J.T., Hoffman, A., and Hopfer, C.J. (2006). Lesbian, gay, and bisexual homeless youth: An eight-city public health perspective. *Child Welfare*, *85*(2), 151–170.

Walters, M.L., Chen, J., and Breiding, M.J. (2013). The National Intimate Partner and Sexual Violence Survey: 2010 findings on victimization by sexual orientation. *PsycEXTRA Dataset*. doi: 10.1037/e541272013-001.

Westbrook, L., and Schilt, K. (2014). Doing gender, determining gender: Transgender people, gender panics, and the maintenance of the sex/gender/sexuality system. *Gender and Society*, *28*(1), 32–57.

Wilson, B.D.M., and Kastanis, A.A. (2015). Sexual and gender minority disproportionality and disparities in child welfare: A population-based study. *Child and Youth Services Review*, *58*, 11–17.

Wilson, B.D.M., Jordan, S.P., Meyer, I.H., Flores, A.R., Stemple, L., and Herman, J.L. (2017). Disproportionality and disparities among sexual minority youth in custody. *Journal of Youth and Adolescence*, *46*, 1547–1561. doi: 10.1007/s10964-017-0632-5.

6

Public Policy and Structural Stigma

This chapter first provides an overview of three aspects of public life that affect social and gender diverse (SGD) populations: public policy, social movements, and changing public opinion. It then turns to the emerging literature on how structural factors—law, public policy, and public attitudes—influence the well-being of SGD populations, including economic outcomes, experiences of victimization and violence, and mental and physical health. Collectively, this research falls under the umbrella of what researchers call structural stigma, which is defined as "societal-level conditions, cultural norms, and institutional policies that constrain the opportunities, resources, and well-being of the stigmatized" (Hatzenbuehler and Link, 2014, p. 2).

PUBLIC POLICY, SOCIAL MOVEMENTS, AND PUBLIC OPINION

The public policy process includes defining social problems that may require policy solutions, framing public policies for the general public and policy makers, developing strategies to effect policy adoption, effectively implementing public policies, and developing accountability and evaluation mechanisms. Policies seldom change without outside social forces organizing to effect change. Thus, advocacy organizations providing services and seeking changes in public policy, which are often sponsored by government programs, are central to the policy process.

Policy Advocacy Groups

Public policies affecting SGD populations change when advocates articulate what and why changes are needed and how to implement them (Taylor, Lewis, and Haider-Markel, 2018). Given the multiple levels of government—federal, state, and local—and the division of functions associated with the separation of powers, the U.S. political and legal systems offer numerous access points to effect policy change. The complexity also means the process is susceptible to policy gridlock (Baumgartner and Jones, 1993). This means that sustained advocacy for policy change is necessary, and social movement organizing and policy advocacy groups need to have the infrastructure to maintain pressure.

Prior to the emergence of a social movement, however, are the contextual and structural factors that define choices, how individuals define problems, and how they see themselves in relation to those problems (Gusfield, 1993, 1996). Among SGD populations, early organizing centered on gay men and lesbian women who had to construct an identity in the context of high degrees of social and structural stigma (Bernstein, 2002; D'Emilio 1983). This stigma led to individuals not embracing a public gay identity until about 1958, where organizations embraced the term "homophile" as opposed to "homosexual" to de-center sex, which was often viewed in the public eye as associated with sexual deviancy (Armstrong, 2002; Bernstein, 2002; D'Emilio, 1983; Schneider and Ingram, 1993). As the social movement developed and contexts changed, the strategies, identities, and definition of problems have also changed (Gusfield, 1993, 1996).

Early organizing in what can be termed the homophile era (1958–1968) began with organizations such as the Mattachine Society and the Daughters of Bilitis pursuing strategies intended to secure civil liberties for lesbian women and gay men, effectively to remove state policies that criminalized homosexuality (Armstrong, 2002; D'Emilio, 1983). A general way to understand these efforts was a struggle for rights for gay and lesbian people to be left alone, and organizing activities were primarily about quietly lobbying elected officials and engaging with mainstream political institutions (Armstrong, 2002; D'Emilio, 1983). In April 1965, astronomer Frank Kameny and other activists began a new approach by picketing the White House. Inspired by the Civil Rights Movement and Black politics, activists Kameny and Craig Rodwell embraced the slogan, "Gay Is Good," and hinted that a change in strategy to one of a proud and public gay identity needed to be embraced to effect change.

The "Stonewall era" (1969–1973) was characterized by a radically different view, embracing gay liberation (Armstrong, 2002; D'Emilio, 2000; Ghaziani, Taylor, and Stone, 2016). In addition to fully embracing an out-of-the-closet proud gay identity, gay liberation organizations, such as the Gay Liberation Front (GLF), embraced a broad policy agenda that supported other liberation movements and direct action protests, seeking to advance economic issues and gender and racial justice, even though there remained sexual stigma in those other movements (Armstrong, 2002). Some gay liberation activists such as Marsha P. Johnson and Sylvia Rivera created Street Transvestite Action Revolutionaries (STAR) to serve some of the most vulnerable SGD people (Shepard, 2013), while others, frustrated with the priorities of the GLF, established the Gay Activists Alliance to pursue policies directly affecting gay and lesbian people, as well as to hold dances to create space for connection, gay identity building, and community (Armstrong, 2002).

This identity-based movement continued with the establishment of the National Gay Task Force in 1973 and the Gay Rights National Lobby in 1976 (the former was renamed the National LGBTQ Task Force and the latter eventually became the Human Rights Campaign). While still building capacity, these organizations pursued policy change through interaction with mainstream political institutions and embraced a public gay identity by engaging in pride marches (D'Emilio, 2000; Ghaziani, Tayor, and Stone, 2016).

Over time, LGBT social movements have engaged in cycles of mainstream tactics and direct action protest tactics, each with their successes and failures (D'Emilio 2000; Ghaziani, Tayor, and Stone, 2016). For example, the direct action protests by ACT UP during the HIV/AIDS crisis changed policies and practices to address the virus (Cohen, 1999; Gould, 2009). The mainstream strategy, which remains dominant, requires a wide range of organizations and the growth of capacity to take advantage of the numerous access points and political opportunities in the U.S. political system.

Because there are multiple access points, there are numerous opportunities for policy and legal change, but only if an infrastructure is present to take advantage of such opportunities (McAdam, 1982). Early efforts to create national advocacy organizations for SGD people were categorized as "weak, poorly funded, and newly created" (Stone, 2012, p. 41). The contemporary LGBT advocacy coalition has significant infrastructure and capacity. The coalition of organizations that advocate on behalf of SGD populations consists of a myriad of groups (Taylor et al., 2018); some focus on policy advocacy, many prioritize litigation, and others are issue specific, faith based, or work primarily to deliver goods and services. For example, the top-ranked grant-receiving organizations in 2017 included organizations that primarily provide public services (e.g., New York LGBT Community Center and Los Angeles LGBT Center); others that focus on national policy advocacy (e.g., the Human Rights Campaign and the National LGBTQ Task Force); many others that focus on legal advocacy (e.g., Transgender Law Center, National Center for Lesbian Rights, and Lambda

Legal Defense & Education Fund); and select organizations that focus on carrying out research on SGD populations and policies affecting them (e.g., Williams Institute). In 2017, about 29 percent of grants from private groups went to organizations focused on nationwide issues, 5 percent to those focused on regional (multistate) issues, 10 percent to those focused on state issues, 30 percent to those focused on local issues, and 26 percent to those focused on international issues (Wallace, Maulbeck, and Kan, 2019).

Advocacy coalitions and actors who leverage opportunities to effect policy change, collectively known as policy entrepreneurs, frequently share information to spread strategies, tactics, successes, and failures (Boushey, 2010; Mintrom and Norman, 2009). They set policy priorities (Kingdon, 1984), gain access to decision makers and decision-making arenas (Andrews and Edwards, 2004), and engage in public education and lobbying (Wright, 2003). Policy entrepreneurs often monitor the successful implementation of policies (Andrew and Edwards, 2004), and they look for future political opportunities to reinforce their policy priorities (Theodoulou, 2013). Occasionally, the differences between organizations create coordination conflicts that may impede their effectiveness (Engel, 2007; Haider-Markel, 1997).

Alongside the advocacy coalition for SGD people, there is a countermovement that opposes policy advancements designed to further the well-being of SGD people. These organizations also try to gain access to policy makers to advance their interests and control the policy agenda (Fetner, 2008; Stone, 2012; Wilson and Burack, 2012) and to craft arguments to particular audiences in opposition to policies that may benefit SGD people (Burack, 2008). Like advocacy organizations devoted to the advancement of rights for SGD populations, organizations opposed to such advancement also devote considerable resources to framing and tailoring their messages to the public (Flores, 2019; Stone, 2012). These frames are often delivered through costly initiative and referendum campaigns in an attempt to affect ballot measures (e.g., same-sex marriage bans) (Fetner, 2008; Stone, 2012). The use of direct democracy by the countermovement has historically maneuvered the LGBT advocacy coalition into a defensive position (Fetner, 2008; Stone, 2012).

Thus, over time, the SGD rights movement and the countermovement compete over issue priorities and how to frame those issues. In this dynamic context, structural forms of exclusion (e.g., California's Briggs Initiative to ban gay men and lesbian women from being school teachers) and the context of competing movements propelled lesbian women and gay men into the public eye, mobilizing them to engage in canvassing and other forms of activism to advance their positions (Armstrong, 2002). In this political and social environment, the understanding of sexual and gender diversity in the United States has changed as the SGD rights movement strategically framed policies to the voting public (Stone, 2012). Changing such discourses can also change how movements understand themselves and their identities (Gusfield, 1993, 1996), which has happened for SGD populations. This kind of change is consistent with studies of numerous social movements in the United States during the 20th and early 21st centuries.

Issue Framing

Political elites, social movements, and mass media can influence which issues become important for public policy and how those issues are framed (Garretson, 2018; Jones and Brewer, 2020; Iyengar and Kinder, 2010; Lee, 2002; Zaller, 1992). The way issues are communicated affects how people come to understand those issues, particularly when certain values are emphasized to frame proposed policies (Brewer, 2001, 2007). Policy advocates and social movements can activate public opinion by drawing attention to social problems (e.g., direct action protest, litigation, and canvassing) (McAdam, 1996), and they can frame those problems through mass media to reach the general population and try to control a narrative (Carroll and Ratner, 1999; Gamson and Wolfsfeld, 1993; Ryan 1991). Framing can facilitate how individuals evaluate social groups (Gamson and Modigliani, 1989).

For example, Brewer (2007) found that the lesbian and gay rights movement in the 1990s and early 2000s was framed around either egalitarianism or moral traditionalism, which worked to polarize people's views. When HIV/AIDS was framed as a condition affecting social deviants, resources were slow to serve the communities most affected (Cohen, 1999). Early on, advocates in favor of marriage equality adopted a "rights and benefits frame," which emphasized the rights denied to same-sex couples by denying them legal marriage recognition (Solomon, 2014; Stone, 2012). The rights frame was countered by a morality frame, which proved appealing to opponents of marriage equality (Hull, 2001). In the 2010s, there was a strategic shift in framing support for marriage equality to "love and commitment," which emphasized the emotional foundations for why people choose to get married, including people in same-sex relationships (Harrison and Michelson, 2017). The love and commitment frame registered a stronger shift in support for LGBT rights than had the rights frame (Harrison and Michelson, 2017; Solomon, 2014). Efforts to reframe issues have profound consequences in public policies affecting SGD populations (Brewer, 2007).

Because framing and public perception are so important, the pursuit of public policies affecting SGD populations is constrained by prioritizing policies that are politically palatable and crafting respectable ways to present and discuss them (Cohen, 1999). For example, in the 1990s and 2000s the advocacy coalition in favor of LGBT rights avoided direct reference to transgender people, rendering them invisible in its strategic communications (Stone, 2012). These tactics are tied to traditional electoral politics that primarily focus on the median or "middle" voter (Downs, 1957) and lead campaigns to pursue and present issues that are appealing to political moderates. Initiative and referendum campaigns on issues affecting SGD people tend to hone their political communications to that median (or "persuadable") voter (Solomon, 2014; Stone, 2012), which can create conflict with advocates embracing a more transformative view of "queer politics" (Cohen, 1997) and others embracing a single-issue, pragmatic campaign (Stone, 2012).

The way the subject of sexual and gender diversity is addressed by advocacy coalitions may benefit the well-being of some individuals but fail to benefit others (Ward, 2008). The extent to which LGBT advocacy groups sustain normative practices and ideologies (Ward, 2008) may increase stigmatization of marginalized SGD groups by increasing minority stress (Cyrus, 2017) and decreasing community belonging (Barr, Budge, and Adelson, 2016). Some groups that have felt underrepresented by LGBT advocacy coalitions, such as transgender people and people of color, have challenged how the coalitions have approached diversity, which in many cases led to greater inclusion, representation, and greater outreach (Armstrong, 2002). However, challenges remain. In policy and legal discourses on LGBT rights, for example, Marcus (2015) found that bisexual people have effectively been erased. Even intersectional coalitions like the coordination between LGBTQ and immigrant rights advocacy organizations can advance some policy goals but may perpetuate a single-issue framework that further marginalizes immigrant LGBTQ people who do not meet a "respectable" image (Mayo-Adam, 2020).

Thus, the policy process creates an apparent tension between policy priorities and how inclusive those priorities are of the most vulnerable SGD populations (Hindman, 2017; Murib, 2017; Strolovitch, 2007, 2012). For some, the policies that may affect the well-being of SGD people most may be along other dimensions of marginalization (e.g., race, class, immigration status). As a result, the identity politics framework of LGBT advocacy can overlook policy proposals that can have the most impact on the well-being of multiply marginalized SGD people (Cohen, 1999; Mayo-Adam, 2020; Strolovitch, 2007). In addition, the policies that most affect multiply marginalized SGD populations (e.g., policies relating to sex work) may be avoided due to the political system and the politics of respectability.

The way groups are socially constructed affects whether and how public policies distribute costs and benefits. Schneider and Ingram (1993) noted that policy makers might design policies to create, sustain, or reduce disparities among numerous social strata. They also established that social groups may be categorized into one of four typologies based on their degree of deservingness and political power: those who lack deservingness or power (deviants); those who are deserving but lack power (dependents); those who lack deservingness but have power (contenders); and those who are seen as both deserving of and having political power (advantaged). Just as changing frames can shift the way people come to understand issues, the social construction of groups can change over time. In their original categorization scheme, Schneider and Ingram (1993) categorized gay men and lesbian women as deviants, which aligns with research showing that lesbian, gay, and bisexual populations have lacked political power and have been stigmatized (Sherrill, 1996). More recently, people have perceived LGBT people as slightly more deserving of support but still lacking political power relative to other groups (Kreitzer and Smith, 2018). Policy makers and the public may support policies benefiting SGD populations based on how such populations are socially constructed. This perception varies geographically, temporally, and contextually.

Because they still make up a small percentage of the U.S. population, SGD people have had to depend on heterosexual and cisgender individuals to advance their interests in elections (Haider-Markel, 2010) and institutions (Hansen and Treul, 2015; Proctor, 2020). Given their high propensity to vote for the Democratic Party, lesbian and gay people may be considered to be electorally captured—when a political party does not seem compelled to respond to the demands of a constituent group because the group is unlikely to vote for the other political party (Smith, 2007)—though research is inconclusive (Bishin and Smith, 2013; McThomas and Buchanan, 2012). Direct democracy and electoral politics also mean that the attitudes of the general public, both directly and indirectly, affect policies pertaining to the well-being of SGD populations. The frequent use of ballot initiatives and referendums in the passage of state and local policies affecting SGD populations directly involves the attitudes of voters in policy making (Stone, 2012), and it is far more likely than other approaches to position LGBT rights on the losing end of policy debates (Haider-Markel, Querze, and Lindaman, 2007; Lewis, 2019; Stone, 2012).

Public Opinion and Public Policy

Although there is a strong correlation between public opinion on specific gay and transgender rights and whether public policies exist on those specific issues, studies find policies are sometimes out of step with the majority opinion (Flores, Herman, and Mallory, 2015; Lax and Phillips, 2009; Lax and Phillips, 2012). On many issues affecting SGD populations, there is a "democratic deficit," which means that a majority view is not reflected in public policy; in such a situation, a super-majority is needed (Flores, Herman, and Mallory, 2015; Krimmel, Lax, and Phillips, 2016; Lax and Phillips, 2009). One source of this difference may be that elected officials, particularly Republican officials, frequently overestimate how conservative their constituents are (Broockman and Skovron, 2018; Krimmel, Lax, and Phillips, 2016). Although policy makers are more likely to vote for gay rights when their constituents include a relatively larger share of same-sex couples (Bishin, 2009; Bishin and Smith, 2013), this effect may be conditioned by local acceptance of such rights (Hansen and Treul, 2015).

Changing Public Attitudes

Because public opinion affects both law and policy, social movements engage in policy and legal strategies to try to affect the hearts and minds of the general public. In addition to issue framing and strategic communications (Solomon, 2014; Stone, 2012), advocates and academics have examined various strategies to change public opinion to be more favorable to SGD populations. This section reviews some of those strategies. At times, these strategies have been developed by advocacy organizations who recruit academics to determine through rigorous experimental and quasi-experimental designs whether their tactics are effective.

Using a canvassing strategy to have face-to-face conversations with people about LGBT rights (Lempinen, 2020), Broockman and Kalla (2016) found in a field experiment that having these conversations about transgender people and having people imagine themselves in the shoes of transgender people—a process known as perspective taking—can reduce transphobia and make people more resistant to arguments opposing the inclusion of gender identity in public accommodations policies. Kalla and Broockman (2020) further found that in-depth conversations between canvassers and individuals are effective when individuals are asked about their own narratives, but ineffective when the canvasser provides arguments for why the individual should support an issue.

In a survey experiment, Flores and colleagues (Flores, Hatzenbuehler, and Gates, 2018; Flores et al., 2018) found that introducing the concept of transgender to people and providing them faces of transgender people can reduce transphobia, thereby potentially increasing support for transgender rights. Harrison and Michelson (2017) showed through a series of experiments that priming a shared identity unrelated to sexual orientation or gender identity (e.g., a sports fan identity) and then emphasizing support for LGBT rights can persuade people to be more supportive of LGBT rights. Michelson and Harrison (2020) showed through a series of experiments that reminding people that they are moral individuals who want do "the right thing" can increase their expressed support for transgender people and rights.

Experimental, quasi-experimental, and observational studies also found that the presence of LGBT characters in mass media can reduce prejudice toward LGBT people (Billard, 2019; Garretson, 2014, 2015, 2018; Schiappa, Gregg, and Hewes, 2005, 2006). These effects are generally explained by Allport's (1954) contact hypothesis, which states that interacting with members of social outgroups can result in prejudice reduction and notes the various ways contact can occur in a mediated fashion, such as through mass media (Schiappa, Gregg, and Hewes, 2005). Garretson (2018) showed that social movement activism rooted in ACT UP eventually led to mass media and entertainment media representing SGD populations. Such representation may be one key driver of the mass opinion change that shifted favorably toward lesbian women and gay men in the United States (Garretson, 2018). Thus, activism and social movement organizing played a role in mass opinion change.

Public Policy Adoption and Diffusion

The presence of SGD elected officials affects the adoption of public policies that advance SGD rights. Haider-Markel (2010) traced the difficulties and accomplishments of "out" gay and lesbian candidates and elected officials and found that gay and lesbian elected officials can translate their descriptive diversity into substantive policies. Reynolds (2013) showed that countries with more out LGBT legislators have more SGD-inclusive policies, and Reynolds (2018) emphasized the work done by openly LGBT legislators in building legislative coalitions to advance policies inclusive of SGD populations. This area of research is nascent, particularly because of the slowly growing number of self-identified SGD elected officials since Harvey Milk won elected office in San Francisco in 1977 and Barney Frank came out as the first out gay congressman in 1987. The first out transgender elected official in a U.S. state legislature, Danica Roem, was elected in 2017 in Virginia.

In 2020, 843 self-identified SGD people held elected office in the United States (Victory Institute, 2020), a noticeable but small minority of the 519,682 total elected officials in the country (Lawless, 2012). Of the 843 holding office, approximately 39 identified their gender as transgender, gender-nonconforming, genderqueer, Two Spirit, or intersex; 458 as gay; 252 as lesbian; 52 as bisexual; 41 as queer; and 11 as pansexual (Victory Institute, 2020).[1] "Out" LGBTQ elected officials often engage in discussions and work on legislation to advance policies that are inclusive of SGD populations (Haider-Markel, 2010; Reynolds, 2018).

Racially and ethnically diverse elected officials have formed coalitions to further advance policies, with some of those policies favorable

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[1] Numeric totals converted from percentages.

to SGD communities. These elected officials perceive an intersectional linked fate in which several policy issues cross-cut numerous groups (Tyson, 2016). For example, homeless youth issues intersect with race, class, sexual orientation, and gender identity, such that furthering policies to deal with homeless youth requires a diverse coalition of policy makers. In Congress, this coalition involves members of numerous identity-based caucuses (e.g., the LGBT Equality Caucus and the Congressional Hispanic Caucus). However, the identity politics framework of the LGBT advocacy coalition may make it more difficult to further policies that might benefit multiply marginalized SGD people (Strolovitch, 2007), which may limit policy innovation.

New policies tend to spread at both state and local levels, making it more likely that they are adopted in other locations (Berry and Berry, 2014). Such horizontal diffusion results in states and localities adopting policies similar to their neighbors, which occurred with such innovations as gender identity nondiscrimination protections (Sellers and Colvin, 2014). Innovations can be influenced by a number of factors, including the characteristics of local areas (Colvin, 2007; Taylor et al., 2014), policies in nearby states (Taylor et al., 2012), partisan control of lawmaking bodies (Lewis et al., 2014), and the capacity of local advocacy organizations (Taylor et al., 2018).

Model policies can also shape state or local law through vertical diffusion. For example, the Centers for Disease Control and Prevention has influenced state laws regarding updating birth certificates for transgender people (Taylor, Tadlock, and Poggione, 2013) and policies relevant to HIV (Rugg et al., 1999). Another form of vertical diffusion and innovation is the use of state preemption (Movement Advancement Project, 2018). Although each state constitution differs, local governments have limited powers and are subject to state laws that can further preempt their legislative authority. As a result, as policies change locally, countermovement organizations have sought legislation that removes local authority in certain fields, including anti-discrimination laws (Gossett, 1999; Movement Advancement Project, 2018).

More inclusive laws and policies are perceived as a signal that society has changed to be less stigmatizing to SGD populations (Andersen, 2017; Valelly, 2012). Just as advocates seek to win over the hearts and minds of the general public in the pursuit of policy or legal change, once they achieve policy changes, the public may respond in different ways. A pro-rights policy change has the capacity to produce both backlash or further positive change for SGD populations (Egan, Persily, and Wallsten, 2008), though recent empirical research tends to show mass attitudes become more favorable of SGD populations following adoption of pro-rights laws (Flores and Barclay, 2016; Ofosu et al., 2018; Tankard and Paluck, 2017). Sometimes legal inclusion produces opinion backlash. National public support for legalization of same-sex marriage and anti-sodomy laws dropped following *Lawrence v. Texas* in 2003 (Egan, Persily, and Wallsten, 2008), which decriminalized consensual same-sex sexual acts. Ofosu and colleagues (2018) found that when marriage equality was introduced federally, residents of states that did not yet legally recognize marriages for same-sex couples had increases in implicit and explicit antigay bias, suggesting a backlash to federal policy change.

Backlash may follow adoption of inclusive policies that are new to the general public, but the public's response may be different when policies become more familiar. For example, Barclay and Flores (2017) found that increased public familiarity with debates over marriage equality increased support for legalization of same-sex marriage, even if the particular dispute resulted in an exclusionary law.

There are intricate connections among social movements, the public policy process, and changing public opinion. Public policy and public opinion represent structures that establish the overall context for SGD populations. Social movements and advocacy organizations represent the ongoing struggle of SGD people to change those structures to improve their well-being. However, those structures are resistant to change, greatly affecting the well-being of SGD populations.

STRUCTURAL STIGMA

As discussed in Chapter 2, stigma is conceptualized as a multilevel construct (Link and Phelan, 2001), ranging from individual (e.g., self-stigma) and interpersonal processes (e.g., discriminatory treatment) to structural factors (e.g., laws and policies, institutional practices). Until recently, the vast majority of research on stigma had been directed at the individual and interpersonal levels (Major and O'Brien, 2005), despite the acknowledgment by researchers that structural forms of stigma were prevalent and likely played a significant role in shaping the lives of the stigmatized (Corrigan, Markowitz, and Watson, 2004; Corrigan et al., 2005; Link and Phelan, 2001). In the past decade, researchers have begun to address this gap, and research as it specifically relates to SGD populations has proliferated since the Institute of Medicine (2011) report.

In this section we summarize the emerging literature on structural stigma and the well-being of SGD populations, organized around four issues: measurement approaches used to study structural stigma; an evaluation of the evidence on the consequences of structural stigma for the well-being of SGD populations; the challenge of establishing causal inferences regarding the effects of structural stigma on adverse outcomes among SGD populations; and future directions to advance this emerging literature.

Measurement Approaches

The measures used to study structural stigma have tended to follow one of three approaches: legal and policy analysis, aggregated measures of social attitudes, and composite indicators. In legal and policy analysis, the content of laws or policies (whether at the country, state, or municipal level) is coded to determine the presence of structural stigma in institutions (Corrigan et al., 2005). The main advantage of this approach is that it relies on objective data sources to code the policies; the primary limitation is that such analyses often do not capture the unwritten customs or procedures that undergird informal institutional practices (Livingston, 2013).

In the second approach, aggregated measures, researchers obtain data on individuals' attitudes toward members of stigmatized groups and aggregate them to the community level (defined at various geographic scales, such as counties), so that the level of stigma can be compared across communities. This approach has been used to study structural forms of stigma related to mental illness (Evans-Lacko et al., 2012), sexual orientation (Hatzenbuehler, Flores, and Gates, 2017), and HIV/AIDS (Miller et al., 2011). A methodological strength of this approach is that members of stigmatized groups are not asked about their perceptions of community attitudes; instead, the community attitudes are derived from residents' own attitudes.

This approach overcomes same-source bias, which can introduce spurious results when the independent and dependent variables are measured with the same method (Diez Roux, 2007). However, this approach can underestimate levels of structural stigma because self-reported attitudes toward stigmatized groups may be subject to social desirability biases (Livingston, 2013). To address this limitation, researchers have begun to use alternative approaches to capture attitudes that do not rely on self-reported measures. These alternative approaches include measures of implicit attitudes that are assessed with response latencies on computerized tasks, such as the Implicit Association Test (Leitner et al., 2016); aggregation of Google searches of racial epithets (Chae et al., 2015); and objective media market data on exposure to thousands of television campaign ads for and against a topic, such as same-sex marriage (Flores, Hatzenbuehler, and Gates, 2018).

These first two approaches measure a single aspect of structural stigma (i.e., laws, policies, or social attitudes), which may be appropriate for research questions that seek to evaluate which individual components of structural stigma are most robustly associated with the well-being of SGD populations. Under some circumstances, however, it is desirable to develop comprehensive measures of structural stigma that tap into shared variance in order to eliminate or minimize unique variance (e.g., unmeasured variables that reflect constructs other than structural stigma), especially given the high correlation among different components of structural stigma.

Some studies (Hatzenbuehler, 2011; Hatzenbuehler and McLaughlin, 2014; Pachankis et al., 2015) have begun to develop these more comprehensive measures of structural stigma that capture its multiple components (e.g., laws, institutional practices, social norms). This approach reduces measurement error, thereby increasing both construct and statistical validity.

Review of Research

This section reviews and provides illustrative examples of studies of the effects of structural stigma on the well-being of SGD populations, organized by kind of study: cross-sectional, longitudinal, quasi-experimental, field, and laboratory. Table 6-1 summarizes these research examples.

Cross-Sectional Designs

Much of the work on structural stigma and SGD populations began with cross-sectional, observational designs in order to establish whether structural stigma was associated with health inequalities. In an early example of this work, Hatzenbuehler, Keyes, and Hasin (2009) coded all 50 states for the presence or absence of hate crime statutes and employment nondiscrimination policies that included sexual orientation as a protected class (the measure of structural stigma). They then linked this policy information to individual-level data on mental health and sexual orientation from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a nationally representative health survey of U.S. adults. They found that sexual orientation disparities in psychiatric morbidity were more pronounced in states that measured high in structural stigma than in states that measured low in structural stigma. For instance, LGB adults who lived in states with no protective policies were nearly 2.5 times more likely to have dysthymia (a mood disorder) than were heterosexuals in those same states, controlling for established risk factors. In contrast, there were no disparities in dysthymia by sexual orientation in states with protective policies (Hatzenbuehler, Keyes, and Hasin, 2009).

SGD populations are not passive victims as they experience structural forms of stigma, but instead they engage in a variety of coping responses that buffer the negative effects of structural stigma and lead to positive psychosocial outcomes. Retrospective cross-sectional studies of LGB respondents have revealed sources of resiliency associated with campaign ballot initiatives, including an enhanced sense of personal and communal efficacy, experiences of personal growth (e.g., having a greater understanding of how prejudice affects their lives), and support from certain heterosexual allies; these factors helped to minimize feelings of isolation and powerlessness (Rostosky et al., 2010; Russell and Richards, 2003).

TABLE 6-1 Studies Examining Structural Stigma and Well-Being among SGD Populations

Design	Measure of Stigma
	Cross-Sectional Studies
	Composite variable of state laws and attitudes toward homosexuality
	Five legislative protections for LGB status at the country level: (1) recognition of same-sex relationships; (2) possibility of same-sex marriage; (3) possibility of same-sex adoption; (4) opportunity to serve openly as gay in the military; and (5) the presence of a legal framework to address all anti-gay discrimination
	Composite variable of two state laws: hate crimes and employment nondiscrimination acts
	Constitutional amendments banning same-sex marriage
	Voter referendum on sexual orientation-based discrimination
	Voter referendum on same-sex marriage (Proposition 8)
	Prevalence of school districts whose anti-bullying policies include sexual orientation as an enumerated class
	Composite variable of four factors: (1) density of same-sex couples; (2) proportion of gay-straight alliances in public high schools; (3) five policies related to sexual orientation discrimination (e.g., same-sex marriage bans, employment nondiscrimination acts that included sexual orientation); and (4) public opinion toward LGB-related policies (e.g., same-sex adoption, public accommodations)
	Lesbian, gay, bisexual, and transgender assault hate crimes obtained from police records

Outcome	Sample Characteristics	Source
	Cross-Sectional Studies	
Tobacco and alcohol use	Nonprobability sample of young adult sexual minority men (N = 119)	Pachankis, Hatzenbuehler, and Starks (2014)
Internalized homonegativity	Nonprobability sample of sexual minority men from 38 European countries in the European Men Who Have Sex with Men Internet Survey (N = 144,177)	Berg et al. (2013)
Psychiatric disorders	Nationally representative sample of non-institutionalized adults from the National Epidemiologic Survey on Alcohol and Related Conditions (N = 577 LGB respondents)	Hatzenbuehler, Keyes, and Hasin (2009)
Psychological distress (negative affect, stress, depressive symptoms), minority stress experiences, political participation	Nonprobability sample of LGB adults (N = 1,552)	Rostosky et al. (2010)
Stressors and resilience factors	Nonprobability sample of LGB adults (N = 316)	Russell and Richards (2003)
Affect, social relationships, support and conflict	Nonprobability sample of LGB adults (N = 354)	Maisel and Fingerhut (2011)
Suicide attempts	Population-based sample of youth in 11th grade from the Oregon Healthy Teens Survey (N = 1,413 LGB respondents)	Hatzenbuehler and Keyes (2013)
Suicide attempts, tobacco use	Population-based sample of youth in 11th grade from the Oregon Healthy Teens Survey (N = 1,413 LGB respondents)	Hatzenbuehler, (2011); Hatzenbuehler, Wieringa, and Keyes, (2011)
Suicide ideation or attempts, illicit drug use, bullying	Population-based sample of public high school students from the Boston Youth Survey Geospatial Dataset (N = 102 sexual minority youth)	Duncan and Hatzenbuehler (2014); Duncan, Hatzenbuehler, and Johnson (2014); Hatzenbuehler, Duncan, and Johnson (2015)

continued

TABLE 6-1 Continued

Design	Measure of Stigma
	Composite indicator of five factors of school climate: (1) have a gay-straight alliance and safe space for LGBTQ youth; (2) provide curricula on health matters relevant to LGBTQ youths (e.g., HIV); (3) prohibit harassment based on sexual orientation or gender identity; (4) encourage staff to attend trainings on creating supportive environments for LGBTQ youths; and (5) facilitate access to providers off school property that provide health and other services specifically targeted to LGBTQ youths (from School Health Profile Data of the Centers for Disease Control and Prevention)
	Composite measure of country-level policies related to sexual orientation and aggregated social attitudes toward homosexuality held by the citizens of each country
	Composite measure of country-level policies related to sexual orientation and aggregated social attitudes toward homosexuality held by the citizens of each country
	Voter referendum on same-sex marriage
	Aggregate measure of community attitudes on same-sex marriage
	Sexual orientation enumeration in state anti-bullying statutes
	Religious Freedom Restoration Acts
Longitudinal Studies	
Longitudinal panel	Composite variable of (1) density of same-sex couples; (2) proportion of gay-straight alliances in public high schools; (3) five policies related to sexual orientation discrimination (e.g., same-sex marriage bans, employment nondiscrimination acts that included sexual orientation); and (4) public opinion toward LGB-related policies (e.g., same-sex adoption, public accommodations)

Outcome	Sample Characteristics	Source
Suicide ideation, plan, and attempts	Population-based sample of public high school students in 8 states and cities from the Youth Risk Behavior Surveillance System (N = 2,782 LGB youth)	Hatzenbuehler et al. (2014a)
Concealment	Nonprobability sample of sexual minority men from 38 European countries in the European Men Who Have Sex with Men Internet Survey (N = 174,209)	Pachankis et al. (2015)
Life satisfaction, concealment, discrimination, and victimization	Nonprobability sample of sexual minorities from 28 countries participating in the European Union Lesbian, Gay, Bisexual, and Transgender survey (N = 85,582)	Pachankis and Bränström (2018)
Life satisfaction, mental health, overall health, perceived social support	Probability-based sample of adults from the Household, Income, and Labour Dynamics in Australia Survey (N = 554 LGB respondents)	Perales and Todd (2018)
Self-rated health, tobacco use	Population-based sample from the Gallup Daily Tracking survey (N = 11,949 LGBT respondents)	Hatzenbuehler, Flores, and Gates (2017)
Bullying, suicidal ideation and attempts in the past 12 months	Population-based sample of youth from the Youth Risk Behavior Surveillance System (N = 2,000 sexual minority youth)	Meyer et al. (2019)
Unhealthy days in the past 30 days	Probability sample of adults from the Behavior Risk Factor Surveillance System (N = 4,911 sexual minorities)	Blosnich et al. (2018)
	Longitudinal Studies	
Cigarette smoking, illicit drug use	Nonprobability sample of youth from the Growing Up Today Study, a longitudinal cohort (N = 2,190 sexual minorities)	Hatzenbuehler et al., (2014b, 2015)

continued

TABLE 6-1 Continued

Design	Measure of Stigma
Repeated cross-sectional surveys linked prospectively to mortality data in the National Death Index	Aggregate measure of community attitudes on same-sex sexuality
Daily diary study	Voter referendum on same-sex marriage in 4 states
Repeated cross-section	Composite measure of laws and aggregated community attitudes in Sweden
Quasi-Experiments	
Longitudinal panel	Constitutional amendments banning same-sex marriage
Longitudinal panel	Massachusetts Supreme Court decision on constitutionality of same-sex marriage
Longitudinal panel	Illinois law legalizing civil unions (Religious Freedom Protection and Civil Union Act)
Interrupted time series	Voter referendum on same-sex marriage ("Proposition 8")
Repeated cross-sectional samples with fixed effects	Same-sex marriage policies
Repeated cross-sectional samples with fixed effects	State laws permitting the denial of services to same-sex couples ("religious exemption laws")

Outcome	Sample Characteristics	Source
All-cause mortality	Probability-based sample from the General Social Survey (N = 1,524 individuals reporting same-sex sexual partners)	Hatzenbuehler et al. (2019a)
Psychological and relational well-being	Nonprobability sample of 62 same-sex couples who completed a baseline survey and 10 daily diary reports during the month before the election	Frost and Fingerhut (2016)
Psychological distress	Population-based sample of Swedish adults from the Swedish National Public Health Survey (N = 565 LGB respondents)	Hatzenbuehler, Bränström, and Pachankis (2018)
	Quasi-Experiments	
Psychiatric disorders in the past year	Nationally representative sample of non-institutionalized U.S. adults from the National Epidemiologic Survey on Alcohol and Related Conditions (N = 577 LGB respondents)	Hatzenbuehler et al. (2012)
Health care utilization and expenditures	Nonprobability data from a health clinic serving LGBT individuals (N = 1,211 sexual minority male patients)	Hatzenbuehler et al. (2012)
Hazardous drinking, depressive symptoms, perceived discrimination, stigma consciousness	Nonprobability sample from the Chicago Health and Life Experiences of Women Study (N = 517 sexual minority women)	Everett, Hatzenbuehler, and Hughes (2016)
Homophobic bullying in the past year	Nonprobability sample from the California Healthy Kids Survey (N = 4,977,557 children)	Hatzenbuehler et al. (2019b)
Suicide attempts in the past year	Population-based data from the Youth Risk Behavior Surveillance System (N = 231,413)	Raifman et al. (2017)
Poor mental health in the past 30 days	Population-based data from the Behavioral Risk Factor Surveillance System (N = 4,656 LGB and “unsure” respondents)	Raifman et al. (2018)

continued

TABLE 6-1 Continued

Design	Measure of Stigma
Repeated cross-sectional samples with fixed effects	Three state policies: (1) same-sex partner recognition, (2) constitutional amendments banning same-sex marriage, and (3) employment nondiscrimination and hate crime laws
Cross-sectional analysis, examining "spillover" into states where "treated" individuals were accidentally exposed to the campaign ads	Media market data of television ads during a voter referendum on same-sex marriage
Field Experiments	
Audit experiment	Legal protections related to employment discrimination
Laboratory Studies	
	Composite variable of (1) density of same-sex couples; (2) proportion of gay-straight alliances in public high schools; (3) five policies related to sexual orientation discrimination (e.g., same-sex marriage bans, employment non-discrimination acts that included sexual orientation); and (4) public opinion toward LGB-related policies (e.g., same-sex adoption, public accommodations)

*NOTE: Studies on presence of gay-straight alliances in schools are discussed in Chapter 10.

Outcome	Sample Characteristics	Source
Hate crimes based on sexual orientation	Federal Bureau of Investigation's Uniform Crime Reporting Program on hate crimes related to sexual orientation	Levy and Levy (2017)
Psychological distress, negative affect	Probability-based sample of LGBT adults (N = 939)	Flores, Hatzenbuehler, and Gates (2018)
	Field Experiments	
Employment discrimination (percentage of gay men who received a callback)	1,769 job postings in states; one resume in each pair was randomly assigned experience in a gay campus organization, and the other resume was assigned a control condition	Tilcsik (2011)
	Laboratory Studies	
Physiological stress response, measured by cortisol	Nonprobability sample of LGB young adults (N = 74)	Hatzenbuehler and McLaughlin (2014)

Longitudinal Designs

Although cross-sectional studies provide important insights into associations, prospective designs improve the ability to establish temporal ordering of the relationship between structural stigma and the well-being of SGD populations. Longitudinal designs involve an assessment of the same respondents over time. A typical longitudinal design involves panel or cohort studies, in which the same respondents are repeatedly assessed. Below, we describe three types of longitudinal designs that have been used: respondents followed over time, daily diary studies, and repeated cross-sectional samples that examine trends over time.

Respondents Followed over Time Hatzenbuehler and colleagues (2014b, 2015) constructed a composite measure of structural stigma surrounding LGB youth, which included four items at the state level: density of same-sex couples, proportion of gay-straight alliances in public high schools, policies related to sexual orientation, and public opinion toward homosexuality (using aggregated responses from national polls). The researchers linked this information on state-level structural stigma to individual-level data on tobacco and illicit drug use from the Growing Up Today Study, a prospective cohort study of youth. They found that sexual minority youth living in states with low structural stigma were less likely to smoke over time than sexual minority youth in states with high structural stigma states, controlling for individual- and state-level confounders (Hatzenbuehler et al., 2014b).

Daily Diary Studies Experience sampling methods (also known as ecological momentary assessments and daily diary studies) offer a number of methodological strengths, including capturing reported events and psychological reactions longitudinally in their natural context, thereby permitting the examination of person-by-situation interactions; reducing recall bias (because the approach minimizes the amount of time that elapses between an experience and the reporting of the experience); improving the validity of modeling within-individual changes (because of the much larger number of assessments that are possible with this design); and affording researchers the opportunity to examine the temporal sequence of events and to control for third variables by using individuals as their own controls, thereby improving causal inferences (Bolger, Davis, and Rafaeli, 2003).

Daily diary studies are increasingly being used to study structural stigma among SGD populations. For instance, Frost and Fingerhut (2016) used this design to obtain daily reports on health and stress exposure from 62 same-sex couples from four states in the month before state voting on same-sex marriage in voter referenda. Self-reported exposure to negative campaign messages was associated with increased negative affect, as well as with decreased positive affect and relationship satisfaction, controlling for baseline measures of depression and daily fluctuations in general stress among both members of the couple. Thus, even though all four states voted in favor of same-sex marriage, the negative social environment created by public debates about the rights of SGD individuals affected the mental health of same-sex couples.

Repeated Cross-Sectional Samples Repeated cross-sectional samples are used to examine trends over time. In one example of this approach, researchers used a population-based dataset in Sweden that has assessed sexual orientation and mental health every 5 years since 2005 (2005, 2010, 2015). Over this 10-year period, there were marked declines in structural forms of stigma, including changes in laws and policies that provided protections to sexual minorities, as well as declines in prejudicial attitudes towards homosexuality. These declines in structural stigma were associated with a significant reduction in the magnitude of the sexual orientation disparity in mental health: in 2005, gay men and lesbian women were nearly three times more likely to meet criteria for elevated psychological distress than heterosexual men and women, but in 2015 the sexual orientation disparity was eliminated (Hatzenbuehler, Bränström, and Pachankis, 2018). This finding is important because it suggests that sexual orientation disparities in mental health are responsive to changes in the social context.

Quasi-Experimental Designs

Researchers have complemented observational designs through the use of several different methods, such as quasi-, or natural, experiments, which permit stronger inferences regarding the relationship between structural stigma and outcomes in well-being. Quasi-experiments are used in situations in which it is not possible or ethical to randomly assign individuals to a particular condition, as is the case in studying structural forms of stigma. Three types of quasi-experimental designs have been used: those that use longitudinal panel studies, those that use repeated cross-sectional samples, and those that use interrupted time-series designs.

Quasi-Experiments Using Longitudinal Panel Studies In this approach, researchers use quasi-experiments to examine changes in health following changes in structural stigma (usually through a change in a social policy) among the same set of respondents who have been assessed both before and after the policy change. In one example of this work, Hatzenbuehler and colleagues (2010) took advantage of the fact that, leading up to and during the 2004 election, several states passed constitutional amendments banning same-sex marriage. These events occurred between two waves of data collection of NESARC. Respondents were first interviewed in 2001 and then reinterviewed in 2005, following the adoption of bans on same-sex marriage. LGB adults who lived in states that passed same-sex marriage bans experienced a 37 percent increase in mood disorders, a 42 percent increase in alcohol use disorders, and a 248 percent increase in generalized anxiety disorder between the two waves (Hatzenbuehler et al., 2010). In contrast, LGB respondents in states that did not adopt such bans did not experience a significant increase in psychiatric disorders during the study period. The mental health of heterosexuals in states that adopted the bans was largely unchanged between the two waves.

Complementing this study, which suggests that implementing structural stigma through state laws may have negative mental health consequences for LGB populations, there is evidence that abolishing structural forms of stigma may improve their health. When Massachusetts became the first state to legalize same-sex marriage in 2003, researchers obtained data (from previously collected medical records) from a community-based health clinic in Massachusetts to examine the influence of the law on health care use and costs among sexual minority men. There was a 15 percent reduction in mental and medical health care utilization and costs among these men in the 12 months following the legalization of same-sex marriage, compared with the 12 months before (Hatzenbuehler et al., 2012).

Quasi-experimental designs cannot rule out the possibility that some other factor that occurred contemporaneously with the change in structural stigma affected the results. However, the plausibility of alternative factors can be evaluated by examining whether they occurred during the same time period and, if so, whether they could have contributed to the results. For example, in the aforementioned study by Hatzenbuehler and colleagues (2012), the researchers examined data from the Centers for Medicare & Medicaid Services to determine trends in health care costs during the study period, 2002–2004. These data revealed that health care costs in the general population of Massachusetts residents increased during the study period. This pattern was in the opposite direction of those observed in the study's sample of sexual minority men, suggesting that external factors in the Massachusetts health care environment were unlikely to have influenced the results.

Quasi-Experiments Using Repeated Cross-Sectional Samples A second quasi-experimental approach uses repeated cross-sectional samples with state fixed effects to examine the consequences of structural stigma for SGD populations. In this approach, the same respondents are not followed, as in the studies reviewed above; instead, different "snapshots" of a population are followed over time to determine whether changes in structural stigma affect outcomes in well-being.

In one example of this work, Raifman and colleagues (2018) used a difference-in-difference-in-differences analysis[2] that compared changes in

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[2] Difference-in-difference-in-differences is a statistical technique that studies the status of a "treatment" group" and a "control group" before a treatment is administered, as well as studying the outcomes of each group after the treatment.

mental distress among LGB and heterosexual respondents in three states that implemented laws in 2015 denying public accommodations services to same-sex couples (treatment group) with changes in mental distress among LGB and heterosexual respondents in six geographically nearby states with similar demographics but without these laws (control group). Data on mental health and sexual orientation came from the Behavioral Risk Factor Surveillance System. The only group experiencing an increase in mental distress during this period was that of the sexual minorities living in states with the denial law. This increase was equivalent to a 46 percent relative increase in sexual minority adults experiencing mental distress in these states (Raifman et al., 2018). This study used state fixed effects, which controlled for baseline differences in rates of mental distress across states, and for time-invariant characteristics (e.g., political climate) that could have affected both the independent and dependent variables.

Levy and Levy (2017) used a similar quasi-experimental approach in a study looking at a different well-being outcome: hate crimes targeting LGBT populations. The authors used repeated cross-sectional data on hate crimes from the Federal Bureau of Investigation's Uniform Crime Reporting Program, examining whether state laws (constitutional amendments banning same-sex marriage, same-sex partner recognition, employment nondiscrimination, and hate crime laws) were associated with reduced incidence of hate crimes against LGBT individuals. Results indicated that the presence of hate crime and employment nondiscrimination laws that include sexual orientation as a protected class resulted in a small but statistically reliable reduction in the incidence of hate crimes against LGBT populations. For instance, states instituting a nondiscrimination law had one fewer reported hate crime per 900,000 people during the year the policy was adopted and an additional one fewer reported crime per 1.2 million people in the following year (Levy and Levy, 2017).

Quasi-Experiments Using Interrupted Time Series Another quasi-experimental approach is the use of interrupted time-series designs, a statistical tool used in nonexperimental data for assessing associations between policy or legislation and outcomes of interest. With a series of repeated observations, this approach compares the rates of a phenomenon before and after a policy or legislative change. Hatzenbuehler and colleagues (2019b) used this approach to examine the associations between a voter referendum that restricted marriage to heterosexuals in California (Proposition 8, in 2008) and homophobic bullying among youth. They strategically combined data from nearly 5 million youth in more than 5,000 schools across 14 school years, linked to statewide data on school gay-straight alliances, to determine whether rates of homophobic bullying increased as a result of the referendum. The interrupted time-series analyses found that the 2008–2009 academic year, during which Proposition 8 was passed, served as a turning point in homophobic bullying (Hatzenbuehler et al., 2019b). Specifically, the rate of homophobic bullying increased and accelerated in the period prior to Proposition 8 and then gradually declined in the years following the vote. Specificity analyses showed that these trends were not observed among students who reported that they were bullied because of their race, ethnicity, religion, or gender, but not because of their sexual orientation. The analysis also showed that the presence of gay-straight alliances served as a protective factor specific to school contexts among LGBT youth; they were associated with a smaller increase in homophobic bullying during the pre-Proposition 8 period.

Field Experiments

One of the strengths of field experiments is that they retain the internal validity of a traditional randomized experiment but improve external validity by examining stigma processes in "real-world" settings. One particular type of field experiment is the audit experiment, which has been used in several studies on discrimination. An innovative example of this approach was conducted by Tilcsik (2011), who explored discrimination based on sexual orientation in employment outcomes among men. The researcher submitted a pair of fictitious, but ostensibly real, resumes to job postings of white-collar, entry-level jobs in seven states that were chosen on the basis of whether they had employment nondiscrimination laws that included sexual orientation as a protected class. The sexual orientation of the applicant was randomly assigned to each pair before the resumes were sent: the sexual orientation of the apparent applicant was signaled through the applicant's membership in a campus organization during college. Although the resumes differed slightly to avoid raising suspicion, there was no systematic relationship between resume quality and sexual orientation; as such, any difference that was observed in call-back rates (the dependent variable of interest) could be attributed to the sexual orientation of the applicant.

Gay men were approximately 40 percent less likely to be offered a job interview than similarly qualified heterosexual men, an effect that is similar to previous audit studies on Black-white disparities in employment outcomes (Tilcsik, 2011). However, there was also substantial variation in the level of hiring discrimination across the seven states. Specifically, rates of employment discrimination against gay men were higher in states that did not have employment nondiscrimination policies that protected gay men. Thus, this study provided experimental evidence not only that both interpersonal and structural discrimination influence employment outcomes, but also that these forms of discrimination interact to produce adverse employment outcomes for gay men.

Laboratory Studies

The primary advantage of laboratory designs is that researchers can examine how structural stigma moderates responses to the same stimuli as measured in a controlled setting. In these studies, individuals are recruited on the basis of their prior exposure to structural stigma (high or low) and then are assigned to different conditions to examine how structural stigma influences their behavioral, psychosocial, and physiological responses.

In one example of this work, researchers recruited 74 LGB young adults who were raised in 24 different states as adolescents. The states differed widely in terms of structural stigma, which was coded on the basis of a composite measure that included, among other factors, state laws and attitudes (Hatzenbuehler and McLaughlin, 2014). All respondents were currently living in New York, a low structural stigma state. In order to examine how prior exposure to structural stigma during adolescence affected subsequent physiological stress responses during young adulthood, participants completed a validated laboratory stressor, the Trier Social Stress Test (TSST), and neuroendocrine measures were collected. LGB young adults who were raised in high structural stigma states as adolescents evidenced a blunted cortisol response following the TSST compared with LGB young adults raised in low structural stigma states. This blunted cortisol response has been similarly documented in other groups that have experienced chronic stressors, including children exposed to childhood maltreatment (Gunnar et al., 2009). Thus, these results suggest that the stress of growing up in high structural stigma environments may exert biological consequences that are similar to those from other chronic life stressors.

Establishing Causal Inferences

Researchers have used several different approaches to achieve the strongest inferences possible regarding the effects of structural stigma on the well-being of SGD populations. Below, we briefly discuss six of these strategies.

First, as shown in the studies above, researchers have used a multimeasure, multimethod, multi-outcome approach to examine the consequences of structural stigma for SGD populations. This is an established approach to assessing validity; when convergence is demonstrated, one can be relatively confident that the results are not spuriously confounded by particular methods, measures, or outcomes (Campbell and Fiske, 1959). Relatedly, the findings of structural stigma have been documented across multiple research groups using different methods, samples, and measures, providing further support for the robustness of these findings.

Second, researchers have explored whether the effects of structural stigma are apparent among SGD populations and not among cisgender, heterosexual populations. When associations between structural stigma and well-being outcomes are observed only among members of the stigmatized group, it is likely that this result is due to structural stigma itself rather than to factors that may be associated with it (e.g., better economic conditions). Studies have generally documented this kind of specificity (e.g., Blosnich et al., 2018; Duncan and Hatzenbuehler, 2014; Hatzenbuehler and Keyes, 2013; Hatzenbuehler et al., 2010, 2014a; Raifman et al., 2018), or they have shown that the association between structural stigma and well-being outcomes is more pronounced for SGD populations than for non-SGD populations (e.g., Hatzenbuehler, Bränström, and Pachankis, 2018; Raifman et al., 2017); however, there are some studies that have shown that structural stigma is associated with health outcomes among both stigmatized and non-stigmatized groups (e.g., Hatzenbuehler, 2011; Meyer et al., 2019).

A third approach for improving causal inferences comes through the direct assessment of plausible alternative explanations. One alternative explanation for the relationship between structural stigma and health is that people with better health move away from policy regimes and attitudinal contexts that disadvantage them, leaving unhealthy respondents behind. If this occurs, differential selection by health status could contribute to the observed association between structural stigma and health. Studies have begun to address this possibility and have thus far not found strong evidence for this selection hypothesis. For instance, using data from the General Social Survey (2008–2014), Hatzenbuehler, Flores, and Gates (2017) found that among participants who self-reported fair or poor health, sexual minorities were *more* likely to have moved out of state than heterosexuals (43 percent and 37 percent, respectively), the opposite of what the social selection hypothesis would predict. This finding indicates that differential selection by health status is unlikely to be responsible for the observed association between structural stigma and well-being outcomes among SGD populations.

Fourth, researchers have controlled for a variety of potential individual- and structural-level confounders to rule out spurious associations between structural stigma and well-being. By and large, results remain robust to the inclusion of these confounders. In addition, researchers have used fixed effects analyses (e.g., Levy and Levy, 2017; Raifman et al., 2017, 2018), which control for baseline differences across geographic units (e.g., states) in the analysis, as well as for time-invariant characteristics that could affect both structural stigma and health outcomes.

Fifth, researchers have conducted falsification tests that show structural stigma does not predict outcomes it theoretically should not influence, such as fruit juice consumption (Raifman et al., 2017) or cancer diagnoses (Flores et al., 2018).

Finally, one potential methodological limitation that can affect internal validity (and therefore causal inferences) is expectancy effects, meaning that researchers' biases in obtaining support for their hypotheses about the effects of structural stigma may influence their coding behaviors of the independent (i.e., structural stigma) or dependent (e.g., health) variables. The studies discussed above have largely minimized the threat of expectancy effects because of the methodological approaches that were used. Specifically, researchers first obtained data on structural stigma, typically from external sources. Data on policies were either collected by outside groups that use legal and policy experts to independently code the policies or were obtained from publicly available data sources whose accuracy can be objectively verified by comparisons with legislative records (Krieger et al., 2013; Pachankis et al., 2015). In studies that used data on aggregated social attitudes as the indicator of structural stigma, researchers usually obtained these data from publicly available data sources (e.g., the General Social Survey) rather than collecting the data themselves, thereby reducing the likelihood of expectancy effects. Information on structural stigma was then linked to datasets in which the outcomes were previously collected by other researchers who were, by definition, blind to study hypotheses (because the data were not originally collected for the purposes of studying structural stigma). This approach further minimizes the threat of expectancy effects.

Advancing Research on Structural Stigma

Although research has advanced understanding of how structural stigma affects the well-being of SGD populations, several gaps remain. In this section we review these gaps, as well as needed data. In addition, we identify key barriers that have hindered work in this area and offer suggestions for addressing these data needs in order to advance the evidence base.

Research Needs

For research that is needed to advance the emerging field of structural stigma and SGD well-being, we focus on five areas: mediating pathways, expanding measurement of structural stigma, life course and developmental trajectories, structural stigma relevant to individuals with diverse genders and sexualities, and intersectionality.

Mediating Pathways Although most research to date has focused on main effect relations between structural stigma and well-being outcomes among SGD populations, research has begun to identify potential mechanisms explaining this association. This work has largely focused on two primary pathways: stress mechanisms and psychosocial mechanisms. Evidence for a stress pathway comes from both direct tests—e.g., research indicating that structural stigma is associated with dysregulated physiological stress responses among LGB young adults (Hatzenbuehler and McLaughlin, 2014)—and from indirect tests (Hatzenbuehler et al., 2012).

The second potential pathway involves psychosocial mechanisms, such as social isolation and maladaptive forms of emotion regulation, which have been shown to mediate the health effects of individual and interpersonal forms of stigma (Hatzenbuehler, 2009; Hatzenbuehler, Phelan, and Link, 2013). For example, LGB respondents who live in countries with higher levels of structural stigma report greater identity concealment, which in turn predicts lower life satisfaction (Pachankis and Bränström, 2018). In addition, in Australia, LGB respondents who lived in communities with higher levels of structural stigma (i.e., constituencies with higher proportions of residents voting against same-sex marriage) reported less social support, which in turn was associated with worse life satisfaction, as well as poorer mental health and overall health (Perales and Todd, 2018).

These initial findings have been important, but research is needed to identify additional mediating pathways—including material (e.g., income, educational attainment), psychosocial (e.g., emotion regulation), and biological (e.g., inflammation) pathways. This topic represents an important avenue for future inquiry and can inform potential targets for preventive interventions to reduce the negative consequences of structural stigma for SGD well-being.

Expanding Measurement of Structural Stigma As reviewed above, studies have measured structural stigma in a variety of ways. While this diversity of measurement represents a methodological strength, the work has thus far focused on a limited set of social institutions (largely, state laws and aggregated social norms). Research that expands the measurement of structural stigma to include social institutions that have thus far not received as much empirical attention in the literature is needed: those institutions include health care settings, policing, and the criminal justice and juvenile justice systems. Research is also needed that more comprehensively examines the implementation of social policies relevant to SGD populations, as well as the social, economic, and political factors that affect variability in implementation and enforcement.

In addition, the advent of "big data" sources—such as Google searches, social media (e.g., Twitter feeds), and exposure to various media content (e.g., television ads)—offers new ways of measuring the presence and scope of structural stigma, as reflected in aggregated social norms and attitudes, that affect SGD populations. To date, studies are only beginning to use these big data sources to study structural stigma as it relates to diverse sexual orientations and gender identities (Flores et al., 2018), and comprehensive information on the psychometric properties of these data sources does not yet exist. This area represents an important avenue for future research on structural stigma.

Life Course and Developmental Trajectories Research on structural stigma and the well-being of SGD people has been conducted among adolescents (Duncan and Hatzenbuehler, 2014; Hatzenbuehler and Keyes, 2013; Raifman et al., 2017), young adults (Hatzenbuehler and McLaughlin, 2014; Pachankis, Hatzenbuehler, and Starks, 2014), and adults (Hatzenbuehler et al., 2010, 2012; Pachankis and Bränström, 2018; Perales and Todd, 2018; Raifman et al., 2018). However, most research examines exposure to structural stigma at a single point in development, and attention to developmental timing and chronicity of exposure to structural stigma has been relatively lacking. Thus, although it is clear that structural stigma matters for the health and well-being of SGD populations, how this develops over the life course is not well understood. Future research should therefore consider how structural stigma unfolds using life course and developmental trajectories in order to advance this line of work. Researchers could also study dose–response relationships between length of exposure to structural stigma over a person's life course and adverse outcomes among SGD populations.

Structural Stigma Relevant to Individuals of Diverse Genders and Sexualities Most research has examined structural stigma related to sexual orientation, with a particular focus on same-sex sexuality. Comparatively fewer studies have been conducted about structural stigma related to other sexual orientations, such as bisexuality, as well as to individuals with intersex traits. In addition, there is a dearth of research on structural stigma related to gender identity (for an exception, see Perez-Brumer et al., 2015), despite acknowledgment that transgender populations confront several sources of structural stigma (Hughto, Reisner, and Pachankis, 2015).

There are at least two reasons for this relative dearth of research. One is the lack of data structures that include measures of diverse genders and sexualities and that sample respondents across multiple contexts that vary in the level of structural stigma against these groups. Another reason is the lack of measurement development regarding structural forms that may be unique to specific groups of SGD populations. For instance, prejudice related to bisexuality involves different stereotypic content than prejudice related to homosexuality (Dodge et al., 2016; Worthen, 2013), indicating the importance of developing new measures that capture the facets of structural stigma and prejudice that are distinct to bisexuality, as well as to other diverse sexualities and genders.

Intersectionality Research to date has largely explored structural forms of stigma that are shared by LGBT populations related to their sexual orientation. This work is important, but it has tended to obscure the fact that

LGBT individuals have other identities that are relevant to their well-being, including race, ethnicity, gender, and socioeconomic status (for a notable exception, see Everett, Hatzenbuehler, and Hughes, 2016). Thus, how structural forms of stigma across multiple axes of social stratification interact to confer risk for, or protection against, adverse outcomes among SGD people with intersecting identities is not well understood. Recent research has begun to address this gap, using novel approaches to testing intersectionality (Pachankis et al., 2017), but more work is needed.

Data Needs

The most widely used approaches for studying structural stigma and well-being among SGD populations include multilevel or population-average models that provide an estimate of the effect of structural stigma on well-being outcomes, net of individual and contextual factors (Hatzenbuehler, 2017). In order to conduct these studies, researchers require datasets with the four variables (1) demographic measures of sexual orientation and gender identity (at the individual level); (2) covariates to control for potential confounders and plausible alternative explanations (measured at the individual and contextual levels); (3) dependent variables (e.g., health outcomes or other indicators of social and economic well-being, measured at the individual level); and (4) geographic information on respondents' residence (e.g., ZIP codes) that enables researchers to link structural stigma variables (i.e., the independent/predictor variable) to individual-level data.

This last point is particularly important, because without geographic measures of where respondents are located, it is not possible to examine the influence of structural stigma on SGD well-being. Currently, numerous datasets either do not provide this information on geographic residence or else release data at only one geographic level of analysis (e.g., state), which restricts researchers' ability to examine structural forms of stigma across multiple geographic levels simultaneously (e.g., state, county, city, and school). This lack of data on geographic residence across different spaces in which SGD individuals live, work, and play has created a significant barrier to advancing the literature on structural stigma.

Another data and methodological challenge in conducting research on structural stigma is the lack of a centralized mechanism by which government or private actors initiate and track surveillance of laws and policies relevant to SGD populations and their enforcement (Blake and Hatzenbuehler, 2019). This hinders the ability of researchers to longitudinally track how laws and policies, as well as their enforcement (or lack thereof), affect the well-being of SGD populations.

SUMMARY AND CONCLUSIONS

There are numerous advocacy organizations devoted to the advancement of rights for SGD populations. The contemporary LGBT advocacy coalition has growing infrastructure and capacity, and hundreds of foundations and corporations have invested in issues addressing sexual and gender diversity. At the same time, however, there are organizations opposed to the advancement of rights for SGD populations that also try to control the policy agenda and reach the public through counter campaigns and social movements.

The way issues are communicated affects how people come to understand them. The strategic shift of a frame, as with marriage equality, for example—from an "egalitarian" movement to one that was centered on "love and commitment"—can cause a shift in support and have a profound effect on public policy. However, the pursuit of polices likely to garner public support may stigmatize or erase certain SGD groups, such as bisexual and transgender men and women.

CONCLUSION 6-1: The pursuit of public policies affecting sexual and gender diverse populations is constrained by the need to frame policies that are politically palatable and socially acceptable to voters. Sometimes legal inclusion in one policy area can produce opinion backlash on other policy areas affecting those populations.

Because SGD populations make up a small percentage of the U.S. population, they have had to depend on heterosexual and cisgender individuals to advance their interests in elections, which means that the attitudes of the general public both directly and indirectly affect public policies. Contextual factors, such as the geographic distribution of the population density of SGD people, can result in differences in levels of acceptance. Policy makers are more likely to vote for gay rights when their constituencies have a larger share of same-sex couples, though this may be conditioned by local attitudes.

The majority of U.S. adults support nondiscrimination protections for LGBT people in employment, public accommodations, and housing and support transgender people being able to serve openly in the military. The public is more divided on such issues as gender identity protections in public accommodations, such as public restrooms, and businesses' right to deny services to LGBT people because of religious belief. Personalizing sexual and gender diverse people when placing them in context for poll respondents—i.e., highlighting a shared identity unrelated to sexual orientation or gender identity—can bolster support for LGBT rights.

The presence of sexual and gender diverse elected officials affects SGD public policy adoption. "Out" LGBT elected officials often work to advance policies that are inclusive of sexual and gender diverse populations, but they make up a small minority of all elected officials. Policies can diffuse horizontally, when states and localities adopt policies similar to neighboring legislations, or vertically, when national organizations effect changes to state laws or states do so to localities. More inclusive laws and policies are perceived as a signal that society has changed to be less stigmatizing of SGD populations.

> **CONCLUSION 6-2: Tracking shifts in policies and public opinion is important to illuminate the policy environments for sexual and gender diverse populations and to understand the processes and consequences of legal and policy changes.**

The well-being of SGD populations is affected not only by legal and political institutions and public attitudes, but also by structural factors, including structural stigma. There is now a growing body of evidence that structural stigma affects the health and well-being of people of diverse sexualities and genders.

Research using multiple methods has documented associations between structural stigma and well-being. The multiple dimensions of well-being across which the effects of structural stigma can be found include mental health (e.g., psychiatric diagnoses, suicide attempts, psychological distress); physiological stress response (e.g., cortisol reactivity); victimization experiences (e.g., hate crimes, homophobic bullying); and employment (e.g., employment discrimination).

> **CONCLUSION 6-3: Structural stigma is an important mechanism that contributes to inequalities for sexual and gender diverse populations across numerous domains that are essential for living healthy, productive, and fulfilling lives, including socioeconomic well-being, physical and mental health, and physical safety.**

In looking at the effects of structural stigma, studies have begun identifying mediating pathways, such as stress and psychosocial mechanisms, but work is needed to understand whether other pathways (e.g., material and biological) underlie the established associations between structural stigma and the well-being of SGD people. Research is also need to expand beyond the study of large social institutions and federal and state policies to include less-studied institutions, such as health care settings and criminal justice systems.

Big data sources may also provide insight on the ways structural stigma affects diverse sexual orientations and gender identities. Research has been conducted among adolescents, young adults, and adults, but it has not been conducted on how structural stigma develops and evolves over the life course. Furthermore, most structural stigma research has focused on gay men and lesbian women and has not considered intersectional characteristics, such as race, ethnicity, gender identity, and socioeconomic status, that are relevant to well-being. Also needed are studies that focus on less-represented SGD subgroups and consider the role of intersectionality in structural stigma. For this research, there are a number of data needs, including developing systems and methods that identify geographic indicators for SGD respondents (e.g., state or city of residence) and remove barriers in access to or use of such indicators in datasets.

> **CONCLUSION 6-4: Research on structural stigma has been hampered by the lack of available geographic data for sexual and gender diverse respondents and the absence of a centralized mechanism for longitudinally tracking the status and enforcement of laws and policies relevant to sexual and gender populations.**

REFERENCES

Allport, G. (1954). *The Nature of Prejudice*. Boston, MA: Addison-Wesley.

Andersen, E.A. (2017). Transformative events in the LGBTQ rights movement. *Indiana Journal of Law and Social Equality, 5*(2), 441–472.

Andrews, K., and Edwards, B. (2004). Advocacy organizations in the U.S. political process. *Annual Review of Sociology, 30*, 479–506.

Armstrong, E.A. (2002). *Forging Gay Identities: Organizing Sexuality in San Francisco, 1950–1944*. Chicago: University of Chicago Press.

Baumgartner, B., and Jones, B. (1993). *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.

Barclay, S., and Flores, A.R. (2017). Policy backlash: Measuring the effect of policy venues using public opinion. *Indiana Journal of Law and Social Equality, 391*, 391–408.

Barr, S.M., Budge, S.L., and Adelson, J.L. (2016). Transgender community belongingness as a mediator between strength of transgender identity and well-being. *Journal of Counseling Psychology, 63*(1), 87–97.

Berg, R.C., Ross, M.W., Weatherburn, P., and Schmidt, A.J. (2013). Structural and environmental factors are associated with internalised homonegativity in men who have sex with men: Findings from the European MSM Internet Survey (EMIS) in 38 countries. *Social Science & Medicine*, *78*, 61–69.

Bernstein, M. (2002). Identities and politics: Toward a historical understanding of the lesbian and gay movement. *Social Science History, 26*(3), 531–581.

Berry, F.S., and Berry, W.D. (2014). Innovation and diffusion models in policy research. In P.A. Sabatier and C.M. Weble (Eds.), *Theories of the Policy Process* (pp. 307–362). Boulder, CO: Westview Press.

Billard, T.J. (2019). Experimental evidence for differences in the prosocial effects of binge-watched versus appointment-viewed television programs. *Journalism and Mass Communication Quarterly, 96*(4), 1025–1051. doi: 10.1177/2F1077699019843856.

Bishin, B.G. (2009). *Tyranny of the Minority: The Subconstituency Politics Theory of Representation*. Philadelphia, PA: Temple University Press.

Bishin, B.G., and Smith, C.A. (2013). When do legislators defy popular sovereignty? Testing theories of minority representation using DOMA. *Political Research Quarterly, 66*(4), 794–803.

Blake, V., and Hatzenbuehler, M.L. (2019). Legal remedies to address stigma-based health inequalities in the United States: Opportunities and challenges. *Milbank Quarterly, 97,* 480–504.

Blosnich, J.R., Cassese, E.C., Friedman, M.R., Coulter, R.W., Sang, J.M., Matthews, D.D., and Mair, C. (2018). Religious freedom restoration acts and sexual minority population health in the United States. *American Journal of Orthopsychiatry*, *89*(6), 675–681. doi: 10.1037/ort0000349.

Bolger, N., Davis, A., and Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, *54*(1), 579–616. doi: 10.1146/annurev.psych.54.101601.145030.

Boushey, G. (2010). *Policy Diffusion Dynamics in America*. New York: Cambridge University Press.

Brewer, P.R. (2001). Value words and lizard brains: Do citizens deliberate about appeals to their core values? *Political Psychology, 22*(1), 45–64. doi: 10.1111/0162-895X.00225.

Brewer, P.R. (2007). *Value War: Public Opinion and the Politics of Gay Rights*. Lanham, MD: Rowman and Littlefield Publishers.

Broockman, D., and Kalla, J. (2016). Durably reducing transphobia: A field experiment on door-to-door canvassing. *Science, 352*(6282), 220–224.

Broockman, D.E., and Skovron, C. (2018). Bias in perception of public opinion among political elites. *American Political Science Review, 112*(3), 542–563.

Burack, C. (2008). *Sin, Sex, and Democracy: Antigay Rhetoric and the Christian Right*. Albany: State University of New York Press.

Campbell, D.T., and Fiske, D.W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*(2), 81–105. doi: 10.1037/h0046016.

Carroll, W.K., and Ratner, R.S. (1999). Media strategies and political projects: A comparative study of social movements. *Canadian Journal of Sociology, 24*(1), 1–34.

Chae, D.H., Clouston, S., Hatzenbuehler, M.L., Kramer, M.R., Cooper, H.L., Wilson, S.M., Stephens-Davidowitz, S.I., Gold, R.S., and Link, B.G. (2015). Association between an internet-based measure of area racism and black mortality. *Public Library of Science, 10*(4), e0122963. doi: 10.1371/journal.pone.0122963.

Cohen, C.J. (1997). Punks, bulldaggers, and welfare queens: The radical potential of queer politics? *GLQ: A Journal of Lesbian and Gay Studies, 3*, 437–465.

Cohen, C.J. (1999). *Boundaries of Blackness: AIDS and the Breakdown of Black Politics*. Chicago: University of Chicago Press.

Colvin, R.A. (2007). The rise of transgender-inclusive laws: How well are municipalities implementing supportive nondiscrimination public employment policies? *Review of Public Personnel Administration, 27*(4), 336–360.

Corrigan, P.W., Markowitz, F.E., and Watson, A.C. (2004). Structural levels of mental illness stigma and discrimination. *Schizophrenia Bulletin*, *30*(3), 481–491.

Corrigan, P.W., Watson, A.C., Heyrman, M.L., Warpinski, A., Gracia, G., Slopen, N., and Hall, L.L. (2005). Structural stigma in state legislation. *Psychiatric Services*, *56*(5), 557–563. doi: 10.1176/appi.ps.56.5.557.

Cyrus, K. (2017). Multiple minorities as multiply marginalized: Applying the minority stress theory to LGBTQ people of color. *Journal of Gay and Lesbian Mental Health, 21*(3), 194–202.

D'Emilio, J. (1983). *Sexual Politics, Sexual Communities: The Making of a Homosexual Minority in the United States, 1940–1970.* (1983). Chicago: University of Chicago Press.

D'Emilio, J. (2000). Cycles of change, question of strategy: The gay and lesbian movement after fifty years. In C.A. Rimmerman, K.D. Wald, and C. Wilcox (Eds.), *The Politics of Gay Rights* (pp. 31–53). Chicago: University of Chicago Press. doi: 10.1080/21565503.2018.1517047.

Diez Roux, A.V. (2007). Neighborhoods and health: Where are we and where do we go from here? *Revue d'Epidemiologie et de Sante Publique*, 55(1), 13–21. doi: 10.1016/j.respe.2006.12.003.

Dodge, B., Herbenick, D., Friedman, M.R., Schick, V., Fu, T.C., Bostwick, W., Bartlet, E., Muñoz-Laboy, D.P, Reece, M., and Sandfort, T.G.M. (2016). Attitudes toward bisexual men and women among a nationally representative probability sample of adults in the United States. *PLoS One*, *11*(10). doi: 10.1371/journal.pone.0164430.

Downs, A. (1957). *An Economic Theory of Democracy*. New York: Columbia University Press.

Duncan, D.T., and Hatzenbuehler, M.L. (2014). Lesbian, gay, bisexual, and transgender hate crimes and suicidality among a population-based sample of sexual-minority adolescents in Boston. *American Journal of Public Health*, *104*(2), 272–278. doi: 10.2105/ajph.2013.301424.

Duncan, D.T., Hatzenbuehler, M.L., and Johnson, RM. (2014). Neighborhood-level LGBT hate crimes and current illicit drug use among sexual minority youth. *Drug and Alcohol Dependence*, *135*, 65–70.

Egan, P.J., Persily, N., and Wallsten, K. (2008). Gay rights. In N. Persily, J. Citrin, and P.J. Egan (Eds.), *Public Opinion and Constitutional Controversy* (pp. 234–266). New York: Oxford University Press.

Engel, S. (2007). Organizational identity as a constraint on strategic action: A comparative analysis of gay and lesbian interest groups. *Studies in American Political Development, 21*(1), 66–91.

Evans-Lacko, S., Brohan, E., Mojtabai, R., and Thornicroft, G. (2012). Association between public reviews of mental illness and self-stigma among individuals with mental illness in 14 European countries. *Psychological Medicine*, *42*(8), 1741–1752. doi: 10.1017/s0033291711002558.

Everett, B.G., Hatzenbuehler, M.L., and Hughes, T.L. (2016). The impact of civil union legislation on minority stress, depression, and hazardous drinking in a diverse sample of sexual-minority women: A quasi-natural experiment. *Social Science and Medicine*, *169*, 180–190.

Fetner, T. (2008). *How the Religious Right Shaped Lesbian and Gay Activism*. Minneapolis: University of Minnesota Press.

Flores, A.R. (2019). Persuasion and ballot initiatives: How persuasive were the televised ads on same-sex marriage? *Politics, Groups, and Identities, 7*(1), 177–193.

Flores, A.R., and Barclay, S. (2016). Backlash, consensus, legitimacy, or polarization: The effect of same-sex marriage policy on mass attitudes. *Political Research Quarterly, 69*(1), 43–56.

Flores, A.R., Herman, J.L., and Mallory, C. (2015). Transgender inclusion in state nondiscrimination policies: The democratic deficit and political powerlessness. *Research and Politics, 2*(4), doi: 10.1177/2053168015612246.

Flores, A.R., Hatzenbuehler, M.L., and Gates, G.J. (2018). Identifying psychological responses of stigmatized groups to referendums. *Proceedings of the National Academy of Sciences*, *115*(15), 3816–3821.

Flores, A.R., Haider-Markel, D.P. Lewis, D.C., Miller, P.R., Tadlock, B.L., and Taylor, J.K. (2018). Transgender prejudice reduction and opinion on transgender rights: Results from a mediation analysis on experimental data. *Research and Politics*, 5(1), doi: 10.1177/2053168018764945.

Frost, D.M., and Fingerhut, A.W. (2016). Daily exposure to negative campaign messages decreases same-sex couples' psychological and relational well-being. *Group Processes and Intergroup Relations*, *19*(4), 477–492. doi: 10.1177/1368430216642028.

Gamson, W.A., and Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology, 95*(1), 1–37. doi: 10.1086/229213.

Gamson, W.A., and Wolfsfeld, G. (1993). Movements and media as interacting systems. *Annals of the American Academy of Political and Social Science, 528*(1), 114–125.

Garretson, J.J. (2014). Exposure to the lives of lesbian women and gay men and the origin of young people's greater support for gay rights. *International Journal of Public Opinion Research, 27*(2), 277–288.

Garretson, J.J. (2015). Does change in minority and women's representation on television matter? A thirty-year study of television and social tolerance. *Politics, Groups, and Identities, 3*(4), 615–632.

Garretson, J.J. (2018). *The Path to Gay Rights: How Activism and Coming Out Changed Public Opinion*. New York: New York University Press.

Ghaziani, A., Taylor, V., and Stone, A. (2016). Cycles of sameness and difference in LGBT social movements. *Annual Review of Sociology, 42*, 165–183.

Gossett, C.W. (1999). Dillon's Rule and gay rights: State control over local efforts to protect the rights of lesbian women and gay men. In E.D.B. Riggle and B.L. Tadlock (Eds.), *Gay and Lesbian Women in the Democratic Process: Public Policy, Public Opinion, and Political Representation* (pp. 62–88). New York: Columbia University Press.

Gould, D.B. (2009). *Moving Politics: Emotion and ACT UP's Fights against AIDS*. Chicago: University of Chicago Press.

Gunnar, M.R., Frenn, K., Wewerka, S.S., and Van Ryzin, M.J. (2009). Moderate versus severe early life stress: Associations with stress reactivity and regulation in 10–12-year-old children. *Psychoneuroendocrinology*, *34*(1), 62–75. doi: 10.1016/j.psyneuen.2008.08.013.

Gusfield, J.R. (1993). The social symbolism of smoking and health. In R.A. Rabin and S.D. Sugarman (Eds.), *Smoking Policy: Law, Politics, and Culture* (pp. 49–68). New York: Oxford University Press.

Gusfield, J.R. (1996). *Contested Meanings: The Construction of Alcohol Problems*. Madison: University of Wisconsin Press.

Haider-Markel, D.P. (1997). Interest group survival: Shared interests versus competition for resources. *Journal of Politics, 59*(3), 903–912.

Haider-Markel, D.P. (2010). *Out and Running: Gay and Lesbian Candidates, Elections, and Policy Representation*. Washington, DC: Georgetown University Press.

Haider-Markel, D.P., Querze, A., and Lindaman, K. (2007). Lose, win, or draw? A reexamination of direct democracy and minority rights. *Political Research Quarterly, 60*(2), 304–314.

Hansen, E.R., and Treul, S.A. (2015). The symbolic and substantive representation of LGB American in the US House. *Journal of Politics, 77*(4), 955–967.

Harrison, B.F., and Michelson, M.R. (2017). *Listen, We Need to Talk: How to Change Attitudes about LGBT Rights*. New York: Oxford University Press.

Hatzenbuehler, M.L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychological Bulletin, 135,* 707–730.

Hatzenbuehler, M.L. (2011). The social environment and suicide attempts in lesbian, gay, and bisexual youth. *Pediatrics*, *127*(5), 896–903.

Hatzenbuehler, M.L. (2017). Structural stigma and health. In B. Major, J.F. Dovidio, and B.G. Link, (Eds.), *The Handbook of Stigma, Discrimination and Health* (pp. 105–121). Oxford: Oxford University Press.

Hatzenbuehler, M.L., and Keyes, K.M. (2013). Inclusive anti-bullying policies and reduced risk of suicide attempts in lesbian and gay youth. *Journal of Adolescent Health*, *53*(1, Supplement), S21–S26. doi: 10.1016/j.jadohealth.2012.08.010.

Hatzenbuehler, M., and Link, B. (2014). Introduction to the special issue on structural stigma and health. Social Science & Medicine, *103*, 1–6. doi: 10.1016/j.socscimed.2013.12.017.

Hatzenbuehler, M.L., and McLaughlin, K.A. (2014). Structural stigma and hypothalamic–pituitary–adrenocortical axis reactivity in lesbian, gay, and bisexual young adults. *Annals of Behavioral Medicine*, *47*(1), 39–47.

Hatzenbuehler, M.L., Keyes, K.M., and Hasin, D.S. (2009). State-level policies and psychiatric morbidity in lesbian, gay, and bisexual populations. *American Journal of Public Health*, *99*(12), 2275–2281. doi: 10.2105/AJPH.2008.153510.

Hatzenbuehler, M.L., McLaughlin, K.A., Keyes, K.M., and Hasin, D.S. (2010). The impact of institutional discrimination on psychiatric disorders in lesbian, gay, and bisexual populations: A prospective study. *American Journal of Public Health*, *100*(3), 452–459. doi: 10.2105/AJPH.2009.168815.

Hatzenbuehler, M.L., Wieringa, N.F., and Keyes, K.M. (2011). Community-level determinants of tobacco use disparities in lesbian, gay, and bisexual youth: Results from a population-based study. *Archives of Pediatric & Adolescent Medicine, 165*(6), 527–532. doi: 10.1001/archpediatrics.2011.64. PMID: 21646585.

Hatzenbuehler, M.L., O'Cleirigh, C., Grasso, C., Mayer, K., Safren, S., and Bradford, J. (2012). Effect of same-sex marriage laws on health care use and expenditures in sexual minority men: A quasi-natural experiment. *American Journal of Public Health*, *102*(2), 285–291. doi: 10.2105/Ajph.2011.300382.

Hatzenbuehler, M.L., Phelan, J.C., and Link, B.G. (2013). Stigma as a fundamental cause of population health inequalities. *American Journal of Public Health*, *103*(5), 813–821.

Hatzenbuehler, M.L., Birkett, M., Van Wagenen, A., and Meyer, I.H. (2014a). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health, 104*(2), 279–286. doi: 10.2105/AJPH.2013.301508.

Hatzenbuehler, M.L., Jun, H.-J., Corliss, H.L., and Austin, S.B. (2014b). Structural stigma and cigarette smoking in a prospective cohort study of sexual minority and heterosexual youth. *Annals of Behavioral Medicine*, *47*(1), 48–56.

Hatzenbuehler, M., Duncan, D., and Johnson, R. (2015). Neighborhood-level LGBT hate crimes and bullying among sexual minority youths: A geospatial analysis. *Violence and Victims, 30*. doi: 10.1891/0886-6708.VV-D-13-00166.

Hatzenbuehler, M.L., Jun, H.-J., Corliss, H.L., and Austin, S.B. (2015). Structural stigma and sexual orientation disparities in adolescent drug use. *Addictive Behaviors*, *46*, 14–18. doi: 10.1016/j.addbeh.2015.02.017.

Hatzenbuehler, M.L., Flores, A.R., and Gates, G.J. (2017). Social attitudes regarding same-sex marriage and LGBT health disparities: Results from a national probability sample. *Journal of Social Issues, 73*(3), 508–528.

Hatzenbuehler, M.L., Bränström, R., and Pachankis, J.E. (2018). Societal-level explanations for reductions in sexual orientation mental health disparities: Results from a ten-year, population-based study in Sweden. *Stigma and Health, 3,* 16–26.

Hatzenbuehler, M.L., Rutherford, C., McKetta, S., Prins, S.J., and Keyes, K.M. (2019a). Structural stigma and all-cause mortality among sexual minorities: Differences by sexual behavior? *Social Science and Medicine*, 112463.

Hatzenbuehler, M.L., Shen, Y., Vandewater, E.A., and Russell, S.T. (2019b). Proposition 8 and homophobic bullying in California. *Pediatrics, 143*(6), e20182116.

Hindman, M.D. (2017). Promiscuity of the past: Neoliberalism and gay sexuality pre- and post-AIDS. *Politics, Groups, and Identities, 7*(1), 52–70.

Hughto, J.M.W., Reisner, S.L., and Pachankis, J.E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine*, *147*, 222–231. doi: 10.1016/j.socscimed.2015.11.010.

Hull, K.E. (2001). The political limits of the rights frame: The case of same-sex marriage in Hawaii. *Sociological Perspectives, 44*(2), 207–232.

Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: The National Academies Press. doi: 10.17226/13128.

Iyengar, S., and Kinder, D.R. (2010). *News that Matters: Television and American Opinion*. Chicago: University of Chicago Press. (Original work published in 1987.)

Jones, P.E., and Brewer, P.R. (2020). Elite cues and public polarization on transgender rights. *Politics, Groups, and Identities, 8*(1), 71–85.

Kalla, J.L., and Broockman, D.E. (2020). Reducing exclusionary attitudes through interpersonal conversation: Evidence from three field experiments. *American Political Science Review, 114*(2), 410–425. doi: 10.1017/S0003055419000923.

Kingdon, J.W. (1984). *Agendas, Alternatives, and Public Policies*. Boston: Little, Brown and Company.

Kreitzer, R.J., and Smith, C.W. (2018). Reproducible and replicable: An empirical assessment of the social construction of politically relevant target groups. *Political Science and Politics, 51*(4), 768–774.

Krieger, N., Chen, J.T., Coull, B., Waterman, P.D., and Beckfield, J. (2013). The unique impact of abolition of Jim Crow laws on reducing inequities in infant death rates and implications for choice of comparison groups in analyzing societal determinants of health. *American Journal of Public Health*, *103*(12), 2234–2244. doi: 10.2105/AJPH.2013.301350.

Krimmel, K., Lax, J.R., and Phillips, J.H. (2016). Gay rights in congress: Public opinion and (mis)representation. *Public Opinion Quarterly, 80*(4), 888–913.

Lawless, J.L. (2012). *Becoming a Candidate: Political Ambition and the Decision to Run for Office*. New York: Cambridge University Press.

Lax, J.R., and Phillips, J.H. (2009). Gay rights in the states: Public opinion and policy responsiveness. *American Political Science Review, 103*(3), 367–386.

Lax, J.R., and Phillips, J.H. (2012). The democratic deficit in the states. *American Journal of Political Science, 56*(1), 148–166.

Lee, T. (2002). *Mobilizing Public Opinion: Black Insurgency and Racial Attitudes in the Civil Rights Era*. Chicago: University of Chicago Press.

Leitner, J.B., Hehman, E., Ayduk, O., and Mendoza-Denton, R. (2016). Racial bias is associated with ingroup death rate for Blacks and Whites: Insights from Project Implicit. *Social Science and Medicine*, *170*, 220–227.

Lempinen, E. (2020). *To Persuade an Opponent, Try Listening, Berkeley Scholar Says*. Phys.org. Available: https://phys.org/news/2020-06-opponent-berkeley-scholar.html#:~:text=For%20a%202016%20study%20published%20in%20Science%2C%20Broockman,control%20group%2C%20said%20nothing%20to%20residents%20about%20transphobia.

Levy, B.L., and Levy, D.L. (2017). When love meets hate: The relationship between state policies on gay and lesbian rights and hate crime incidence. *Social Science Research*, *61*, 142–159. doi: 10.1016/j.ssresearch.2016.06.008.

Lewis, D.C. (2019). Direct democracy and LGBT rights. In D.H. Markel (Ed.), *The Oxford Encyclopedia of LGBT Politics and Policy*. New York: Oxford University Press. Available: https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-1205.

Lewis, D.C., Taylor, J.K., DiSarro, B., and Jacobmeiser, M. (2014). Is transgender policy different? Policy complexity, policy diffusion, and LGBT nondiscrimination laws. In J.K. Taylor and D.P. Haider-Markel (Eds.), *Transgender Rights and Politics: Groups, Issue Framing, and Policy Adoption* (pp. 155–188). Ann Arbor: University of Michigan Press.

Link, B.G., and Phelan, J.C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*, 363–385.

Livingston, J.D. (2013). *Mental Illness-Related Structural Stigma: The Downward Spiral of Systemic Exclusion*. Calgary, Alberta: Mental Health Commission of Canada.

Maisel, N.C. and Fingerhut, A.W. (2011). California's Ban on Same-Sex Marriage: The Campaign and its Effects on Gay, Lesbian, and Bisexual Individuals. *Journal of Social Issues*, *67*: 242–263. doi.org/10.1111/j.1540-560.2011.01696.x.

Major, B., and O'Brien, L.T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393–421. doi: 10.1146/annurev.psych.56.091103.070137.

Marcus, N.C. (2015). Bridging bisexual erasure in LGBT-rights discourse and litigation. *Michigan Journal of Gender and Law, 22*, 291–344.

Mayo-Adam, E. (2020). *Queer Alliances: How Power Shapes Political Movement Formation.* Stanford: Stanford University Press.

McAdam, D. (1982). *Political Process and the Development of Black Insurgency, 1930–1970.* Chicago: University of Chicago Press.

McAdam, D. (1996). The framing function of movement tactics: Strategic dramaturgy in the American Civil Rights Movement. In D. McAdam, J.D. McCarthy, and M.N. Zaled (Eds.), *Comparative Perspectives on Social Movements* (pp. 338–355). New York: Cambridge University Press.

McThomas, M., and Buchanan, R.J. (2012). President Obama and gay rights: The 2008 and 2012 presidential elections. *Political Science and Politics, 45*(3), 442–448.

Meyer, I.H., Luo, F., Wilson, B.D., and Stone, D.M. (2019). Sexual orientation enumeration in state antibullying statutes in the United States: Associations with bullying, suicidal ideation, and suicide attempts among youth. *LGBT Health*, *6*(1), 9–14.

Michelson, M.R., and Harrison, B.F. (2020). *Transforming Prejudice: Identity, Fear, and Transgender Rights*. New York: Oxford University Press.

Miller, C.T., Grover, K.W., Bunn, J.Y., and Solomon, S.E. (2011). Community norms about suppression of AIDS-related prejudice and perceptions of stigma by people with HIV or AIDS. *Psychological Science*, *22*(5), 579–583.

Mintrom, M., and Norman, P. (2009). Policy entrepreneurship and policy change. *Policy Studies Journal, 37*(4), 649–667. doi: 10.1111/j.1541-0072.2009.00329.x.

Movement Advancement Project. (2018). *The Power of State Preemption: Preventing Progress and Threatening Equality*. Boulder, CO: Movement Advancement Project. Available: http://www.lgbtmap.org/file/Preemption-Report-FINAL.pdf.

Murib, Z. (2017). Rethinking GLBT as a descriptive and analytic category in political science. In M. Brettschneiders, S. Burgess, and C. Keating (Eds.), *LGBTQ Politics: A Critical Reader* (pp. 14–33). New York: New York University Press.

Ofosu, E.K., Chambers, M.K., Chen, J.M., and Hehman, E. (2018). Same-sex marriage legalization associated with reduced implicit and explicit antigay bias. *Proceedings of the National Academy of Sciences of the United States of America, 116*(18), 8846–8851.

Pachankis, J.E., and Bränström, R. (2018). Hidden from happiness: Structural stigma, sexual orientation concealment, and life satisfaction across 28 countries. *Journal of Consulting and Clinical Psychology*, *86*(5), 403.

Pachankis, J.E., Hatzenbuehler, M.L., and Starks, T.J. (2014). The influence of structural stigma and rejection sensitivity on young sexual minority men's daily tobacco and alcohol use. *Social Science and Medicine*, *103*, 67–75.

Pachankis, J.E., Hatzenbuehler, M.L., Hickson, F., Weatherburn, P., Berg, R., Marcus, U., and Schmidt, A.J. (2015). Hidden from health: Structural stigma, sexual orientation concealment, and HIV across 38 countries in the European MSM Internet Survey (EMIS). *AIDS*, *29*, 1239–1246. doi: 10.1097/QAD.0000000000000724.

Pachankis, J.E., Hatzenbuehler, M.L., Berg, R.C., Fernandez-Davila, P., Mirandola, M., Marcus, U., Weatherburn, O., and Schmidt, A.J. (2017). Anti-LGBT and anti-immigrant structural stigma: An intersectional analysis of sexual minority men's HIV risk when migrating to or within Europe. *Journal of Acquired Immune Deficiency Syndromes*, *76*(4), 356–366. doi: 10.1097/QAI.0000000000001519.

Perales, F., and Todd, A. (2018). Structural stigma and the health and well-being of Australian LGB populations: Exploiting geographic variation in the results of the 2017 same-sex marriage plebiscite. *Social Science and Medicine*, *208*, 190–199.

Perez-Brumer, A., Hatzenbuehler, M.L., Oldenburg, C.E., and Bockting, W. (2015). Individual- and structural-level risk factors for suicide attempts among transgender adults. *Behavioral Medicine*, *41*(3), 164–171.

Proctor, A. (2020). LGBT people as a relatively politically powerless group. In D.P. Haider-Markel (Ed.), *Oxford Encyclopedia of LGBT Politics and Policy*. New York: Oxford University Press. Available: https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-1185.

Raifman, J., Moscoe, E., Austin, S.B., and McConnell, M. (2017). Difference-in-differences analysis of the association between state same-sex marriage policies and adolescent suicide attempts. *JAMA Pediatrics*, *171*, 350–356.

Raifman, J., Moscoe, E., Austin, S.B., Hatzenbuehler, M.L., and Galea, S. (2018). Association of state laws permitting denial of services to same-sex couples with mental distress in sexual minority adults: A difference-in-difference-in-differences analysis. *JAMA Psychiatry*, *75*(7), 671–677.

Reynolds, A. (2013). Representation and rights: The impact of LGBT legislators in comparative perspective. *American Political Science Review, 107*(2), 259–274.

Reynolds, A. (2018). *The Children of Harvey Milk: How LGBTQ Politicians Changed the World*. New York: Oxford University Press.

Rostosky, S.S., Riggle, E.D., Horne, S.G., Denton, F.N., and Huellemeier, J.D. (2010). Lesbian, gay, and bisexual individuals' psychological reactions to amendments denying access to civil marriage. *American Journal of Orthopsychiatry*, *80*(3), 302–310.

Rugg, D., Buehler, J., Renaud, M., Gilliam, A., Heitgerd, J., Westover, B., Wright-Deaguero, L., Bartholow, K., and Swanson, S. (1999). Evaluating HIV prevention: A framework for national, state and local levels. *American Journal of Evaluation, 20*(1), 35–56.

Russell, G.M., and Richards, J.A. (2003). Stressor and resilience factors for lesbian women, gay men, and bisexuals confronting antigay politics. *American Journal of Community Psychology*, *31*(3-4), 313–328.

Ryan, C. (1991). *Prime Time Activism: Media Strategies for Grassroots Organizing*. Boston: South End Press.

Schiappa, E., Gregg, G.G., and Hewes, D.E. (2005). The parasocial contact hypothesis. *Communication Monographs, 72*(1), 92–115.

Schiappa, E., Gregg, G.G., and Hewes, D.E. (2006). Can one TV show make a difference? Will & Grace and the parasocial contact hypothesis. *Journal of Homosexuality, 51*(4), 15–37.

Schneider, A., and Ingram, H. (1993). Social construction of target populations: Implications for politics and policy. *American Political Science Review, 87*(2), 334–347. doi: 10.2307/2939044.

Sellers, M.D., and Colvin, R. (2014). Policy learning, language, and implementation by local governments with transgender-inclusive nondiscrimination policies. In J.K. Taylor and D.P. Haider-Markel (Eds.), *Transgender Rights and Politics: Groups, Issue Framing, and Policy Adoption* (pp. 208–230). Ann Arbor: University of Michigan Press.

Shepard, B. (2013). From community organization to direct services: The Street Trans Action Revolutionaries to Sylvia Rivera Law Project. *Journal of Social Service Research*, *39*(1), 95–114.

Sherrill, K. (1996). The political power of lesbian women, gays, and bisexuals. *Political Science and Politics*, *29*(3), 469–473.

Smith, C.A. (2007). The electoral captures of gay and lesbian Americans: Evidence and implications from the 2004 election. In A. Sarat (Ed.), *Studies in Law, Politics, and Society, Vol. 40* (pp. 103–121). Bingley: Emerald Group Publishing.

Solomon, M. (2014). *Winning Marriage: The Inside Story of How Same-Sex Couples Took on the Politicians and Pundits—And Won*. Lebanon, NH: University Press of New England.

Stone, A. (2012). *Gay Rights at the Ballot Box*. Minneapolis: University of Minnesota Press.

Strolovitch, D.Z. (2007). *Affirmative Advocacy: Race, Class, and Gender in Interest Group Politics*. Chicago: University of Chicago Press.

Strolovitch, D.Z. (2012). Intersectionality in time: Sexuality and shifting boundaries of intersectional marginalization. *Politics and Gender, 8*(3), 386–396.

Tankard, M.E., and Paluck, E.L. (2017). The effect of a Supreme Court decision regarding gay marriage on social norms and personal attitudes. *Psychological Science, 28*(9), 1334–1444. doi: 10.1177%2F0956797617709594.

Taylor, J.K., Lewis, D.C., Jacobmeier, M.L., and DiSarro, B. (2012). Content and complexity in policy reinvention and diffusion: Gay and transgender-inclusive laws against discrimination. *State Politics and Policy Quarterly, 12*(1), 75–98.

Taylor, J.K., Tadlock, B.L., and Poggione, S. (2013). State LGBT rights policy outliers: Transsexual birth certificate amendment laws. *American Review of Politics, 34*(Winter), 245–270.

Taylor, J.K., Tadlock, B.L., Poggione, S., and DiSarro, B. (2014). Transgender inclusive ordinances in cities: Form of government, local politics, and vertical influences. In J.K. Taylor and D.P. Haider-Markel (Eds.), *Transgender Rights and Politics: Groups, Issue Framing, and Policy Adoption* (pp. 135–154). Ann Arbor: University of Michigan Press.

Taylor, J.K., Lewis, D.C., and Haider-Markel, D.P. (2018). *The Remarkable Rise of Transgender Rights*. Ann Arbor: University of Michigan Press.

Taylor, J.K., Lewis, D.C., Haider-Markel, D.P., Flores, A.R., Miller, P.R., and Tadlock, B. (2018). The factors underlying public opinion about transgender rights. In J.K. Taylor, D.C. Lewis, and D.P. Haider-Markel, *The Remarkable Rise of Transgender Rights* (pp. 87–106). Ann Arbor: University of Michigan Press.

Theodoulou, S. (2013). In search of a framework to understand the policy process. In M. Cahn (Ed.), *Public Policy: The Essential Readings*, 2nd Ed. (pp. 123–133). Boston, MA: Pearson.

Tilcsik, A. (2011). Pride and prejudice: Employment discrimination against openly gay men in the United States. *American Journal of Sociology*, *117*(2), 586–626. doi: 10.1086/661653.

Tyson, V.C. (2016). *Twists of Fate: Multiracial Coalition and Minority Representation in the US House of Representatives*. New York: Oxford University Press.

Valelly, R.M. (2012). LGBT politics and American political development. *Annual Review of Political Science, 15*, 313–332.

Victory Institute. (2020). *Out for America 2020: A Census of LGBTQ Elected Officials Nationwide*. Washington, DC: Victory Institute. Available: https://victoryinstitute.org/out-for-america-2020/.

Ward, J. (2008). *Respectably Queer: Diversity Culture in LGBT Activist Organizations*. Nashville: Vanderbilt University Press.

Wallace, A., Maulbeck, B.F., and Kan, L.M. (2019). *2017 Tracking Report: Lesbian, Gay, Bisexual, Transgender, and Queer Grantmaking by U.S. Foundations*. New York: Funder for LGBTQ Issues. Available: https://lgbtfunders.org/research-item/2017-tracking-report/.

Wilson, A.R., and Burack, C. (2012). "Where liberty reigns and God is supreme": The Christian Rights and the Tea Party Movement. *New Political Science, 34*(2), 172–190. doi: 10.1080/07393148.2012.676395.

Worthen, M.G.F. (2013). An argument for separate analyses of attitudes toward lesbian, gay, bisexual men, bisexual women, MtF and FtM transgender individuals. *Sex Roles*, *68*(11), 703–723. doi: 10.1007/s11199-012-0155-1.

Wright, J. (2003). *Interest Groups and Congress: Lobbying, Contributions, and Influence.* New York: Longman.

Zaller, J.R. (1992). *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.

7

Community and Civic Engagement

Sexual and gender diverse (SGD) populations are composed of multiple communities and groups of people with intersecting identities, experiences, and oppressions. The cultural and social contexts that define these groups ultimately shape possibilities for civic and political engagement—what we call sociopolitical involvement—of SGD people (Harris, Battle, and Pastrana, 2018). Communities are composed of and influenced by a variety of actors: the social-ecological context explains the individual, interpersonal, community, and societal factors that affect and shape the conditions in which those actors exist.

Beginning more than a half century ago, SGD community organizations emerged and began to provide spaces for people not only to name and recognize their identities but also to establish venues and strategies for collective action toward visibility and, ultimately, social recognition and legal rights. These spaces, whether physical, virtual, or institutional, have been instrumental in providing the resources and the physical ability to convene for SGD communities. This chapter considers what community is while examining the ways that SGD communities claim, integrate, and negotiate spaces. It also includes a discussion of the effects that community and mobilization have on the lives and histories of SGD populations and explores how space is used as a tool for community building and mobilization.

THE NATURE OF SEXUAL AND GENDER DIVERSE COMMUNITIES

For SGD populations, community has long been an important way to mobilize a range of people with disparate experiences around a set of issues and problems. As discussed throughout this report, SGD people in the United States face forms of oppression, discrimination, and violence because aspects of their gender identities, sexual identities, and expression do not conform to societal conventions and sexualities (Rubin, 1993; Spade, 2011; Warner, 2000). They often struggle with racial, gender, and class divisions, hierarchies, and exclusions. Communities serve as a means through which SGD people survive, withstand, and, in some cases, overcome these conditions.

The word "community" has been used so pervasively to describe numerous groups and sectors of people throughout the country that some scholars believe the value of its meaning has eroded (Joseph, 2007). "Community" is often invoked to describe sociopolitical movements across spectrums of race and ethnic, social, cultural, gender, and sexual identities and experiences. Yet communities are diverse and are forged around a myriad of experiences and consensus issues, rather than solely shared identities (Cohen, 1997, 1999).

SGD communities are made up of people from a variety of racial and ethnic, socioeconomic, cultural, political, regional, age, and ability groups (Joseph, 2007). Some communities with cross-cutting concerns come together and forge strategic connections to meet particular needs and address certain problems. These communities can be active for the long or short term, and they can experience cohesion and conflict, inclusion and exclusion, and affirmation and degradation all at the same time. Defining and understanding the role of community for SGD populations is complex and multidimensional. As other chapters in this report discuss, many SGD people experience socioeconomic deprivation: homelessness and housing instability, under- and unemployment, and institutional violence and discrimination. In this context, community becomes an important means of emotional, social, moral, and political support. In general, the role of community can be examined as three interconnected points: a form of public culture, a site of internal and external contests, and a key source of social and political support. Thus, community is both a site and a source of struggle, hierarchy, and liberation for SGD populations. Community serves as a source of belonging, value, affirmation, and collectivity, all of which are values and feelings associated with well-being.

Community psychologists emphasize the importance that community has on individuals' sense of well-being and their need for relationships and relationship building (Coulombe and Krzesni, 2019). In fact, well-being has been defined as "a positive state of affairs, brought about by the simultaneous and balanced satisfaction of diverse objectives and subjective needs of individuals, relationships, organizations, and communities" (Prilleltensky, Prilleltensky, and Voorhees, 2016, p. 1; Coulombe and Krzesni, 2019). Scholars emphasize that social needs are satisfied by feelings of community, thus contributing not just to well-being but also to happiness (Davidson and Cotter, 1991). For marginalized groups, communities not only contribute to their overall well-being, but also serve as a way to resist and survive the daily forms of oppression they face and a way to withstand and overcome rejection from families and communities of origin.

Communities may form around social and cultural identities, particularly if these identities are marginalized and contested, as is the case with SGD populations. The oppression that they experience—including housing and job discrimination, lack of access to health and medical care, and homophobic and transphobic violence by police (Arredondo and Suárez, 2019)—encourage community formation and mobilization. And even as communities have been a site of refuge, affirmation, and safety, they have also been targets of violence throughout history, as well as targets for surveillance and violence from people who are hostile to sexual and gender diversity.

Often, community and culture overlap or, at least, have notable intersections for many SGD people. According to cultural theorist George Yudice (2007), culture can be a way of life for people, a group, or humanity in general. Many scholars have described SGD communities as subcultures and have referred to larger sexual and gender diverse communities as cultural formations (Bailey, 2013; D'Emilio, 1983). Culture also overlaps with community in the creation of spaces and occasions for political, intellectual, creative, and artistic activities (Yudice, 2007) that celebrate, affirm, and enhance the lives of sexual and gender diverse people. There is a long history of creative endeavors among sexual and gender diverse populations, such as the Mattachine Society and the Daughters of Bilitis—mid-20th century organizations that promoted visibility and acceptance for gay men and lesbian women, respectively (D'Emilio, 1983). These organizations produced publications that highlighted cultural works within these communities (D'Emilio, 1983; Gutterman, 2012). Another example is the Combahee River Collective, a group of Black lesbian feminists who in 1970 crafted the celebrated Combahee River Collective Statement that helped to shape contemporary Black feminist and queer studies, activism, and politics (Combahee River Collective, 1983).

Central to community formations for SGD people is access to public space. Contemporary understandings of what "public" includes are increasingly expanding to include everything from physical spaces to community online engagement, as well as all spaces of social and cultural convening in a given location. Public cultural events are also opportunities for meeting people for romantic, intimate, and sexual relations. Thus, public culture for SGD populations can be understood as occasions, spaces, and domains that enable people to come together to socialize, connect, engage, and, in some cases, create, affirm, and promote, either implicitly or explicitly, shared social identities, experiences, and locations.

Two of the most notable and celebrated moments of public culture and catalysts for the contemporary lesbian and gay liberation movement were the Compton Cafeteria riots in the Tenderloin district in San Francisco in 1966 (Stryker and Silverman, 2005) and the Stonewall rebellion in 1969 at the Stonewall Inn, a gay bar on Christopher Street in Greenwich Village in New York City (D'Emilio, 1983; Jagose, 1996). Both of these events were led by Black and Latinx transgender women, although their efforts were overshadowed by the white, cisgender gay men who participated (Snorton, 2018). Two very prominent figures in the liberation movement sparked by the Stonewall Riots were transgender and drag queen militants Sylvia Rivera and Marsha P. Johnson, who cofounded Street Transvestite Action Revolutionaries (STAR) (Johnson and Rivera-Servera, 2016). The two activists started this organization to help young homeless drag queens find housing and other services. Though the actual diversity of the contemporary lesbian and gay liberation movement—across racial, sexual orientation, and gender axes—is often excluded from the popular narrative, the Compton and Stonewall uprisings are but two of the many examples of the work of SGD communities in fighting against inequalities and oppression. It is important to note that these exclusions from SGD histories coincide with race, gender, and class hierarchies that still affect SGD communities.

THE IMPORTANCE OF SPACE TO SEXUAL AND GENDER DIVERSE COMMUNITIES

"We're here. We're queer. Get used to it" was often chanted at LGBTQ festivals, events, and rallies in the 1980s and 1990s, not only as a message to heterosexual and cisgender populations but also as a message to SGD individuals to reaffirm their rights to be themselves, form communities, and take up space. In this context, space can be described as the means through which marginalized communities, particularly SGD populations, reimagine and remap spatial landscapes, domains, and "spheres that are livable under often unlivable conditions" (Bailey and Shabazz, 2014, p. 450). Space can be created both physically—through the construction of brick and mortar buildings and designated areas—and socially, through the mechanisms of social production. Space is a site of engagement, community formation, and mobilization (Shabazz, 2014). An individual's engagement in multiple communities not only contributes greatly to social change but also helps foster feelings of belonging and connectedness. Such feelings of belonging are particularly important for marginalized groups and, in particular, those facing multiple forms of marginalization (Harris, Battle, and Pastrana, 2018).

Twentieth century queer activists believed "sexuality was constitutional to one's identity, and that subscribing members were a discriminated minority" group in need of resources and support (Martos, Wilson, and Meyer, 2017). This idea helped shift the focus from discussions of sex and sexuality to broader notions of identity. The Daughters of Bilitis and the Mattachine Society are good historical examples because these organizations provided support, resources, and a sense of community for sexual and gender diverse people who sought increased visibility and acceptance after WWII (D'Emilio, 1983). In addition, the Daughters of Bilitis also provided physical space for lesbian women and other women with same-sex attractions to meet outside of bars, which were then frequently raided by law enforcement officials. *Transvestia,* the nation's first transgender-specific magazine, first published in 1960, provided educational resources while also pushing for both the recognition of transgender identity and the decriminalization of non-binary dress. In part influenced by the social movements of the 1950s and 1960s, these community movements were motivated by the need for SGD groups to take up space and be seen. In this context, pivotal moments in the effort to combat SGD oppression, like the Compton riot and the Stonewall uprising, can be seen as violent responses by authorities and others to prevent SGD people from convening and taking up space.

Activism and political mobilization in SGD communities continued throughout the 1970s and into the early 1980s, and it contributed to the rise in HIV/AIDS activism in LGBTQ+ communities. As the decades progressed, other struggles included the fight for equal employment opportunities and housing, the opportunity to serve openly in the military, the striking down of anti-sodomy laws, the legalization of same-sex marriage in 2015, and the 2020 U.S. Supreme Court decision that confirmed LGBT protections from employment discrimination in Title VII of the 1964 Civil Rights Act. Although landmark achievements have been made, groups continue to fight for explicit comprehensive nondiscrimination protections on the basis of sexual orientation, gender identity, and expression. In addition, activism is a more directly intersectional approach to promoting social justice around issues of race, disability, social class, immigration, and aging.

Physical Space

Neighborhoods with large concentrations of SGD people, and businesses therein that cater to them as residents and consumers, are informally known as gayborhoods or gay villages—areas and communities that are considered to be safe spaces for SGD people (Hanhardt, 2013). Gayborhoods are often found in urban communities and are often the center of SGD communities and nightlife. Gay urban enclaves began to emerge shortly after WWII, when queer women and men were discharged from the armed services and sought out areas that were generally considered more tolerant to SGD people (Ghaziani, 2014). Today, these neighborhoods tend to consist primarily of and cater to white gay males.[1]

Gayborhoods provide an important space not only for those who live there but also for those who use them as a refuge from the homophobia they may experience in their daily lives and communities (Gray, 2009). Convening places for SGD populations, such as bookstores, coffee shops, restaurants, bars, clubs, and bathhouses, have been a defining feature of gayborhoods. Each of these spaces has been especially popular during particular historical moments. For example, gay bathhouses were popular in the 1970s but declined in popularity when they were banned due to fears of HIV in the 1980s. Gay clubs also declined in popularity in the early 1980s, only to regain popularity in the 1990s and to again decrease in popularity in the late-2000s due, in large part, to the rise in social media and online dating. Spaces for public convening and culture for social and sexual activities for SGD people, such as lesbian and gay clubs, have continued to diminish (Oswin, 2008). Even queer-friendly vacation spaces, or "gaycation" communities, have seen a decline (Nash, 2005, 2006; Oswin, 2008). Nonetheless, these gayborhoods have provided space for queer communities—at home and even on vacation—where they have not only had a sense of safety and protection but also a real sense of community. As a result of COVID-19, there is a further decline in gay spaces, especially clubs and restaurants, many of which may never reopen (Barreira, 2020). In fact, the pandemic forced queer spaces to again reinvent themselves in an era of social distancing, moving online and even having virtual clubs and DJed Zoom sessions (Kornhaber, 2020).

In addition to bars, clubs, restaurants, and bookshops, an important feature of gayborhoods, many of which face high rental costs and operating expenses, are LGBTQ+ community centers. Such centers have been a staple in SGD communities for decades, originally serving as a space for social gathering and to provide welcome space for people of all ages. Most major cities and urban and many suburban areas have LGBTQ+ community centers (Conradson, 2003), which typically provide a variety of resources that include health services and HIV testing; workshops on the home buying process; and support groups and programs geared toward small communities and different stages of the life course. In addition to community centers, SGD groups also hold gatherings in spaces that are not necessarily LGBTQ+ focused, such as churches and schools.

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[1] Examples include the Castro in San Francisco; West Hollywood in Los Angeles; Chelsea in New York City; Boystown in Chicago; Dupont Circle in Washington, D.C.; the Short North in Columbus, Ohio; Midtown in Atlanta; and the Melrose District in Phoenix. There are comparatively fewer lesbian districts in urban centers, such as Park Slope in Brooklyn and Jamaica Plain in Boston.

The diminishment of public spaces for SGD people noted above is partly the result of restructuring and gentrification of neighborhoods in many cities (McGlotton, 2013). As urban communities have become increasingly gentrified, rental and ownership costs and taxes have increased, as have the costs of living in and operating businesses in them. This has forced out many LGTBQ+-owned businesses and individuals (Nero, 2005). Issues of race, class, and gender have prevented many SGD people from accessing the political, social, and economic resources and spaces in gayborhoods (Gieseking, 2013). This has especially been the case for lesbian and queer women, who have seen a sharp decline in public spaces for meeting and convening, such as bookshops, cafes, bars, and clubs (Podmore, 2006).

These changes have had an especially negative impact on queer bars and clubs. Sociologist Greggor Mattson found that between 1997 and 2017, 33 percent of gay bars closed.[2] In addition, there has been an increase in the heterosexual appropriation of queer spaces, such as heterosexual women who hold their bridal and bachelorette parties in what are generally gay male spaces (Casey, 2004).[3]

Although research on gayborhoods and on queer spaces has primarily focused on gay men, studies have documented the complicated history that lesbian women and women in general have had in claiming space in urban areas (Gieseking, 2013). In many instances, women who identified as lesbian and queer did not have access to the political, economic, and social capital enjoyed by their gay male counterparts (Adler and Brenner, 1992; Rothenberg, 1995). Throughout history, there are examples of lesbian women responding to that lack of political control by seeking out separate living environments, often in rural settings such as communes.[4] Though the number of these communities is diminishing as their residents age, these spaces have been important in providing opportunity for networking, political mobilization, and socializing (Valentine, 1993). In more urban and suburban communities, particularly among women of color, now that the lesbian and feminist bookstores and other more traditional forms of convening have closed (Liddle, 2005) there has been an increase in these women attending private parties and social gatherings at people's homes and in rented spaces (Moore, 2011).

There are arguments for the continued need and relevancy of the gayborhood (Ghaziani, 2014), but others suggest that, with increased acceptance of homosexuality, these gay-specific communities are no longer

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[2] See https://greggormattson.com/2017/06/13/who-needs-gay-bars-summer-2017-tour/.

[3] See https://www.out.com/lifestyle/2016/4/11/bridal-party-problems-how-bachelorettes-are-ruining-gay-nightlife.

[4] See https://www.nytimes.com/2019/08/24/style/womyns-land-movement-lesbian-communities.html.

necessary (Doan and Higgins, 2011). Gayborhoods have been criticized for being exclusionary and even for being heteronormative. Some of the controversies about gayborhoods are complicated by tense racial histories, as many of these neighborhoods were once communities of color that have since been gentrified by white LGBTQ+ people (Rosenberg, 2016). Most gayborhoods are white and predominately gay male spaces that have not historically been welcoming to homeless people, poor women, people of color, transgender people, or gender-nonconforming people who come to these neighborhoods seeking services, support, and a sense of community (Rosenberg, 2016). Rosenberg notes: "In some gay villages, those who challenge and diminish politics of respectable normativity have often been openly and deliberately targeted for expulsion" through the community policing of queer spaces (2016, p. 137). In many of these spaces, such as Christopher Street in the West Village of New York City, the mere congregating of queer and transgender youth of color has been heavily policed by white SGD adults in the community (Daniel-McCarter, 2012; Namaste, 2000).

Many spaces of gay consumption and convening are spaces of bounded exclusions based on race and gender, catering to mostly white gay men with socioeconomic privilege and maintaining prejudices against other sexual minorities (Bell and Binnie, 2004; Phelan, 2001). Because access to space to participate in public culture is influenced by the intersections of race, gender, sexuality, and social class, working class and poor SGD people of color have been disproportionately affected by this shift in the spatial politics of cities. And because public spaces for SGD populations are often situated in segregated neighborhoods, SGD communities of color suffer "spatial marginalization" (Sibley, 1995; Wilkins, 2000). Spatial marginalization is a term that describes how SGD people of color are denied access to public spaces due to their race, gender, or sexual identities or the socially transgressive practices in which they engage (Bailey and Shabazz, 2014; Nero, 2005). And as noted above, many SGD communities of color experience race and gender exclusion within the larger SGD community.

Social Space

Festivals and group celebrations are an important part of LGBTQ+ culture (Morris, 2005). Lesbian and feminist festivals date back to the mid-1970s and include large annual gatherings, such as the Michigan Womyn's Festival, also known as MichFest (1976–2015); Lilith Fair, a traveling musical festival featuring all women-identified performers (1997–1999); and Dinah Shore, the Palm Springs, California, party surrounding a tennis tournament of the same name that started in 1991 and continues to attract lesbian women from around the nation and around the world.

The most well-known annual LGBTQ+ celebrations that take place in most large cities are LGBTQ+ pride events; see Box 7-1. In looking at these celebrations, however, it is important to note that most of the cultural, political, and scholarly emphasis on SGD populations has been about upper- and middle-class white SGD people living in urban centers. As one of the most conspicuous sites of SGD expression, affirmation, and advocacy, LGBTQ+ pride celebrations in New York, San Francisco, and Chicago are widely known and well attended (McFarland Bruce, 2016), but there are now LGBTQ+ pride events in every major city throughout the United States, and they usually draw thousands of people to parades and multiday events throughout the year.

Although there is notably less research on the topic, discrimination and self-segregation are common within queer spaces, as many of these spaces explicitly and implicitly exclude transgender and gender diverse populations, people of color, immigrants (Epstein and Carillo, 2014), and those at their intersections. For example, although they reject the notion that they are transphobic, the Michigan Womyn's Music Festival was the object of intense backlash and a boycott from activists and community members after it actively excluded transgender women. The festival founder, Lisa Vogel, argued for a "womyn-born womyn" space, stating, "I believe in the integrity of autonomous space used to gather and celebrate for any group, whether that autonomous space is defined by age, race, ethnicity, sexual orientation, ability, gender, class, or any other identity."[5]

Similarly, many LGBTQ+ pride events are racially self-segregated. White SGD people garner far more popular attention, sociopolitical influence, and financial resources (i.e., corporate sponsorship) than other groups (Battle et al., 2002; McFarland Bruce, 2016). In many ways, the social privilege afforded to white SGD people in various domains is brought to bear at majority white LGBTQ+ pride celebrations. In some cases, LGBTQ+ pride event leadership and planning committees struggle to be racial and ethnically inclusive, and SGD people of color have challenged these planning committees to include people of color. Some SGD people stage protests at LGBTQ+ pride events to underscore the exclusion. At the 2017 Phoenix, Arizona, LGBTQ+ pride celebration, Trans Queer Pueblo, a community-based migrant and LGBTQ+ organization, carried a banner that prominently displayed the words "No Justice, No Pride" (Cashman, 2019).

There are several LGBTQ+ pride events in most major U.S. cities for other SGD subgroups, including youth, Latinx, Asian, and Native American and Indigenous groups. These and other unique LGBTQ+ events provide space to convene for many SGD people who have been excluded from or

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[5] Excerpted from https://web.archive.org/web/20150330195141/http:/michfest.com/letter-to-the-community-4_11_13/.

BOX 7-1
Black Pride Celebrations

According to Dwayne Jenkins, coordinator of Nashville Black Pride, "pride events are an opportunity for us to celebrate the life and culture of Black LGBT people."* Since the very first Black pride celebration in 1990 in Washington, D.C., Black pride events have served as a means through which some Black LGBT people come together and affirm their identities and experiences and create community. Black LGBTQ+ community formations require a kind of work, or what cultural historian Robin D. G. Kelley (2008) calls cultural labor, which sustains Black LGBT communities in the face of simultaneous forms of racial, socioeconomic, gender, and sexual marginalization and exclusion. Black pride celebrations have been one of a very few ways that Black LGBT people can collectively contend with and challenge their current conditions and contemplate ways to alter them.

There are more than twenty-five Black pride celebrations held annually, for Black LGBT people not only to celebrate and affirm their non-normative gender and sexual identities, but to contemplate issues that disproportionately affect them.* These issues include, but are not limited to, HIV/AIDS and other health disparities, education, employment, poverty, and social justice. For instance, the Hotter than July Black Pride celebration in Detroit has been referred to by event co-organizer Curtis Lipscomb as a social justice rally.** Unlike white LGBT pride celebrations that always include a parade, Black pride events typically do not include a parade, which may be reflective of the notion that Black SGD people do not come out and publicly proclaim queer gender and sexual identities at the same rate or in the same manner as do white SGD people. Rather, the celebrations, which include both old and young people, consist of such activities as candlelight vigils to commemorate people who have died, conferences, boat rides, dances, cookouts, brunches, church services, and ball events.

Black SGD people are often excluded from discourses on and political advocacy for rights and social equity for both LGBT people on the one hand and Black people on the other. Notably, simultaneous forms of oppression and exclusion contribute to Black gay men and transgender women's disproportionate representation in the HIV/AIDS epidemic, as well as their experiences with substance abuse, homelessness, and gender and sexual violence. In many ways, as a public cultural practice, Black pride celebrations mitigate feelings of isolation and low self-worth that some Black LGBTQ+ people experience.

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*From an interview with Jasmyne Cannick, "Celebrating Black Gay Prides," on National Public Radio, June 9, 2005.

**See http://www.uixdetroit.com/people/curtislipscomb.aspx.

marginalized within mainstream SGD communities. Phoenix is said to hold the largest Latinx LGBTQ+ pride event in the country, and there are also events in Dallas and other cities with large Latinx SGD populations.

Another SGD cultural phenomenon is the ballroom culture. Sometimes referred to as the house/ball community, contemporary ballroom culture involves Black and Latinx LGBTQ+ people, as well as straight people (Arnold and Bailey, 2009; Bailey, 2011, 2013). Three inextricable dimensions constitute the social world of ballroom culture: the gender system, houses, and balls. Although these are three separate facets of the ballroom culture, they are strongly interconnected; there are no houses without balls and no balls without houses.

First popularized by Jennie Livingstone's documentary film *Paris is Burning* (1990), ballroom culture has expanded throughout the globe in both presence and popularity. Although dimensions of ballroom culture date back to the early 20th century, the contemporary ballroom scene started in the 1960s in Harlem, New York. One of the first houses was the legendary House of LeBeija in Harlem, founded in 1970. The award-winning FX Network TV television series "Pose" is based on the ballroom community.

The gender system is a collection of six gender and sexual identities that include butch queens (gay men), femme queens (transgender women), butches (transgender men), butch queens up in drag (gay men who perform as women), and cisgender men and women. The gender system organizes the gender and sexual relations in houses and the familial (kinship) structures (Bailey, 2011). Houses consist of mothers, fathers, children, and, in many cases, an entire lineage of members who are socially connected with the ballroom community. In ballroom culture, parent-child relationships are not based on chronological age or actual blood relationships; rather, members become (or are appointed) parents of houses based on their success at walking balls (winning trophies and cash prizes) and their experience and prestige in the ballroom scene. Parents of ballroom houses provide social support, guidance, and nurturing for their house members, as well as others in the larger ballroom community. It is well known in ballroom culture that, with few exceptions, there are no houses without balls and no balls without houses. Another important role that parents play is that they train their house members (children) to compete successfully at balls.

Balls are the ritualized events that houses produce, and they draw participants from throughout North America. Although the number and kinds of categories of competition abound, most categories are based on performative gender and sexual categories, vogue and theatrical performance, and the effective presentation of fashion and physical attributes (Bailey, 2011, 2013). People participate and compete on behalf of their house or as free agents known as "007s."

For the most part, the ballroom culture has been a community consisting of working class and poor SGD people of color who have been ostracized from or marginalized within their families and communities of origin because of their non-normative genders and sexualities. For SGD populations of color, ballroom culture has been a space and practice of social support, service, love, and critique (Bailey, 2013). In other places throughout the world in which ballroom practices have been adopted, it has been by people and communities who are marginalized in their societies. It is important to note that ballroom is a separate autonomous community formation that is highly stigmatized in the larger Black LGBT community; this situation highlights the complexity and multidimensionality of Black LGBT communities.

Virtual Space

The issues that are significant in the physical world can also be relevant in virtual worlds. Online communities can provide safe spaces for people to explore their identities and express themselves authentically, often with others who share their experiences. This type of safe space can be especially important for people who feel alienated or alone in their local communities or do not have access to in-person resources because of geographic barriers, such as those living in rural communities (Hardy, 2019). SGD youth report using online communities primarily to find peer support, and they are more likely than their non-LGBT peers to be friends with people they initially met online (Ybarra et al., 2015). SGD adults use online communities primarily to find sexual and romantic partners (Baams et al., 2011). Lesbian women and gay men are more likely to meet their partners online than are their heterosexual counterparts (Rosenfeld and Thomas, 2012).

Online communities sometimes emerge out of needs for information, connection, and support among less-visible and marginalized SGD groups. The Asexual Visibility and Education Network[6] provides information on and support around asexuality (Robbins, Low, and Query, 2016), and the InterACT website maintains a list of intersex community and advocacy organization sites in multiple countries.[7] There are also online communities for supporting LGBTQ+ people's interactions with medical professionals, including for family planning, HIV, and cancer support (Holland, 2019; Lee et al., 2019; Peterson, 2009). In addition, many SGD people create their own online communities so they can participate safely in activities that have traditionally excluded minority populations, such as Black SGD women creating communities on the online video gaming platform Xbox One (Gray, 2018).

Intersex people have relied on the internet to connect with each other for both support and social change since the 1990s. Although the practice of nondisclosure of medical information about intersex traits was intended to protect children from stigma and gender uncertainty, a consequence was

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[6] See www.asexuality.org.

[7] See https://interactadvocates.org/resources/intersex-organizations/.

to isolate people with intersex traits from each other. When people were informed about their medical history, they were typically told "that their anatomical differences were extremely rare and that they were unlikely to ever meet another person with a similar anatomical trait" (Davis and Preves, 2017, p. 27).

When Bo Laurent, then writing under the name of Cheryl Chase, founded the Intersex Society of North America,[8] the organization became the first important hub for intersex communities, providing sociohistorical and health resources to advance the cause of changing medical practice. Around the same time, organizations like the Androgen Insensitivity Syndrome Support Group (now InterConnect) and Bodies Like Ours coalesced with the help of the internet to provide support to people with intersex traits. Through chat rooms, email circles, and message boards, intersex people found an antidote to secrecy and isolation, sharing stories with each other and finding validation and community. Some of these groups, like InterConnect, hosted and continue to host annual in-person meetings, in addition to maintaining online connection throughout the year. The second generation of online communities sprang up with the advent of social media, especially Facebook, where virtually every intersex advocacy and support organization has a presence (Davis and Preves, 2017). Social media has also been a crucial means of raising intersex visibility, with platforms like Facebook, Tumblr, Twitter, and Instagram bringing millions of views to videos like "What it Means to Be Intersex" (Valentine, Spade, and Trautner, 2020).[9]

While SGD populations derive many benefits from online communities, negative interactions like online bullying, harassment, and discrimination also occur. Despite an overall sense of greater social safety in online communities than in real-world interactions, almost one-half of LGBTQ+ youth report being bullied online (Kosciw et al., 2017). Occasionally, SGD groups discriminate against one another by spreading exclusionary and racist rhetoric about less-prominent SGD populations (Crowley, 2010). The accessibility of the internet has also caused alarm over privacy concerns. Gay and bisexual men are more likely than heterosexual women and men to be victims of revenge porn (i.e., the nonconsensual sharing of nude or seminude photographs) (Waldman, 2019). Additionally, there have been numerous reports of violent predators using social media dating to lure SGD individuals into unsafe or potentially fatal situations.[10]

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[8] See https://isna.org/faq/history/.

[9] See https://www.youtube.com/watch?v=cAUDKEI4QKI.

[10] See https://www.nbcnews.com/feature/nbc-out/michigan-man-charged-grindr-slaying-n1109596 and https://www.justice.gov/opa/pr/dallas-men-charged-hate-crimes-kidnapping-and-conspiracy-after-targeting-gay-men-violent.

SGD populations can also be stigmatized online because of the design of certain websites. For instance, recent reports show that YouTube has been demonetizing videos from some SGD users because of an algorithm that appears to flag words like "gay" or "transgender" as adult content, thereby decreasing advertisement opportunities.[11] There are also reports of advertisements from anti-LGBTQ groups being added to videos with LGBTQ content.[12] Tumblr, a popular website previously known for its openness and inclusivity, banned all adult content in 2018, which disproportionately affected LGBTQ people, especially transgender and non-binary people. The site's efforts to flag and remove adult content removed blogs maintained by transgender and non-binary individuals who documented their transitions and other personal, social, and medical experiences meant to be informative to their peers (Haimson et al., 2019).

Understanding the interactions between online and real-world communities can help to maximize the benefits that SGD populations can gain from online communities while minimizing the negative outcomes. There is also a need for the technology industry to understand the needs of SGD populations in order to avoid creating technology that can lead to discrimination, harassment, and violence. Thus, although online communities are frequently charged with helping to destroy the bars, bookstores, clubs, and other spaces that have been a mainstay of SGD communities, these online communities have helped to redefine the meaning and the uses of space for SGD people. They provide a safe space in which SGD people are able to increase their social networks and access information and resources relevant to their issues, concerns, and identities.

Space in Institutions

Social institutions and systems present particular challenges for SGD populations, whose identities and presentations may clash with dominant codes and mores. In this section, we consider the role of community in efforts to make space within or to transform institutions to serve the needs of SGD individuals in religious, health care, educational, and political institutions.

Religious Institutions

The role that churches play among communities of SGD people is multifaceted and complex. In many ways, the relationship can be a mixture of

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[11] See https://www.forbes.com/sites/meganhills1/2018/06/04/youtube-anti-lgbt-ads/#5b85ff74f734.

[12] See https://www.usatoday.com/story/tech/2018/07/02/youtube-apologizes-lgbtq-creators-restrictions-demonetization/751712002.

affirmation, antagonism, and indifference. This section focuses primarily on Christian religious institutions as the dominant religion in the United States, though a considerable number of SGD people belong to other religions and engage in other spiritual practices.

The central role that religious institutions play in the lives of SGD populations is widely recognized, as is the fact that many of those people have antagonistic experiences in non-affirming religious institutions (Bailey and Richardson, 2019; Wilcox, 2003). Queer-antagonistic and non-open-and-affirming religious institutions often police the boundaries of gender and sexuality within communities (Bailey and Richardson, 2019). Gibbs and Goldbach's (2015) qualitative study of religious and sexual identity conflict, internalized homophobia, and suicidality among LGBT young adults aged 18–24 found that many of them reported experiencing discrimination and internalized homophobia in non-affirming religious contexts. Despite this, many SGD people belong to queer-antagonistic churches (Talvacchia, Pettinger, and Larrimore, 2015). Some of them maintain an ambivalent relationship to religious institutions while continuing to rely on them for spiritual, theological, social, and emotional support. Some SGD people challenge antagonistic and exclusionary religious groups to be open and affirming; others have separated from these religious institutions, or they have started their own SGD-accepting religious institutions.

There are several kinds of mostly Christian churches that are open to or welcome SGD populations. Scheitle, Merino, and Moore (2010) define open and affirming churches as religious denominations, institutions, or programs in which member congregations signal their acceptance of all gender identities and sexual orientations (Scheitle, Merino, and Moore, 2010; Wilcox, 2003). There are churches that have had an official designation and others that function as open on an informal basis. Open and affirming churches allow for SGD people to participate in a radically inclusive theology and, in this way, to obtain social support from clergy and fellow congregants. These churches also allow congregants to reconcile conflicts they may have felt between their theology and their sexual and gender identities and experiences (Campbell, Skovdal, and Gibbs, 2011; McQueeny, 2009).

The United Church of Christ (UCC) was one of the first denominations to openly welcome LGBTQ+ people. In 1985, the general synod of the UCC called on the congregation to adopt a nondiscrimination policy and a covenant of openness and affirmation of people who are LGBTQ+ (Scheitle, Merino, and Moore, 2010; United Church of Christ Coalition for LGBT Concerns, 2005; Wilcox, 2003). Thus, the UCC churches are known as open and affirming churches. Other denominations are referred to as gay- and lesbian-friendly congregations (Scheitle, Merino, and Moore, 2010; Wilcox, 2003).

SGD people have also created LGBTQ+-designated religious spaces. These churches are preferred by some SGD people because they draw from a theology that emphasizes the lived experiences of SGD people and situates these experiences in their religious and spiritual teachings (Talvacchia, Pettinger, and Larrimore, 2015). The Universal Fellowship of Metropolitan Community Churches (UFMCC) is a denomination whose mission is to minister to SGD people (Wilcox, 2003). Troy Perry, the founder of the first UFMCC congregation in Los Angeles in 1968, believed that this church should serve "those seeking and celebrating the integration of their spirituality and sexuality" (Wilcox, 2003, p. 18). In 1982, Carl Bean, a former Motown and gospel singer, met with worshipers at his Los Angeles home and later founded Unity Fellowship Church, the first Black LGBTQ denomination.[13] Unity, with churches throughout the country, is not only the first and only Black gay denomination; it also identifies as a social movement working to respond to both the spiritual and emotional needs of congregants and their physical needs (Harris, 2014).

Much of the discussion about SGD people and religion has focused on Christianity, which has led to presumptions that other religions are not as inclusive. At a seminar entitled "Amplifying Visibility and Increasing Capacity for Sexual and Gender Diverse Populations,"[14] Khadija Kahn (Muslim Youth Leadership Council at Advocates for Youth) noted that the stereotype that Islam is inherently anti-LGBTQ and anti-woman is dangerous and untrue. LGBT Muslims are often viewed as victims trapped in a religious institution that is antagonistic toward SGD people. However, there is a growing community of LGBT people who are Muslims and who resist the stereotype that LGBT Muslims are oppressed, while also challenging the oppression and exclusion of LGBT people in Islam (al-Haqq Kugle, 2014).

There are several supportive groups in the country that provide safe spaces for SGD Muslims, such as Queer Muslims of Boston, a Facebook group for the Muslim Alliance for Gender and Sexual Diversity, and Arabian Nights, a queer Middle Eastern group in Michigan (Opalewski, 2017). Because LGBT Muslims are "a minority within a minority within a minority," they need to build bridges across gender, sexual, racial, ethnic, and religious and secular differences (al-Haqq Kugle, 2014, p. 156). While working to create inclusion within Islam, LGBT Muslims are also working with other minority communities to provide supportive and safe spaces outside of conventional spaces of Islamic practices.

Since SGD people are coming out at younger ages, they are being exposed to a variety of challenges at earlier ages. Kahn noted at the seminar

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[13] See https://ufcmlife.org/.

[14] The seminar was held at the National Academies of Science, Engineering, and Medicine in August 2019: see Appendix B for the full agenda.

that young LGBTQ+ Muslims face a range of challenges related to homophobia, transphobia, Islamophobia, relationship violence, immigration, the "Muslim ban," stigma around HIV, and many other issues. She said that LGBTQ+ Muslims between the ages 14 and 24 are pivotal to the Islamic activist movement.

Institutionalized religion is not the only means through which SGD people engage in spirituality. Many of them create religious and spiritual spaces that are more in alignment with their cultural identities and are not institutionalized. Some of these practices allow members to atone for the harm that institutionalized religions have done to their ancestors (e.g., the church's role in slavery) while also creating a space to affirm SGD identities.

There are a number of Indigenous, Native American, and other cultural spiritual practices that are not formally associated with institutions or traditional denominations in the United States. For example, as discussed in Chapter 1, among some Native American tribes the term "Two Spirit" refers to a gender and sexual identity that emphasizes spirituality and downplays the homosexual persona (Jacobs, Thomas, and Lang, 1997). Within such a cultural context, the spiritual is not only viewed as inseparable from gender and sexuality; it also expands the gender and sexual possibilities that members can take up (Lane, 1997). Thus, Two Spirit identity is viewed as consistent with Native American spirituality, not outside of it. This is a departure from dominant notions of LGBT identity.

Several groups of SGD worshipers throughout the United States draw from and mix traditional African religious practices, such as Candomblé, Santería, and Vodou, shaping the practices to fit their context and conditions (Matory, 2009; Strongman, 2019). These practices recognize that the binarisms that underpin sex, gender, and sexuality categories of identities are a result of settler colonialism and do not reflect traditional African spiritual systems (Jolivette, 2016; Strongman, 2019). These African diasporic religious practices, like Native American spiritual practices, include "the commingling of the human and the divine" to produce identities and experiences in which gender is not dictated by assigned sex at birth (Strongman, 2019, p. 2). This view also speaks to sexual fluidity, wherein heterosexuality is neither the only sexuality nor is it mandatory.

Health Care Institutions

This section examines the role of community in raising awareness around key health issues for SGD populations, such as HIV/AIDS (access to health care is discussed in Chapter 12). Community connectedness has been shown to help SGD people address health disparities by connecting them to important resources. For example, Hussen and colleagues (2018) found that community organizations foster shared understanding and build social capital among Black gay and bisexual men living with HIV, which can facilitate more positive outcomes at the individual, social, and community levels.

A major impediment to the struggle for health and access to health care for LGBT people, people with intersex traits, and other SGD populations has been the social construction, medicalization, and pathologization of sexual and gender diversity (Martos, Wilson, and Meyer, 2017). Ironically, it was the early medicalization and pathologization of same-sex sexual behavior and gender nonconformity that caused health organizations and agencies to overlook the unique health issues and disparities facing SGD communities, especially those who are among the most marginalized in those communities—people of color, transgender individuals, undocumented immigrants, and those living in poverty—for whom intersecting structural oppressions exacerbate many of the health concerns they face.

Social constructionism (see Chapter 2) argues that societies and cultures inform how people perceive and understand their social world (Lupton, 2000). Just as sexuality, race, and gender identity are socially constructed, so too are understandings of health, illness, and death (Brown, 1995). Medical professionals and institutions shape the ways in which health, illness, and the body are defined, and they also helped define and medicalize same-sex attraction and gender dysphoria as health issues in need of medical intervention.

In the early 1970s, activists focused their efforts on encouraging health care professionals to declassify "homosexuality" as a mental illness. They succeeded in these efforts in 1973; however, Martos, Wilson, and Meyer (2017) describe the split that occurred between LGB and transgender organizations and groups when the diagnosis of "gender identity disorder" appeared in the *Diagnostic and Statistical Manual of Mental Disorders* in 1980. The 1970s also saw an increase in the number of organizations dedicated to providing support, resources, and community to LGBT people, with more than 1,000 LGBT organizations emerging during that time (Martos, Wilson, and Meyer, 2017).

Organizations also began to consider the unique issues facing SGD communities with the publication of a chapter on lesbian health in the second edition of *Our Bodies, Ourselves* in 1973. Soon, organizations providing resources and support for SGD groups also began to offer alternative access to health information resources, and this later included medical care. With more people coming out and seeking community, LGBT urban enclaves grew, and some health care organizations responded to a shift in local demographics by beginning to offer support for SGD patient populations. For example, Fenway Health, the nation's oldest LGBT-focused health center, was founded in 1971 in Boston not as an LGBT clinic but as a sexual health clinic that, due to demographic shifts, gained expertise in providing health care services and treatment to LGBT patients. Like Fenway Health, other urban health centers began to cater more toward SGD patient populations, providing such services as mental health counseling, substance abuse treatment, and sexual health care in safe and LGBT-affirming environments. By the mid-1980s, the National Gay and Lesbian Task Force estimated that there were "over 100 clinics and medical service programs and over 300 counseling and mental health programs, with services ranging from testing and treatment for sexually transmitted infection to counseling and care of substance users, that were openly LGBT friendly and accepting" (Martos, Wilson, and Meyer, 2017).

The increasing number of HIV infections and the high rate of HIV-related deaths among gay and bisexual men and transgender women changed the nature of LGBT community mobilization and activism. Access to health care education, resources, and services became an issue of life or death throughout the 1980s, as LGBT and AIDS activists pressured government, religious, and health care leaders for support and services. These activists and organizations "leveraged the health implications of HIV/AIDS to raise awareness about such issues as domestic partnerships, access to the sick and dying, inheritance, and housing" (Martos, Wilson, and Meyer, 2017). As rates of HIV began to increase, more LGBT community centers and groups began to focus on policies, funding, and programs to provide HIV testing, prevention, and treatment, and this also bolstered efforts to connect LGBT communities with a wide range of health care services. Founded in 1999 by Black gay AIDS activist Phill Wilson, the Black AIDS Institute in Los Angeles is an example of a community-based organization created to address a health crisis that disproportionately impacted Black people (particularly Black gay men at that time) in a time of inadequate responses by government health agencies (Wilson, 2020).

However, just as transgender and gender-nonconforming people were excluded from much of the LGB activism taking place during the 1980s, cisgender women similarly faced sexism and misogyny among AIDS activists and the larger LGBT movement. For example, some scholars argue that sexism played a decisive role in the eventual decline of the AIDS Coalition to Unleash Power (ACT UP) Movement in the 1990s (Gould, 2009).

The first LGBT community health center to be recognized as a Federally Qualified Health Center (FQHC) by the Health Resources and Services Administration Bureau of Primary Health Care was Baltimore's Chase Brexton in 2002, and several more have since been recognized, including Fenway Health, the Los Angeles LGBT Center, New York City's Callen-Lorde Community Health Center, Philadelphia's Mazzoni Center, and Washington, D.C.'s Whitman-Walker Health. The FQHC designation ensures federal funding and reimbursement for health services provided by these health centers (Martos, Wilson, and Meyer, 2017).

Although these health centers and many more organizations across the country are addressing health and wellness among SGD populations, many LGBTQ people still experience homophobia, biphobia, and transphobia in health care settings. And too many LGBTQ people of color continue to experience health disparities and a disproportionate representation in the HIV/AIDS epidemic (Bailey and Bost, 2020). As a result, these communities often seek out support from LGBTQ-specific health care organizations or from support groups in religious organizations, such as HIV/AIDS support groups in some Black churches; breast cancer support groups for LGB women; transgender support groups; and other in-person and online communities dedicated to issues such as domestic violence and mental health. More recently, some studies have noted increased levels of acceptance for lesbians, gays, and bisexuals in health care settings (Macapagal, Bhatia, and Green, 2016). Nonetheless, differences in health care access, use, and experiences among LGBTQ populations, particularly LGBTQ people of color, continue to affect patients' experiences with health care and feelings of acceptance in medical settings (Macapagal, Bhatia, and Green, 2016).

Educational Institutions

As a direct result of the activism of LGBTQ+ faculty, students, staff, and their allies, colleges and universities have increased services for SGD populations in recent years. Many have developed LGTBQ+ resource centers that offer community for SGD people on campus and provide space for gay-straight alliances to meet. For some SGD students these centers provide emotional, social, and academic support, shaping and improving the quality of their experiences in colleges and universities (see Chapter 9). However, many students, faculty, and staff may have limited access to these opportunities (Duran, Blockett, and Nicolasso, 2020).

Traditional campus social groups and organizations can be cis-normative and heteronormative, and in some cases, like sororities and fraternities, they can exclude SGD people because of explicit and implicit expectations of adherences to traditional gender and sexual norms. In some places, SGD students have responded to these forms of exclusion by creating their own societies, fraternities, and sororities to provide the opportunity for SGD students to experience social support throughout their education and beyond. More broadly, many SGD student populations create "counterspaces" (Blockett, 2017), in which they can come together to create alternatives for themselves when their college or university is either unable or unwilling to create spaces and resources that are inclusive, affirming, and safe for them.

Not all SGD groups feel welcomed and affirmed at LGBTQ+ resource centers. While the stated aims of these centers center around inclusion, they also produce what is experienced as "colorblind" politics for some groups

(Bailey and Richardson, 2019; Blockett, 2017). The centers may not challenge the host institution's views around racism, homophobia, and transphobia; rather, they do the intellectual and political labor of respectability and normativity at the university by creating an inclusive environment within the larger, less-inclusive environment. As these LGBTQ+ organizations become institutionalized, they often make tradeoffs to be sustained in historically conservative host institutions and so have difficulty creating and sustaining fully inclusive environments and spaces for a diverse range of SGD students and others on campus.

Although most SGD students struggle to find inclusive and safe spaces in colleges and universities, SGD populations of color face greater challenges because of the interconnected oppressions of race, gender, and sexuality. SGD students have to navigate a range of social issues at colleges and universities, and many of them find it difficult to form community around gender and sexuality alone, to the exclusion of their racial and cultural identities (Blockett, 2017). At the same time, many SGD students of color do not feel fully included in their racial and cultural communities of origin. Institutions of higher education have often failed to create and facilitate the conditions under which SGD students of all racial and ethnic backgrounds can feel supported, affirmed, and included in the classroom and, more broadly, in campus life.

CIVIC AND POLITICAL INVOLVEMENT

Understanding the sociopolitical engagement of SGD populations is important to understanding patterns of resilience among historically stigmatized populations (Bruce, Harper, and Bauermeister, 2015). Engaging in political affairs is one source of resilience for SGD communities. This section considers how SGD groups engage in political and civic affairs, how they create their own space when not invited, and how they transform political spaces.

Under previous presidential administrations, LGBTQ+ rights and protections at the federal level had gained strong support in the public sector, with few exceptions. While progress continues to be made in sectors such as employment, legal rights and protections for SGD people in other domains have been rapidly rolled back. While a more detailed discussion on the legal and political challenges confronting SGD populations is taken up elsewhere in this report, this chapter considers how SGD communities help to mitigate some of the harm they experience from legal setbacks through creation and participation in public culture and their sociopolitical involvement.

There are many ways people may engage in formal political institutions, including donating money to campaigns, electioneering for candidates or issues, and attending rallies or protests. The civic and political engagement of SGD people is multidimensional and multifaceted, and studies show that lesbian, gay, and bisexual adults tend to be more civically and politically engaged than heterosexual adults (Egan, Edelman, and Sherrill, 2008; Flores, 2019). They have higher rates of discussing politics online, contacting government officials, donating to campaigns, attending protests and rallies, and volunteering on campaigns than non-LGBT people (Flores, 2019). Studies suggest SGD people are slightly more certain that they are registered to vote than cisgender, heterosexual people (Bowers and Whitley, 2020; James et al., 2016; Pew Research Center, 2013).

Data from the 2015 U.S. Transgender Survey suggest that 76 percent of transgender people are registered to vote, compared with 65 percent of the adult population (James et al., 2016). From probability-based surveys, the Pew Research Center (2013) found that 77 percent of LGBT people are registered to vote, and Mallory (2019) found that about 79 percent of LGBT people are registered to vote; both numbers are less than the 88 percent of the general population that is registered to vote (Goldmacher, 2016). However, information is limited regarding registration rates from nationally representative studies of SGD populations that overcome potential biases of self-reported measures. There are potential barriers for some SGD populations to register to vote. Transgender adults face increased barriers in states that have policies requiring the presentation of identity documents with a photo in order to register (Herman, 2012; Herman and Brown, 2018; O'Neill and Herman, 2020; also see Chapter 12). The problem is encountered both for registration and voting.

Since the early 1990s, the National Election Pool (NEP) has been documenting both sexual orientation and gender identity in its exit poll questionnaire. Over the years, the results of the NEP tend to show that the percentage of voters who identify as LGBT is about 5 percent (Flores, 2019). The LGBT vote may now be a larger portion of the electorate, as Schaffner (2019) shows that about 11 percent of the electorate identified as LGBT in the 2018 midterm election.

In a study of a representative sample of college students, Swank and Fahs (2017) found that sexual minorities participate in political marches at higher rates than heterosexual persons; the primary explanation is their embeddedness and activism in political groups (see also Swank and Fahs, 2019). A field experiment suggested that social esteem—recognizing SGD people who participated in pride rallies by publishing their names and photographs on social media—can be a key driver leading them to participate in politics (McClendon, 2014). Activism, however, can be emotionally stressful and taxing: in one study, 84 percent of a purposive sample of LGBTQ+ activists reported being emotionally taxed by LGBTQ+ activism (Pepin-Neff and Wynter, 2020). Pepin-Neff and Wynter (2020) found that activists described constant pressure to participate in LGBTQ+ pride marches and other rallies as emotionally taxing, especially for people at the intersections of race, age, and gender identity.

At the 2019 public seminar on amplifying visibility and increasing capacity for SGD populations, Todd Snovel (Pennsylvania Commission on LGBTQ Affairs)[15] discussed the broad nature of civic engagement and sociopolitical involvement in what he termed queer communities. He explained that some people equate civic engagement with political engagement, which complicates the concept—especially when political engagement often gets further reduced to partisan engagement. He added: "Any time that someone sees social inequalities or sees areas that could be bettered within a community and raises voice, raises energy, raises resources around improving models for that in a community basis, we would consider all of that under civic engagement." Mary Anne Adams (Zami NOBLA) added to Snovel's points at the seminar, saying that many people are involved in some form of civic engagement, even if they do not define or call it that. She said social media is a prime example of a platform informally used as a way to improve communities and the common good, as well as a voice of resistance and social justice for marginalized communities. Her points reinforce the role of online forums as a platform for sociopolitical involvement and activism as a way to build stronger positive identities among SGD populations (Ceglarek and Ward, 2016). In examining motivators for sociopolitical involvement and civic engagement among SGD populations of color, research reveals that individual connectedness to other SGD people (not necessarily people of color) is a strong predictor of sociopolitical involvement (Harris, Battle, and Pastrana, 2018). Early organizing sought to build community and raise awareness of the social, economic, and political problems that lesbian women and gay men encountered (Armstrong, 2002). This focus continued into the 1970s with service organizations, such as Street Transvestite Action Revolutionaries (STAR), led by Sylvia Rivera and Marsha P. Johnson, and activist organizations such as the Gay Liberation Front and the Gay Activists Alliance (Ghaziani, Taylor, and Stone, 2016; Shepard, 2013). Community organization and activism played a pivotal role in the 1980 and 1990s during the HIV/AIDS crises (Cohen, 1999), and community and activist organizations remain central to the well-being of SGD people (see Chapter 6).

Historically, some organizations rarely included SGD people of color and were known to be comprised primarily of middle-class white gay men and lesbian women (Armstrong, 2002; Cohen, 1999). As a result, community organizations with an intersectional mindset have emerged in various communities seeking to advance the well-being of SGD people

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[15] Snovel is now Special Assistant to the President for Strategic Initatives at the Pennsylvania College of Art and Design.

(Stone, 2012). However, mainstream political organizations tend to prioritize policy and legal changes on topics that may not address the needs of the most vulnerable subgroups (Stone, 2012), though this has also been changing to be more inclusive in recent years. This inclusiveness advances policy and broadens services to further the well-being of SGD people, and it provides agency and political power to them.

SUMMARY AND CONCLUSIONS

SGD communities represent a variety of racial, ethnic, and cultural identities and experiences and both shared and disparate interests and concerns, but they all need access to resources and safe spaces. Over the past several years, spaces for public convening and engagement in social, cultural, and personal activities have diminished substantially for SGD people. Because access to space is linked to participation in public culture, which is also influenced by the intersections of race, gender, sexuality, and social class, working class and poor SGD people of color do not always have access to the same spaces as do SGD people of other races and classes.

> **CONCLUSION 7-1: Space is an essential aspect of building community, which is an important source of resilience for sexual and gender diverse populations. However, not all sexual and gender diverse people have access to affirming and safe physical, virtual, and social spaces.**

Festivals and group celebrations are an important part of LGBTQ+ culture. LGBTQ+ pride celebrations in major cities attract thousands of attendees, but many remain self-segregated, leaving ethnically diverse SGD groups to respond by protest or creating their own pride events. Online communities provide and transform spaces in which SGD people can explore their identities and express themselves openly. Online communities are sometimes created out of the need for information, connection, and support among less visible and marginalized SGD groups.

SGD people have sought to carve out niches in religious and educational institutions, as well as in the realm of civic and political engagement. The past several years have seen the insurgence of LGBTQ+-affirming churches and denominations and noninstitutional and Indigenous spiritual practices, as well as gay-straight alliances on college and university campuses. Community connectedness has also been shown to help SGD people address health disparities by connecting them to important resources.

> **CONCLUSION 7-2: For sexual and gender diverse populations, access to affirming space enables community engagement, which influences**

feelings of recognition, inclusion, connectedness, and safety that are often otherwise denied to them.

In civic affairs, lesbian, gay, and bisexual adults tend to be more civically and politically engaged than heterosexual adults: they engage government officials, donate to and volunteer in campaigns, and attend protests and rallies at higher rates than non-LGBT people. In addition, transgender people are registered to vote at higher rates than the cisgender population. Connectedness to other SGD people is a strong predictor of sociopolitical involvement. While political involvement is often conflated with civic engagement, experts note that the two are different, and civic engagement can manifest itself through participation in both in-person and virtual activism (i.e., social media and online forums).

CONCLUSION 7-3: Community mobilization and sociopolitical involvement have been key to the struggle for equality, inclusion, and social justice for sexual and gender diverse populations.

REFERENCES

Adler, S., and Brenner, J. (1992). Gender and space: Lesbians and gay men in the city. *International Journal of Urban and Regional Research*, *16*(1), 24–34. doi: 10.1111/j.1468-2427.1992.tb00463.x.

al-Haqq Kugle, S.S. (2014). *Living out Islam: Voices of Gay, Lesbian, and Transgender Muslims*. New York: New York University Press.

Armstrong, E.A. (2002). *Forging Gay Identities: Organizing Sexuality in San Francisco, 1950–1994*. Chicago: University of Chicago Press.

Arnold, E.A., and Bailey, M.M. (2009). Constructing home and family: How the ballroom community supports African American GLBTQ youth in the face of HIV/AIDS. Journal of Gay *and Lesbian Social Services, 21*(2-3), 171–188. doi: 10.1080/10538720902772006.

Arredondo, M.I., and Suárez, M.I. (2019). Ecological determinants of child welfare and juvenile justice involvement: K-12 schooling. In K.J. Conron and B.D.M. Wilson (Eds.), *A Research Agenda to Reduce System Involvement and Promote Positive Outcomes with LGBTQ Youth of Color Impacted by the Child Welfare and Juvenile Justice Systems* (pp. 21–26). Los Angeles: Williams Institute, UCLA School of Law.

Baams, L., Jonas, K.J., Utz, S., Bos, H.M.W., and Van Der Vuurst, L. (2011). Internet use and online social support among same sex attracted individuals of different ages. *Computers in Human Behavior*, *27*(5), 1820–1827.

Bailey, M. (2011). Gender/racial realness: Theorizing the gender system in ballroom culture. *Feminist Studies*, 37(2), 365–386.

———. (2013). *Butch Queens Up in Pumps: Gender, Performance and Ballroom Culture in Detroit*. Ann Arbor: University of Michigan Press.

Bailey, M., and Bost, D. (2020). Guest editors' note. *Souls: A Critical Journal of Black Politics, Culture, and Society*, *21*(2–3), 97–106.

Bailey, M.M., and Richardson, M. (2019). "Will the real men stand up?" Regulating gender and policing sexuality through black common sense. In A. Davis and Black Sexual Economies Working Group (Eds.), *Black Sexual Economies: Race and Sex in a Culture of Capital* (pp. 108–123). Champaign: University of Illinois Press.

Bailey, M.M., and Shabazz, R. (2014). Editorial: Gender and sexual geographies of blackness: Anti-black heterotopias (part 1). *Gender, Place and Culture, 21*(3), 316–321. Available: https://www.tandfonline.com/doi/abs/10.1080/0966369X.2013.781305.

Barreira, A. (2020, June 12). Can LGBTQ bars survive the Covid-19 pandemic? *San Francisco Business Times*. Available: https://www.bizjournals.com/sanfrancisco/news/2020/06/12/can-lgbtq-bars-survive-through-covid-19.html.

Battle, B., Cohen, C.J., Warren, D., Fergerson, G., and Audam, S. (2002). *Say It Loud: I'm Black and I'm Proud—Black Pride Survey 2000*. New York: The Policy Institute of the National Gay and Lesbian Task Force. Available: https://www.lgbtracialequity.org/publications/SayItLoudBlackAndProud.pdf.

Bell, D., and Binnie, J. (2004). Authenticating queer space: Citizenship, urbanism and governance. *Urban Studies, 41*(9), 1807–1820.

Blockett, R.A. (2017). "I think it's very much placed on us": Black queer men laboring to forge community at a predominantly white and (hetero)cisnormative research institution. *International Journal of Qualitative Studies in Education, 30*(8), 800–816. doi: 10.1080/09518398.2017.1350296.

Bowers, M.M., and Whitley, C.T. (2020). Assessing voter registration among transgender and gender non-conforming individuals. *Political Behavior, 42*, 143–164. Available: https://link.springer.com/article/10.1007/s11109-018-9489-x.

Brown, P. (1995). Naming and framing: The social construction of diagnosis and illness. *Journal of Health and Social Behavior 35*, 34–54.

Bruce, D., Harper, G.W., and Bauermeister, J.A. (2015). Minority stress, positive identity development, and depressive symptoms: Implications for resilience among sexual minority male youth. *Psychology of Sexual Orientation and Gender Diversity, 2*(3), 287–296. doi: 10.1037/sgd0000128.

Campbell, C., Skovdal, M., and Gibbs, A. (2011). Creating social spaces to tackle AIDS-related stigma: Reviewing the role of church groups in Sub-Saharan Africa. *AIDS and Behavior, 15*(6), 1204–1219. doi: 10.1007/s10461-010-9766-0.

Casey, M. (2004). De-dyking queer space(s): Heterosexual female visibility in gay and lesbian spaces. *Sexualities,* 7(4), 446–461. doi: 10.1177/1363460704047062.

Cashman, H. (2019). What Phoenix's jotería is saying: Identity, normativity, resistance. *Language in Society*, *48*(4), 519–539. doi: 10.1017/S0047404519000411.

Ceglarek, P.J.D., and Ward, L.M. (2016). A tool for help or harm? How association between networking use, social support, and mental health differ for sexual minority and heterosexual youth. *Computers in Human Behavior, 65*, 201–209.

Cohen, C.J. (1997). Punks, bulldaggers, and welfare queens: The radical potential of queer politics? *GLQ: A Journal of Lesbian and Gay Studies,* 3, 437–465.

———. (1999). *The Boundaries of Blackness: AIDS and the Breakdown of Black Politics*. Chicago: University of Chicago Press.

Combahee River Collective. (1983). Combahee River Collective Statement. In Barbara Smith (Ed.), *Home Girls, A Black Feminist Anthology* (pp. 264–274). New York: Kitchen Table: Women of Color Press.

Conradson, D. (2003). Spaces of care in the city: The place of a community drop-in centre. *Social and Cultural Geography, 4*(4), 507–525.

Coulombe, S., and Krzesni, D.A. (2019). Associations between sense of community and well-being: A comprehensive variable and person-centered exploration. *Journal of Community Psychology*, *47*(5), 1246–1268.

Crowley, M.S. (2010). Experiences of young bisexual women in lesbian/bisexual groups on MySpace. *Journal of Bisexuality*, *10*(4), 388–403.

Daniel-McCarter, O. (2012). Us vs. them! Gays and the criminalization of queer youth of color in Chicago. *Children's Legal Rights Journal, 32*(1), 5–17.

Davidson, W.B., and Cotter, P.R. (1991). The relationship between sense of community and subjective well-being: A first look. *Journal of Community Psychology*, *19*(3), 246–243.

Davis, G., and Preves, S. (2017). Reflecting on intersex: 25 years of activism, mobilization, and change. In J.Z. Spade and C.F. Valentine (Eds.), *The Kaleidoscope of Gender: Prisms, Patterns, and Possibilities* (pp. 30–43). Thousand Oaks, CA: SAGE Publishing.

D'Emilio, J. (1983). *Sexual Politics, Sexual Communities: The Making of the Homosexual Minority in the United States, 1940–1970.* Chicago: University of Chicago Press.

Doan, P.L., and Higgins, H. (2011). The demise of queer space? Resurgent gentrification and the assimilation of LGBT neighborhoods. *Journal of Planning Education and Research, 31*(1), 6–25.

Duran, A., Blockett, R.A., and Nicolazzo, Z. (2020). An interdisciplinary return to queer and trans studies in higher education implications for research and practice. In M.B. Paulsen and L.W. Perna (Eds.), *Higher Education: Handbook on Theory and Research* (Vol. 35). New York: Springer.

Egan, P.J., Edelman, M.S., and Sherrill, K. (2008). *Findings from the Hunter College Poll: New Discoveries about the Political Attitudes of Lesbians, Gays and Bisexuals*. Paper presented at the American Political Science Association. New York: Hunter College CUNY.

Epstein, S., and Carrilo, H. (2014). Immigrant sexual citizenship: Intersectional templates among Mexican gay immigrants to the USA. *Citizenship Studies, 18*(3–4), 259–276.

Flores, A.R. (2019). LGBTQ voters. In J. Pierceson (Ed.), *An Encyclopedia of Activists, Candidates, and Officeholders* (pp. 83–95). Santa Barbara, CA: ABC-CLIO.

Ghaziani, A. (2014). *There Goes the Gayborhood?* Princeton: Princeton University Press.

Ghaziani, A., Taylor, V., and Stone, A. (2016). Cycles of sameness and difference in LGBT social movements. *Annual Review of Sociology, 42*, 165–183. doi: 10.1146/annurev-soc-073014-112352.

Gibbs, J.J., and Goldbach, J. (2015). Religious conflict, sexual identity, and suicidal behaviors among LGBT young adults. *Archives of Suicide Research, 19*(4), 472–488. doi: 10.1080/13811118.2015.1004476.

Gieseking, J.J. (2013). Queering the meaning of "neighbourhood": Reinterpreting the lesbian-queer experience of Park Slope, Brooklyn, 1983-2008. In M. Addison and Y. Taylor (Eds.), *Queer Presences and Absences: Genders and Sexualities in the Social Sciences* (pp. 178–200). London: Palgrave Macmillan.

Goldmacher, S. (2016, Oct. 19). America hits new landmark: 200 million registered voters. *Politico*. Available: https://www.politico.com/story/2016/10/how-many-registered-voters-are-in-america-2016-229993.

Gould, D.B. (2009). *Moving Politics: Emotion and ACT UP's Fight Against AIDS*. Chicago: The University of Chicago Press.

Gray, K.L. (2018). Gaming out online: Black lesbian identity development and community building in Xbox Live. *Journal of Lesbian Studies*, *22*(3), 282–296.

Gray, M. (2009). *Out in the Country: Youth, Media, and Queer Visibility in Rural America*. New York: New York University Press.

Gutterman, L. (2012). The house on the borderland: Lesbian desire, marriage, and the household, 1950–1979. *Journal of Social History*, *46*(1), 1–22.

Haimson, O.L., Dame-Griff, A., Capello, E., and Richter, Z. (2019). Tumblr was a trans technology: The meaning, importance, history, and future of trans technologies. *Feminist Media Studies*, 1–17.

Hanhardt, C.B. (2013). *Safe Space: Gay Neighborhood History and the Politics of Violence*. Durham, NC: Duke University Press.

Hardy, J. (2019). Queer information literacies: Social and technological circulation in the rural Midwestern United States. *Information, Communication and Society*, 1–16.

Harris, A. (2014). Conflicts within Black churches. In A. Thatcher (Ed.), *The Oxford Handbook of Theology, Sexuality and Gender*. London: Oxford University Press. doi: 10.1093/oxfordhb/9780199664153.013.019.

Harris, A., Battle, J., and Pastrana, Jr., A. (2018). *Queer People of Color: Connected, but Not Comfortable*. New York: Lynne Rienner.

Herman, J.L. (2012). *The Potential Impact of Voter Identification Laws on Transgender Voters*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://escholarship.org/uc/item/9gw3c861.

Herman, J.L., and Brown T.N.T. (2018). *The Potential Impact of Voter Identificaiton Laws in the 2018 General Election*. Los Angeles: Williams Institute, UCLA School of Law. Available: https://escholarship.org/content/qt0441c9rs/qt0441c9rs.pdf.

Holland, S. (2019). Constructing queer mother-knowledge and negotiating medical authority in online lesbian pregnancy journals. *Sociology of Health and Illness*, *41*(1), 52–66.

Hussen, S.A., Easley, K.A., Smith, J.C., Shenvi, N., Harper, G.W., Camacho-Gonzalez, A.F., Stephenson, R., and Del Rio, C. (2018). Social capital, depressive symptoms, and HIV viral suppression among young black, gay, bisexual and other men who have sex with men living with HIV. *AIDS and Behavior*, *22*(9), 3024–3032. doi: 10.1007/s10461-018-2105-6.

Jacobs, S.E., Thomas, W., and Lane, S. (Eds.) (1997). *Two Spirit People: Native American Gender Identity, Sexuality, and Spirituality*. Urbana: University of Illinois Press.

Jagose, A.R. (1996). *Queer Theory: An Introduction*. New York: New York University Press.

James, S.E., Herman, J.L., Rankin, S., Kesiling, M., Mottet, L., and Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey.* Washington, DC: National Center for Transgender Equality. Available: https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf.

Johnson, E.P., and Rivera-Servera, R.H. (2016). Introduction: Ethnoracial intimacies in blacktino queer performance. In Johnson, E.P. and Rivera-Severa, R.H. (Eds.). *Blacktino Queer Performance* (pp. 1–18). Durham, NC: Duke University Press.

Jolivette, A.J. (2016). *Indian Blood: HIV and Colonial Trauma in San Francisco's Two Spirit Community*. Seattle: University of Washington Press.

Joseph, M. (2007). Community. In B. Burgett and G. Hendler (Eds.), *Keywords for American Cultural Studies* (pp. 53–56). New York: New York University Press.

Kelley, R.D. (2008). *Yo' Mama's Disfunktional!: Fighting the Culture Wars in Urban America*. Boston, MA: Beacon Press.

Kornhaber, S. (2020, June). The coronavirus is testing queer culture. *The Atlantic*. Available: https://www.theatlantic.com/culture/archive/2020/06/how-quarantine-reshaping-queer-nightlife/612865.

Kosciw, J.G., Greytak, E.A., Zongrone, A.D., Clark, C.M., and Truong, N.L. (2017). *The 2017 National School Climate Survey: The Experiences of Lesbian, Gay, Bisexual, Transgender, and Queer Youth in Our Nation's Schools.* GLSEN. Available: https://www.glsen.org/sites/default/files/2019-10/GLSEN-2017-National-School-Climate-Survey-NSCS-Full-Report.pdf.

Lane, S. (1997). Various kinds of Two-Spirit people: Gender variance and homosexuality in Native American communities. In S.E. Jacobs, W. Thomas, and S. Lane (Eds.), *Two Spirit People: Native American Gender Identity, Sexuality, and Spirituality* (pp. 100–118). Urbana: University of Illinois Press.

Lee, Y.J., Kamen, C., Margolies, L., and Boehmer, U. (2019). Online health community experiences of sexual minority women with cancer. *Journal of the American Medical Informatics Association*, *26*(8–9), 759–766.

Liddle, K. (2005). More than a bookstore: The continuing relevance of feminist bookstores for the lesbian community. In E.D. Rothblum and P. Sablove (Eds.), *Lesbian Communities: Festivals, RVs and the Internet* (pp. 145–160). New York: Routledge.

Lupton, D. (2000). *Medicine as Culture: Illness, Disease and the Body in Western Societies*. Thousand Oaks, CA: SAGE Publishing.

Macapagal, K., Bhatia, R., and Green, G.J. (2016). Differences in healthcare access, use, and experiences within a community sample of racially diverse lesbian, gay, bisexual, transgender and questioning emerging adults. *LGBT Health, 3*(6), 434–442. doi: 10.1089/lgbt.2015.0124.

Mallory, C. (2019). *The 2020 LGBT Vote: Preferences and Characteristics of LGBT Voters*. Los Angeles: Williams Institute UCLA School of Law. Available: https://escholarship.org/content/qt4232v8j9/qt4232v8j9.pdf.

Martos, A.J., Wilson, P.A., and Meyer, I.H. (2017). Lesbian, gay, bisexual, and transgender (LGBT) health services in the United States: Origins, evolution, and contemporary landscape. *PLoS One*, *12*(7), e0180544. doi: 10.1371/journal.pone.0180544.

Matory, L. (2009). *Black Atlantic Religion, Traditions, Transnationalism, and Matriarchy in the Afro-Brazilian Condembl*é. Durham, NC: Duke University Press.

McClendon, G.H. (2014). Social esteem and participation in contentious politics: A field experiment at an LGBT pride rally. *American Journal of Political Science, 58*(2), 279–290.

McFarland Bruce, K. (2016). *Pride Parades: How a Parade Changed the World*. New York: New York University Press.

McGlotton, S. (2013). *Virtual Intimacies: Media, Affect, and Queer Sociality*. Albany: State University of New York Press.

McQueeny, K. (2009). "We are God's children, y'all": Race, gender, and sexuality in lesbian and gay-affirming congregations. *Social Problems*, *56*(1), 151–173.

Moore, M.R. (2011). *Invisible Families: Gay Identities, Relationships and Motherhood Among Black Women*. Berkeley, CA: University of California Press.

Morris, B. (2005). Negotiating lesbian worlds: The festival communities. In E.D. Rothblum and P. Sablove (Eds.), *Lesbian Communities: Festivals, RVs and the Internet* (pp. 55–62). New York: Routledge.

Namaste, V. (2000). *Invisible Lives: The Erasure of Transsexual and Transgendered People*. Chicago: University of Chicago Press.

Nash, C.J. (2005). Contesting identity: Politics of gays and lesbians in Toronto in the 1970s: *Gender, Place and Culture*, *12*(1), 113–135.

———. (2006). Toronto's gay village (1969–1982): Plotting the politics of gay identity. *The Canadian Geographer, 50*(1), 1–16.

Nero, C. (2005). Why are gay ghettos white? In E.P. Johnson and M.G. Henderson (Eds.), *Black Queer Studies: A Critical Anthology* (pp. 228–245). Durham, NC: Duke University Press.

O'Neill, K., and Herman, J.L. (2020). *The Potential Impact of Voter Identification Laws on Transgender Voters in the 2020 General Election*. Los Angeles: Williams Institute, UCLA School of Law. Available: https://escholarship.org/content/qt1qx199j7/qt1qx199j7.pdf.

Opalewski, K. (2017). LGBT Middle-Eastern Americans Find Community during Arabian Nights. *Between the Lines: Pride Source Media Group*. Available: https://pridesource.com/article/83223-2/.

Oswin, N. (2008). Critical geographies and the uses of sexuality: Deconstructing queer space. *Progress in Human Geography, 32*(1), 89–103. doi: 10.1177/0309132507085213.

Pepin-Neff, C., and Wynter, T. (2020). The costs of pride: Survey results from LGBTQI activists in the United States, United Kingdom, South Africa, and Australia. *Politics and Gender, 16*(2), 498–524. Available: https://www.cambridge.org/core/journals/politics-and-gender/article/costs-of-pride-survey-results-from-lgbtqi-activists-in-the-united-states-united-kingdom-south-africa-and-australia/35A758971D436833E0E3740A88DBA359.

Peterson, J.L. (2009). "You have to be positive.": Social support processes of an online support group for men living with HIV. *Communication Studies*, *60*(5), 526–541.

Pew Research Center. (2013). *A Survey of LGBT Americans: Attitudes, Experiences and Values in Changing Times*. Washington, DC: Pew Research Center. Available: https://www.pewsocialtrends.org/2013/06/13/a-survey-of-lgbt-americans/.

Phelan, S. (2001). *Sexual Strangers: Gays, Lesbians, and Dilemmas of Citizenship*. Philadelphia, PA: Temple University Press.

Podmore, J.A. (2006). Gone "underground"? Lesbian visibility and the consolidation of queer space in Montréal. *Social and Cultural Geography, 7*(4), 595–625.

Prilleltensky, I., Prilleltensky, O., and Voorhees, C. (2016). Psychopolitical validity in the helping professions: Applications to research, interventions, case conceptualization, and therapy. Available: https://sites.education.miami.edu/faculty/wp-content/uploads/2016/09/psychopolitical.pdf.

Robbins, N.K., Low, K.G., and Query, A.N. (2016). A qualitative exploration of the "coming out" process for asexual individuals. *Archives of Sexual Behavior*, *45*(3), 751–760.

Rosenberg, R. (2016). The whiteness of gay urban belonging: Criminalizing LGBTQ youth of color in queer spaces of care. *Urban Geography, 38*(1), 137–148. doi: 10.1080/02723638.2016.1239498.

Rosenfeld, M.J., and Thomas, R.J. (2012). Searching for a mate: The rise of the Internet as a social intermediary. *American Sociological Review*, *77*(4), 523–547.

Rothenberg, T. (1995). "And she told two friends": Lesbians creating urban social space. In D. Bell and G. Valentine (Eds.), *Mapping Desire: Geographies of Sexualities*. London: Routledge.

Rubin, G. (1993). Thinking sex: Notes for a radical theory of the politics of sexuality. In H. Abelove, M. Barale, A.Michèle, and D.M. Halparin (Eds.), *The Gay and Lesbian Studies Reader* (pp. 3–37). New York: Routledge.

Schaffner, B. (2019). *CCES: US House Vote 2018* (v1) [Google Sheets]. Medford, MA. Available: https://docs.google.com/spreadsheets/d/1GWxlFixhhErfJVh95xwDFyqClrwNHkLMGrByTAou8rE/htmlview.

Scheitle, C.P., Merino, S.M., and Moore, A. (2010). On the varying meaning of "open and affirming." *Journal of Homosexuality, 57*(10), 1223–1236. doi: 10.1080/00918369.2010.517064.

Shabazz, R. (2014). *Spatializing Blackness: Architectures of Confinement and Black Masculinity*. Urbana: University of Illinois Press.

Shepard, B. (2013). From community organization to direct services: The Street Trans Action Revolutionaries to Sylvia Rivera Law Project. *Journal of Social Service Research, 39*(1), 95–114.

Sibley, D. (1995). *Geographies of Exclusion: Society and Difference in the West*. New York: Routledge.

Snorton, C.R. (2018). *Black on Both Sides: A Racial History of Trans Identity*. Minneapolis: University of Minnesota Press.

Spade, D. (2011). *Normal Life: Administrative Violence, Trans Politics, and the Limits of the Law*. New York: South End Press.

Stone, A.L. (2012). *Gay Rights at the Ballot Box*. Minneapolis: University of Minnesota Press.

Strongman, R. (2019). *Queering Black Atlantic Religions: Transcorporeality in Candomblé, Santería and Vodou*. Durham, NC: Duke University Press.

Stryker, S., and Silverman, V. (Directors). (2005). *Screaming Queens: The Riot at Compton's Cafeteria* [Documentary]. Independent Television Service.

Swank, E.W., and Fahs, B.R. (2017). College students, sexualities identities, and participation in political marches. *Sexuality Research and Social Policy, 14*(2), 122–132.

———. (2019). Explaining the sexuality gap in protest participation. *Journal of Homosexuality, 66*(3), 324–348.

Talvacchia, K.T., Pettinger, M.F., and Larrimore, M. (2015). *Queer Christianities: Lived Religion in Transgressive Forms*. New York: New York University Press.

United Church of Christ Coalition for LGBT Concerns. (2005). In support of equal marriage rights for all. Available: http://uccfiles.com/pdf/in-support-of-equal-marriage-rights-for-all-with-background.pdf.

Valentine, C.G., Spade, J.Z., and Trautner, M.N. (2020). *The Kaleidoscope of Gender: Prisms, Patterns, and Possibilities*, 6th edition. Thousand Oaks, CA: SAGE Publishing.

Valentine, G. (1993). (Hetero)sexing space: Lesbian perceptions and experiences of everyday spaces. *Environment and Planning D: Society and Space*, *11*(4), 395–413. doi: 10.1068/d110395.

Waldman, A.E. (2019). Law, privacy, and online dating: "Revenge porn" in gay online communities. *Law and Social Inquiry*, *44*(4), 987–1018.

Warner, M. (2000). *The Trouble with Normal: Sex, Politics, and the Ethics of Queer Life*. Cambridge: Harvard University Press.

Wilcox, M.M. (2003). *Coming Out in Christianity: Religion, Identity, and Community.* Bloomington: Indiana University Press.

Wilkins, C.L. (2000). (W)rapped space: The architecture of hip hop. *Journal of Architectural Education, 54*(1), 7–19.

Wilson, A.L. (2020). Interview with Raniyah Coeland, President and CEO of the Black AIDS Institute Discussing Black Feminist Leadership, and Black Women at Risk. *Souls: A Critical Journal of Black Politics, Culture, and Society*, *21*(2–3), 2019–2235.

Ybarra, M.L., Mitchell, K.J., Palmer, N.A., and Reisner, S.L. (2015). Online social support as a buffer against online and offline peer and sexual victimization among U.S. LGBT and non-LGBT youth. *Child Abuse and Neglect*, *39*, 123–136.

Yudice, G. (2007). Culture. In B. Burgett and G. Hendler (Eds.), *Keywords for American Cultural Studies* (pp. 68–72). New York: New York University Press.

8

Families and Social Relationships

Decades of study reveal that individuals who are relatively more socially connected are in better health and live longer than those who are relatively more socially isolated (Holt-Lunstad, Smith, and Layton, 2010). Close relationships and social connections, such as those found in families, are fundamentally important to health and well-being throughout life (Umberson and Karas Montez, 2010; Umberson and Thomeer, 2020). Supportive and stable relationships foster health and well-being, and relationships early in life have implications for the quality and stability of social ties in adolescence and adulthood. Throughout adulthood, people who are more socially connected have better mental and physical health and lower mortality than those who are more socially isolated (Yang et al., 2016).

Sexual and gender diverse (SGD) populations have not been a focus of this research to date, even though minority stress and discrimination experienced by SGD populations contribute to patterns of social engagement and patterns of isolation. Beginning in childhood, SGD populations face unique sources of stigma and discrimination due to SGD status that may introduce strain in relationships with others, inhibit family formation, and contribute to social isolation (Patterson, 2019; Riskind and Patterson, 2010; Russell and Fish, 2016). Close social ties can help individuals cope with sexual minority stress and offer sources of connection, resilience, and support that foster health and well-being (Umberson and Thomeer, 2020).

This chapter presents an overview of research findings relevant to social relationships and family lives across the life course. The discussion focuses on research about relationships in childhood and adolescence, on parenting and parent-child relationships, and on social ties in adulthood. In assessing the evidence, attention is devoted to contexts of relationships (such as stigma and discrimination), diversity in social ties as a function of diverse identities (such as sex and gender, social and economic status, and race and ethnicity), and on factors related to risk and resilience.

SOCIAL AND FAMILY RELATIONSHIPS IN CHILDHOOD AND ADOLESCENCE

Research over recent years has found that SGD youth show high rates of behavioral, mental, and physical health risks (Institute of Medicine, 2011; Russell and Fish, 2016). These vulnerabilities are one of the earliest and most consistent areas of scientific evidence regarding the lives of SGD people (Russell and Fish, 2016). In recent years, scholars have begun to trace many such risks to experiences of stigma and discrimination, whether at home, in the form of family rejection (Parker et al., 2018), or at school, in the form of bullying by peers (Moyano and del Mar Sánchez-Fuentes, 2020).

Most of the scientific research in this area has relied on measures of sexual identity (mostly on gay and lesbian identities); there is much less empirical research on gender identity or expression and even less on the health and well-being of intersex children and adolescents. However, newer studies on transgender youth and youth who question their sexual or gender identities show results generally consistent with the pattern found for lesbian, gay, and bisexual (LGB) youth: experiences of stigma or discrimination undermine health and well-being (Connolly et al., 2016; Russell and Fish, 2016). To the extent that youth might experience stigma or discrimination due to differences of sex development (DSD) or intersex traits, one might expect similar patterns, but research on this population is lacking.

While SGD people in earlier generations most often came out—that is, disclosed their identities as lesbian, gay, bisexual, transgender, or queer (LGBTQ)—in young adulthood, many SGD people now come out in adolescence (Floyd and Bakeman, 2006; Martos, Nezhad, and Meyer, 2015). A study that examined sexual identity developmental milestones across groups defined by gender or race and ethnicity found that developmental milestones are generally earlier for gay men than for lesbian women, but it found no significant differences across racial and ethnic groups (Martos, Nezhad, and Meyer, 2015). An earlier study, however, suggested that disclosure of SGD identity in early adolescence may be more likely among white than among Black or Latinx youth (Rosario, Schrimshaw, and Hunter, 2004). Finally, in a recent national probability sample of sexual minority people in the United States, gay males and SGD people from more recent generations generally reported earlier milestones than those from older generations and those with other sexual minority identities, and white participants reported later ages of some milestones than Black and Latinx participants (Bishop et al., 2020).

The shift over time in the age of coming out is especially relevant for adolescent social relationships: it means that contemporary youth come out in the context of legal, social, and financial dependence on their parents or caregivers, and during a period of life when extra-familial social relationships revolve primarily around school, a setting with few options and for which attendance is mandatory. While the potential for bullying or other forms of social rejection is greater for youth who come out (Russell et al., 2014), coming out also opens the door for positive social relationships, such as SGD-affirming friendships and romantic relationships (Russell, Watson, and Muraco, 2011; Whitton et al., 2018). Thus, over the recent past, youth have encountered experiences in families, schools, and peer groups that had not previously been encountered by SGD youth.

Family Relationships

Early studies of gay and lesbian youth described their fears of coming out at home (D'Augelli, Hershberger, and Pilkington, 1998). For many youth, coming out to parents or family members was very difficult if not impossible, and those who did come out reported experiences of family rejection ranging from guilt and shame to physical violence and being driven out of the home (Rosario et al., 2001). In an early study of LGB youth, D'Augelli and colleagues (1998) found that, when compared with youth who did not come out at home, those who did come out to family members reported more verbal and physical harassment and more suicidal thoughts and behavior. Since then, studies have assessed multiple dimensions or behaviors related to family rejection: they found strong associations between rejecting behaviors by parents and a range of emotional and behavioral health problems among LGBT youth (Puckett et al., 2015; Ryan et al., 2009). For example, LGBT youth who reported high levels of family rejection also reported more depressive symptoms, suicidal ideation, and suicidal behavior than did their peers (Ryan et al., 2009). A study of transgender adolescents (Johnson et al., 2020) and a retrospective survey of transgender adults identified similar correlates of family rejection in adolescence and adult well-being (Klein and Golub, 2016).

The dynamics of coming out and family relationships are distinctly gendered. Youth are more likely to come out to mothers than fathers or to come out to mothers before fathers (Floyd and Bakeman, 2006; Rothman et al., 2012; Savin-Williams, 2001), and reactions of fathers are usually feared more than reactions from mothers (Heatherington and Lavner, 2008). Like the gendered pattern of relations with parents, SGD youth report that their sisters are more likely to be confidants for disclosure of SGD identities than are their brothers (Toomey and Richardson, 2009).

Negative family experiences among SGD youth are often concentrated around the time of coming out (D'Augelli, Hershberger, and Pilkington, 1998). The conflict related to a youth's asserted SGD identity can set off relationship tension or disruption in families. In previous generations and in the context of profound stigma related to sexual and gender diversity and development, parents were often unable to understand a child's same-sex sexuality or transgender identity (Herdt and Koff, 2000). Today, in a social context of greater awareness, positive images of SGD people in the media, and increased visibility of SGD populations, many parents are able to be more accepting of their sexual and gender variant children (Russell and Fish, 2019).

In recent years, increased public understanding of transgender identities has also made possible the growing numbers of young children who assert gender identities that are not aligned with the sex they were assigned at birth (Johnson et al., 2020; Olson, Key, and Eaton, 2015). For intersex youth, coming out to immediate families may be less relevant, since their differences of sex development are often known by parents from birth or early childhood, and they are understood as physiological sexual differences rather than differences based in personal identity and expression (Gough et al., 2008). However, routine disclosure of intersex status by physicians to patients and families is a relatively recent practice. At the same time, many intersex youth and their families still struggle over whether and how to disclose to other people (Hollenbach, Eckstrand, and Dreger, 2014). Thus, coming out experiences among SGD youth are diverse and may vary as a function of gender, race and ethnicity, and other characteristics, as well as sexual and gender identities (Grov et al., 2006; Martos, Nezhad, and Meyer, 2015; Rosario, Schrimshaw, and Hunter, 2004).

Supportive family relationships are a foundation for child and adolescent well-being. For LGB and transgender children and adolescents, accepting behaviors by parents are associated with both multiple indicators of positive youth adjustment (e.g., higher self-esteem, reported social support, and general health) and lower levels of mental and behavioral health risk (e.g., fewer depressive symptoms, less suicidality, and less substance use) (Durwood, McLaughlin, and Olson, 2017; Johnson et al., 2020; Olson et al., 2016; Ryan et al., 2010). Recent studies provide evidence of the primary role of parental support (relative to support from friends or teachers) for the mental health of youth (Shilo and Savaya, 2011; Snapp et al., 2015; Watson, Grossman, and Russell, 2019). Research on parents of intersex children has focused largely on parents' understanding of differences of sex development and decision making regarding medical approaches to treatment (Ernst et al., 2018; Gough et al., 2008).

Relationships with Teachers and Other Adults

Teachers are among the most important nonfamily adults in the lives of youth. Having a supportive teacher has been identified as a protective factor for sexual and gender diverse students (Russell, Seif, and Truong, 2001). (This topic is treated in detail in Chapter 10.) Studies have also documented the role of other important nonfamily adults in the lives of SGD youth. For example, in a qualitative study of how they coped with school victimization, LGBT students reported the need for adult mentors as well as supportive teachers (Grossman et al., 2009).

Peers and Friendships

Studies of SGD youth and their peers have been dominated by studies of victimization or bullying (Horn and Romeo, 2010). Research documents the persistence of negative peer interactions, such as patterns of bullying, for both previous and recent cohorts of SGD students (Earnshaw et al., 2016; NASEM, 2019; Toomey and Russell, 2016). Beyond bullying, early studies documented the pain of losing of close friends when a young person comes out (D'Augelli, 2003; Diamond and Lucas, 2004) and that some SGD youth lack friends and feel lonely (Grossman and Kerner, 1998).

More recent studies have examined the potential positive social influence of peers and the positive role of friendships for SGD youth (Snapp et al., 2015; Watson, Grossman, and Russell, 2019). As they do for other youth, friendships support positive adjustment for SGD youth (Rosario, Scrimshaw, and Hunter, 2009; Shilo and Savaya, 2011). Maintaining friendships following coming out is protective: lesbian and bisexual adolescent girls reported better psychosocial adjustment when they did not lose friends after coming out (D'Augelli, 2003). Support from friends is a common and important form of social support for SGD youth (Watson, Grossman, and Russell, 2019). Importantly, studies have documented the distinctive salience of SGD friendships for SGD youth: in comparison with social support from family and heterosexual friends, LGB youth reported more social support from LGB friends, and LGB friend support was associated with fewer psychological symptoms (Doty et al., 2010).

Romantic Partners

Romantic relationships emerge in the adolescent years; most youth experience their first romantic attractions and relationships as adolescents and begin to develop relationship skills that they will carry forward into adulthood. The development of romantic relationships is normative and expected for heterosexual youth, but in some cultural or historical contexts, same-sex romantic relationship experiences may not have been or be possible (D'Augelli, Hershberger, and Pilkington, 1998; Savin-Williams, 1994). In some environments, youth may have been (or may still be) unable to carry on romantic relationships with partners of the same sex. In order to conform to expectations among family and peers or because they deny same-sex attractions, some avoid same-sex romantic relationships (Diamond, in press; Diamond, Savin-Williams, and Dubé, 1999). A study based on a national sample of youth who were adolescents in the mid-1990s showed that youth with same-sex romantic attractions were not less likely to date, but the majority dated different-sex partners (Russell and Consolacion, 2003). Much has changed since then, although little is known about national patterns today. Intersex youth with diverse external genitalia may experience fear of rejection by romantic partners due to anatomical differences or concerns about future fertility (Slowikowska-Hilczer et al., 2017), but there is less research in this area.

There has been significant attention to experiences of peer victimization and bullying among LGBT youth, but less attention to victimization in the context of romantic relationships. Research shows that LGBT youth are at higher risk for dating violence compared with heterosexual youth (Reuter, Sharp, and Temple, 2015). Furthermore, rates of dating violence are higher for female than male youth and for transgender than for cisgender youth (Dank et al., 2014), as well as for Black youth compared with white youth (Reuter et al., 2017). LGBT youth who report intimate partner violence reported more sexual risk-taking and compromised mental health (Reuter et al., 2017). Finally, there may be not only higher rates of victimization but also more dating violence perpetration among LGBT youth (Dank et al., 2014): one recent study documented associations between minority stressors (e.g., internalized homonegativity, concealment) and partner violence among LGBTQ college students (Edwards and Sylaska, 2013).

The advent of the internet has made a significant difference in the social lives of SGD youth. With its growth and influence, otherwise isolated SGD youth were able to find SGD peers for the first time online (Russell, 2002). The internet has allowed SGD youth to meet others like them and to build friendships and romantic relationships (DeHaan et al., 2013). LGBTQ youth may be more likely than non-LGBTQ youth to meet romantic partners online (Korchmaros, Ybarra, and Mitchell, 2015), yet LGBTQ youth remain less likely overall than their heterosexual peers to be involved in romantic relationships. Despite barriers, there is evidence from a small number of recent studies that SGD youth who develop same-sex romantic relationships in adolescence report better adjustment than those who do not develop such relationships (Bauermeister et al., 2010; Glover, Galliher, and Lamere, 2009; Whitton et al., 2018). These findings are consistent with research on the normative and positive role that romantic relationships play in adolescent development (Russell, Watson, and Muraco, 2011). The role of positive social relationships with family members, as well as with those outside the family, is important in helping youth develop in positive ways. Intersex youth and adults tend to report fewer sexual partners, with some evidence that intersex individuals report later initiation of sexual activity (Kreukels et al., 2019).

PARENTING AND OTHER FAMILY RELATIONSHIPS

This section presents information based on research on family formation, parenting, children, and other family ties, ending with a discussion of the concept of "chosen family."

Family Formation

Parenthood is one of the most universal and highly valued of human experiences (Bornstein, 2019). LGBTQ people are, however, less likely than heterosexual individuals to want or intend to have children or to become parents (Goldberg, 2010; Patterson, 2019; Reczek, 2020). Studies of nationally representative datasets have shown that adult lesbian women and gay men are less likely than their heterosexual peers to express desire for parenthood. Indeed, sexual minority women may be more likely than heterosexual women to have pregnancies that were not planned (Everett, McCabe, and Hughes, 2017). In addition, gay men who desire parenthood are less likely than their heterosexual peers to expect that they will attain it (Riskind and Patterson, 2010). Researchers have explored reasons for these disparities, and they have identified relevant contextual as well as individual-level variables (Tate and Patterson, 2019a). In contrast, desires for parenthood among bisexual men and women seem to be more similar to those among heterosexual individuals (Riskind and Tornello, 2017; Simon et al., 2018). The study of parenting desires and intentions among intersex and transgender people is only beginning (Tornello and Bos, 2017). Some intersex traits are associated with infertility, but some are not, and fertility has gained increased attention in clinical care and research (Slowikowska-Hilczer et al., 2017). Many intersex people desire and achieve parenthood through assisted or unassisted conception, adoption, and surrogacy, though little research has explored these pathways to parenthood.

There is some recent evidence that lower desire and expectation for parenthood in SGD populations may be related to lower expectations (but not desires) over a broad range of life goals (Tate and Patterson, 2019c). In a convenience sample of 368 lesbian, gay, and heterosexual young adults, participants were asked about their desires and expectations with respect to life goals in a number of areas, such as marriage, parenthood, friendship, and career. With the exception of desire for parenthood, which was lower among sexual minority respondents, lesbian and gay young adults reported desires that were very similar to those of heterosexual peers, but they described expectations that were consistently lower for most other aims. Thus, lesbian and gay young adults reported life aims that were similar to those of heterosexual peers, but they did not believe that they would achieve them (Tate and Patterson, 2019c). These results suggest that lower parenting desires among SGD adults may be part of a larger pattern and may reflect social and cultural constraints.

Despite divergent overall rates of desires and expectations, many SGD people become parents, and they do so through many pathways. However, the numbers of SGD parents in the United States are difficult to estimate. Using 2014–2016 data from the American Community Survey (ACS), Goldberg and Conron (2018) estimated that there are currently just over 700,000 households headed by same-sex couples, of which approximately half are headed by male couples and half by female couples (Goldberg and Conron, 2018). In this sample, 39 percent of male-female couples, 8 percent of male couples, and 24 percent of female couples described themselves as parents of children 18 years of age or younger (Goldberg and Conron, 2018). Census and ACS data do not include information on sexual or gender identity, so those identifying as lesbian, gay, bisexual, transgender, or queer cannot be identified from these data. Similarly, census and ACS data cannot identify nonresidential parents or households headed by single SGD parents. As a consequence, estimates of parenthood among SGD population based on census and ACS data are likely to provide an undercount of these families.

Some SGD people become parents in the context of heterosexual relationships (Patterson, 2013). For example, a gay man or lesbian woman could have married a partner of a different sex and had children; the couple could have subsequently divorced when one of them came out as non-heterosexual. Some findings suggest that this pathway to parenthood is more common among older people and less common among younger individuals (Tornello and Patterson, 2015), but it remains an important pathway to parenthood among LGBT people in the United States (Goldberg and Conron, 2018).

Another pathway to parenthood among LGBTQ+ people involves the use of assisted reproductive technology, such as sperm donation, egg donation, in vitro fertilization, surrogacy, and related procedures (Blake et al., 2017; Golombok, 2015, 2019). People who cannot produce sperm may pursue sperm donation and artificial insemination; people who cannot produce eggs or do not have uteruses may pursue egg donation and gestational surrogacy (Golombok, 2015). The costs of such techniques can be high, so access to these options is limited to those with substantial financial resources.

Legal or policy issues vary across states and may also provide obstacles for some LGBTQ+ people who wish to become parents (Farr, Vazquez, and Patterson, 2020). For example, in addition to its high economic costs, surrogacy is legally banned in some jurisdictions and highly regulated in others (Green et al., 2019). Thus, access to reproductive technology among SGD individuals and couples may be greater for those with substantial economic resources and for those who live in states or local jurisdictions that legally permit the technology (see Chapter 5).

Adoption and foster care are also pathways to parenthood that are pursued by many LGBTQ+ people (Farr, Vazquez, and Patterson, 2020). Recent estimates based on data from the 2014–2016 ACS suggest that same-sex couples are far more likely than male-female couples to be foster or adoptive parents: 21 percent of same-sex couples were adoptive parents, compared with only 3 percent of male-female couples, and 3 percent of same-sex couples were foster parents, compared with only 0.4 percent of male-female couples (Goldberg and Conron, 2018). In addition to the issues that may be encountered by heterosexual people who hope to foster or adopt children, additional obstacles may be encountered by prospective lesbian, gay, and transgender foster and adoptive parents (Farr, Vazquez, and Patterson, 2020). Many uncertainties surround adoption as a pathway to parenthood for transgender individuals; only a handful of states prohibit discrimination against prospective parents who identify as transgender. Thus, transgender prospective adoptive parents may face added scrutiny.

Sexual and Gender Diverse Parenting and Children

The many studies that have examined parenting processes among SGD parents have found these family relationships to be generally warm and positive (Biblarz and Stacey, 2010; Goldberg, 2010; Golombok et al., 2014; Patterson, 1992, 2000, 2017). Both children and adolescents generally enjoy supportive relationships with lesbian and gay parents (Farr, Forssell, and Patterson, 2010a; Golombok et al., 2014; Wainright, Russell, and Patterson, 2004). Overall, and with some exceptions, both lesbian and gay couples seem to share child care and household labor more evenly than do heterosexual couples (Farr and Patterson, 2013; Patterson, Sutfin, and Fulcher, 2004). In contrast, research on small samples of the cisgender female partners of transgender men has shown that cisgender women report doing more household labor than their transgender male partners (Pfeffer, 2010); studies of child care in these couples have not been reported. Likewise, little information is available about parenting among those who identify as bisexual or intersex (Stotzer, Herman, and Hasenbush, 2014).

Many studies have focused on the development of children reared by lesbian and gay parents. Much of the research is focused on children with lesbian mothers (Goldberg, 2010; Golombok, 2015; Patterson, 1992, 2000, 2017), although some studies have also included children of gay fathers (Farr, Forssell, and Patterson, 2010a; Golombok et al., 2014, 2018; Tornello and Patterson, 2015). The research has focused on sexual and gender identity of children with LGBT parents, on peer relationships and other aspects of social development, academic performance, and overall adjustment (Farr, Forssell, and Patterson, 2010a; Farr et al., 2018; Farr and Patterson, 2013; Fedewa, Black, and Ahn, 2015; Golombok et al., 2014, 2018; Potter, 2012; Potter and Potter, 2016; Wainright and Patterson, 2008; Wainright, Russell, and Patterson, 2004). In general, across all characteristics, children of lesbian and gay parents have shown typical development (Manning, Fettro, and Lamidi, 2014; Patterson, 2017). At the same time, there is evidence that, when compared with children in heterosexual-parent families, children with lesbian parents report less pressure to conform to gender expectations and have more egalitarian attitudes regarding gender (Bos and Sandfort, 2010). Similarly, adult children of lesbian and gay parents report that they were raised with less rigid gender stereotypes than others (Goldberg, 2007). Regardless of their own sexual orientation, adult offspring of lesbian and gay parents report greater well-being when they live in social climates that are supportive for SGD people (Lick et al., 2012). Little information is available about children with bisexual, transgender, or intersex parents, but researchers have not identified special behavior problems of any kind among these children (Goldberg, 2010; Golombok, 2015; Patterson, 2000, 2017).

Much of the existing research has been based on relatively small convenience samples of participating families, leaving open questions about possible sample bias; this is especially true of early work (Patterson, 1992). Increasingly, however, research has been conducted using data from larger samples that are representative of the populations from which they were drawn, and this work has yielded findings that are similar to those from the earlier studies (Patterson, 2017). For example, data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) study (Wainright and Patterson, 2006, 2008; Wainright, Russell, and Patterson, 2004) and from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–1999 study (Potter, 2012; Potter and Potter, 2016) have produced findings that are consistent with those from earlier work. These studies drew on data from representative samples, so they do not reflect sample biases that are likely to be present in purposive and convenience samples.

Thus, after conducting a careful review of the research, in a resolution the American Psychological Association (2005) concluded:

> [T]here is no scientific evidence that parenting effectiveness is related to parental sexual orientation; lesbian and gay parents are as likely as heterosexual parents to provide supportive and healthy environments for their children . . . [and] research has shown that the adjustment, development, and psychological well-being of children are unrelated to parental sexual orientation and that the children of lesbian and gay parents are as likely as those of heterosexual parents to flourish.

Similarly, in its review of the literature, the American Sociological Association concluded that the clear and consistent social science consensus is that children reared by same-sex parents fare just as well as children reared by different-sex parents (American Sociological Association, 2015, p. 5).

Without question, however, multiple stressors, such as harassment and bullying, are often encountered by SGD parents and their children. The evidence clearly shows that children who are bullied by peers are more likely than other children to show behavior problems (Goldberg, 2010; Patterson, 2017). Some SGD-parent families also experience more economic stress, unemployment, and lack of health insurance relative to families headed by heterosexual parents (Patterson and Goldberg, 2016). Moreover, the experiences of offspring of SGD parents are influenced by the social climate in which they grow up (Golombok et al., 2018; Lick et al., 2012). The findings in this area suggest possible roles for law and policy in improving the lives of SGD parents and their children (see Chapter 5).

Other Family Ties

In addition to their roles as parents, SGD adults have other family ties, such as those with their own parents, siblings, and extended family. Of these, the relationships that have been studied most often are those between adult lesbian and gay people and their own parents. Overall, most researchers have reported that, on average, lesbian and gay adults have more distant, less positive relationships with their parents than do their heterosexual peers (Needham and Austin, 2010; Reczek, 2014; Tate and Patterson, 2019b; Ueno, 2005) and that this is a source of stress for many lesbian and gay adults. Research-based information about the relationships of bisexual and transgender adults and their parents and other members of families of origin is still scarce and often based on small, nonrepresentative samples (Brumbaugh-Johnson and Hull, 2018; Fredriksen-Goldsen et al., 2016; Norwood, 2013). In two studies using data from representative samples, however, indications of such stress have included depressive symptoms, substance use, and sleep problems (Patterson et al., 2018; Rothman et al., 2012).

A small number of studies have been conducted to assess variations across racial and ethnic minority groups with regard to relationships of SGD adults and members of their families of origin. For instance, Pastrana (2015) studied large samples of Black and Latinx SGM adults and found that disclosure of SGD identities ("outness") was associated with support from members of the family of origin. In both Black and Latinx groups, those who had disclosed sexual and gender minority identities were more likely to feel supported (Pastrana, 2015); similar findings have been reported by Swendener and Woodell (2017). Among cisgender SGD Latinas, Acosta (2013) found that those who embodied conventional femininity were more likely to feel accepted by members of their families of origin. While these findings are important, they are not based on representative samples, and they do not allow comparisons across racial or ethnic groups. Additional research in this area would be valuable.

CLOSE RELATIONSHIPS IN ADULTHOOD

The most salient close relationships in adulthood are those with romantic partners, other family members (e.g., aging parents), and close friends. Close friends are sometimes referred to as one's "chosen family" in SGD communities, in part due to weaker or more strained ties to one's family of origin (Reczek, 2020). In this section we focus primarily on intimate and romantic relationships, which have been the focus of a great deal of research, and then highlight recent evidence concerning relationships with close friends and family.

Intimate and Romantic Relationships

Demographics and Relationship Status

Recent data from the Gallup Daily Tracking Survey indicates (Jones, 2017, cited in Goldberg and Romero, 2019, p. 3):

> [O]f the more than 10.7 million LGBT-identified adults in the United States as of June 2017 (Romero, 2017): 17% were married to or living with a same-sex partner; 17% were married to or living with a different-sex partner, and 10% were divorced, separated, or widowed.

About 10.2 percent of the Gallup sample identified as being married to a same-sex spouse, and the number of married same-sex couples in the United States is growing—from 390,000 in 2015 to 547,000 in 2017 (Romero, 2017). Notably, over half of LGBT-identified people in the Gallup Tracking Survey are classified as single (see below, "Chosen Families").

The legalization of same-sex marriage and more favorable societal attitudes towards same-sex coresidential relationships have likely contributed to the increased number of reported same-sex relationships (Gates and Brown, 2015). Same-sex couples are more likely than different-sex couples to be interracial and well educated (Gates, 2014) and to participate in the labor force (Gates, 2013). Women are also more likely than men to enter into same-sex relationships (Gates, 2014). Same-sex couples are more likely than different-sex couples to reside in urban areas (Gates, 2006) and in more LGBT tolerant regions of the United States, such as those where same-sex marriage was first legalized (Gates, 2009, 2014).

Romantic Partnerships and Health

There has been significant research on intimate partnerships of lesbian and gay populations, with most of the early research in this area focused on cohabiting relationships, civil unions, and domestic partnerships. This area of research expanded significantly to include attention to married same-sex couples when (as discussed above) the United States extended constitutional protection for marriage equality in 2015. In part, proponents of marriage equality argued that same-sex marriage recognition could improve the health of sexual minority adults and their children and that restriction from marriage was discriminatory and negatively affected health. A great deal of research has addressed the link between relationship status and health, and many of the findings rely on nationally representative and publicly available datasets.

Theoretical work on minority stress and gender-as-relational perspectives undergirds much of the influential research in this area. *Minority stress theory* points to the unique stressors and stigma associated with sexual minority status (LeBlanc, Frost, and Bowen, 2018), and *gender-as-relational* perspectives emphasize the different patterns of men's and women's partner interactions, depending on whether they are in a same- or different-sex union (Thomeer, Umberson, and Reczek, 2020). Higher levels of stress for sexual minority populations may mean that same-sex spouses encounter more stress in their daily lives in ways that strain their relationships and undermine their health. At the same time, marriage may be especially important in helping sexual minority populations to cope with stress and to protect their health and well-being.

Several studies on romantic partnerships and health of same-sex couples have relied on nationally representative data (e.g., data from the National Health Interview Study [NHIS]) and conclude that same-sex cohabiting couples' health is worse than that of different-sex married couples but better than that of unpartnered adults (not differentiated by heterosexual/LGB status) (Denney, Gorman, and Barrera, 2013; Liu, Reczek, and Brown, 2013). Research suggests that greater legal recognition (i.e., marriages, civil unions, and registered domestic partnerships versus no legal status) is associated with better health and that same- and different-sex couples receive similar health benefits from marriage (LeBlanc, Frost, and Bowen, 2018).

There is much less research on bisexual, transgender, and intersex people in romantic partnerships. Growing evidence indicates that bisexual populations are in poorer health (on multiple measures, including mental health and functional limitations) than people who identify as gay, lesbian, or heterosexual (Bostwick et al., 2010; Conron et al., 2010; Fredriksen-Goldsen et al., 2010; Gorman et al., 2015; Hsieh and Ruther, 2016). One recent study, based on data from the NHIS, found that married persons who identify as bisexual report poorer health than their unmarried counterparts after adjusting for socioeconomic status and health behaviors (both of which are disadvantaged for bisexual respondents) (Hsieh and Liu, 2019). This study found a health advantage for married heterosexual partners and, to a lesser extent, men and women in same-sex partnerships, in comparison with their unmarried peers.

Hsieh and Liu (2019) also report that men and women who identify as bisexual in different-sex marriages are less healthy than those in same-sex marriages. The authors suggest that, although marriage may benefit the health of self-identified gay, lesbian, and heterosexual people, marriage may not benefit the health of those who identify as bisexual, perhaps due to higher levels of stigma and partner conflict associated with bisexuality. It is likely that individuals who identify as bisexual encounter unique sources of stress and stigma in their relationships (Feinstein and Dyar, 2017)—an important topic for future research. These findings also point to the importance of considering variation in romantic partnerships and health across diverse groups.

Current research on relationship status and health for couples in which at least one partner is transgender or gender-nonconforming is limited. With a few exceptions, the available evidence is descriptive and based on qualitative data drawn from small samples. This research has focused primarily on individuals who transition while in an existing relationship, and it addresses their specific challenges and supports. Emerging evidence suggests that an intimate partner relationship is a source of social and emotional support that can reduce perceived levels of discrimination for transgender people (Liu and Wilkinson, 2017; Pfeffer, 2016), suggesting potential health benefits. Liu and Wilkinson (2017) analyzed data from the National Transgender Discrimination study and found that married transgender women reported less discrimination than cohabiting and previously married transgender women (but not less than never-married transgender women). These patterns were partly explained by greater economic resources for married people. However, these patterns were not found for transgender men. Taken together, these findings point to the importance of addressing variations as a function of gender identity and socioeconomic status, as well as race and ethnicity, in research.

Research on heterosexual populations shows that marriage becomes even more important to health with advancing age, as individuals develop health conditions, cognitive decline, or functional limitations. This finding may also emerge among aging sexual minority populations, but relevant research is not yet available. In a study of SGD adults over 50 years old, those who had a same-sex partner, regardless of marital status, reported better health and fewer depressive symptoms than those who were single (Williams and Fredriksen-Goldsen, 2014). Further study on aging and later-life SGD couples is needed, particularly longitudinal studies that allow researchers to follow couples as they grow older.

Relationship Dissolution

Longitudinal research on heterosexual populations clearly documents that marital dissolution through divorce or widowhood undermines health and well-being and increases mortality risk and that this effect is stronger for men than for women (Rendall et al., 2011). Much less is known about the effects of marital dissolution in SGD populations. The first book on this subject, published in 2019, represents a multidisciplinary effort to compile the current evidence (Goldberg and Romero, 2019), but study in this area is still quite new.

Divorce and Separation of Partners Numerous studies have considered rates of relationship dissolution among same-sex couples. Manning and Joyner (2019) reviewed these studies and concluded that, across same-sex and different-sex couples, dissolution rates for married and cohabiting couples are fairly similar; cohabiting couples show higher rates than do married couples. Moreover, cohabiting same-sex female couples have higher probabilities of relationship dissolution than same-sex male couples (Manning and Joyner, 2019). Both for same- and different-sex couples, legally recognized relationships are characterized by greater stability.

Several factors have been associated with higher rates of relationship dissolution among SGD populations, especially among female same-sex couples. Joyner and colleagues (2017) analyzed Add Health data and found that, for young adults, racial minority status and lower socioeconomic status increase marital instability for same-sex couples, much as it does for different-sex couples. Transgender people may also be at greater risk for marital instability, particularly for those who married prior to transition. Meier and colleagues (2013) report that, among transgender men who were partnered prior to transition, half of the relationships were dissolved during or after transition. Again, relatively few data are available in this area.

Widowhood (Death) of a Partner Very little is known about the bereavement experiences of sexual minority populations following the death of a partner. Notably, the landmark case leading to marriage equality, *Obergefell v. Hodges,* was based on the inability of a bereaved spouse to be listed on the death certificate of his partner (thus, disallowing spousal benefits granted to different-sex spouses). Many of the existing studies of partner bereavement in sexual minority populations (primarily gay men) are focused on death of partners due to HIV-related causes; these studies have found increased social isolation, risky sexual behavior, and mental health problems during the bereavement process (Hatzenbuehler, Nolen-Hoeksema, and Erikson, 2008; Rosengard and Folkman, 1997; Satterfield, Folkman, and Acree, 2002). Additional work on bereavement following loss of a partner is needed, including the possibility of unique bereavement experiences of SGD populations (compared with different-sex couples) due to differences in marital dynamics, the presence or absence of children, family support, and sexual or gender minority stressors (Donnelly, Reczek, and Umberson, 2018). Indeed, results of available studies of bereavement in sexual minority populations due to non-HIV-related causes suggest that sexual minority populations face bereavement experiences that are shaped by the quality of interactions with health care providers prior to a partner's death and also by more complex legal and financial issues than those experienced by different-sex couples (Bristowe, Marshall, and Harding, 2016).

Relationship Dynamics, Health, and Well-Being

The accumulation of daily experiences and partner interactions in couples influences health and well-being over time. Partners may help each other to cope with stress, yet partners can also be a source of stress. There is a large research literature on relationship dynamics of different-sex couples: findings from this literature describe how cohabiting, marital, and other committed partnerships contribute to or detract from health and well-being. Information is, however, much more limited for SGD populations; the available evidence suggests certain types of variation in relationship dynamics and health for men and women in same-sex relationships in comparison with different-sex relationships (Umberson and Thomeer, 2020). The rest of this section highlights some of the key relationship dynamics known to be important for couples: overall relationship quality, sexual minority stress, division of labor, the dynamics of sexual and emotional intimacy, intimate partner violence, partners' influences on health behaviors, and caregiving dynamics when a partner is ill.

Overall Relationship Quality Much of the research on SGD couples has focused on partner interactions and relationship quality. The preponderance of evidence suggests that same-sex and different-sex couples are similar in overall relationship quality, such as closeness and emotional support (Farr, Forssell, and Patterson, 2010b; Kurdek, 2005).

Sexual Minority Stress Although it is well established that sexual minority stress adversely affects the health of individuals (Hatzenbuehler et al., 2012), a growing research literature has also explored the ways in which sexual minority stress affects couples (Frost et al., 2017; LeBlanc, Frost, and Wight, 2015). This approach emphasizes that individuals in SGD couples may be vulnerable to couple-level minority stressors that cannot be understood in individual terms (Neilands et al., 2019). These stressors may include lack of integration with families of origin, management of stereotypes about their relationships, and couple-level experiences of discrimination (Neilands et al., 2019). Spouses or partners can also play an important role in helping each other cope with minority stress. In fact, relationships can help to buffer individuals from adverse effects of minority stress (Cao et al., 2017; Donnelly, Robinson, and Umberson, 2019). Members of the couple's families of origin may also affect romantic relationships. When parents are critical of a partner or of a relationship, it can impose strain on couple relationships; however, the joint efforts of couples to cope with this kind of stress can also promote resilience (Frost, 2011; Graham and Barnow, 2013; Macapagal et al., 2015; Reczek, 2016).

Division of Labor Considerable research has been conducted on the division of household and child care labor in same-sex partnerships. The preponderance of evidence has shown that same-sex couples are more egalitarian in their division of household and child care than are different-sex couples (Patterson, Sutfin, and Fulcher, 2004). However, much of this research focuses on small, nonrepresentative samples of predominantly white lesbian and gay couples. There may be important variations across racial and ethnic and socioeconomic statuses, and these may covary with family structure (Moore, 2011), so it is difficult to draw clear general conclusions at this time (Patterson, Sutfin, and Fulcher, 2004). Qualitative research on families of transgender people (Pfeffer, 2016; Ward, 2010) suggests that cisgender women coupled with transgender men do comparatively more housework in an effort to clarify and assert gender order.

Dynamics of Sexual and Emotional Intimacy Studies based on national samples indicate that overall satisfaction with sex is similar for those in gay, lesbian, and heterosexual couples (Holmberg and Blair, 2009; Kurdek, 1991; Peplau and Fingerhut, 2007). Gay couples report less sexual exclusivity (Joyner, Manning, and Prince, 2019) and more frequent sexual encounters of shorter duration than do lesbian couples, but no differences in sexual satisfaction (Blair and Pukall, 2014; Farr, Forssell, and Patterson, 2010b). Qualitative data suggest that same-sex partners (both male and female) are more concordant than different-sex partners in their levels of sexual desire and views of intimacy. Lesbian women are more concerned with and do more work to promote sex in their relationships than do gay men, possibly because they are more likely to see sex as indicative of intimacy, closeness, and relationship quality (Umberson et al., 2015).

Intimate Partner Violence The available evidence, limited by the few studies that rely on representative data, indicates that the incidence of intimate partner violence in LGB couples is similar to or greater than that in heterosexual couples (Edwards, Sylaska, and Neal, 2015; Rollè et al., 2018). Notably, intimate partner violence is more likely in cohabiting couples than in marital relationships, and it is especially prevalent among bisexual individuals (National Intimate Partner and Sexual Violence Survey, 2010). The risk factors for intimate partner violence are also similar for heterosexual and LGB partners and include lower socioeconomic status, being younger, substance use disorders, and exposure to family violence as a child (Edwards, Sylaska, and Neal, 2015). In addition, unique risk factors have been observed for LGB populations, including sexual minority stress, internalized homonegativity, and the failure of community and health care systems to identify and treat intimate partner violence in SGD populations (Edwards, Sylaska, and Neal, 2015; Rollè et al., 2018). (See Chapter 11 for additional studies of LGBTQ victimization.)

Partners' Influences on Health Behaviors Spousal influence on health behaviors is often identified as one reason for the better health status of married different-sex couples compared to their unmarried counterparts (Rendall et al., 2011). Only recently have researchers had access to data that clearly identified the union status of SGD individuals. Although patterns of health behavior in different-sex marriages often differ for men and women (e.g., men are more likely than women to drink heavily), health behaviors in same-sex marriages seem to be characterized by more similarity between spouses. A recent study of more than 400 couples using dyadic data shows that same-sex spouses are more similar to one another than are different-sex spouses in their smoking, drinking, and exercise habits (Holway, Umberson, and Donnelly, 2018); results of this study showed greater concordance for lesbian than for gay spouses. Exactly how same-sex spouses influence one another's health and well-being, and how that influence may evolve over the life course, is a topic for future study.

Caregiving Dynamics When a Partner Is Ill Spouses are typically the front line of defense when an adult becomes ill, and spouses who provide informal care or facilitate formal health care for their partners may promote the partner's health and well-being—even while caregiving may impose stress on the caregiver. One study of interview data from 90 spouses (45 couples) considered how spouses co-construct illness experiences in ways that shape relationship dynamics (Umberson et al., 2016). In both same- and different-sex marriages, men tend to downplay illness and thus perform less care work when their spouse is ill; women tend to construct illness as involving intensive care work (Umberson et al., 2016). Same-sex spouses described similar constructions of illness more often than different-sex couples and, as such, same-sex spouses described less illness-related disagreement and stress around caregiving (Umberson et al., 2016).

These qualitative findings are supported by dyadic survey data from more than 800 respondents who reported on couples' behavior during serious illness events (Umberson et al., 2017). Women tended to provide and receive more instrumental care than men; women who were married to women provided and received the most instrumental care. Men and women in same-sex marriages reported providing more emotional support for their sick spouse than did men and women in different-sex marriages. However, during their own health event, women—whether they were married to a man or a woman—provided more emotional support to their spouse than did men. These findings point to the many similarities in caregiving across union types and suggest that differences across union types reflect the intersection of gender and sexuality.

There may be a greater need for caregiving in SGD than in heterosexual communities due to higher levels of certain chronic conditions, poorer overall health, and higher risk of cognitive impairment (Baumle, 2014; Fredriksen-Goldsen et al., 2018). Because SGD people are less likely than others to have a spouse or partner and less likely to have children, those who need care may also face unique challenges in getting that care. Members of families of origin who do not accept SGD identities may create additional strains in this regard. Both SGD caregivers and SGD care recipients may face challenges in obtaining needed services and medical care, in that the legacy of stigma and discrimination in institutional settings contributes to underutilization of medical and social services for older LGBT adults (SAGE, 2014).

Very little is known about end-of-life experiences for SGD couples and families (Marsack and Stephenson, 2018; Reczek, 2020). One small-scale qualitative study found that lesbian and gay couples were more likely than heterosexual couples to plan for their end of life (e.g., by having wills and related documents), in part because same-sex couples were more concerned about possible interference from members of their families of origin due to their sexual minority status (Thomeer et al., 2017). Now that marriage equality is the law, this situation may shift, but little is yet known about this possibility.

Overall, and apart from studies of caregiving within intimate relationships, little is known about illness and caregiving among adult or aging SGD populations (Reczek and Umberson, 2016), and there are even fewer studies of end-of-life issues among SGD people. A few studies suggest differences in caregiving needs and experiences of SGD people in comparison with other older people, but little is yet known about this topic. These are areas of research in need of further study.

Chosen Families

Marital and romantic partnerships are clearly important to the health and well-being of SGD as well as heterosexual populations, but more than half of LGBT-identified people were classified as single in recent Gallup tracking surveys (Romero, 2017). Moreover, SGD adults report less frequent contact and more strain in their family-of-origin relationships than do heterosexual adults (Reczek, 2020). Several types of evidence suggest that, compared with their heterosexual counterparts, SGD people rely more on support from "chosen families"—selected friend and social network ties.

Recent evidence on the function and composition of support networks reveals considerable complexity. Using data from a community study of 524 lesbian, gay, bisexual, and heterosexual adults living in New York City, Frost and colleagues (2016) reported that, although heterosexual and LGB individuals relied more on friends than families of origin for routine support (e.g., talking about problems), gay and bisexual men relied more on friends than did lesbian and bisexual women. For major support (such as borrowing money), heterosexual people and lesbian and bisexual women relied mostly on members of their families of origin, whereas gay and bisexual men relied more on friends. Frost and colleagues (2016) found additional variation based on race and ethnicity—with racial and ethnic minority SGD individuals reporting less overall support than others. These findings, like those concerning romantic and marital relationships, point to the need for future research to consider the intersection of gender and sexuality, as well as race and ethnicity, in understanding the relationship dynamics that influence health and well-being in potentially different ways across SGD groups.

Chosen families may also play an important role in caregiving in SGD communities. In one study, for example, in contrast to the 6 percent of heterosexual older adults who reported providing care to a friend, 21 percent of older LGBT adults reported having provided care to friends (MetLife Mature Market Institute and American Society on Aging, 2010). Another survey of American adults (Robbins et al., 2017) found that LGBTQ adults were more likely than others to have taken time off from work to care for someone in their chosen family. Although friends who provide care may experience caregiving stress and psychological distress associated with that caregiving (Shiu, Muraco, and Fredriksen-Goldsen, 2016), this care is valuable in supporting the independence, health, and well-being of the SGD recipients of that care.

SUMMARY AND CONCLUSIONS

Close, supportive, and stable relationships foster health and well-being, and relationships early in life have implications for the quality and stability of social ties in adolescence and adulthood. Many SGD and intersex people are coming out at younger ages than in previous years, and this affects their social relationships. SGD youth are at higher risk of depressive symptoms, anxiety, and suicidality than other youth. In addition, many SGD youth encounter harassment and hostility at home or at school, which can have negative effects on their mental and physical health.

Supportive family relationships are a foundation for child and adolescent well-being for SGD as for other people. Parental acceptance of their SGD youth is associated with positive youth adjustment; conversely, parental rejection is associated with a range of emotional and behavioral health problems. Supportive teachers are among the most important nonfamily adults in the lives of contemporary SGD youth. Maintaining friendships throughout and following the coming out process supports positive adjustment for SGD youth. Romantic relationships in youth are also supportive in many cases, although the risk of intimate partner violence is higher for SGD youth than for other youth.

> **CONCLUSION 8-1: Relationships with parents, teachers, peers, and romantic partners are important in shaping development and well-being among children and adolescents; these relationships can be strained for sexual and gender diverse youth.**

Further research is needed on developmental processes among SGD youth as well as on the effects of intersectional identities, stigma, and discrimination on developmental processes. Study is especially needed on bisexual, transgender, and intersex youth.

The number of married same-sex couples has nearly doubled since 2015. There is much more evidence on union status and health of gay and lesbian couples than on that of other SGD populations. Higher levels of stress for sexual minority populations may mean that same-sex spouses encounter more stress in their daily lives in ways that strain their relationships and undermine their health. At the same time, marriage may be especially important in helping sexual minority populations to cope with stress and to protect their health and well-being. The legal status of romantic unions is associated with other markers of advantage and disadvantage, particularly socioeconomic status. Those of higher socioeconomic status are more likely to marry, and marriage itself may also provide economic benefits. As with different-sex couples, legally recognized same-sex relationships are less likely than others to dissolve over time.

CONCLUSION 8-2: The legal status of romantic unions is associated with better health outcomes. It is also associated with other markers of advantage and disadvantage, such as income and education.

The existing evidence is characterized by sample and research design limitations. To clarify links between union status and health, longitudinal data with well-validated measures of sexual and gender identity are needed.

Lesbian, gay, and intersex individuals are less likely than heterosexual individuals to become parents. Less is known about the prevalence of parenthood among bisexual and transgender people. Some SGD people become parents in the context of prior heterosexual relationships—a pathway that is more common for older people than younger people. Another pathway to parenthood among LGBTQ+ people involves the use of assisted reproductive technology; however, the costs of such techniques can be high, so access to these options is limited to those with substantial financial resources. Some SGD adults also become foster or adoptive parents. Both children and adolescents have been found to enjoy supportive relationships with lesbian and gay parents, and children of lesbian and gay parents have shown typical development.

CONCLUSION 8-3: Sexual orientation is not a significant determinant of parenting ability or child development. Children with lesbian and gay parents have generally been found to develop in typical ways. Family processes and family stability are more important determinants of development among children and youth in these families than parental sexual orientation.

In contrast to the evidence about lesbian and gay parents, less is known about parenting by bisexual or transgender people, but existing research suggests that they are as competent in parenting roles as other parents. Additional research is needed on relationship development in adolescence, adult family formation among SGD (especially bisexual, transgender, and intersex) people, as well as family processes and couple dynamics among older SGD individuals and families.

Throughout adulthood, people who are more socially connected have better mental and physical health and lower mortality than those who are more socially isolated. Evidence suggests that SGD adults rely more on support from friends and "chosen families" than do their heterosexual counterparts. In comparison with heterosexual peers, SGD adults report less frequent contact and more strain in their family-of-origin relationships. Overall, lesbian and gay adults report more strained relationships with their own parents than do heterosexual adults, and these strained relationships are associated with stress, psychological distress, and unhealthy behaviors.

Friends and members of chosen families may also play an important role in SGD communities. For example, many more LGBT than heterosexual older adults reported providing care to a friend. This care is invaluable in supporting the independence, health, and well-being of SGD care recipients.

Research is needed on the effects of relationships on SGD well-being that uses reliable assessment tools, samples that are based on nationally representative data, and longitudinal designs. Research on SGD families and couples that devotes attention to diversity and intersectionality, with a particular focus on multiple, intersecting forms of inequality, is also needed.

REFERENCES

Acosta, K.L. (2013). *Amigas y Amantes: Sexually Nonconforming Latinas Negotiate Family.* New Brunswick, NJ: Rutgers University Press.

American Psychological Association. (2005). *Resolution on Sexual Orientation, Gender Identity (SOGI), Parents and Their Children.* Available: https://www.apa.org/pi/lgbt/resources/policy/sexual-orientation.

American Sociological Association. (2015). *Brief of Amicus Curiae American Sociological Association in Obergefell v. Hodges*, Supreme Court of the United States. Available: https://www.asanet.org/sites/default/files/savvy/documents/ASA/pdfs/ASA_March_2015_Supreme_Court_Marriage_Equality_Amicus_Brief.pdf.

Bauermeister, J.A., Johns, M.M., Sandfort, T.G., Eisenberg, A., Grossman, A.H., and D'Augelli, A.R. (2010). Relationship trajectories and psychological well-being among sexual minority youth. *Journal of Youth and Adolescence*, *39*(10), 1148–1163.

Baumle, A.K. (2014). Same-sex cohabiting elders versus different-sex cohabiting and married elders: Effects of relationship status and sex of partner on economic and health outcomes. *Social Science Research*, *43*, 60–73.

Biblarz, T.J., and Stacey, J. (2010). How does the gender of parents matter? *Journal of Marriage and the Family, 72*, 3–22.

Bishop, M.D., Fish, J.N., Hammack, P.L., and Russell, S.T. (2020). Sexual identity development milestones in three generations of sexual minority people: A national probability sample. *Developmental Psychology.* doi: 10.1037/dev0001105.

Blair, K.L., and Pukall, C.F. (2014). Can less be more? Comparing duration vs. frequency of sexual encounters in same-sex and mixed-sex relationships. *The Canadian Journal of Human Sexuality*, *23*(2), 123–136.

Blake, L., Carone, N., Raffanello, E., Slutsky, J., Ehrhardt, A., and Golombok, S. (2017). Gay fathers' motivations for and feelings about surrogacy as a path to parenthood. *Human Reproduction, 32*, 860–867.

Bornstein, M.H. (Ed.). (2019). *Handbook of Parenting: Volume 5: The Practice of Parenting.* New York: Routledge.

Bos, H., and Sandfort, T.G. (2010). Children's gender identity in lesbian and heterosexual two-parent families. *Sex Roles*, *62*(1–2), 114–126.

Bostwick, W.B., Boyd, C.J., Hughes, T.L., and McCabe, S.E. (2010). Dimensions of sexual orientation and the prevalence of mood and anxiety disorders in the United States. *American Journal of Public Health, 100*, 468–475.

Bristowe, K., Marshall, S., and Harding, R. (2016). The bereavement experiences of lesbian, gay, bisexual and/or trans people who have lost a partner: A systematic review, thematic synthesis and modelling of the literature. *Palliative Medicine*, *30*(8), 730–744.

Brumbaugh-Johnson, S.M., and Hull, K.E. (2018). Coming out as transgender: Navigating the social implications of a transgender identity. *Journal of Homosexuality*, *66*(1), 1–30.

Cao, H., Zhou, N., Fine, M., Liang, Y., Li, J., and Mills-Koonce, W.R. (2017). Sexual minority stress and same-sex relationship well-being: A meta-analysis of research prior to the U.S. nationwide legalization of same-sex marriage. *Journal of Marriage and Family*, *79*(5), 1258–1277.

Connolly, M.D., Zervos, M.J., Barone II, C.J., Johnson, C.C., and Joseph, C.L. (2016). The mental health of transgender youth: Advances in understanding. *Journal of Adolescent Health*, *59*(5), 489–495.

Conron, K.J., Mimiaga, M.J., and Landers, S.J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health, 100*, 1953–1960.

Dank, M., Lachman, P., Zweig, J.M., and Yahner, J. (2014). Dating violence experiences of lesbian, gay, bisexual, and transgender youth. *Journal of Youth and Adolescence*, *43*(5), 846–857.

D'Augelli, A.R. (2003). Lesbian and bisexual female youths aged 14 to 21: Developmental challenges and victimization experiences. *Journal of Lesbian Studies, 7*, 9–29.

D'Augelli, A.R., Hershberger, S.L., and Pilkington, N.W. (1998). Lesbian, gay, and bisexual youth and their families: Disclosure of sexual orientation and its consequences. *American Journal of Orthopsychiatry*, *68*(3), 361–371.

DeHaan, S., Kuper, L.E., Magee, J.C., Bigelow, L., and Mustanski, B.S. (2013). The interplay between online and offline explorations of identity, relationships, and sex: A mixed-methods study with LGBT youth. *Journal of Sex Research, 50,* 421–434.

Denney, J.T., Gorman, B.K., and Barrera, C.B. (2013). Families, resources, and adult health: Where do sexual minorities fit? *Journal of Health and Social Behavior*, *54,* 46–63. doi: 10.1177/0022146512469629.

Diamond, L.M., and Lucas, S. (2004). Sexual-minority and heterosexual youths' peer relationships: Experiences, expectations, and implications for well-being. *Journal of Research on Adolescence*, *14*(3), 313–340.

Diamond, L.M., Savin-Williams, R.C., and Dubé, E.M. (1999). Sex, dating, passionate friendships, and romance: Intimate peer relations among lesbian, gay, and bisexual adolescents. In W. Furman, B.B. Brown, and C. Feiring (Eds.), *The Development of Romantic Relationships in Adolescence* (pp. 175–210). New York: Cambridge University Press.

Donnelly, R., Reczek, C., and Umberson, D. (2018). What we know (and don't know) about the bereavement experiences of same-sex spouses. In A.E. Goldberg and A. Romero (Eds.), *LGBTQ Divorce and Relationship Dissolution: Psychological and Legal Perspectives and Implications for Practice*. New York: Oxford University Press.

Donnelly, R., Robinson, B.A., and Umberson, D. (2019). Can spouses buffer the impact of discrimination on depressive symptoms?: An examination of same-sex and different-sex marriages. *Society and Mental Health, 9*(2), 192–210. doi: 10.1177/2156869318800157.

Doty, N.D., Willoughby, B.L., Lindahl, K.M., and Malik, N.M. (2010). Sexuality related social support among lesbian, gay, and bisexual youth. *Journal of Youth and Adolescence*, *39*(10), 1134–1147.

Durwood, L., McLaughlin, K., and Olson, K. (2017). Mental health and self-worth in socially transitioned transgender youth. *Journal of the American Academy of Child and Adolescent Psychiatry, 56*, 116–123.

Earnshaw, V.A., Bogart, L.M., Poteat, V.P., Reisner, S.L., and Schuster, M.A. (2016). Bullying among lesbian, gay, bisexual, and transgender youth. *Pediatric Clinics*, *63*(6), 999–1010.

Edwards, K.M., and Sylaska, K.M. (2013). The perpetration of intimate partner violence among LGBTQ college youth: The role of minority stress. *Journal of Youth and Adolescence*, *42*(11), 1721–1731.

Edwards, K., Sylaska, K.M., and Neal, A.M. (2015). Intimate partner violence among sexual minority populations: A critical review of the literature and agenda for future research. *Psychology of Violence, 5*(2), 112–121. doi: 10.1037/a0038656.

Ernst, M.M., Liao, L.M., Baratz, A.B., and Sandberg, D.E. (2018). Disorders of sex development/intersex: Gaps in psychosocial care for children. *Pediatrics*, *142*(2), e20174045.

Everett, B.G., McCabe, K.F., and Hughes, T.L. (2017). Sexual orientation disparities in mistimed and unwanted pregnancy among adult women. *Perspectives in Sexual and Reproductive Health, 49*, 157–165.

Farr, R.H., and Patterson, C.J. (2013). Coparenting among lesbian, gay, and heterosexual couples: Associations with adopted children's outcomes. *Child Development*, *84*, 1226–1240.

Farr, R.H., Forssell, S.L., and Patterson, C.J. (2010a). Parenting and child development in adoptive families: Does parental sexual orientation matter? *Applied Developmental Science, 14,* 164–178.

———. (2010b). Gay, lesbian, and heterosexual adoptive parents: Couple and relationship issues. *Journal of GLBT Family Studies, 6,* 199–213.

Farr, R.H., Vazquez, C.P., and Patterson, C.J. (2020). LGBTQ adoptive parents and their children. In A.E. Goldberg and K.R. Allen (Eds.), *LGBT-Parent Families: Innovations in Research and Implications for Practice* (2nd ed.). New York: Springer.

Farr, R.H., Bruun, S.T., Doss, K.M., and Patterson, C.J. (2018). Children's gender-typed behavior from early to middle childhood in adoptive families with lesbian, gay, and heterosexual parents. *Sex Roles, 78*, 528–541.

Fedewa, A.L., Black, W.W., and Ahn, S. (2015). Children and adolescents with same-gender parents: A meta-analytic approach in assessing outcomes. *Journal of GLBT Family Studies, 11*, 1–34.

Feinstein, B.A., and Dyar, C. (2017). Bisexuality, minority stress, and health. *Current Sexual Health Reports*, *9*(1), 42–49. doi: 10.1007/s11930-017-0096-3.

Floyd, F.J., and Bakeman, R. (2006). Coming-out across the life course: Implications of age and historical context. *Archives of Sexual Behavior*, *35*(3), 287–296.

Fredriksen-Goldsen, K., Kim, H., Barkan, S., Balsam, K., and Mincer, S. (2010). Disparities in health-related quality of life: A comparison of lesbians and bisexual women. *American Journal of Public Health, 100,* 2255–2261.

Fredriksen-Goldsen, K.I., Shiu, C., Bryan, A.E., Goldsen, J., and Kim, H.J. (2016). Health equity and aging of bisexual older adults: Pathways of risk and resilience. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *72*(3), 468–478.

Fredriksen-Goldsen, K.I., Jen, S., Bryan, A.E., and Goldsen, J. (2018). Cognitive impairment, Alzheimer's disease, and other dementias in the lives of lesbian, gay, bisexual and transgender (LGBT) older adults and their caregivers: Needs and competencies. *Journal of Applied Gerontology*, *37*, 545–569.

Frost, D.M. (2011). Stigma and intimacy in same-sex relationships: A narrative approach. *Journal of Family Psychology*, *25*(1), 1.

Frost, D.M., Meyer, I.H., and Schwartz, S. (2016). Social support networks among diverse sexual minority populations. *American Journal of Orthopsychiatry, 86*(1), 91–102.

Frost, D.M., LeBlanc, A.J., de Vries, B., Alston-Stepnitz, E., Stephenson, R., and Woodyatt, C. (2017). Couple-level minority stress: An examination of same-sex couples' unique experiences. *Journal of Health and Social Behavior*, *58*(4), 455–472.

Gates, G.J. (2006). *Same-Sex Couples and the Gay, Lesbian, Bisexual Population: New Estimates from the American Community Survey*. Los Angeles, CA: Williams Institute, UCLA School of Law.

———. (2009). *Same-Sex Spouses and Unmarried Partners in the American Community Survey, 2008*. Los Angeles, CA: Williams Institute, UCLA School of Law.

———. (2013). *Same-Sex and Different-Sex Couples in the American Community Survey: 2005–2011*. Los Angeles, CA: Williams Institute, UCLA School of Law.

———. (2014). *LGB Families and Relationships: Analyses of the 2013 National Health Interview Survey.* Los Angeles, CA: Williams Institute, UCLA School of Law.

Gates, G.J., and Brown, T.N.T. (2015). *Marriage and Same-Sex Couples after Obergefell*. Los Angeles, CA: Williams Institute, UCLA School of Law.

Glover, J.A., Galliher, R.V., and Lamere, T.G. (2009). Identity development and exploration among sexual minority adolescents: Examination of a multidimensional model. *Journal of Homosexuality*, *56*(1), 77–101.

Goldberg, A.E. (2007). (How) does it make a difference? Perspectives of adults with lesbian, gay, and bisexual parents. *American Journal of Orthopsychiatry*, *77*(4), 550–562.

Goldberg, A.E. (2010). *Lesbian and Gay Parents and Their Children: Research on the Family Life Cycle*. Washington DC: American Psychological Association.

Goldberg, A.E., and Romero, A.P. (2019). *LGBTQ Divorce and Relationship Dissolution: Psychological and Legal Perspectives and Implications for Practice*. New York: Oxford University Press.

Goldberg, S.K., and Conron, K.J. (2018). *How Many Same-Sex Couples in the U.S. Are Raising Children?* Los Angeles, CA: Williams Institute, UCLA School of Law.

Golombok, S. (2015). *Modern Families: Parents and Children in New Family Forms*. Cambridge, UK: Cambridge University Press.

______. (2019). Parenting and contemporary reproductive technologies. In M.H. Bornstein (Ed.), *Handbook of Parenting* (3rd ed.), Volume 5. New York: Routledge.

Golombok, S., Mellish, L., Jennings, S., Casey, P., Tasker, F., and Lamb, M.E. (2014). Adoptive gay father families: Parent-child relationships and children's psychological adjustment. *Child Development, 85*, 456–468.

Golombok, S., Blake, L., Slutsky, J., Raffanello, E., Roman, G., and Ehrhardt, A. (2018). Parenting and the adjustment of children born to gay fathers through surrogacy. *Child Development, 89*, 1223–1233.

Gorman, B.K., Denney, J.T., Dowdy, H., and Medeiros, R.A. (2015). A new piece of the puzzle: Sexual orientation, gender, and physical health status. *Demography, 52*, 1357–1382.

Gough, B., Weyman, N., Alderson, J., Butler, G., and Stoner, M. (2008). "They did not have a word": The parental quest to locate a "true sex" for their intersex children. *Psychology and Health*, *23*(4), 493–507.

Graham, J.M., and Barnow, Z.B. (2013). Stress and social support in gay, lesbian, and heterosexual couples: Direct effects and buffering models. *Journal of Family Psychology*, *27*(4), 569.

Green, R.-J., Rubio, R.J., Rothblum, E.D., Bergman, K., and Katuzny, K.E. (2019). Gay fathers by surrogacy: Prejudice, parenting, and well-being of female and male children. *Psychology of Sexual Orientation and Gender Identity, 6*, 269–283.

Grossman, A.H., and Kerner, M.S. (1998). Self-esteem and supportiveness as predictors of emotional distress in gay male and lesbian youth. *Journal of Homosexuality, 35*(2), 25–39. doi: 10.1300/J082v35n02_02.

Grossman, A.H., Haney, A.P., Edwards, P., Alessi, E.J., Ardon, M., and Howell, T.J. (2009). Lesbian, gay, bisexual and transgender youth talk about experiencing and coping with school violence: A qualitative study. *Journal of LGBT Youth*, *6*, 24–46.

Grov, C., Bimbi, D.S., Nanín, J.E., and Parsons, J.T. (2006). Race, ethnicity, gender, and generational factors associated with the coming-out process among gay, lesbian, and bisexual individuals. *Journal of Sex Research*, *43*(2), 115–121.

Hatzenbuehler, M.L., Nolen-Hoeksema, S., and Erickson, S.J. (2008). Minority stress predictors of HIV risk behavior, substance use, and depressive symptoms: Results from a prospective study of bereaved gay men. *Health Psychology*, *27*(4), 455.

Hatzenbuehler, M.L., O'Cleirigh, C., Grasso, C., Mayer, K., Safren, S., and Bradford, J. (2012). Effect of same-sex marriage laws on health care use and expenditures in sexual minority men: A quasi-natural experiment. *American Journal of Public Health*, *102*(2), 285–291.

Heatherington, L., and Lavner, J.A. (2008). Coming to terms with coming out: Review and recommendations for family systems-focused research. *Journal of Family Psychology*, *22*(3), 329.

Herdt, G., and Koff, B. (2000). *Something to Tell You: The Road Families Travel When a Child Is Gay*. New York: Columbia University Press.

Hollenbach, A.D., Eckstrand, K.L., and Dreger, A. (2014). Association of American Medical Colleges. Implementing curricular and institutional climate changes to improve health care for individuals who are LGBT, gender nonconforming, or born with DSD: A resource for medical educators. Available: https://members.aamc.org/eweb/upload/Executive%20LGBT%20FINAL.pdf.

Holmberg, D., and Blair, K.L. (2009). Sexual desire, communication, satisfaction, and preferences of men and women in same-sex versus mixed-sex relationships. *Journal of Sex Research*, *46*(1), 57–66.

Holt-Lunstad, J., Smith, T., and Layton, J.B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine, 7,* e1000316.

Holway, G.V., Umberson, D., and Donnelly, R. (2018). Health and health behavior concordance between spouses in same-sex and different-sex marriages. *Social Currents*, *5*(4), 319–327.

Horn, S.S., and Romeo, K.E. (2010). Peer contexts for lesbian, gay, bisexual, and transgender students: Reducing stigma, prejudice, and discrimination. *Prevention Researcher*, *17*(4), 7–10.

Hsieh, N., and Liu, H. (2019). Bisexuality, union status, and gender composition of the couple: Reexamining marital advantage in health. *Demography*, *56*(5), 1791–1825. doi: 10.1007/s13524-019-00813-2.

Hsieh, N., and Ruther, M. (2016). Sexual minority health and health risk factors: Intersection effects of gender, race, and sexual identity. *American Journal of Preventive Medicine, 50*, 746–755.

Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: The National Academies Press. doi: 10.17226/13128.

Johnson, K.C., LeBlanc, A.J., Sterzing, P.R., Deardorff, J., Antin, T., and Bockting, W. (2020). Trans adolescents' perceptions and experiences of their parents' supportive and rejecting behaviors. *Journal of Counseling Psychology, 67*, 156–170.

Jones, J.M. (2017). *In U.S. 10.2% of LGBT Adults Now Married to Same-Sex Spouse*. Gallup. Available: https://news.gallup.com/poll/212702/lgbt-adults-married-sex-spouse.aspx.

Joyner, K., Manning, W.D., and Bogle, R.H. (2017). Gender and the stability of same-sex and different-sex relationships among young adults. *Demography, 54*(6), 2351–2374. doi: 10.1007/s13524-017-0633-8.

Joyner, K., Manning, W., and Prince, B. (2020). *Social Context and the Stability of Same-Sex and Different-Sex Relationships*. New Brunswick, NJ: Rutgers University Press. doi: 10.2307/j.ctv128fqjw.19.

Klein, A., and Golub, S.A. (2016). Family rejection as a predictor of suicide attempts and substance misuse among transgender and gender nonconforming adults. *LGBT Health*, *3*(3), 193–199.

Korchmaros, J.D., Ybarra, M.L., and Mitchell, K.J. (2015). Adolescent online romantic relationship initiation: Differences by sexual and gender identification. *Journal of Adolescence*, *40*, 54–64.

Kreukels, B.P., Cohen-Kettenis, P.T., Roehle, R., van de Grift, T.C., Slowikowska-Hilczer, J., Claahsen-van der Grinten, H., Hirschberg, A.L., de Vries, A.L.C., Reisch, N., Bouvattier, C., Nordenström, A., Thyen, U., Köhler, B., and on behalf of the dsd-LIFE group. (2019). Sexuality in adults with differences/disorders of sex development (DSD): Findings from the dsd-LIFE study. *Journal of Sex and Marital Therapy*, *45*(8), 688–705.

Kurdek, L.A. (1991). Correlates of relationship satisfaction in cohabiting gay and lesbian couples: Integration of contextual, investment, and problem-solving models. *Journal of Personality and Social Psychology*, *61*(6), 910.

______. (2005). What do we know about gay and lesbian couples? *Current Directions in Psychological Science, 14*(5), 251–254. doi: 10.1111/j.0963-7214.2005.00375.x.

LeBlanc, A.J., Frost, D.M., and Bowen, K. (2018). Legal marriage, unequal recognition, and mental health among same-sex couples. *Journal of Marriage and Family*, *80*, 397–408. doi: 10.1111/jomf.12460.

LeBlanc, A.J., Frost, D.M., and Wight, R.G. (2015). Minority stress, stress proliferation, and mental health among same-sex and other marginalized couples. *Journal of Marriage and Family*, 77, 40–59. doi: 10.1111/jomf.12160.

Lick, D.J., Tornello, S.L., Riskind, R.G., Schmidt, K.M., and Patterson, C.J. (2012). Social climate for sexual minorities predicts well-being among heterosexual offspring of lesbian and gay parents. *Sexuality Research and Social Policy, 9,* 99–112.

Liu, H., and Wilkinson, L. (2017). Marital status and perceived discrimination among transgender people. *Journal of Marriage and Family*, *79,* 1295–1313. doi: 10.1111/jomf.12424.

Liu, H., Reczek, C., and Brown, D. (2013). Same-sex cohabitors and health: The role of race-ethnicity, gender, and socioeconomic status. *Journal of Health and Social Behavior*, *54*, 25–45. doi: 10.1177/0022146512468280.

Macapagal, K., Greene, G.J., Rivera, Z., and Mustanski, B. (2015). "The best is always yet to come": Relationship stages and processes among young LGBT couples. *Journal of Family Psychology*, *29*(3), 309.

Manning, W.D., and Joyner, K. (2019). Demographic approaches to same-sex relationship dissolution and divorce. In A.E. Goldberg and A.P. Romero (Eds.), *LGBTQ Divorce and Relationship Dissolution: Psychological and Legal Perspectives and Implications for Practice* (pp. 35–48). New York: Oxford University Press.

Manning, W.D., Fettro, M.N., and Lamidi, E. (2014). Child well-being in same-sex parent families: Review of research prepared for American Sociological Association amicus brief. *Population Research and Policy Review, 33*(4), 485–502. doi: 10.1007/s11113-014-9329-6.

Marsack, J., and Stephenson, R. (2018). Barriers to end-of-life care for LGBT persons in the absence of legal marriage or adequate legal documentation. *LGBT Health*, *5*(5), 273–283. doi: 10.1089/lgbt.2016.0182.

Martos, A.J., Nezhad, S., and Meyer, I.H. (2015). Variations in sexual identity milestones among lesbians, gay men, and bisexuals. *Sexuality Research and Social Policy*, *12*(1), 24–33.

Meier, S.C., Sharp, C., Michonski, J., Babcock, J.C., and Fitzgerald, K. (2013). Romantic relationships of female-to-male trans men: A descriptive study. *International Journal of Transgenderism*, *14*(2), 75–85.

MetLife Mature Market Institute and American Society on Aging. (2010). *Still Out, Still Aging: The MetLife Study of Lesbian, Gay, Bisexual, and Transgender Baby Boomers.* Available: https://www.asaging.org/sites/default/files/files/mmi-still-out-still-aging.pdf.

Moore, M.R. (2011). *Invisible Families: Gay Identities, Relationships and Motherhood Among Black Women.* Berkeley, CA: University of California Press.

Moyano, N., and del Mar Sánchez-Fuentes, M. (2020). Homophobic bullying at schools: A systematic review of research, prevalence, school-related predictors and consequences. *Aggression and Violent Behavior*, 101441.

National Academies of Sciences, Engineering, and Medicine. (2019). *The Promise of Adolescence: Realizing Opportunity for All Youth*. Washington, DC: National Academies Press.

National Intimate Partner and Sexual Violence Survey. (2010). Available: http:www.cdc.gov/violenceprevention/pdf/cdc_nisvs_victimization_final-a.pdf

Needham, B.L., and Austin, E.L. (2010). Sexual orientation, parental support, and health during the transition to young adulthood. *Journal of Youth and Adolescence, 39*, 1189–1198. doi: 10.1007/s10964-010-9353-6.

Neilands, T.B., LeBlanc, A.J., Frost, D.M., Bowen, K., Sullivan, P.S., Hoff, C.C., and Chang, J. (2019). Measuring a new stress domain: Validation of the couple-level minority stress scale. *Archives of Sexual Behavior, 49*, 249–265. doi: 10.1007/s10508-019-01487-y.

Norwood, K. (2013). Meaning matters: Framing trans identity in the context of family relationships. *Journal of GLBT Family Studies*, *9*(2), 152–178.

Olson, K.R., Key, A.C., and Eaton, N.R. (2015). Gender cognition in transgender children. *Psychological Science*, *26*(4), 467–474.

Olson, K., Durwood, L., DeMeules, M., and McLaughlin, K. (2016). Mental health of transgender children who are supported in their identity. *Pediatrics, 137*, e20153223.

Parker, C.M., Hirsch, J.S., Philbin, M.M., and Parker, R.G. (2018). The urgent need for research and interventions to address family-based stigma and discrimination against lesbian, gay, bisexual, transgender, and queer youth. *Journal of Adolescent Health, 63*, 383–393.

Pastrana, A.J. (2015). Being out to others: The relative importance of family support, identity and religion for LGBT Latina/os. *Latino Studies*, *13*(1), 88–112.

Patterson, C.J. (1992). Children of lesbian and gay parents. *Child Development, 63*, 1025–1042.

———. (2000). Sexual orientation and family life: A decade review. *Journal of Marriage and the Family, 62*, 1052–1069.

———. (2013). Sexual orientation and family lives. In C.J. Patterson and A.R. D'Augelli (Eds.), *Handbook of Psychology and Sexual Orientation*. New York: Oxford University Press.

———. (2017). Parental sexual orientation and child development. *Child Development Perspectives, 11,* 45–49.

———. (2019). Lesbian and gay parenting. In M.H. Bornstein (Ed.), *Handbook of Parenting,* (3rd ed.), Volume 3. New York: Routledge.

Patterson, C.J., and Goldberg, A.E. (2016). *Lesbian and Gay Parents and Their Children.* NCFR Brief, National Council on Family Relations. Available: https://www.ncfr.org/sites/default/files/2017-01/ncfr_policy_brief_november_final.pdf.

Patterson, C.J., Sutfin, E.L., and Fulcher, M. (2004). Division of labor among lesbian and heterosexual parenting couples: Correlates of specialized versus shared patterns. *Journal of Adult Development, 11*, 179–189.

Patterson, C.J., Tate, D., Sumontha, J., and Xu, R. (2018). Sleep difficulties among sexual minority adults: Associations with family relationship problems. *Psychology of Sexual Orientation and Gender Diversity, 5,* 109–116.

Peplau, L.A., and Fingerhut, A.W. (2007). The close relationships of lesbians and gay men. *Annual Review of Psychology*, *58*, 405–424.

Pfeffer, C.A. (2010). "Women's work"? Women partners of transgender men doing housework and emotion work. *Journal of Marriage and Family, 72*, 165–183.

———. (2016). *Queering Families: The Postmodern Partnerships of Cisgender Women and Transgender Men.* New York: Oxford University Press.

Potter, D. (2012). Same sex parent families and children's academic achievement. *Journal of Marriage and Family, 74*, 556–571.

Potter, D., and Potter, E.C. (2016). Psychosocial well-being in children of same-sex parents: A longitudinal analysis of familial transitions. *Journal of Family Issues, 38*(16), 2303–2328. doi: 10.1177/0192513X16646338.

Puckett, J.A., Woodward, E.N., Mereish, E.H., and Pantalone, D. (2015). Parental rejection following sexual orientation disclosure: Impact on internalized homophobia, social support, and mental health. *LGBT Health, 2,* 265–269.

Reczek, C. (2014). The intergenerational relationships of gay men and lesbian women. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *69*(6), 909–919.

———. (2016). Parental disapproval and gay and lesbian relationship quality. *Journal of Family Issues*, *37*(15), 2189–2212.

———. (2020). Research on gender and sexual minority families: A 2010–2020 decade in review. *Journal of Marriage and Family, 82,* 300–325.

Reczek, C., and Umberson, D. (2016). Greedy spouse, needy parent: The marital dynamics of gay, lesbian, and heterosexual intergenerational caregivers. *Journal of Marriage and Family,* 78, 957–974. doi: 10.1111/jomf.12318.

Rendall, M.S., Weden, M.M., Favreault, M.M., and Waldron, H. (2011). The protective effect of marriage for survival: A review and update. *Demography*, *48*, 481–506. doi: 10.1007/s13524-011-0032-5.

Reuter, T.R., Sharp, C., and Temple, J.R. (2015). An exploratory study of teen dating violence in sexual minority youth. *Partner Abuse*, *6*(1), 8–28.

Reuter, T.R., Newcomb, M.E., Whitton, S.W., and Mustanski, B. (2017). Intimate partner violence victimization in LGBT young adults: Demographic differences and associations with health behaviors. *Psychology of Violence, 7,* 101–109.

Riskind, R.G., and Patterson, C.J. (2010). Parenting intentions and desires among childless lesbian, gay, and heterosexual individuals. *Journal of Family Psychology, 24*, 78.

Riskind, R.G., and Tornello, S.L. (2017). Sexual orientation and future parenthood in a 2011–2013 nationally representative United States sample. *Journal of Family Psychology, 31*, 792.

Robbins, K.G., Durso, L.E., Bewkes, F.J., and Schultz, E. (2017). *People Need Paid Leave Policies that Cover Chosen Family*. Washington DC: Center for American Progress.

Rollè, L., Giardina, G., Caldarera, A.M., Gerino, E., and Brustia, P. (2018). When intimate partner violence meets same sex couples: A review of same sex intimate partner violence. *Frontiers in Psychology*, *9*, 1506. doi: 10.3389/fpsyg.2018.01506.

Romero, A. (2017). *1.1 Million LGBT Adults Are Married to Someone of the Same Sex at the Two-Year Anniversary of Obergefell v. Hodges*. Los Angeles, CA: The William Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Obergefell-2-Year-Marriages.pdf.

Rosario, M., Schrimshaw, E.W., and Hunter, J. (2004). Ethnic/racial differences in the coming-out process of lesbian, gay, and bisexual youths: A comparison of sexual identity development over time. *Cultural Diversity and Ethnic Minority Psychology*, *10*(3), 215.

———. (2009). Disclosure of sexual orientation and subsequent substance use and abuse among lesbian, gay, and bisexual youths: Critical role of disclosure relations. *Psychology of Addictive Behaviors*, *23*, 175–184. doi: 10.1037/a0014284.

Rosario, M., Hunter, J., Maguen, S., Gwadz, M., and Smith, R. (2001). The coming-out process and its adaptational and health-related associations among gay, lesbian, and bisexual youths: Stipulation and exploration of a model. *American Journal of Community Psychology*, *29*(1), 133–160.

Rosengard, C., and Folkman, S. (1997). Suicidal ideation, bereavement, HIV serostatus and psychosocial variables in partners of men with AIDS. *AIDS Care*, *9*(4), 373–384.

Rothman, E.F., Sullivan, M., Keyes, S., and Boehmer, U. (2012). Parents' supportive reactions to sexual orientation disclosure associated with better health: Results from a population-based survey of LGB adults in Massachusetts. *Journal of Homosexuality*, *59*(2), 186–200.

Russell, S.T. (2002). Queer in America: Citizenship for sexual minority youth. *Applied Developmental Science*, *6*(4), 258–263.

Russell, S.T., and Consolacion, T.B. (2003). Adolescent romance and emotional health in the United States: Beyond binaries. *Journal of Clinical Child and Adolescent Psychology*, *32*(4), 499–508.

Russell, S.T., and Fish, J.N. (2016). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annual Review of Clinical Psychology*, *12*, 465–487.

———. (2019). Sexual minority youth, social change, and health: A developmental collision. *Research in Human Development, 16*, 5–20.

Russell, S.T., Seif, H., and Truong, N.L. (2001). School outcomes of sexual minority youth in the United States: Evidence from a national study. *Journal of Adolescence*, *24*(1), 111–127.

Russell, S.T., Watson, R., and Muraco, J.A. (2011). The development of same-sex intimate relationships during adolescence. In B. Laursen and W.A. Collins (Eds.), *Relationship Pathways: From Adolescence to Young Adulthood*. Thousand Oaks, CA: Sage.

Russell, S.T., Toomey, R.B., Ryan, C., and Diaz, R.M. (2014). Being out at school: The implications for school victimization and young adult adjustment. *American Journal of Orthopsychiatry, 84*(6), 635–643. doi: 10.1037/ort0000037.

Ryan, C., Huebner, D., Diaz, R.M., and Sanchez, J. (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. *Pediatrics, 123*, 346–352. doi: 10.1542/peds.2007-3524.

Ryan, C., Russell, S.T., Huebner, D., Diaz, R., and Sanchez, J. (2010). Family acceptance in adolescence and the health of LGBT young adults. *Journal of Child and Adolescent Psychiatric Nursing*, *23*(4), 205–213.

SAGE. (2014). Out & visible: The experieces and attitudes of lesbian, gay, bisexual and transgender older adults, ages 45–75. Available: https://www.sageusa.org/resource-posts/out-visible-the-experiences-and-attitudes-of-lesbian-gay-bisexual-and-transgender-older-adults-ages-45-75-by-the-numbers-full-report.

Satterfield, J.M., Folkman, S., and Acree, M. (2002). Explanatory style predicts depressive symptoms following AIDS-related bereavement. *Cognitive Therapy and Research*, *26*(3), 393–403.

Savin-Williams, R.C. (1994). Dating those you can't love and loving those you can't date. In R. Montemayor, G. Adams, and T. Gullotta (Eds.), *Personal Relationships during Adolescence* (pp. 163–175). Thousand Oaks, CA: Sage Press.

———. (2001). *Mom, Dad. I'm Gay: How Families Negotiate Coming Out*. American Psychological Association. doi: 10.1037/10437-000.

Shilo, G., and Savaya, R. (2011). Effects of family and friend support on LGB youths' mental health and sexual orientation milestones. *Family Relations*, *60*(3), 318–330.

Shiu, C., Muraco, A., and Fredriksen-Goldsen, K. (2016). Invisible care: Friend and partner care among older lesbian, gay, bisexual, and transgender (LGBT) adults. *Journal of the Society for Social Work and Research*, *7*(3), 527–546.

Simon, K.A., Tornello, S.L., Far, R.H., and Bos, H.M.W. (2018). Envisioning future parenthood among bisexual, lesbian, and heterosexual women. *Psychology of Sexual Orientation and Gender Diversity, 5*, 253–259.

Slowikowska-Hilczer, J., Hirschberg, A.L., Claahsen-van der Grinten, H., Reisch, N., Bouvattier, C., Thyen, U., Cohen Kettinis, P., Roehle, R., Kohler, B., and Nordenstrom, A. (2017). Fertility outcome and information on fertility issues in individuals with different forms of disorders of sex development: Findings from the dsd-LIFE study. *Fertility and Sterility, 108*, 822–831.

Snapp, S.D., Watson, R.J., Russell, S.T., Diaz, R.M., and Ryan, C. (2015). Social support networks for LGBT young adults: Low cost strategies for positive adjustment. *Family Relations*, *64*(3), 420–430.

Stotzer, R.L., Herman, J.L., and Hasenbush, A. (2014). *Transgender Parenting: A Review of Existing Research*. Los Angeles, CA: Williams Institute, UCLA School of Law.

Swendener, A., and Woodell, B. (2017). Predictors of family support and well-being among Black and Latina/o sexual minorities. *Journal of GLBT Family Studies*, *13*(4), 357–379.

Tate, D.P., and Patterson, C.J. (2019a). Sexual minority women's attitudes toward infants, children, and parenthood. *Journal of Lesbian Studies*, *23*(4), 464–475. doi: 10.1080/10894160.2019.1629807.

———. (2019b). Sexual orientation, relationships with parents, stress, and depressive symptoms among adults. *Journal of GLBT Family Studies, 15,* 256–271.

———. (2019c). Desire for parenthood in context of other life aspirations among lesbian, gay, and heterosexual young adults. *Frontiers in Psychology, 10*, 2679.

Thomeer, M., Umberson, D., and Reczek, C. (2020). The gender-as-relational approach for theorizing about romantic relationships of sexual and gender diverse mid- to later-life adults. *Journal of Family Theory and Review*. doi: 10.1111/jftr.12368.

Thomeer, M.B., Donnelly, R., Reczek, C., and Umberson, D. (2017). Planning for future care and the end of life: A qualitative analysis of gay, lesbian, and heterosexual couples. *Journal of Health and Social Behavior*, *58*(4), 473–487.

Toomey, R.B., and Richardson, R.A. (2009). Perceived sibling relationships of sexual minority youth. *Journal of Homosexuality*, *56*(7), 849–860.

Toomey, R.B., and Russell, S.T. (2016). The role of sexual orientation in school-based victimization: A meta-analysis. *Youth and Society*, *48*(2), 176–201.

Tornello, S.L., and Bos, H. (2017). Parenting intentions among transgender individuals. *LGBT Health, 4*(2), 115–120. doi: 10.1089/lgbt.2016.0153.

Tornello, S.L., and Patterson, C.J. (2015). Timing of parenthood and experiences of gay fathers: A life course perspective. *Journal of GLBT Family Studies, 11,* 35–56.

Ueno, K. (2005). Sexual orientation and psychological distress in adolescence: Examining interpersonal stressors and social support processes. *Social Psychology Quarterly*, 68(3), 258–277.

Umberson, D., and Karas Montez, J. (2010). Social relationships and health: A flashpoint for public policy. *Journal of Health and Social Behavior, 51*: S54–S66. doi: 10.1177/0022146510383501.

Umberson, D., and Thomeer, M. (2020). Family matters: Research on family ties and health, 2010–2020. *Journal of Marriage and Family, 82*(1), 404–419.

Umberson, D., Thomeer, M., Kroeger, R., Lodge, A., and Minle, X. (2015). Challenges and opportunities for research on same-sex relationships. *Journal of Marriage and Family*, *77*, 96–111.

Umberson, D., Thomeer, M., Reczek, C., and Donnelly, R. (2016). Physical illness in gay, lesbian, and heterosexual marriages: Gendered dyadic experiences. *Journal of Health and Social Behavior, 57*, 517–531. doi: 10.1177/0022146516671570.

Umberson, D., Reczek, C., Thomeer, M., Donnelly, M, and Kroeger, R. (2017). Instrumental- and emotion-focused care work during physical health events: Comparing gay, lesbian, and heterosexual marriages. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences,* 72(3), 498–509. doi: 10.1093/geronb/gbw133.

Wainright, J.L., and Patterson, C.J. (2006). Delinquency, victimization, and substance use among adolescents with female same-sex parents. *Journal of Family Psychology, 20*, 526–530.

———. (2008). Peer relations among adolescents with female same-sex parents. *Developmental Psychology, 44*, 117–126.

Wainright, J.L., Russell, S.T., and Patterson, C.J. (2004). Psychosocial adjustment and school outcomes of adolescents with same-sex parents. *Child Development, 75*, 1886–1898.

Ward, J. (2010). Gender labor: Transmen, femmes, and collective work of transgression. *Sexualities*, *13*(2), 236–254.

Watson, R.J., Grossman, A.H., and Russell, S.T. (2019). Sources of social support and mental health among LGB youth. *Youth and Society*, *51*(1), 30–48.

Whitton, S.W., Dyar, C., Newcomb, M.E., and Mustanski, B. (2018). Romantic involvement: A protective factor for psychological health in racially-diverse young sexual minorities. *Journal of Abnormal Psychology*, *127*(3), 265.

Williams, M.E., and Fredriksen-Goldsen, K.I. (2014). Same-sex partnerships and the health of older adults. *Journal of Community Psychology, 42*(5), 558–570.

Yang, C., Boen, C., Gerke, K., Li, T., Schorpp, K., and Harris, K.M. (2016). Social relationships and physiological determinants of longevity across human life span. *Proceedings of the National Academy of Sciences, 113*, 578–583.

9

Educational Environments

This chapter considers the body of research in the last decade on the school experiences of sexual and gender diverse (SGD) students (Russell and Horn, 2016; Wimberly, 2015). Most research in this area has focused on school experiences in middle schools and high schools, but we note examples where research has extended to elementary schools and higher education. Much of the research has focused on experiences of bullying and victimization (NASEM, 2016), yet there is a growing body of research that identifies educational policies and practices that are associated with positive experiences for SGD students, whether through reducing bullying and victimization or improving school climates. As discussed in Chapter 8, SGD youth are coming out at younger ages and are therefore encountering unique experiences in schools with peer groups based on their sexual orientation and gender identity at earlier stages.

Experiences that SGD students have in school are important because school has historically been a primary institution that has socialized cisnormativity and heteronormativity in the lives of children and youth (McNeill, 2013; Pascoe, 2011). Furthermore, negative experiences in school not only undermine personal well-being but also affect educational attainment and, ultimately, occupational attainment and socioeconomic status. In addition, SGD issues in education extend beyond the experiences of individual students. Research on lesbian and gay parents and their children has illuminated the issues that parents navigate in their children's schools, as well as the experiences of their children as students.

Before considering the research findings, it is important to describe the range of methodological approaches that researchers have used in the study of SGD issues in education. The earliest studies were based on community (often called "convenience") samples of self-identified gay and lesbian students. These studies, both qualitative (e.g., interviews and ethnographies) and quantitative (e.g., survey questionnaires), were not intended to be representative but rather to highlight the unique experiences of SGD students in schools. Other studies documented the culture and climate of schools. For example, Pascoe's (2011) ethnographic study of a U.S. high school illuminated ways that rigid rules of masculinity undergird school climates characterized by heteronormativity and homophobia.

In the past 20 years, surveys have become central to understanding the experiences of SGD students as new ways to reach SGD youth populations were identified, and SGD measures began to be included on youth surveys. In 1999 the Gay, Lesbian & Straight Education Network (now known as GLSEN) introduced its biennial National School Climate Survey. The survey was created to capture the experiences of SGD students and thus included multiple measures relevant to their experiences (e.g., whether they are "out" at school) that would otherwise not be feasible to include in general population school surveys. Although not a population-based or representative sample, the survey has provided a valuable source of information about SGD students and their experiences in schools.

Also in the 1990s, several states included questions about sexual identity or same-sex sexual behavior in their Youth Risk Behavior Surveys (YRBS). These studies were the first to provide population-based estimates of health-related risk behaviors for gay and lesbian youth, as well as youth with a history of same-sex sexual behavior. Most of the early focus was on health and risk behaviors, rather than school experiences. Also over the past two decades, measures of same-sex sexual behavior, sexual identity, and gender identity have been included in multiple local, state, and federal education and health monitoring systems, making population-based estimates possible. Although most of these studies exclude questions specific to the experiences of SGD students in schools, several include questions about SGD discrimination, such as being bullied "because you are gay or lesbian or someone thought you were" (Russell et al., 2012, p. 144).

Most research attention has been on the experiences of sexual minority students (students who report LGB identities) or has combined sexual and gender minority youth into global measures of SGD students. Recently, however, 10 states and 9 urban school districts that participated in the 2017 YRBS included a measure of transgender identity. Results from the YRBS are reported at various points in this chapter.

DISCRIMINATORY EXPERIENCES AT SCHOOL

Bullying, Victimization, and Well-Being

Early research identified victimization and bullying as significant issues in the lives of what was then termed gay youth (Hunter and Schaecher, 1987; Rofes, 1993), a theme that has continued to this day. Findings from the 2015 YRBS showed that 34 percent of LGB students reported being bullied on school property, compared with 19 percent of heterosexual students (Kann et al., 2016). In 2017, the YRBS included a measure of transgender identity in some states and localities; results showed that 35 percent of transgender students reported being bullied at school (Johns et al., 2019b). A recent consensus study by the National Academies (2016) highlighted bullying as a significant social problem in schools and identified both that LGBTQ students are a population at higher risk for being bullied and that discriminatory bullying often takes the form of homophobic or transphobic bullying. Although most research has focused on secondary schools, similar patterns of discriminatory behavior have been documented for sexual minority and transgender students in higher education (Beemyn, 2012; Rankin, 2005). Several recent studies have examined school restroom and locker room access for transgender and other gender diverse students, showing in one case that transgender students who were restricted from using restroom and locker rooms that matched their gender identity were at higher risk for assault (Murchison et al., 2019). Another study found that transgender and gender-nonconforming students who felt unsafe in bathrooms reported lower quality of life and more anxiety (Weinhardt et al., 2017).

Not surprisingly, bullying and lack of safety at school have been consistently linked to the compromised mental, behavioral, and academic well-being of SGD students. Population-based studies have documented the association between bullying at school and mental health problems (e.g., depressive symptoms and suicidality) and risk behaviors (e.g., substance use) for sexual minority students (Russell et al., 2012), and recent studies document similar patterns for transgender students (Day et al., 2017; Perez-Brumer et al., 2017). For LGBT college students, perceived discrimination is associated with both adjustment at college and indecision regarding vocation (Schmidt, Miles, and Welsh, 2011). In one of the few studies of the school experiences of adults with intersex traits, an online survey of more than 200 Australians, many respondents reported school bullying, and many dropped out of school before receiving a high school certification (Jones, 2016).

The association of bullying with mental health and risk behaviors is strong and consistent across studies. Some studies have found a similar pattern in the link between bullying and poor academic achievement (Poteat, Scheer, and Mereish, 2014), but the evidence is less consistent. Other studies have found a bimodal distribution in attainment: some SGD youth reported higher attainment than their non-SGD peers, and others reported lower attainment (Watson and Russell, 2016). Since many LGBT students reported negative peer experiences, such as victimization and associated mental health challenges, as well as higher rates of suspension or expulsion (Poteat, Scheer, and Chong, 2016), those experiences may undermine academic focus and achievement or prompt disengagement at school. Yet the higher educational attainment reported by some SGD students may be due to their focus on academic achievement (Pachankis and Hatzenbuehler, 2013). Negative experiences at school might induce some students to align their interests with academics and the adult achievement values of their schools while withdrawing from peer settings where they are at risk for victimization (Watson and Russell, 2016).

Differential Treatment in Schools

SGD students interact extensively with school personnel, and there is evidence that LGBTQ students may be treated differently than other students. One study that used data from a school survey of nearly 900 LGBQ students matched with comparison heterosexual youth found that the LGBQ students reported more school suspensions and more juvenile justice system involvement and that the differences were not explained by different rates of punishable behavior at school (Poteat, Scheer, and Chong, 2016). These results parallel well-documented racial disparities in exclusionary discipline that have shown that Black and Latinx youth are much more likely to be suspended or expelled from schools than white youth (Gregory, Skiba, and Noguera, 2010). Recent studies have also documented the intersections of race with sexual and gender diversity, such as the ways that LGBTQ youth of color are overrepresented in exclusionary discipline in schools (Chmielewski et al., 2016). Qualitative studies have documented the ways that gender, race, and sexuality intersect to disadvantage youth who are gender nonconforming: for example, Latinx girls whose gender expression is masculine may be perceived by teachers as threatening, while Black boys whose gender expression is feminine may be disciplined for their dress, behavior, or expression (Snapp et al., 2015a).

EDUCATIONAL ATTAINMENT

Economic opportunities are considered in the next chapter, yet education shapes the economic opportunities available to LGBT people, and education itself reflects a measure of socioeconomic status. The research on attainment provides support for different hypotheses. Due to experiences of discrimination or victimization at school, SGD students may skip school, drop out, not plan to attend college, and have lower academic achievement. Lack of family support might hinder enrollment in higher education enrollment. In contrast, however, sexual and gender minorities might invest more in education to compensate for the psychological and economic effects of stigma (Pachankis and Hatzenbuehler, 2013). Moreover, individuals expecting to partner with someone of the same sex might make different educational investments because of variation in expectations of having children or the need to contribute earnings to their families (Carpenter, 2009).

The research on educational attainment supports both hypotheses: most national samples of LGB people find higher-than-average levels of education, but lower levels for transgender people, while surveys of younger cohorts of people in the United States suggest that educational attainment is lower for LGBT people. It appears that, since SGD people from younger cohorts have been coming out earlier, they have greater likelihoods of exposure to risk factors for poor educational attainment, such as victimization in schools or loss of parental support. In national surveys that cut across age cohorts for adults, most (but not all) found higher average levels of education for self-identified LGB people or for people in same-sex couples (Black, Sanders, and Taylor, 2007; Gates, 2014).

Transgender people's relative education level also varies across surveys. The 2015 U.S. Transgender Survey found higher levels of educational attainment among transgender and gender-nonconforming adults in comparison with the general population of adults in the United States (James et al., 2016). However, transgender people in the Behavioral Risk Factor Surveillance System reported significantly lower average levels of education than cisgender people (Carpenter, Eppink, and Gonzales, 2020).

The range of experiences in the population—and the different times they went through the education system—makes it difficult to know why average education levels might be higher for LGB people, and few analyses of educational outcomes have drawn on these broad datasets. An important perspective comes from several studies that compared educational attainment of relatively recent cohorts of young people in longitudinal studies. Those studies found evidence of lower educational attainment for LGBT young people. One recent study using data from the High School Longitudinal Study of 2009 (Sansone, 2019) found that LGB people were almost 2 percent less likely to graduate from high school and 3 percent less likely to attend college than heterosexual people 7 years later, after holding constant demographic, family, school, and state characteristics. Transgender people had similar differences that were not statistically significant. A set of studies analyzing data from the National Longitudinal Study of Adolescent to Adult Health also found lower levels of education among young sexual minority women, who were less likely to graduate from high school or to enroll in and complete college than heterosexual women (Pearson and Wilkinson, 2017; Ueno, Roach, and Peña-Talamantes, 2013). In contrast, most men with same-sex attraction, identity, or behavior had similar educational levels as heterosexual men in their age group. However, the "late bloomers"—those who first reported same-sex attractions or behavior in adulthood—were more likely than heterosexual men to finish high school and college. Both women and men who identified as bisexual in adulthood were less likely to complete high school or to enroll in college than non-bisexual people, although the difference was only statistically significant for bisexual women (Mollborn and Everett, 2015).

Little is known about whether sexual orientation and gender identity influence students' choice of college majors. An analysis of data from the 1993 National Survey of College Graduates found that women in same-sex couples were more likely than other women to report college majors that had higher percentages of men (Black, Sanders, and Taylor, 2007). Conversely, men in same-sex couples were more likely to have majors with higher proportions of women. A recent study replicates this finding for science, technology, engineering, and mathematics (STEM) majors: sexual minority men who entered college wanting to be a STEM major are less likely than heterosexual men to actually end up with a STEM major four years later, while sexual minority women who entered with STEM interests are more likely than similar heterosexual women to be in a STEM major (Hughes, 2018).

EDUCATION LAWS AND SCHOOL POLICIES

There is now clear evidence that state and local K–12 education policies that are inclusive of SGD students—that enumerate status characteristics—provide a context for positive school climate and student well-being and success. Enumerated policies list status characteristics that may be the basis of bullying or discrimination and typically mandate protection for them; in some cases, policies identify strategies to promote school safety and reduce bullying.

There is no federal law pertaining to nondiscrimination in education based on sexual orientation, gender identity or expression, or intersex characteristics. In the absence of federal law or policy, many states and school districts have responded by outlining such protections. As of the writing of this report, every state had an anti-bullying law or policy (Centers for Disease Control and Prevention [CDC], 2018), but only 21 states, 1 territory, and the District of Columbia had laws that prohibit bullying on the basis of sexual orientation and gender identity; 24 states and 1 territory had no laws protecting SGD students; 5 states and 1 territory had no laws but had school regulations or teacher codes that prohibit bullying based on sexual orientation or gender identity (Movement Advancement Project, 2020).

Federal and state agencies provide guidance for interpretation of applicable laws and policies. Although there had not been explicit protection for transgender students in federal law, in 2016 the White House issued guidance to schools to allow students to use restrooms and locker rooms that match their gender identities, citing Title IX of the Education Amendments of 1972, which protects students from sex discrimination. However, in early 2017, the U.S. Department of Education and U.S. Department of Justice reversed that guidance, pointing to the role of states to establish educational policy, effectively removing protection for transgender students under Title IX. A 2019 report revealed that, although transgender students were overrepresented in Title IX complaints and that harassment was the most frequent form of Title IX complaint, dramatically fewer LGBTQ-related complaints resulted in corrective action following the 2017 reversal (Mirza and Bewkes, 2019).

Research from several countries, U.S. states, and multiple local communities has found that the existence of nondiscrimination policies is associated with positive school climate and with more positive experiences for SGD and, indeed, all students (Black, Fedewa, and Gonzalez, 2012; Russell et al., 2010; Kull et al., 2016). As noted above, research to date on inclusive and enumerated policies has focused primarily on secondary education (middle and high schools). In schools that have nondiscrimination policies that include sexual orientation and gender identity or expression, students not only reported feeling safer, but they also reported hearing fewer homophobic remarks and seeing less bullying (Kosciw et al., 2016; Kull et al., 2016); better school attendance (Greytak, Kosciw, and Boesen, 2013); higher self-esteem (Kosciw et al., 2013), fewer mental health problems (Goodenow, Szalacha, and Westheimer, 2006; Hatzenbuehler, 2011; Hatzenbuehler et al., 2014), including lower risk for suicidal behaviors (Meyer et al., 2019); and lower substance use (Konishi et al., 2013). Moreover, in schools with such policies, teachers are seen as being more supportive of LGBT students (Swanson and Gettinger, 2016) and are more likely to intervene in bullying (Kosciw et al., 2016), and students are less likely to report homophobic attitudes toward LGBT peers (Horn and Szalacha, 2009).

SCHOOL CLIMATE

In the past decade there has been a dramatic advance in research on school practices and programs that are associated with safe and supportive school climates for all students and with positive adjustment and well-being for SGD students (NASEM, 2019). These strategies include education or training for teachers, administrators, and other school personnel; school clubs that support students' needs and interests; and explicit inclusion of

SGD topics in school curricula or in other school resources (e.g., libraries, posters or visual images, and designated safe spaces) (Day, Ioverno, and Russell, 2019; Gower et al., 2018; Johns et al., 2019a). Although a number of studies have documented prejudice and harassment of SGD students on college campuses (Rankin and Garvey, 2015; Rankin and Reason, 2006), most of the research has been focused on secondary schooling.

Professional Education and Training

Teachers play a defining role in the lives of all students, and support from teachers has been identified as a critical factor in the well-being of SGD students (Russell, Seif, and Truong, 2001). When SGD students view school personnel as supportive, they feel safer, have better attendance, and show better school performance (Greytak, Kosciw, and Boesen, 2013; Kosciw et al., 2016; Seelman et al., 2012). Teacher support may come in the form of proactive, SGD-affirming relationships between students and their teachers or may be as basic as intervention in bullying and harassment when it takes place. In one study based in a large U.S. urban area, students said that teachers were less likely to intervene when they heard homophobic remarks than racist or sexist remarks (Kosciw et al., 2016). In fact, some students have reported that school personnel use homophobic language: in a national survey of LGBT students, 56 percent reported hearing homophobic remarks from school personnel (Kosciw et al., 2016). Thus, preventing bullying—especially bullying motivated by prejudice or bias—is a vexing challenge (NASEM, 2016). Many teachers and other school personnel are not professionally prepared to intervene in bullying or victimization or to promote school safety for SGD students.

Of course, there are many SGD teachers who themselves navigate school climate that may be hostile to SGD people. One of the few wide-scale surveys of LGBT teachers found that, although the majority reported feeling comfortable being out at school, the majority also reported hearing homophobic remarks at school with little intervention by their peers; furthermore, one-third reported hearing homophobic marks in the presence of administrators, the majority of which went unchecked (Wright and Smith, 2015). In addition, state laws and school district policies vary in nondiscrimination protections for students as well as teachers: some school communities do not support teachers to be assertive about promoting the well-being of SGD students, and many teachers lack employment protection based on their SGD status (Graves, 2018; see also Chapters 5 and 6).

Given these findings, professional education for teachers, administrators, and other personnel (e.g., bus drivers, cafeteria workers) has been identified as a key strategy to improve school experiences and promote positive school climates for all students. According to the nationwide 2018 School Health Profiles, a national survey of principals and school health teachers, 55.6–95.7 percent of schools reported that staff were "encouraged to attend professional development on safe and supportive school environments for all students, regardless of sexual orientation or gender identity" (CDC, 2019, p. 40). Several studies have documented the efficacy of training school personnel to understand and support SGD students (Gower et al., 2018; Greytak et al., 2016; Swanson and Gettinger, 2016). For example, in a national sample of secondary school teachers (Greytak et al., 2016), teachers who had professional development regarding LGBT issues were more likely to intervene when they heard homophobic remarks; however, general professional development on bullying was not associated with intervention in homophobic remarks.

School Clubs

Gay-straight alliances (GSAs, sometimes known as gender-sexuality alliances) are student-led clubs that aim to create a safe, welcoming school climate for all youth, regardless of sexual orientation or gender identity. The percentage of U.S. schools with GSAs had grown from less than 25 percent of schools in 2008 to nearly 40 percent of schools in 2018 (CDC, 2019). However, there is significant variability in access to GSAs across the nation. In 2018, the percentage of high schools with GSAs ranged from 14.5 percent in Mississippi to 71.9 percent in Rhode Island (median, 36.8 percent) (CDC, 2019). Participating in a GSA has been linked to academic performance (i.e., higher grade point average) (Walls, Kane, and Wisneski, 2010), school belonging (Toomey, McGuire, and Russell, 2012), school safety (Ioverno et al., 2016), and a number of indicators of civic involvement or participation (Poteat et al., 2019, 2020).

Several early studies described the "whiteness" of GSAs (Herdt et al., 2006; McCready, 2004), and several recent studies have investigated differences in participation in and support from GSAs for students, showing differences by race and ethnicity as well as by sexual and gender identity. In one study, racial and ethnic minority GSA members reported less frequent GSA attendance and receiving less peer support (Poteat et al., 2015) and less engagement in their GSA than white youth (Poteat et al., 2015). At the same time, transgender and genderqueer students reported greater involvement in their GSAs, and sexual minority students reported more support and engagement in GSAs than other students (Poteat et al., 2016).

The benefits of GSAs are not limited to participants. Several studies have found that the presence of a GSA at a school (regardless of a student's membership) is linked to positive outcomes for both LGBT students

(Chesir-Teran and Hughes, 2009; Goodenow, Szalacha, and Westheimer, 2006; Kosciw et al., 2016; Lee, 2002; O'Shaughnessy et al., 2004; Szalacha, 2003; Walls, Kane, and Wisneski, 2010) and heterosexual students (Poteat et al., 2013; Saewyc et al., 2014; Szalacha, 2003). Students who attended schools with GSAs reported hearing less homophobic language, seeing less bullying, and feeling more belonging (Kosciw et al., 2016).

In addition, having a GSA has been linked to better health and health behaviors for LGBT students, including lower risk behaviors (Heck et al., 2014; Poteat et al., 2013) and better mental health (Goodenow, Szalacha, and Westheimer, 2006; McCormick, Schmidt, and Clifton, 2015; Saewyc et al., 2014; Toomey et al., 2011; Walls, Freedenthal, and Wisneski, 2008; Walls, Wisneski, and Kane, 2013). A recent meta-analysis showed that, across studies, LGBT students with GSAs in their schools were less likely to be victimized and more likely to feel safe than LGBT students in schools without GSAs (Marx and Kettrey, 2016). In one longitudinal study, having a GSA was linked with less bullying and more safety the following school year (Ioverno et al., 2016). Another recent study showed that having a well-functioning GSA was associated with less homophobic bullying, especially in schools with a negative climate overall, and especially for transgender students (Ioverno and Russell, 2020).

School Resources and Inclusive Curricula

A growing body of research has identified the ways that resources and inclusive curricula in schools contribute to positive school climates and SGD student well-being (Black, Fedewa, and Gonzalez, 2012; Russell et al., 2010). In a national study of LGBTQ students (Kosciw et al., 2016), those who had access to supportive information felt safer at school. Another study showed that students with access to LGBTQ-related resources were more likely to believe that adults cared about them and that teachers were fair (O'Shaughnessy et al., 2004). "Safe spaces" or "safe zones," designated school personnel, classrooms, and student organizations where SGD students can receive support, have emerged in K–12 schools in recent years. Across states, data from the School Health Profiles indicate that safe spaces are now present in between 44.2 and 95.2 percent of schools (CDC, 2019). There is as yet little empirical evaluation of the efficacy of safe spaces for SGD students in K–12 education, but several studies show that the presence of safe zones contributes to feelings of safety and greater connectedness for SGD students in college (Evans, 2002; Katz et al., 2016).

There is strong evidence that curricula that are inclusive of sexual and gender diversity contribute to school safety for all students (Burdge et al., 2013; Snapp et al., 2015b). Although many studies have documented the affirming role of inclusive curricula, there are few examples of standard curriculum modules that are publicly available: see Box 9-1 for a model example. Some states have laws that require nonpejorative descriptions of SGD people in curricula, yet laws that prohibit the discussion or positive portrayal of homosexuality in instruction, often specifically related to HIV education (and sometimes called "no promo homo laws"), remain in place in six U.S. states. Thus, for SGD youth, there are important geographic differences in the degree to which sexual and gender diversity is included in school curricula.

Multiple studies have found that students who learn about SGD issues at school report less bullying (Greytak, Kosciw, and Boesen, 2013; Russell et al., 2006; Snapp et al., 2015a), more safety (Szalacha, 2003; Toomey, McGuire, and Russell, 2012), and better attendance (Greytak, Kosciw, and Boesen, 2013; Kosciw et al., 2016). A study of over 1,200 students from 154 middle schools and high schools in California found that SGD curricular materials were most common in sexuality education or health education classes (40%), followed by English and social studies classes (27%); mathematics, science, music, art, drama, and physical education were the least likely subjects to include inclusive lessons (Snapp et al., 2015b). The pattern of findings in that study, which compared student-level as well as school-level differences, showed that students who reported using inclusive curricular materials were more likely than students in the same school who did not use inclusive materials to report being bullied; however, at the school level, inclusive curricula were associated with greater feelings of safety. The results suggest that students who may be targets of homophobic bullying may seek out classes that have inclusive curricula, or they may be more attuned to perceive and report bullying.

Finally, there has been growing attention to the inclusion of SGD issues in sexuality education in schools (Meadows, 2018). Inclusive and accurate school-based sexuality education can provide access to information that may not be available to SGD youth in other community settings (Elia et al., 2015). Yet sexuality education programs have historically excluded information about SGD attraction, identities, relationships, or healthy sexual expression (Kubicek et al., 2010; McNeill, 2013; Meadows, 2018), and this silence has directly or indirectly communicated messages of fear, shame, and prejudice to SGD people (Bishop et al., 2020). In the absence of school-based inclusive sexuality education, there are encouraging new models for sexuality education to reach SGD youth; the evaluation of an online sexual health promotion program for LGBT youth found gains across multiple outcomes, including self-acceptance, relationship skills, and safer sex knowledge (Mustanski et al., 2015).

BOX 9-1
A Model of Inclusive Curricula: "Defending Democracy at Home"

Many studies have documented the affirming role of inclusive curricula, but there are few publicly available standard curriculum modules. The Massachusetts Department of Elementary and Secondary Education offers a model curriculum unit, "Defending Democracy at Home: Advancing Constitutional Rights, *Obergefell v. Hodges* (2015) Same-Sex Marriage," as part of English language arts/literacy and humanities resources. The unit, also designated as appropriate for history and social science, is designed for grades 11 and 12. It examines "the role of state courts, individuals, and advocacy organizations in working to advocate for the expansion of constitutional rights in advance of *Obergefell v. Hodges* (2015), the Supreme Court Case that led to the protection of same-sex marriage as a fundamental right under the Constitution."

SOURCE: http://www.doe.mass.edu/frameworks/mcu/ela-hssg11-12-defending-democracy.docx.

SEXUAL AND GENDER DIVERSE PARENTS AND THEIR CHILDREN

In adulthood, many SGD people have significant interaction with schools in their roles as parents. Several factors have prompted scholarly interest in these experiences, given the recognized importance of strong relationships between K–12 schools and parents. Several studies, though based on small samples of same-sex couple families, have shown that parents may experience homophobia expressed by teachers (Gartrell et al., 2005) and that teachers may exclude those parents from activities or events (Goldberg, 2014). In addition to these explicit forms of exclusion, heteronormative practices in schools (such as parent forms that have spaces only for mother and father) implicitly exclude many SGD parents (Goldberg, 2014; Leland, 2019).

There has been interest in whether and how SGD parents "come out" in the context of their children's schools. In a nationwide study of more than 500 LGBT parents, two-thirds had self-identified to their children's teachers (Kosciw and Diaz, 2008). In contrast, a study of 50 transgender parents' experiences with their children's school found that disclosure was much less common (Haines, Ajayi, and Boyd, 2014). For some SGD parents, disclosure may be part of the process of school selection; some parents reported disclosing their identities to ensure that they chose a safe and inclusive school for their children (Goldberg, 2014; Leland, 2019). There is emerging research on the degree to which parents explicitly disclose or conceal their sexual or gender identities at their children's schools and whether those decisions change over the course of child development: parents' diversity status appears more salient as children get older (Goldberg et al., 2017b).

The experiences that SGD parents have navigating their children's schools have implications for their involvement. Studies of parental involvement in schooling clearly show gendered patterns, with mothers being more involved in schools than fathers. In contrast, recent studies of same-sex couples or lesbian and gay parents have shown greater involvement in early education classrooms by gay male fathers than by heterosexual fathers (Goldberg et al., 2017a). Other studies of lesbian and gay parents' school involvement have reported that involvement is more common among parents who perceive their communities as more homophobic but who also perceive less exclusion from other parents (Goldberg and Smith, 2014). Overall, SGD parents may feel the need to be more active if they perceive a potentially hostile context for their children, yet they are understandably more involved when they feel included with networks of other parents. However, these findings are based on small samples, and further research is needed.

A few studies have investigated the academic or school adjustment of students with SGD parents, focusing on secondary school samples. In a large, geographically diverse sample that included LGBT as well as non-LGBT students, adolescents who identified as LGBT reported that their schools were less safe for students with LGBT parents (Russell et al., 2008). Among all students, those who reported that they had learned about LGBT issues in the school curriculum or who had teachers who intervened in homophobic harassment reported that their schools were safer for students with LGBT parents (Russell et al., 2008). A survey of more than 3,700 Canadian students found that students with an LGBT parent were more likely to report victimization at school and to have skipped school in the past year because they felt unsafe (Peter, Tayor, and Edkins, 2016).

SUMMARY AND CONCLUSIONS

Much of the existing research on sexual and gender diversity in education has focused on experiences of bullying and victimization; however, there is a growing body of research that identifies educational policies and practices associated with positive experiences for SGD students, whether through reducing bullying and victimization or improving school climates. Experiences that SGD students have in school are important not only because negative experiences undermine personal well-being but also because school experiences set the groundwork for educational attainment, future occupational achievement, and socioeconomic status. Because SGD youth are coming out at younger ages, research on school experiences that extends to elementary schools and continues through higher education could help researchers gain a clearer understanding of the way these experiences affect students over their life course.

LGBTQ students are at risk for being victimized by homophobic bullying or by experiencing a hostile campus climate. Although most research has focused on secondary schools, similar patterns of discriminatory behavior have been documented for sexual minority and transgender students in higher education. The majority of LGBT students who experience bullying report negative peer experiences such as victimization, as well as higher rates of suspension or expulsion, which can undermine academic focus and achievement or lead to disengagement at school.

> **CONCLUSION 9-1: Many sexual and gender diverse students experience discrimination or victimization—most commonly, bullying—in educational environments from K–12 through higher education. These experiences are strongly linked to vulnerabilities with respect to mental health, behavioral health, and academic achievement.**

Although no federal law explicitly prohibits discrimination in education based on sexual orientation, gender identity or expression, or intersex characteristics, federal courts and agencies have found that such discrimination may be covered under the federal ban on sex discrimination. State and local K–12 education policies that are inclusive of SGD students and that clearly enumerate characteristics of students who have historically been targets of bullying in the language regarding protection from bullying and discrimination (including sexual orientation and gender identity) are associated with positive school climates and with students' well-being and success. In schools with such policies, teachers are also seen as being more supportive of LGBT students and are more likely to intervene in bullying.

> **CONCLUSION 9-2: The adoption of inclusive and enumerated nondiscrimination and anti-bullying laws and policies is associated with positive school environments for sexual and gender diverse students, as well as students in other marginalized groups. Those laws and policies are also associated with positive student adjustment and achievement.**

When SGD students view school personnel as supportive, they feel safer, have better attendance, and show better school performance. Many teachers and other school personnel are not professionally prepared to intervene in bullying or victimization or to promote school safety for SGD students; furthermore, many teachers work in communities where laws or policies may not support them being assertive about promoting the well-being of SGD students. Schools can use such strategies as professional education and training for teachers, administrators, and other personnel (e.g., bus drivers, cafeteria workers) to improve school experiences and promote a positive school climate for all students.

The presence of a gay-straight alliance at school (regardless of a student's membership) is linked to positive outcomes for LGBT students, and students with access to LGBTQ-related resources are more likely to believe that adults care about them and that teachers are fair.

> **CONCLUSION 9-3: Strategies such as teacher education and training to understand and support sexual and gender diverse students—incorporating resources and curricula to support sexual and gender diverse students and providing opportunities for student engagement in creating positive spaces at their schools—are associated with more positive experiences and outcomes for sexual and gender diverse students.**

Research on lesbian and gay parents and their children has illuminated the issues that parents encounter in their children's schools, as well as the experiences of their children as students. Several small studies of same-sex couple families have shown that they may experience homophobia expressed by teachers and that teachers may exclude those parents from activities or events.

> **CONCLUSION 9-4: In comparison with other parents, sexual and gender diverse parents are equally or more engaged in their children's education. However, many sexual and gender diverse parents experience barriers to engagement in the form of direct or indirect discriminatory experiences.**

REFERENCES

Beemyn, G. (2012). The experiences and needs of transgender community college students. *Community College Journal of Research and Practice, 36*(7), 504–510. doi: 10.1080/10668926.2012.664089.

Bishop, M.D., Mallory, A.B., Gessner, M., Frost, D.M., and Russell, S.T. (2020). School-based sexuality education experiences across three generations of sexual minority people. *The Journal of Sex Research*, 1–11.

Black, D.A., Sanders, S.G., and Taylor, L.J. (2007). The economics of lesbian and gay families. *Journal of Economic Perspectives*, *21*(2), 53–70. doi: 10.1257/jep.21.2.53.

Black, W.W., Fedewa, A.L., and Gonzales, K.A. (2012). Effects of "safe school" programs and policies on the social climate for sexual-minority youth: A review of the literature. *Journal of LGBT Youth*, *9*(4), 321–339.

Burdge, H., Snapp, S., Laub, C., Russell, S.T., and Moody, R. (2013). *Implementing Lessons that Matter: The Impact of LGBTQ-Inclusive Curriculum on Student Safety, Well-Being, and Achievement*. San Francisco, CA: Gay-Straight Alliance Network and Tucson, AZ: Frances McClelland Institute for Children, Youth, and Families at the University of Arizona.

Carpenter, C.S. (2009). Sexual orientation and outcomes in college. *Economics of Education Review*, *28*(6), 693–703. doi: 10.1016/j.econedurev.2007.10.010.

Carpenter, C.S., Eppink, S.T., and Gonzales, G. (2020). Transgender status, gender identity, and socioeconomic outcomes in the United States. *Industrial and Labor Relations Review, 73*(3), 573–599. doi: 10.1177/0019793920902776.

Centers for Disease Control and Prevention. (2018). *Anti-Bullying Policies and Enumeration: An Infobrief for Local Education Agencies*. Available: https://www.cdc.gov/healthyyouth/health_and_academics/bullying/anti_bullying_policies_infobrief-basic.htm.

———. (2019). *School Health Profiles 2018: Characteristics of Health Programs among Secondary Schools*. Available: https://www.cdc.gov/healthyyouth/data/profiles/pdf/2018/CDC-Profiles-2018.pdf.

Chesir-Teran, D., and Hughes, D. (2009). Heterosexism in high school and victimization among lesbian, gay, bisexual, and questioning students. *Journal of Youth and Adolescence, 38*(7), 963–975.

Chmielewski, J.F., Belmonte, K.M., Fine, M., and Stoudt, B.G. (2016). Intersectional inquiries with LGBTQ and gender nonconforming youth of color: Participatory research on discipline disparities at the race/sexuality/gender nexus. In *Inequality in School Discipline* (pp. 171–188). doi: 10.1057/978-1-137-51257-4_10.

Day, J.K., Ioverno, S., and Russell, S.T. (2019). Safe and supportive schools for LGBT youth: Addressing educational inequities through inclusive policies and practices. *Journal of School Psychology*, *74*, 29–43.

Day, J.K., Fish, J.N., Perez-Brumer, A., Hatzenbuehler, M.L., and Russell, S.T. (2017). Transgender youth substance use disparities: Results from a population-based sample. *Journal of Adolescent Health*, *61*(6), 729–735.

Elia, J.P., Tokunaga, J., Venka Simovska, P., and Ros Kane, D. (2015). Sexuality education: Implications for health, equity, and social justice in the United States. *Health Education*, *115*(1), 105–120. doi: 10.1108/HE-01-2014-0001.

Evans, N.J. (2002). The impact of an LGBT safe zone project on campus climate. *Journal of College Student Development, 43*(4), 522–539.

Gates, G.J. (2014). *LGB Families and Relationships: Analyses of the 2013 National Health Interview Survey.* Los Angeles, CA: Williams Institute, UCLA School of Law.

Gartrell, N., Rodas, C., Deck, A., Peyser, H., and Banks, A. (2005). The National Lesbian Family Study: 4. Interviews with the 10-year-old children. *American Journal of Orthopsychiatry*, *75*(4), 518–524.

Goldberg, A.E. (2014). Lesbian, gay, and heterosexual adoptive parents' experiences in preschool environments. *Early Childhood Research Quarterly*, *29*(4), 669–681.

Goldberg, A.E., and Smith, J.Z. (2014). Perceptions of stigma and self-reported school engagement in same-sex couples with young children. *Psychology of Sexual Orientation and Gender Diversity*, *1*(3), 202.

Goldberg, A.E., Black, K.A., Manley, M.H., and Frost, R. (2017a). "We told them that we are both really involved parents": Sexual minority and heterosexual adoptive parents' engagement in school communities. *Gender and Education*, *29*(5), 614–631.

Goldberg, A.E., Black, K., Sweeney, K., and Moyer, A. (2017b). Lesbian, gay, and heterosexual adoptive parents' perceptions of inclusivity and receptiveness in early childhood education settings. *Journal of Research in Childhood Education*, *31*(1), 141–159.

Goodenow, C., Szalacha, L., and Westheimer, K. (2006). School support groups, other school factors, and the safety of sexual minority adolescents. *Psychology in the Schools, 43*(5), 573–589.

Gower, A.L., Forster, M., Gloppen, K., Johnson, A.Z., Eisenberg, M.E., Connett, J.E., and Borowsky, I.W. (2018). School practices to foster LGBT-supportive climate: Associations with adolescent bullying involvement. *Prevention Science*, *19*(6), 813–821.

Graves, K. (2018). A matter of public concern: The First Amendment and equal employment for LGBT educators. *History of Education Quarterly*, *58*(3), 453–460.

Gregory, A., Skiba, R.J., and Noguera, P.A. (2010). The achievement gap and the discipline gap: Two sides of the same coin? *Educational Researcher, 39*(1), 59–68. doi: 10.3102/0013189X09357621.

Greytak, E.A., Kosciw, J.G., and Boesen, M.J. (2013). Putting the "T" in "resource": The benefits of LGBT-related school resources for transgender youth. *Journal of LGBT Youth*, *10*(1–2), 45–63.

Greytak, E.A., Kosciw, J.G., Villenas, C., and Giga, N.M. (2016). *From Teasing to Torment: School Climate Revisited. A Survey of US Secondary School Students and Teachers*. New York: Gay, Lesbian & Straight Education Network (GLSEN).

Haines, B.A., Ajayi, A.A., and Boyd, H. (2014). Making trans parents visible: Intersectionality of trans and parenting identities. *Feminism and Psychology*, *24*(2), 238–247.

Hatzenbuehler, M.L. (2011). The social environment and suicide attempts in lesbian, gay, and bisexual youth. *Pediatrics, 127*(5), 896–903.

Hatzenbuehler, M.L., Birkett, M., Van Wagenen, A., and Meyer, I.H. (2014). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health, 104*(2), 279–286.

Heck, N.C., Livingston, N.A., Flentje, A., Oost, K., Stewart, B.T., and Cochran, B.N. (2014). Reducing risk for illicit drug use and prescription drug misuse: High school gay-straight alliances and lesbian, gay, bisexual, and transgender youth. *Addictive Behaviors*, *39*(4), 824–828.

Herdt, G., Russell, S.T., Sweat, J., and Marzullo, M. (2006). Sexual inequality, youth empowerment, and the GSA: A community study in California. In N. Teunis and G. Herdt (Eds.), *Sexual Inequalities and Social Justice* (pp. 233–251). Berkeley, CA: University of California Press. doi: 10.1525/california/9780520246140.003.0011.

Horn, S.S., and Szalacha, L.A. (2009). School differences in heterosexual students' attitudes about homosexuality and prejudice based on sexual orientation. *International Journal of Developmental Science, 3*(1), 64–79.

Hughes, B.E. (2018). Coming out in STEM: Factors affecting retention of sexual minority STEM students. *Science Advances*, *4*(3), 1–6.

Hunter, J., and Schaecher, R. (1987). Stresses on lesbian and gay adolescents in schools. *Children and Schools*, *9*(3), 180–190.

Ioverno, S., and Russell, S.T. (2020). Homophobic bullying in positive and negative school climates: The moderating role of gender sexuality alliances. *Journal of Youth and Adolescence*, 1–14.

Ioverno, S., Belser, A.B., Baiocco, R., Grossman, A.H., and Russell, S.T. (2016). The protective role of gay-straight alliances for lesbian, gay, bisexual, and questioning students: A prospective analysis. *Psychology of Sexual Orientation and Gender Diversity, 3*(4), 397.

James, S., Herman, J., Rankin, S., Keisling, M., Mottet, L., and Anafi, M.A. (2016). *The Report of the 2015 US Transgender Survey.* Washington, DC: National Center for Transgender Equality.

Johns, M.M., Poteat, V.P., Horn, S.S., and Kosciw, J. (2019a). Strengthening our schools to promote resilience and health among LGBTQ youth: Emerging evidence and research priorities from The State of LGBTQ Youth Health and Wellbeing Symposium. *LGBT Health*, *6*(4), 146–155.

Johns, M.M., Lowry, R., Andrzejewski, J., Barrios, L.C., Demissie, Z., McManus, T., Rasberry, C.N., Robin, L., and Underwood, J.M. (2019b). Transgender identity and experiences of violence victimization, substance use, suicide risk, and sexual risk behaviors among high school students—19 states and large urban school districts, 2017. *Morbidity and Mortality Weekly Report*, *68*(3), 67–71.

Jones, T. (2016). The needs of students with intersex variations. *Sex Education*, *16*(6), 602–618.

Kann, L., Olsen, E.O.M., McManus, T., Harris, W.A., Shanklin, S.L., Flint, K.H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J, Lim, C., Yamakawa, Y., Brener, N., and Zaza, S. (2016). Sexual identity, sex of sexual contacts, and health-related behaviors among students in grades 9–12—United States and Selected Sites, 2015. *Morbidity and Mortality Weekly Report: Surveillance Summaries, 65*(9). Available: https://www.cdc.gov/mmwr/volumes/65/ss/pdfs/ss6509.pdf.

Katz, J., Federici, D., Ciovacco, M., and Cropsey, A. (2016). Effect of exposure to a safe zone symbol on perceptions of campus climate for sexual minority students. *Psychology of Sexual Orientation and Gender Diversity*, *3*(3), 367.

Konishi, C., Saewyc, E., Homma, Y., and Poon, C. (2013). Population-level evaluation of school-based interventions to prevent problem substance use among gay, lesbian and bisexual adolescents in Canada. *Preventative Medicine, 57*(6), 929–933.

Kosciw, J.G., and Diaz, E.M. (2008). *Involved, Invisible, Ignored: The Experiences of Lesbian, Gay, Bisexual and Transgender Parents and Their Children in Our Nation's K–12 Schools*. New York: Gay, Lesbian & Straight Education Network (GLSEN).

Kosciw, J.G., Palmer, N.A., Kull, R.M., and Greytak, E.A. (2013). The effect of negative school climate on academic outcomes for LGBT youth and the role of in-school supports. *Journal of School Violence*, 12(1), 45–63.

Kosciw, J.G., Greytak, E.A., Giga, N.M., Villenas, C., and Danischewski, D.J. (2016). *The 2011 National School Climate Survey: The Experiences of Lesbian, Gay, Bisexual and Transgender Youth in our Nation's Schools*. New York: Gay, Lesbian, & Straight Education Network (GLSEN). Available: https://eric.ed.gov/?id=ED574808.

Kubicek, K., Beyer, W.J., Weiss, G., Iverson, E., and Kipke, M.D. (2010). In the dark: Young men's stories of sexual initiation in the absence of relevant sexual health information. *Health Education & Behavior*, *37*(2), 243–263. doi: 10.1177/1090198109339993.

Kull, R.M., Greytak, E.A., Kosciw, J.G., and Villenas, C. (2016). Effectiveness of school district antibullying policies in improving LGBT youths' school climate. *Psychology of Sexual Orientation and Gender Diversity, 3*(4), 407–415. doi: 10.1037/sgd0000196.

Lee, C. (2002). The impact of belonging to a high school gay/straight alliance. *The High School Journal, 85*(3), 13–26.

Leland, A. (2019). The experiences of LGBT parents and caregivers with their children's schooling: A critical review of the literature. *Planning and Changing*, *48*.

Marx, R.A., and Kettrey, H.H. (2016). Gay-straight alliances are associated with lower levels of school-based victimization of LGBTQ+ youth: A systematic review and meta-analysis. *Journal of Youth and Adolescence*, *45*(7), 1269–1282.

McCormick, A., Schmidt, K., and Clifton, E. (2015). Gay–straight alliances: Understanding their impact on the academic and social experiences of lesbian, gay, bisexual, transgender, and questioning high school students. *Children and Schools*, *37*(2), 71–77.

McCready, L. (2004). Some challenges facing queer youth programs in urban high schools: Racial segregation and de-normalizing whiteness. *Journal of Gay and Lesbian Issues in Education*, *1*, 37–51. doi: 10.1300/J367v01n03_05.

McNeill, T. (2013). Sex education and the promotion of heteronormativity. *Sexualities*, *16*(7), 826–846. doi: 10.1177/1363460713497216.

Meadows, E. (2018). Sexual health equity in schools: Inclusive sexuality and relationship education for gender and sexual minority students. *American Journal of Sexuality Education*, *13*(3), 297–309.

Meyer, I.H., Luo, F., Wilson, B.D., and Stone, D.M. (2019). Sexual orientation enumeration in state antibullying statutes in the United States: Associations with bullying, suicidal ideation, and suicide attempts among youth. *LGBT Health*, *6*(1), 9–14.

Mirza, S., and Bewkes, F. (2019). *Secretary DeVos Is Failing to Protect the Civil Rights of LGBTQ Students. Center for American Progress.* Available: https://cdn.americanprogress.org/content/uploads/2019/07/30073047/LGBTQ-Student-Civil-Rights-9.pdf?_ga=2.78004692.1782947992.1598285317-344120623.1598285317.

Mollborn, S., and Everett, B. (2015). Understanding the educational attainment of sexual minority women and men. *Research in Social Stratification and Mobility*, *41*, 40–55. doi: 10.1016/j.rssm.2015.04.004.

Movement Advancement Project. (2020). *Equality Maps: School Safety Laws*. Available: http://www.lgbtmap.org/equality-maps/safe_school_laws.

Murchison, G. R., Agénor, M., Reisner, S.L., and Watson, R.J. (2019). School restroom and locker room restrictions and sexual assault risk among transgender youth. *Pediatrics*, *143*(6), e20182902.

Mustanski, B., Greene, G.J., Ryan, D., and Whitton, S.W. (2015). Feasibility, acceptability, and initial efficacy of an online sexual health promotion program for LGBT youth: The Queer Sex Ed intervention. *The Journal of Sex Research*, *52*(2), 220–230.

National Academies of Sciences, Engineering, and Medicine. (2016). *Preventing Bullying Through Science, Policy, and Practice*. Washington, DC: The National Academies Press.

———. (2019). *The Promise of Adolescence: Realizing Opportunity for All Youth*. Washington, DC: The National Academies Press.

O'Shaughnessy, M., Russell, S., Heck, K., Calhoun, C., and Laub, C. (2004). *Safe Place to Learn: Consequences of Harassment Based on Actual or Perceived Sexual Orientation and Gender Non-Conformity and Steps for Making Schools Safer.* San Francisco: California Safe Schools Coalition.

Pachankis, J.E., and Hatzenbuehler, M.L. (2013). The social development of contingent self-worth in sexual minority young men: An empirical investigation of the "best little boy in the world" hypothesis. *Basic and Applied Social Psychology*, *35*(2), 176–190. doi: 10.1080/01973533.2013.764304.

Pascoe, C.J. (2011). *Dude, You're a Fag: Masculinity and Sexuality in High School*. Berkeley: University of California Press.

Perez-Brumer, A., Day, J.K., Russell, S.T., and Hatzenbuehler, M.L. (2017). Prevalence and correlates of suicidal ideation among transgender youth in California: Findings from a representative, population-based sample of high school students. *Journal of the American Academy of Child and Adolescent Psychiatry*, *56*(9), 739–746.

Peter, T., Taylor, C., and Edkins, T. (2016). Are the kids all right? The impact of school climate among students with LGBT parents. *Canadian Journal of Education*, *39*(1).

Pearson, J., and Wilkinson, L. (2017). Same-sex sexuality and educational attainment: The pathway to college. *Journal of Homosexuality*, *64*(4), 538–576. doi: 10.1080/00918369.2016.1194114.

Poteat, V.P., Scheer, J.R., and Chong, E.S.K. (2016). Sexual orientation-based disparities in school and juvenile justice discipline: A multiple group comparison of contributing factors. *Journal of Educational Psychology, 108*(2), 229–241. doi: 10.1037/edu0000058.

Poteat, V.P., Scheer, J.R., and Mereish, E.H. (2014). Factors affecting academic achievement among sexual minority and gender-variant youth. In *Advances in Child Development and Behavior*, Volume 47 (pp. 261–300). New York: JAI.

Poteat, P.V., Sinclair, K.O., Digiovanni, C.D., Koenig, B.W., and Russell, S.T. (2013). Gay-straight alliances are associated with student health: A multischool comparison of LGBTQ and heterosexual youth. *Journal of Research on Adolescence*, *23*(2), 319–330. doi: 10.1111/j.1532-7795.2012.00832.x.

Poteat, V.P., Yoshikawa, H., Calzo, J.P., Gray, M.L., DiGiovanni, C.D., Lipkin, A., Mundy-Shephard, A., Perrotti, J., Scheer, J.R., and Shaw, M.P. (2015). Contextualizing gay-straight alliances: Student, advisor, and structural factors related to positive youth development among members. *Child Development*, *86*, 176–193. doi: 10.1111/cdev.12289.

Poteat, V.P., Heck, N.C., Yoshikawa, H., and Calzo, J.P. (2016). Greater engagement among members of gay-straight alliances. *American Educational Research Journal*, *53*, 1732–1758. doi: 10.3102/0002831216674804.

Poteat, V.P., Calzo, J.P., Yoshikawa, H., Rosenbach, S.B., Ceccolini, C.J., and Marx, R.A. (2019). Extracurricular settings as a space to address sociopolitical crises: The case of discussing immigration in Gender-Sexuality Alliances following the 2016 US presidential election. *American Educational Research Journal*, *56*(6), 2262–2294.

Poteat, V.P., Godfrey, E.B., Brion-Meisels, G., and Calzo, J.P. (2020). Development of youth advocacy and sociopolitical efficacy as dimensions of critical consciousness within gender-sexuality alliances. *Developmental Psychology*, *56*(6), 1207.

Rankin, S.R. (2005). Campus climates for sexual minorities. *New Directions for Student Services, 111*. doi: 10.1002/ss.170.

Rankin, S.R. and Garvey, J. (2015). Identifying, quantifying, and operationalizing queer-spectrum and trans-spectrum students: Assessment and research in student affairs. *New Directions for Student Services*, *2015*(152), 73–84.

Rankin, S., and Reason, R. (2006). College students' experiences and perceptions of harassment on campus: An exploration of gender differences. *College Student Affairs Journal*, *26*(1), 7–29.

Rofes, E.E. (1993). Making our schools safe for sissies. *The High School Journal*, *77*(1/2), 37–40.

Russell, S.T., and Horn, S.S. (Eds.). (2016). *Sexual Orientation, Gender Identity, and Schooling: The Nexus of Research, Practice, and Policy*, Volume 1. New York: Oxford University Press. doi: 10.1093/med:psych/9780199387656.001.0001.

Russell, S.T., Seif, H., and Truong, N.L. (2001). School outcomes of sexual minority youth in the United States: Evidence from a national study. *Journal of Adolescence*, *24*(1), 111–127.

Russell, S.T., Kostroski, O., McGuire, J.K., Laub, C., and Manke, E. (2006). LGBT issues in the curriculum promotes school safety. *Safe Schools Research Brief*, *4*. San Fransisco: California Safe Schools Coalition.

Russell, S.T., McGuire, J.K., Lee, S.A., Larriva, J.C., and Laub, C. (2008). Adolescent perceptions of school safety for students with lesbian, gay, bisexual, and transgender parents. *Journal of LGBT Youth*, *5*(4), 11–27.

Russell, S.T., Horn, S., Kosciw, J., and Saewyc, E. (2010). Safe schools policy for LGBTQ students and commentaries. *Social Policy Report*, 24(4), 1–25.

Russell, S.T., Sinclair, K.O., Poteat, V.P., and Koenig, B.W. (2012). Adolescent health and harassment based on discriminatory bias. *American Journal of Public Health*, 102(3), 493–495.

Saewyc, E.M., Konishi, C., Rose, H.A., and Homma, Y. (2014). School-based strategies to reduce suicidal ideation, suicide attempts, and discrimination among sexual minority and heterosexual adolescents in western Canada. *International Journal of Child, Youth and Family Studies*, *5*(1), 89–112. doi: 10.1167/iovs.07-1072.

Sansone, D. (2019). LGBT students: New evidence on demographics and educational outcomes. *Economics of Education Review*, *73*(April), 101933. doi: 10.1016/j.econedurev.2019.101933.

Schmidt, C.K., Miles, J.R., and Welsh, A.C. (2011). Perceived discrimination and social support: The influences on career development and college adjustment of LGBT college students. *Journal of Career Development*. doi: 10.1177/0894845310372615.

Seelman, K.L., Walls, N.E., Hazel, C., and Wiskneski, H. (2012). Student school engagement among sexual minority students: Understanding the contributions to predicting academic outcomes. *Journal of Social Service Research, 38*(1), 3–17.

Snapp, S.D., Burdge, H., Licona, A.C., Moody, R.L., and Russell, S.T. (2015a). Students' perspectives on LGBTQ-inclusive curriculum. *Equity and Excellence in Education*, *48*(2), 249–265.

Snapp, S.D., McGuire, J.K., Sinclair, K.O., Gabrion, K., and Russell, S.T. (2015b). LGBTQ-inclusive curricula: Why supportive curricula matter. *Sex Education*, *15*(6), 580–596.

Swanson, K., and Gettinger, M. (2016). Teachers' knowledge, attitudes, and supportive behaviors toward LGBT students: Relationship to Gay-Straight Alliances, antibullying policy, and teacher training. *Journal of LGBT Youth, 13*(4), 326–351.

Szalacha, L.A. (2003). Safer sexual diversity climates: Lessons learned from an evaluation of Massachusetts Safe Schools Program for Gay and Lesbian Students. *American Journal of Education*, *110*(1), 58–88. doi: 10.1086/377673.

Toomey, R.B., McGuire, J.K., and Russell, S.T. (2012). Heteronormativity, school climates, and perceived safety for gender nonconforming peers. *Journal of Adolescence*, *35*(1), 187–196.

Toomey, R.B., Ryan, C., Diaz, R.M., and Russell, S.T. (2011). High school gay–straight alliances (GSAs) and young adult well-being: An examination of GSA presence, participation, and perceived effectiveness. *Applied Developmental Science*, *15*(4), 175–185.

Ueno, K., Roach, T.A., and Peña-Talamantes, A.E. (2013). The dynamic association between same-sex contact and educational attainment. *Advances in Life Course Research*, *18*(2), 127–140. doi: 10.1016/j.alcr.2012.09.002

Walls, N.E., Freedenthal, S., and Wisneski, H. (2008). Suicidal ideation and attempts among sexual minority youths receiving social services. *Social Work*, *53*(1), 21–29.

Walls, N.E., Kane, S.B., and Wisneski, H. (2010). Gay-straight alliances and school experiences of sexual minority youth. *Youth and Society*, *41*(3), 307–332.

Walls, N.E., Wisneski, H., and Kane, S. (2013). School climate, individual support, or both? Gay–straight alliances and the mental health of sexual minority youth. *School Social Work Journal*, *37*(2), 88–111.

Watson, R.J., and Russell, S.T. (2016). Disengaged or bookworm: Academics, mental health, and success for sexual minority youth. *Journal of Research on Adolescence*, *26*(1), 159–165.

Weinhardt, L.S., Stevens, P., Xie, H., Wesp, L.M., John, S.A., Apchemengich, I., Kioko, D., Chavez, Korell, S., Cochran, K.M., Watjen, J.M., and Lambrou, N.H. (2017). Transgender and gender nonconforming youths' public facilities use and psychological well-being: A mixed-method study. *Transgender Health*, *2*(1), 140–150.

Wimberly, G. (Ed.) (2015). *LGBTQ issues in Education: Advancing a Research Agenda*. American Educational Research Association.

Wright, T.E., and Smith, N.J. (2015). A safer place? LGBT educators, school climate, and implications for administrators. *The Educational Forum, 79*(4), 394–407.

10

Economic Well-Being

The health, well-being, and quality of life of sexual and gender diverse (SGD) populations are significantly affected by the economic systems in which they live, develop, and work. Socioeconomic status and educational, employment, and housing opportunities are important measures of well-being. They are also connected to family, health, community, and other aspects of well-being addressed elsewhere in this report. This chapter explores what is known and not known about the economic well-being of SGD populations, and it identifies essential economics research needs. It examines how specific SGD populations fare with respect to economic well-being, focusing on individuals' and families' economic security and access to necessary resources that sustain and enhance life. In the United States, most of those resources or goods and services come from the marketplace, requiring purchases using income acquired through earnings from employment, benefits from a public assistance program, or income derived from sources of wealth. Accordingly, this chapter addresses what is known about income, wealth, and poverty, looking at differences based on sexual orientation and gender identity.

The chapter also discusses several factors that are likely to affect income and wealth. As a complement to the discussion of education in Chapter 9 and the discussion of health in Chapter 11—two areas that contribute to the skills and knowledge that an individual has to offer in the labor market, known as human capital (Goldin, 2016)—this chapter adds a discussion of individual occupational attainment. It considers the dynamics of SGD families and households (one or more adults with or without children living together), the attainment of an adequate or equal standard of living for SGD people in comparison with heterosexual and cisgender people, and barriers to that attainment, such as discrimination.

SOCIOECONOMIC STATUS

Overall, studies that measure socioeconomic status as earnings, household income, poverty, and occupational attainment reveal a complex picture of the economic well-being of SGD populations. The research primarily compares people who identify as lesbian, gay, or bisexual with those who identify as heterosexual, or it compares transgender people with those who are cisgender. Much evidence suggests that bisexual and transgender people have lower incomes and higher poverty than lesbian, gay, and cisgender heterosexual people (Badgett, 2018; Badgett, Choi, and Wilson, 2019; Carpenter, Eppink, and Gonzales, 2020). Lesbian women and gay men may have mitigated some of the effects of discrimination on earnings and household income through adaptive strategies in education, occupations, and family decisions, but they still face discrimination in the labor force (Valfort, 2017).

Individual Income from Earnings

Research on individual earnings suggests that, after controlling for differences in income-related characteristics, gay and bisexual men earn less than heterosexual men and that lesbian and bisexual women earn less than heterosexual men but more than heterosexual women (Klawitter, 2015; Valfort, 2017). Recent research suggests that the lower earnings of bisexual men might be driving those general patterns for men, but the research is not conclusive on this point (Carpenter, 2005; Mize, 2016; Sabia, 2014). Some evidence suggests that the wage gap for men might be diminishing over time, but these observations are preliminary and have not been confirmed.

These general findings have been made possible by the growing availability of datasets that have measures of income along with measures of sexual orientation or gender identity, thus improving researchers' ability to analyze income differences. Some datasets have behavioral measures of sexual orientation (the sex of one's sexual partners), and others have measures of self-identity (gay, lesbian, bisexual, or transgender). Many datasets that lack sexual orientation questions do contain household rosters that allow the identification of people with same-sex partners, as in the U.S. census, the American Community Survey (ACS), and the Current Population Survey (U.S. Census Bureau, n.d.). Those datasets expand researchers' ability to compare economic outcomes between people in same-sex couples and people with different-sex partners, but they do not include single people. Other significant data gaps remain. Some samples of older SGD populations are too small for analysis or for detailed comparisons by race or ethnicity.

In addition, no probability-based surveys with individual income measures include questions on transgender status or people with intersex traits, so less is known about the economic status of those groups.

Making comparisons of income among sexual orientation and gender identity categories is a complex task. For example, a recent study of incomes in the 2013–2015 National Health Interview Survey (NHIS) reported average annual earnings; they were $39,903 for heterosexual women but $38,803 for bisexual women and $47,026 for lesbian women. Earnings were $57,033 for heterosexual men, $49,766 for bisexual men, and $59,618 for gay men (Carpenter and Eppink, 2017). However, such simple comparisons of average earnings may be misleading, as differences in the characteristics of groups, such as a higher average education level or different ages, confound observed earnings differences across groups. Accordingly, the rest of this section reviews research from economics and sociology that accounts for other influences on earnings, such as race, sex, age, education, and experience.

Earnings differences by sexual orientation were examined in a recent meta-analysis of 31 studies conducted through 2012, of which 69 percent were from the United States (Klawitter, 2015). After adjusting for key factors that influence earnings, these studies found that, on average, gay and bisexual men earn 11 percent less than comparable heterosexual men, with ranges of 11–16 percent lower wages in the United States and 0–30 percent lower for all countries. The biggest gaps were seen in studies using data on same-sex couples. Earnings for lesbian and bisexual women were nine percent higher than those for heterosexual women on average (the "lesbian premium"). The range of estimates for women was wider than for men, partly because the studies analyzed only full-time workers: differences in earnings between lesbian and bisexual women and heterosexual women ranged from 5 to 15 percent higher earnings for lesbian and bisexual women in the United States and from 25 percent lower earnings to 43 percent higher earnings in studies from all countries.

In general, recent studies continue to find negative earnings gaps for gay and bisexual men (Burn, 2019; Valfort, 2017). However, one U.S. study found a different earnings pattern for gay men in comparison with heterosexual men. An analysis of data from the 2013–2015 NHIS, including more than 1,300 self-identified lesbian, gay, and bisexual people (Carpenter and Eppink, 2017), found that, after controlling for race, age, education, partnership, children, region, and job characteristics, both lesbian women and gay men earned more than their heterosexual counterparts. One possible reason for the unusual finding for men is that the NHIS data did not include a variable for living in an urban area. That variable is important, since urban areas have higher wages and more gay men (Denier and Waite, 2019). More recent studies on earnings differences for lesbian and bisexual women show mixed results: some studies report higher earnings for them than for heterosexual women (Burn, 2019; Valfort, 2017); other studies report lower earnings (Curley, 2018; Martell, 2019; Martell and Hansen, 2017). For example, one study using data from the ACS found that women under 45 who have female partners have lower earnings than women with male partners, while women over 45 with female partners have the lesbian "earnings premium" (Martell, 2019).

While most studies reviewed by Klawitter (2015) and Valfort (2017) combined gay or lesbian people with bisexual people and compared the combined group to heterosexual men or women, some studies have been able to estimate separate effects for being bisexual and lesbian or gay people. Two such studies found that bisexual men and women (but not gay men or lesbian women) appear to earn less than heterosexuals and less than gay or lesbian people (Carpenter, 2005; Mize, 2016). In contrast, two other studies found either small or insignificant earnings differences for bisexual men and women compared with heterosexuals (Carpenter and Eppink, 2017; Sabia, 2014).

Some researchers have considered specifically whether the sexual orientation effects on income have fallen over time in the United States. Findings from these studies are inconclusive due to design weaknesses, including confounding, small sample sizes, and failure to report the statistical significance of reported differences (Clarke and Sevak, 2013; Cushing-Daniels and Yeung, 2009; Elmslie and Tebaldi, 2014; Klawitter, 2015; Martell and Hansen, 2017).

Interpretations of Earnings Data

The interpretation of reported wage differences by sexual orientation or gender identity is challenging for several reasons: LGBT people are a heterogeneous population, and the effects may be subgroup specific; studies have used different data sources; time periods vary; and the study designs limit extrapolations.

One possible interpretation is that discrimination accounts for some of the observed wage gaps for gay and bisexual men (Badgett, 1995; Blandford, 2003). A recent study found that the wage gap is larger for men in same-sex couples who live in states with more people who are prejudiced against homosexuals (Burn, 2019). Another study argued that discrimination was an unlikely explanation for the observed pay gap among some bisexual people because they are unlikely to be known as bisexual, such as bisexual men with female partners (Sabia, 2014). Finally, a few studies have estimated the effect of statewide employment nondiscrimination laws on wage gaps, finding some evidence that states with those laws have lower earnings gaps for gay men (Burn, 2018; Klawitter, 2011).

A second potential interpretation of earnings differences relates to the household division of labor, or how families, particularly couples, divide up paid work and household work responsibilities. Those decisions directly affect how much time an individual devotes to hours worked in the paid labor market and to earnings, as well as how much individuals invest in building the human capital that may increase earnings over time (Becker, 1991). People who are partnered with or expect to partner with a person of the same sex might make different decisions about education, training, experience, and careers than those who plan to partner with a different-sex partner (Antecol and Steinberger, 2013; Badgett, 1995; Black, Sanders, and Taylor, 2007).

Some analysts have argued that gay men will not expect to support a partner and children, so they will invest less in labor market–specific human capital than heterosexual men, reducing gay men's earnings (Black et al., 2003). However, as noted in Chapter 9, measures of actual investment in education do not support this argument.

The thesis about the household division of labor may better fit the common, although not universal, pattern of higher earnings for lesbian and bisexual women. Lesbian and bisexual women might expect not to have a higher earning (male) partner who might be expected to provide for them. This expectation might result in greater investment in their own education, training, and experience, thereby raising their wages above those of heterosexual women (Badgett, 2001; Black et al., 2003). However, although studies that report a lesbian premium did control for education, they did not directly measure labor market experience, requiring researchers to use a proxy (age minus years of education minus five). It is possible that researchers might be underestimating the gap in actual experience between lesbian and heterosexual women, which would make lesbian women look like they have higher earnings. The lack of inclusion of measures of sexual and gender diversity in longitudinal surveys has prevented more detailed comparisons of earnings at different stages of life for SGD people, as well as better insight into measuring labor market experience.

Given the gaps and weaknesses in the available data, studies use novel strategies to approximate the sexual orientation difference in labor market experience and explore whether the lesbian premium is related to greater commitment to and experience in the paid labor market. Two studies showed that the return on one year of potential experience is higher for lesbian women than for heterosexual women (Daneshvary, Waddoups, and Wimmer, 2008; Jepsen, 2007), supporting the idea that lesbian women have more unmeasured human capital than heterosexual women. Also, the wage premium is largest for lesbian women who do not have a bachelor's degree, and it disappears for those with higher levels of education, perhaps because heterosexual women with higher levels of education are also more committed to the labor market (Daneshvary, Waddoups, and Wimmer, 2008). Notably, the premium is higher for women in same-sex couples who were never married to men (Daneshvary, Waddoups, and Wimmer, 2009). Overall, it appears plausible that lesbian women have higher earnings because of a greater commitment to the paid labor force, an adaptation that might also counteract a potential negative effect of discrimination on lesbian women's wages.

Overall, making generalizations about the individual earnings of LGBT people is very difficult, and future research is warranted to understand the causes of earnings differences. While the first generation of wage gap studies found a consistent penalty in the United States (and other countries) for gay and bisexual men, more recent studies are less consistent and occasionally find that only bisexual men earn significantly less than heterosexual men. Studies for lesbian and bisexual women have always found a wide range of values, with most U.S. studies showing higher earnings than heterosexual women but lower earnings than gay, bisexual, and heterosexual men, demonstrating the complexity of interpreting wages in the context of a highly gendered labor market.

Intersectionality

The wage effects of sexual orientation and gender identity may not be uniform across gender, race, and ethnicity, immigration status, or disability status given the intersecting effects of those personal characteristics, although there has been little research on intersectionality in economic outcomes. Three studies provide direct evidence that cisgender women and SGD people of color are worse off in terms of income than are their male or white counterparts. Two of these three studies used data on same-sex and different-sex couples from the ACS, which has the largest sample sizes of people presumed to be lesbian, gay, or bisexual (del Río and Alonso-Villar, 2019a; Douglas and Steinberger, 2015). Other sources of data have samples too small to support detailed comparisons by race and ethnicity.

Four perspectives demonstrate the variation in the effects of sexual orientation by gender, race, and ethnicity. First, one study showed that white LGB people earned more than Black, Hispanic, and Asian LGB people with the same characteristics, except for Asian lesbian women and Hispanic gay men (del Río and Alonso-Villar, 2019a; Douglas and Steinberger, 2015). Second, lesbian and bisexual women of all races earn less than their same-race male counterparts (del Río and Alonso-Villar, 2019a). Third, all lesbian women earn more than their same-race heterosexual female counterparts, but studies vary in findings about which group of lesbian women has the largest wage premium (Carpenter and Eppink, 2017; del Río and

Alonso-Villar, 2019a; Douglas and Steinberger, 2015). Fourth, a sexual orientation penalty consistently exists for white, Hispanic, and Asian gay men compared with same-race heterosexual men, but the relative earnings of Black gay men vary by study (del Río and Alonso-Villar, 2019a; Douglas and Steinberger, 2015). Relative to white heterosexual men, Black gay men have the largest earnings gap, followed by Hispanic, Asian, and then white gay men (del Río and Alonso-Villar, 2019a).

Household Income

Because members of households or families are likely to share income, it is useful to know how household income compares across sexual orientation or gender identity. However, there are only a few studies of LGBT household income that control for other predictors of income, which is important for making appropriate comparisons.

Studies of same-sex couples suggest that the gender composition of couples matters greatly. Married different-sex couples and male same-sex couples have the highest household incomes, while female same-sex couples and unmarried different-sex couples have the lowest (Black, Sanders, and Taylor, 2007; Klawitter, 2011). One recent study found that bisexual men had lower household incomes than heterosexual men (Chai and Maroto, 2019). Among couples in which one or both partners were 65 or older, female same-sex couples had significantly lower levels of income than either older male same-sex couples or older married different-sex couples (Goldberg, 2009).

Only one study assessed household income differences by gender identity (Carpenter, Eppink, and Gonzales, 2020). After taking into account differences in the number of adults in the household, health, education, age, race, and other characteristics, transgender women's household income was 17 percent lower and transgender men's income 9 percent lower than cisgender people's household income. However, the income difference was only statistically significant for the transgender women.

Poverty and Economic Insecurity

In the United States, people are classified as poor if their household income falls below the official poverty line for their family size and age configuration (Semega et al., 2019). A growing body of research suggests that at least some groups in the LGBT population—notably, transgender people and bisexual people—have a higher risk of poverty than heterosexual cisgender people. On average, lesbian women and gay men appear to be equally likely to be poor as heterosexuals, although some groups show a higher risk of poverty. In addition to these and similar measures of poverty, this section also addresses food insecurity and other markers of having insufficient income to provide for human needs that suggest a higher level of economic insecurity for LGBT people.

The findings on relative poverty differ somewhat between studies using data on couples and those using data on self-identity among individuals. First, couple comparison studies have mostly found higher poverty rates for female same-sex couples than for women in married different-sex couples, but lower poverty rates for male same-sex couples than for men in married different-sex couples (Albelda et al., 2009; Badgett, 2018; Badgett, Durso, and Schneebaum, 2013; Prokos and Keene, 2010; Schneebaum and Badgett, 2019). However, studies using ACS or census data also found that, after controlling for other predictors of being poor, such as education, employment, region, residence in a rural area, and race, both male and female same-sex couples are at greater risk of being poor than married different-sex couples.

Second, data on self-identified LGBT people show that bisexual and transgender people are more at risk and lesbian women and gay men at equal risk of poverty compared with heterosexual-identified people. One study pooled 2013–2016 NHIS data that included 2,600 self-identified LGB people (Badgett, 2018); the poverty rate was 14.3 percent for heterosexual women, 13.8 percent for lesbian women, and 27.3 percent for bisexual women; and the poverty rate was 11.0 percent for heterosexual men, 11.7 percent for gay men, and 22.9 percent for bisexual men. After controlling for other predictors, lesbian women and gay men were as likely to be poor as heterosexual people, but bisexual women and men were significantly more likely to be poor than heterosexuals with the same demographic, health, education, and other characteristics.[1] A recent study of data from the Behavioral Risk Factor Surveillance System (BRFSS) also found a similar risk of poverty for lesbian women, gay men, and bisexual men compared with their heterosexual counterparts and a significantly higher risk of poverty for bisexual women (Badgett, Choi, and Wilson, 2019).

Transgender people are much more vulnerable to poverty than are cisgender heterosexual, lesbian, and gay people according to two analyses of BRFSS data (Badgett, Choi, and Wilson, 2019; Carpenter, Eppink, and Gonzales, 2020). The poverty rate for transgender men was 33.7 percent, for transgender women 29.6 percent, and for gender-nonconforming people 23.8 percent; in comparison, the rate for cisgender heterosexual men was 13.4 percent, and for cisgender heterosexual women it was 17.8 percent

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[1] It is important to note, however, that the public-use NHIS dataset used in this study does not include a measure of urban residence, where wages are higher. As a result, the greater urban concentration of gay men than heterosexual men, in particular, could bias the poverty difference for gay men in the multivariable analysis.

(Badgett, Choi, and Wilson, 2019). After controlling for predictors of poverty, transgender people (combined) had 70 percent higher odds of being poor than cisgender heterosexual men and 38 percent higher odds of being poor than cisgender heterosexual women. Similarly, the 2015 U.S. Transgender Survey (USTS), which is a large, purposive, community-based sample, found that one-third of transgender and gender-nonconforming adult respondents were living in poverty (James et al., 2016).

In addition to disaggregating the LGBT population, some research provides insights into subgroups of the LGBT population who are at greater or lesser risk of poverty.

- LGB people in couples, especially married couples, are less likely to be poor than single LGB people, based on 2013–2016 NHIS data (Badgett, 2018). These differences by marital status could reflect selection into marriage or the poverty-reducing effects of marriage.
- Same-sex couples and lesbian and bisexual women with children are more likely to be poor than childless couples or LGB women (Badgett, 2018; Brown, Manning, and Payne, 2016; Schneebaum and Badgett, 2019). Also, the poverty rates for same-sex couples raising children were twice as high as the rates for married different-sex couples raising children (Albelda et al., 2009; Badgett, Durso, and Schneebaum, 2013).
- Blacks who identify as LGBT or are in same-sex couples have higher poverty rates than white LGBT people or same-sex couples and higher rates than non-LGBT Blacks (Badgett, Choi, and Wilson, 2019; Badgett, Durso, and Schneebaum, 2013).
- People whose sex assigned at birth is female—women in same-sex couples and lesbian women generally, as well as transgender men—have higher rates of poverty than do all groups of cisgender men (Badgett, Choi, and Wilson, 2019).
- Among LGBT people, 26 percent living in rural areas are poor, compared with 21 percent of those living in urban areas (Badgett, Choi, and Wilson, 2019).
- In data from Washington state, LGB people 50 and older are as likely as heterosexuals to have incomes that are less than or equal to 200 percent of the poverty level (Fredriksen-Goldsen et al., 2013). Almost half (47 percent) of transgender people 50 and older had similarly low incomes in a recent survey (Fredriksen-Goldsen et al., 2014).

Relatedly, several characteristics that are more common for LGB people may provide some protection from poverty, most notably higher levels of education and labor force participation, a lower probability of having children, and living in urban areas (Badgett, Choi, and Wilson, 2019; Schneebaum and Badgett, 2019). Each of those factors tends to reduce the risk of poverty in general and therefore contributes to reducing the potential gap between LGB and heterosexual poverty rates.

The research on poverty is corroborated by other measures that indicate economic insecurity. An analysis from the National Longitudinal Study of Adolescent to Adult Health found that female sexual minorities were more likely than heterosexual women to have personal incomes in the near-poverty range (100–199 percent of the poverty level); both sexual minority women and men were more likely than heterosexuals to have experienced economic hardship in the past 12 months (such as unpaid rent or utility bills) (Conron, Goldberg, and Halpern, 2018).

Receiving means-tested benefits is another marker of economic insecurity. Same-sex couples are more likely to receive cash or cash-like public assistance benefits (such as Temporary Assistance to Needy Families and the Supplemental Nutrition Assistance Program [SNAP, food stamps]) than are married different-sex couples (Badgett, Durso, and Schneebaum, 2013). Using several population-based surveys between 2011 and 2014, one study found that LGBT adults are more likely to report food insecurity and more likely to participate in the SNAP program than are non-LGBT adults (Brown, Romero, and Gates, 2016). Disparities were higher among bisexual people, women, young adults, and people of color. Other data also suggest that LGBT people overall have higher rates of use of Medicaid and SNAP than non-LGBT people (Rooney, Whittington, and Durso, 2018). Little is known about how low-income SGD populations are treated when seeking services and public assistance, but given the existence of bias in other economic settings, it is possible bias would also exist in public services. Policy simulations suggest that raising the minimum wage and reducing gender and racial wage gaps would reduce LGBT poverty (Badgett and Schneebaum, 2015, 2016).

These research studies have focused on economic insecurity, but many related topics are either mostly or completely unexplored (Burwick et al., 2014). For example, only a few studies have attempted to identify economic issues for aging LGBT people. Surveys show that the LGBT population is young and growing among younger cohorts (see Chapter 3), but older cohorts have faced different historical contexts and might have diminished social and financial resources in retirement, requiring particular policies and services (Fredriksen-Goldsen, 2016). In addition, very little is known about the pathways into poverty or the barriers to leaving poverty for SGD populations. Higher take-up rates for means-tested programs might also disguise differences in treatment and experiences of LGBT people: exploring this issue would require administrative data and other research efforts. No research has focused on how inclusive or effective human services and programs are for LGBT adults, nor have studies assessed the effectiveness of other services that are more directly targeted to low-income LGBT people. There has also been little systematic research about the interactions between poverty and the criminal justice system (Hunter, McGovern, and Sutherland, 2018). Finally, one in five respondents to the USTS reported that they had worked in the underground economy at some time in their lives, particularly in the sex or drug trades (James et al., 2016). A small body of available research links participation in survival economic work with arrests and incarceration (Fitzgerald, Elspeth, and Hickey, 2015; James et al., 2016) and social services discrimination (Bakko, 2019).

Occupational Attainment and Segregation

People's occupations provide an additional indicator of socioeconomic status. Only a few studies have directly addressed this issue, finding that LGB people have different occupational patterns than do heterosexuals (del Río and Alonso-Villar, 2019a, 2019b; Pearson and Wilkinson, 2017; Tilcsik, Anteby, and Knight, 2015; Ueno, Peña-Talamantes, and Roach, 2013; Ueno, Vaghela, and Nix, 2018). These differing patterns of occupational attainment by an ascribed status, like gender identity and sexual orientation, are generally called occupational segregation. Occupational segregation matters because occupation is an important determinant of earnings, and it also reflects the inclusiveness of labor markets for SGD populations.

The studies of earnings discussed above usually controlled for occupation in their analyses, and several of them also highlighted that LGB people are overrepresented or underrepresented in particular occupational categories when compared with non-LGBT people (Antecol, Jong, and Steinberger, 2008; Badgett, 1995; Baumle, Compton, and Poston, 2009). One study analyzing detailed occupational data for same-sex partners and different-sex partners in the ACS found clear patterns of occupation segregation: 22.5 percent of people in same-sex couples would have to change their occupations in order to have the same occupational distribution as the overall economy, compared with only 9 percent of people in different-sex couples who would have to change (del Río and Alonso-Villar, 2019b).

Researchers are divided about whether occupational segregation by sexual orientation is a positive or negative outcome. For example, one consistent finding across studies is that gender plays a smaller role in the sorting of LGB individuals into occupations than it does for heterosexual people (Badgett and King, 1997; Baumle, Compton, and Poston, 2009; del Río and Alonso-Villar, 2019b; Ueno, Roach, and Peña-Talamantes, 2013). More specifically, lesbian and bisexual women are in occupations with a higher percentage of men than are heterosexual women; gay and bisexual men are in occupations with a higher percentage of women than are heterosexual men. These patterns might be seen as positive if LGB people feel less constrained by early socialization or by gendered expectations about appropriate occupations than do heterosexual men and women. However, stereotyping and discrimination may also generate gendered barriers that shape those patterns. For instance, gay and bisexual men are less likely to be hired into jobs requiring stereotypically masculine characteristics (such as being assertive or aggressive), and lesbian and bisexual women are less likely to be hired when employers seek stereotypically feminine characteristics (such as being cheerful or gentle) (Ahmed, Andersson, and Hammarstedt, 2013; Drydakis, 2015; Tilcsik, 2011).

Stigma may also shape occupational choices of sexual and gender minorities in other ways. Compared with heterosexual people, LGB people are found in occupations that involve more task independence and social perceptiveness, which might protect them against discrimination and harassment if they were to disclose their sexual orientation (Martell, 2018; Tilcsik, Anteby, and Knight, 2015). Also, some evidence from Australia and the United States suggests that LGB people seek out occupations where they will have more tolerant coworkers (Badgett and King, 1997; Plug and Webbink, 2014).

One way to assess whether occupational segregation is benign would be to see its effect on earnings, and two studies suggest that this relationship is complicated by the role of education in both occupational attainment and income. The occupational patterns of men in same-sex couples tend to raise their earnings relative to the average for people in different-sex couples, while women in same-sex couples get only a tiny bump in earnings from their occupational patterns (del Río and Alonso-Villar, 2019b). However, those gains are largely because of individuals' relatively high education levels. After controlling for education and other relevant characteristics, the gains from occupations shrink for men in same-sex couples and are negative for women of all races in same-sex couples. Also, those gains are not the same across race, and it is mainly white and Asian people in same-sex couples who gain from occupational sorting, while Black and Hispanic people in same-sex couples are in occupations that tend to reduce their earnings relative to all earners (del Río and Alonso-Villar, 2019a). A study of one young cohort found that young women who had sexual contact with women in young adulthood had lower status occupations (measured by education and income in occupations) than those with early sexual contact or no sexual contact with women, at least partly because of lower levels of education (Ueno, Peña-Talamantes, and Roach, 2013). In contrast, young men who had dating relationships with men in young adulthood were in higher status occupations than men without same-sex dating or those with early same-sex dating, at least partly because of their higher education levels.

In sum, research has established differences in occupational patterns across sexual orientation. But the research on how and why sexual and gender diversity shape occupational segregation is at an early stage. Further research will be necessary to distinguish the extent to which occupational segregation reflects stigma-related stereotyping and barriers or reflects greater freedom from gender stereotypes.

WORKFORCE ISSUES

Employment Discrimination

Research conducted over several decades has found that SGD populations face stigma and unequal treatment in the workforce. Assessments of discrimination toward SGD employees come in a variety of forms, but there are as yet no studies in the United States of discrimination against people with intersex traits. Self-reports of discrimination show that many LGBT people perceive that they have been treated unequally in the workforce. For example, findings from a 2017 survey using a national probability sample of more than 3,400 LGBT adults showed that one in five reported experiencing discrimination associated with their LGBT status when applying for a job (National Public Radio, 2017). A 2017 study of federal agencies in the fields of science, technology, engineering, and mathematics found that LGBT employees reported more negative workplace experiences than their non-LGBT colleagues (Cech and Pham, 2017). More than 9,000 people filed charges of employment discrimination based on either sexual orientation or gender identity discrimination with state and federal nondiscrimination agencies over the 2013–2016 period (Baumle, Badgett, and Boutcher, 2019).

The 2015 USTS includes substantial self-reporting of workplace discrimination by transgender and gender-nonconforming people: 19 percent report being fired, denied a promotion, or not getting hired due to their gender identity or expression (James et al., 2016). Other studies of nonrandom samples of transgender people reveal a range of workplace experiences when transitioning (Brewster et al., 2014; Dietert and Dentice, 2010; Lombardi and Malouf, 2001; Ruggs et al., 2015). In some cases, transgender workers report having supportive workplaces and positive experiences, while others have more negative experiences, including coworkers' refusal to use proper pronouns and negative treatment for deviating from gender norms. One study compared non-binary transgender people to transgender men and transgender women, finding that transgender women often reported the worst workplace outcomes in terms of unemployment, underemployment, and discrimination (Davidson, 2016).

Several audit studies that consider employer responses to resumes provide additional evidence of employment discrimination. These studies involve carefully constructed experiments to see if applicants who are sexual and gender minorities, as indicated primarily by activities on a resume, are treated differently than cisgender heterosexual applicants. A large U.S. study found that openly gay men in many states were less likely to be invited to a first-round interview than otherwise identical straight men (Tilcsik, 2011). That study implied that a gay man would have to apply to 14 jobs to get an interview while a heterosexual man would have to apply for only 9. A similar result was found for LGBT women in the United States (Mishel, 2016). A third experiment found evidence that racial and sexual stereotypes might interact in unexpected ways: Black gay male job applicants were seen as less threatening and as deserving of higher salaries than Black heterosexual male job candidates (Pedulla, 2014). However, transgender people in New York City who applied in person for jobs were significantly less likely to receive job offers for retail sales positions than cisgender applicants with comparable fictionalized resumes (Make the Road New York, 2010). Studies in other countries also find potentially discriminatory hiring practices for gay men and lesbian women in Sweden and the United Kingdom and for transgender people in four Asian countries (Ahmed, Andersson, and Hammarstedt, 2013; Drydakis, 2015; Winter et al., 2018). A challenge associated with experimental designs that focus on reaction to resumes is that they are generally limited to entry-level positions; assessments of discrimination at later career stages are limited.

Other possible evidence of employment discrimination comes from disparities in the probability of unemployment, defined as being available and searching for a job. Analyses of population-based data from Gallup show that 9 percent of LGBT-identified adults report being unemployed compared with 5 percent of non-LGBT adults. The 2015 USTS found that 15 percent of transgender and gender-nonconforming adult respondents said they were unemployed (James et al., 2016), and another study shows that, after controlling for other predictors of unemployment in BRFSS data, transgender people were more likely than cisgender men to be unemployed (Carpenter, Eppink, and Gonzales, 2020). In general, the research base is too thin to draw conclusions about unemployment disparities.

Many important research topics are understudied related to the experiences of LGBT people in the workplace. Expanding the research base will be necessary to better identify the sources of disadvantage and to design and evaluate interventions to reduce discrimination. Such research might include analyzing variation in the experiences of SGD populations by other important characteristics, such as race and ethnicity; variation by geographic location, in relation to policy and attitudes; and variation by industry and occupation. Research that studies the attitudes and behaviors of supervisors and coworkers of LGBT people might provide additional insights.

Compensation Discrimination

SGD populations experience compensation discrimination in the workplace, which includes unequal treatment between same-sex and different-sex couples regarding health insurance benefits and parental leave and access to transition-related care for transgender populations. Prior to the national legalization of marriage for same-sex couples in 2015, several studies documented disparities in access to health insurance among same-sex couples and their children (Ash and Badgett, 2006; Buchmueller and Carpenter, 2010, 2012; Heck, Sell, and Gorin, 2006; Ponce et al., 2010), with larger disparities for Hispanic men, Black women, and Native American and Alaskan women (Gilbert and Ortiz, 2015; Gonzales and Blewett, 2013). Both qualitative and quantitative studies have shown that LGBT employees in some firms formed "employee resource groups" that were influential in convincing employers to offer domestic partner benefits to employees with same-sex partners (Badgett, 2001; Raeburn, 2004; Briscoe and Safford, 2008; Creed, Douglas, and Scully, 2000), and unions sometimes bargained for these benefits (Boris, 2010; Holcomb, 1999). Access to the right to marry appears to have reduced disparities in health insurance among same-sex couples (Carpenter et al., 2018), although the research is too preliminary to draw strong conclusions.

More generally, several studies have documented changes in access to insurance coverage among SGD populations in relation to passage of the Affordable Care Act (ACA). In 2013, prior to the full implementation of the ACA, 34 percent of a nationally representative sample of LGBT people making less than $45,000 per year were uninsured (Baker, Durso, and Cray, 2014). Uninsurance among LGBT people in this income bracket dropped to 26 percent in 2014 and to 22 percent in 2017 (Baker and Durso, 2017). Data from the Health Reform Monitoring Survey similarly indicated that the share of LGB adults without health insurance across all income ranges decreased from 21.7 percent to 11.1 percent between 2013 and 2015 (Karpman, Skopec, and Long, 2015). Still, a 2017 analysis of Gallup data found that LGBT-identified adults remained less likely to report having health insurance than their non-LGBT counterparts (15 percent and 12 percent, respectively), though this finding did not account for age differences in the two populations: LGBT-identified individuals were younger.[2] (See more detailed discussion in Chapter 12 on health care access.)

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[2] See https://williamsinstitute.law.ucla.edu/visualization/lgbt-stats/?topic=LGBT#economic.

For transgender people, insurance exclusions for transition-related care have historically been a common problem in employer plans. In 2012, the Corporate Equality Index began to require self-insured employers to remove these exclusions from their employee benefits in order to receive a full score. By 2019, 62 percent of Fortune 500 employers, representing a 16-fold increase since 2010, had eliminated transgender exclusions from the coverage they offer their employees (Human Rights Campaign, 2019). The Federal Employees Health Benefits Program required participating carriers to eliminate transgender exclusions in 2016 (U.S. Office of Personnel Management, n.d.), and at least 17 state governments and the District of Columbia also offer employee benefits that include transition-related care (Movement Advancement Project, 2020). In a related trend, several courts have found that transgender exclusions in employer-sponsored insurance violate Title VII of the federal Civil Rights Act, which bans sex discrimination in employment, as well as Section 1557 of the ACA, which bans sex discrimination in health care and insurance (Glasser and Labbees, 2018).

Access to Military Service

Research suggests that military service can be a route to better economic outcomes, especially for marginalized populations, and the military is a large employer of SGD people (Martorell et al., 2014; Routon, 2014). Estimates from a 2010 study suggested that 2.2 percent of active and reserve forces in the U.S. military were lesbian, gay, or bisexual (Gates, 2010). A 2014 study estimated that 0.6 percent of U.S. active and reserve forces are transgender. The lifting of the "don't ask, don't tell" policy in 2010 meant that lesbian, gay, and bisexual individuals could serve openly in the U.S. military, but transgender individuals are currently banned from military service. The economic effects on individual LGBT people of both the lifting of the "don't ask, don't tell" policy and the continuation of the ban on transgender people are unknown. Given the research suggesting positive economic benefits of military service among marginalized populations, it seems reasonable to assume that the ban on transgender military service effectively closes an avenue for economic advancement for this already economically disadvantaged population.

Workplace Disclosure of Sexual Orientation and Gender Identity

Another important factor in assessing the effects of workplace discrimination is the degree to which SGD populations are "out" in their workplace environments. A 2013 population-based survey of LGBT adults conducted by the Pew Research Center found that, even though one-half of employed LGBT adults think their workplace is accepting of LGBT employees, only one-third say they are open to most of their work colleagues about their sexual orientation or gender identity. Openness about sexual orientation is much higher among lesbian women and gay men (50 percent and 48 percent, respectively) than bisexual individuals (11 percent). Notably, LGBT adults are more out to family and friends than to their work colleagues. More than half of respondents said they were out to all or most of the important people in their lives. However, like the responses about the workplace, lesbian women and gay men were far more likely to be out (71 percent and 77 percent, respectively) than their bisexual counterparts (28 percent). However, the research base on workplace disclosure and its relationship to economic outcomes is very thin, at least in part because large-scale surveys that include sexual orientation and gender identity questions do not also include questions on workplace disclosure. Future research could approach disclosure as both an outcome variable that measures the workplace climate and as an explanatory variable that may predict other outcomes, such as experiencing discrimination, wage gaps, job turnover, and productivity.

Nondiscrimination Policies

Employment discrimination against public-sector workers is prohibited by the Equal Protection Clause of the Fourteenth Amendment. Until the Supreme Court's *Bostock vs. Clayton County* decision in 2020, the status of protection against private-sector discrimination was uncertain, even though coverage had been extended by federal agencies and some federal courts (see Chapter 5). Between 2013 and 2016, more than 9,000 people filed charges of employment discrimination with state and federal nondiscrimination agencies on the basis of either sexual orientation or gender identity discrimination (Baumle, Badgett, and Boutcher, 2019). Enforcement agencies might increase the likelihood of a charge being filed when employees believe they face discrimination by making filing methods more transparent and accessible, as some European human rights agencies have attempted (Organization for Economic Cooperation and Development [OECD], 2020).

Evidence suggests that laws banning workplace discrimination based on sexual orientation have positive economic effects for sexual minority populations. Studies prior to 2020 found that gay men and men in same-sex couples saw lower wage gaps in locations where there was a state anti-discrimination law (Klawitter, 2011). An audit study of resumes found lower levels of discrimination toward gay men in states with anti-discrimination laws (Tilcsik, 2011). A more recent study also found that state anti-discrimination laws are associated with increased wages for gay men, but it also found an association with decreased employment among lesbian women (Burn, 2018). Additional research is needed into the policy effects on other economic outcomes, as well as exploring more directly the effects of nationwide nondiscrimination laws on transgender people and on groups within LGBT populations. Early research on the effects of marriage equality suggests that such a policy change may be linked to higher rates of employment, more mortgage applications, and more health insurance coverage (Carpenter et al., 2018; Downing and Cha, 2020; Miller and Park, 2018; Sansone, 2019).

Some businesses and other private-sector employers have implemented their own sexual orientation and gender identity nondiscrimination protections that cover employees regardless of state of residence. In some cases, qualitative research suggests those changes in policy emerged because of direct pressure from the employer's own employees (Badgett, 2001; Raeburn, 2004) or from unions, as noted above. As of the writing of this report, 93 percent of Fortune 500 companies have sexual orientation nondiscrimination policies, and 91 percent of Fortune 500 companies had gender identity protections (Human Rights Campaign, 2020). Other "best practices" by employers in the United States and globally include equal benefits, internal training on employer policies, prejudice-reduction trainings, clear guidelines for gender transitions, and employee resource groups (Human Rights Campaign, 2020; OECD, 2020).

Private-sector workplaces that have policies that affirm the inclusion of SGD people and prohibit discrimination based on sexual orientation and gender identity are associated with positive outcomes for both the businesses and their employees. A review of 36 studies using nonprobability samples found that LGBT-supportive policies and affirming workplace climates are often associated with greater job commitment, improved workplace relationships, increased job satisfaction, and improved health outcomes among LGBT employees (Badgett et al., 2013). LGBT employees also reported an association between LGBT-affirming organizations and less discrimination and more openness. Comparisons of companies with and without LGBT-inclusive policies show that more inclusive companies report higher stock prices, return on assets, productivity, and more patents (Gao and Zhang, 2016; Johnston and Malina, 2008; Li and Nagar, 2013; Pichler et al., 2018; Shan, Fu, and Zheng, 2017; Wang and Schwarz, 2010).

HOUSING

Access to housing is another measure of economic well-being. This topic has received much less research attention than issues of employment, but it is important for several reasons. First, housing is a necessary resource to sustain life, and evidence of high rates of homelessness for LGBT young people indicates a pressing social and individual problem. Second, home ownership is both a means to obtain housing and an asset that makes up a significant part of wealth for people in the United States, and evidence of disparities in home ownership between same-sex couples and different-sex couples have implications for differences in the wealth of SGD populations. Third, because of stigma, SGD populations may face barriers in the markets for credit and rental housing. Data on housing outcomes with measures of sexual orientation and gender identity (or other SGD markers) are limited, so the body of research reviewed in this section includes existing studies of population-based data, but it relies heavily on nonprobability samples and experiments to study disadvantages related to housing.

Homelessness

Existing studies show an elevated risk of homelessness among LGBT youth. An analysis of data from eight states using the population-based Youth Risk Behavior Survey found that LGB youth were twice as likely as their non-LGB counterparts to experience homelessness (Cutuli, Treglia, and Herbers, 2019). Surveys of homeless youth service providers also indicate elevated risks of homelessness among LGBTQ youth, with a higher risk among youths of color. Providers have reported that LGBTQ youth experience longer periods of homelessness than their non-LGBTQ counterparts, and service patterns suggest particular increases in transgender youth accessing services for homelessness (Choi et al., 2015). A systematic review of literature identified four main themes associated with LGBTQ+ homelessness: stigma, discrimination, and exclusion; mental health issues and substance use; sexual risks and vulnerability; and interventions and supports (McCann and Brown, 2019).

Studies of adult homelessness among the LGBT population reveal that adult LGBTQ+ people are also vulnerable to homelessness. In one recent study based on nationally representative samples, 3 percent of sexual minority and 8 percent of transgender adults reported having experienced homelessness in the previous 12 months, compared with only 1 percent of cisgender heterosexual adults (Wilson et al., 2020). A recent systematic literature review found that many homeless LGBT adults have challenges associated with HIV and substance use (Ecker, Aubry, and Sylvestre, 2019).

Evidence suggests that adult homelessness may be particularly acute among transgender and gender-nonconforming populations. In the USTS, nearly one-third of respondents reported having ever experienced homelessness, and 12 percent reported being homeless within the past year (James et al., 2016). The New York state 2015 LGBT Health and Human Services Needs Assessment, a community survey of nearly 3,800 people, found that transgender respondents were substantially more likely to report housing insecurity (50 percent), defined as having difficulty paying for housing accommodation, than they were to report having ever been homeless

(31 percent) (Frazer and Howe, 2015). The New York study highlights a potential gap in the literature addressing homelessness issues among SGD populations, which focuses on a limited assessment of variation in forms of homelessness (e.g., sleeping outdoors, group shelters, "couch surfing" with friends or acquaintances) and rarely considers the extent or effects of housing insecurity. Transgender and gender-nonconforming adults in homelessness systems have reported experiencing frequent concerns regarding safety and gender-affirming supports. One study found that most shelters were not willing to house a transgender homeless woman in accordance with her gender identity (Rooney, Durso, and Gruberg, 2016).

Home Ownership and Wealth

Home ownership is both a source of housing services and an important source of wealth. Some research finds that LGBT populations have lower home ownership rates than cisgender heterosexual people. The 2015 USTS found only 16 percent of transgender and gender-nonconforming adult respondents indicated that they owned their homes, compared with more than 60 percent of all U.S. adults (James et al., 2016). Same-sex couples and sexual minorities are less likely to be homeowners than are heterosexuals after controlling for income and demographic factors (Conron, Goldberg, and Halpern, 2018; Jepsen and Jepsen, 2009; Leppel, 2007). More recent analyses still find lower home ownership rates among married same-sex couples than their married different-sex counterparts, but unmarried cohabiting same-sex couples are more likely to own their homes than unmarried different-sex couples (Gates, 2015). A 2016 study suggests that the introduction of legal marriage for same-sex couples has led to increases in mortgage applications among same-sex couples (Miller and Park, 2018).

Differences in home ownership can be associated with a wide array of possible disparities related to sexual and gender diversity. A gap in ownership rates can be a sign of discrimination in mortgage lending practices. Evidence suggests that same-sex couples experience mortgage discrimination. In a large-scale study of mortgage lending data, same-sex couples were 73 percent more likely than different-sex couples to be denied a mortgage, and they were charged up to 0.2 percent higher fees or interest rates. Also, a neighborhood's higher same-sex couple population density adversely affects both same-sex and different-sex borrowers' lending experiences (Sun and Gao, 2019). A gap could also be a sign of housing insecurity, meaning that SGD populations are more likely than others to lack sufficient resources to buy a home. Finally, differences in home ownership rates offer evidence of differences and possible disparities in asset and wealth accumulation.

Research that considers disparities in asset accumulation and wealth associated with SGD populations is rare. Population-based data resources to comprehensively assess these issues do not exist. Although home ownership is occasionally measured, no major U.S. national population-based survey that measures assets and wealth includes measurements of sexual orientation and gender identity, creating a large knowledge gap that requires further research. This gap in knowledge about wealth is particularly problematic for assessing the economic well-being of aging SGD populations, who may receive fewer transfers of wealth from unsupportive families of origin and may have fewer children to count on for unpaid assistance with their needs in old age.

Discrimination in Rental Housing

Research shows that rental-related housing discrimination associated with sexual orientation and gender identity exists, but the extent of that discrimination is not well documented. Findings from the 2011 National Transgender Discrimination Survey (NTDS) and the 2015 USTS show substantial self-reporting of housing discrimination. The NTDS found that 19 percent of respondents reported having ever been refused a home or apartment, and 11 percent reported being evicted because of their gender identity or expression (Grant, Mottet, and Tanis, 2011). Nearly one-quarter (23 percent) of USTS respondents said they had experienced housing discrimination in the past year, which included evictions and being denied a home or apartment because of their transgender or gender-nonconforming status (James et al., 2016). Findings from an internet-based U.S. probability sample of lesbian, gay, and bisexual adults showed that 10 percent reported experiencing housing discrimination, with gay men and lesbian women reporting more discrimination than their bisexual counterparts (Herek, 2009).

In studies other than self-reports, researchers have found differential treatment of LGBT people in experiments that compare responses to LGBT people to those of non-LGBT people at key stages of the rental process, particularly in the initial response to a rental ad. Using telephone and in-person paired testing, two fair housing organizations found differential treatment between LGBTQ individuals and their heterosexual cisgender counterparts (Equal Rights Center, 2014; Fair Housing Centers of Michigan, 2007). A study sponsored by the U.S. Department of Housing and Urban Development (HUD) found that same-sex male couples were significantly less likely than their different-sex couple counterparts to receive email responses from housing providers (Friedman et al., 2013). A separate academic study of email responses to inquiries about rental listings on Craigslist found discrimination against male same-sex couples, with the largest amount of discrimination against Black and Hispanic male couples (where race was designated through names) (Schwegman, 2019). The treatment of Black male couples was less unequal in states that ban discrimination against sexual orientation in housing. The Black male couples also received fewer positive responses from property owners. Studies in Sweden and Canada have also found differential treatment between same-sex male and different-sex couples (Ahmed and Hammarstedt, 2009; Lauster and Easterbrook, 2011). One audit study of senior housing in 10 states found that same-sex couples experienced adverse differential treatment in comparison with different-sex couples in almost half of the tests conducted (Equal Rights Center, 2014).

The Urban Institute used in-person, telephone, and email testing to conduct one of the most recent and largest studies of LGBT-related housing discrimination in three metropolitan areas: Dallas-Fort Worth, Los Angeles, and Washington, D.C. (Levy et al., 2017). Their paired-testing study (funded by HUD) assessed differences between same-sex and different-sex couples and differences between transgender and genderqueer individuals compared with their cisgender counterparts. As with other studies, this study found more evidence of differential and discriminatory treatment among men in same-sex couples than among women in same-sex couples. Providers told gay men about fewer available rental units and were slightly less likely to schedule an appointment with them. Gay men were also quoted higher average yearly costs than were heterosexual men. Treatment of same-sex couples, regardless of gender, did not differ much by race or city. Relative to cisgender testers, transgender testers were told about fewer units. Of note, the Urban Institute study was considered a pilot test of methodologies used to assess differential treatment based on sexual orientation and gender nonconformity. The study included several tests of different approaches with regard to selection of testers, disclosure of sexual orientation or gender identity, and a comparison of email and in-person assessments of discrimination.

SUMMARY AND CONCLUSIONS

The social science research on the economic well-being of SGD populations has focused mainly on comparisons of lesbian, gay, and bisexual people with heterosexual people. More recently, data on transgender people have allowed for some comparisons with cisgender populations. The research, which has analyzed earnings, household income, poverty, education, and occupational attainment, reveals a picture of economic inequality for LGBT people. Some research is at an early stage or is limited by currently available data. Accordingly, this chapter notes many unmet data needs and research opportunities. In particular, interventions that may currently exist to enhance well-being and to reduce inequality for SGD groups in these economic contexts are inadequate and untested. However, several general findings on economic well-being emerge from the existing research.

Evidence suggests that transgender people—and possibly bisexual people—have lower incomes and higher poverty than lesbian, gay, and cisgender heterosexual people. Lesbian women and gay men may have mitigated some of the effects of discrimination on earnings and household income through adaptive strategies in education, occupations, and family decisions, but they still face discrimination in the labor force. Research on individual earnings suggests that, after controlling for differences in income-related characteristics, gay and bisexual men earn less than heterosexual men, while lesbian and bisexual women earn less than heterosexual men but more than heterosexual women.

These general findings have been made possible by the growing availability of datasets that have measures of income as well as measures of sexual orientation or gender identity, thus improving the ability to analyze income differences by sexual orientation and gender identity. However, significant data gaps remain. Some samples are too small for analysis of older SGD populations or for detailed comparisons by race or ethnicity. In addition, no probability-based surveys with individual income measures include questions on transgender people or people with intersex traits. Some researchers have asked specifically whether sexual orientation effects on income have fallen over time in the United States. Findings from these studies are inconclusive.

Poverty and economic insecurity are more common among LGBT people than among cisgender, heterosexual people. Poverty rates are higher for female same-sex couples and lower for male same-sex couples than for married different-sex couples, which at least partly reflects the gender composition of the couple. But after adjusting for other predictors of being poor, both male and female same-sex couples are at greater risk of being poor than married different-sex couples. Among self-identified single and coupled LGBT people, bisexual and transgender people are more at risk of poverty and lesbian and gay people are at equal risk of poverty than self-identified heterosexual cisgender people of the same sex. Some groups within the LGBT population are at greater risk of poverty or low-income status: unmarried people, people with children, Black people, people living in rural areas, and people over age 50. Some studies suggest that food and housing insecurity are greater among LGBT people than among cisgender heterosexual people.

CONCLUSION 10-1: There is clear evidence of economic inequality for sexual and gender diverse populations. Economic vulnerabilities are greater for certain groups, including transgender people, bisexual people, lesbian women, and LGBT people of color. However, very little is known about how low-income SGD populations are treated when seeking services and public assistance, or about intersectional inequalities associated with race, ethnicity, and disability status.

In the workforce, lesbian and bisexual women are in occupations with a higher percentage of men than are heterosexual women; gay and bisexual men are in occupations with a higher percentage of women than are heterosexual men. These patterns might be seen as positive if LGB people feel less constrained by gendered expectations about appropriate occupations than do heterosexual men and women. However, stereotyping and discrimination may also generate gendered barriers that shape those patterns. Access to the right to marry appears to have reduced disparities in health insurance among same-sex couples, and changes in access to insurance coverage among SGD populations in relation to passage of the ACA have improved conditions for previously uninsured individuals.

Studies based on self-report data show that many LGBT people perceive that they have been treated unequally in the workforce. Many individual employers have created their own voluntary nondiscrimination policies. SGD populations have also experienced compensation and benefit discrimination in the workplace. In 2020, the Supreme Court held that discrimination based on sexual orientation or gender identity is prohibited by Title VII, the federal law that is part of the 1964 Civil Rights Act (*Bostock v. Clayton County*). The efficacy of this clarity about nationwide anti-discrimination protections will depend on how well federal and state agencies and courts carry out its mandate.

> **CONCLUSION 10-2: Sexual and gender diverse people face discrimination in employment. The Supreme Court's affirmation that Title VII prohibits such discrimination is new, and the improvement of outcomes for sexual and gender diverse people in the workplace will be contingent on effective enforcement.**

Access to housing is another measure of economic well-being for sexual and gender diverse populations, but data on housing outcomes with measures of sexual orientation and gender identity are somewhat limited. Those limited data show significant disparities for SGD people.

There is a greater risk of homelessness among LGBTQ youth, with elevated risk for LGBTQ youth of color, than other youth. Adult homelessness may be particularly acute among transgender and gender-nonconforming populations. There are four main factors associated with LGBTQ homelessness: stigma, discrimination, and exclusion; mental health issues and substance use; sexual risks and vulnerability; and a lack of access to interventions and supports.

Some research finds that LGBT populations have lower home ownership rates than cisgender heterosexual people. Differences in home ownership can be associated with a wide array of possible disparities related to sexual and gender diversity and can point to discrimination in mortgage lending practices. Differences in home ownership rates offer evidence of possible disparities in asset and wealth accumulation, but there are no population-based data that comprehensively assess these issues.

Because of stigma, SGD populations may also face barriers in the markets for credit and rental housing. Nearly a quarter of respondents to the 2015 U.S. Transgender Survey said they had experienced housing discrimination in the past year, and there is evidence of more differential and discriminatory treatment among men in same-sex couples than among women in same-sex couples.

> **CONCLUSION 10-3: Sexual and gender diverse people face discrimination in the housing market, with evidence showing differential treatment of LGBT applicants for rental housing and mortgages. LGBT youth have an elevated risk of homelessness, and sexual and gender diverse adults may also be at risk.**

Many outstanding questions about the economic well-being of SGD people can be addressed with enhanced research that addresses known disparities and data gaps. For instance, research on lifetime workforce experience could measure the effects of labor force participation and human capital differences on income differences for SGD populations. Research on the influences on occupational attainment could address the roles of gender and sexuality stereotypes, preferences, barriers, and workplace characteristics. As access to health care is a critical component of well-being, it is important to also study how the provision of LGBT-relevant health care benefits, including same-sex partner benefits and transition-related care benefits, affect SGD communities.

Much more research is needed to assess the economic well-being of transgender people, non-binary people, and people with intersex traits. From wealth and asset accumulation to homelessness and housing insecurity, there is much more to be understood about how certain economic conditions affect SGD populations, particularly for groups identified as having bigger economic challenges, such as people in rural areas, older SGD people, and SGD people of color.

REFERENCES

Ahmed, A.M., and Hammarstedt, M. (2009). Detecting discrimination against homosexuals: Evidence from a field experiment on the Internet. *Economica, 76*(303), 588–597.

Ahmed, A.M., Andersson, L., and Hammarstedt, M. (2013). Are gay men and lesbians discriminated against in the hiring process? *Southern Economic Journal, 79*(3), 565–585. doi: 10.4284/0038-4038-2011.317.

Albelda, R., Badgett, M.V.L., Schneebaum, A., and Gates, G.J. (2009). *Poverty in the Lesbian, Gay, and Bisexual Community*. Los Angeles, CA: Williams Institute, UCLA School of Law.

Antecol, H., and Steinberger, M.D. (2013). Labor supply differences between married heterosexual women and partnered lesbians: A semi-parametric decomposition approach. *Economic Inquiry*, *51*(1), 783–805. doi: 10.1111/j.1465-7295.2010.00363.x.

Antecol, H., Jong, A., and Steinberger, M. (2008). The sexual orientation wage gap: The role of occupational sorting and human capital. *Industrial and Labor Relations Review, 61*(4), 518–543.

Ash, M.A., and Badgett, M.V.L. (2006). Separate and unequal: The effect of unequal access to employment-based health insurance on same-sex and unmarried different-sex couples. *Contemporary Economic Policy, 24*(4), 582–599. doi: 10.1093/cep/byl010.

Badgett, M.V.L. (1995). The wage effects of sexual orientation discrimination. *Industrial and Labor Relations Review, 48*(4), 726–739.

———. (2001). *Money, Myths, and Change: The Economic Lives of Lesbians and Gay Men.* Chicago: University of Chicago Press.

———. (2018). Left out? Lesbian, gay, and bisexual poverty in the U.S. *Population Research and Policy Review, 37*(5), 667–702. doi: 10.1007/s11113-018-9457-5.

Badgett, M.V.L., and King, M.C. (1997). Occupational strategies of lesbians and gay men. In A. Gluckman and B. Reed (Eds.), *Homo Economics: Capitalism, Community, and Lesbian and Gay Life*. New York: Routledge.

Badgett, M.V.L., and Schneebaum, A. (2015). *The Impact of Wage Equality on Sexual Orientation Poverty Gaps*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Wage-Equality-LGB-Poverty-Gap-Jun-2015.pdf.

———. (2016). *The Impact of a $15 Minimum Wage on Poverty Among Same-Sex Couples.* Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Min-Wage-SS-Couples-Sep-2016.pdf.

Badgett, M.V.L., Choi, S.K., and Wilson, B.D.M. (2019). *LGBT Poverty in the United States: A Study of Differences between Sexual Orientation and Gender Identity Groups*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/National-LGBT-Poverty-Oct-2019.pdf.

Badgett, M.V.L., Durso, L.E., and Schneebaum, A. (2013). *New Patterns of Poverty in the Lesbian, Gay, and Bisexual Community*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: http://williamsinstitute.law.ucla.edu/wp-content/uploads/LGB-Poverty-Update-Jun-2013.pdf.

Badgett, M.V.L., Durso, L.E., Kastanis, A., and Mallory, C. (2013). *The Business Impact of LGBT-Supportive Workplace Policies*. Los Angeles, CA: Williams Institute, UCLA School of Law.

Baker, K.E., and Durso, L.E. (2017). *Why Repealing the Affordable Care Act Is Bad Medicine for LGBT Communities*. Center for American Progress. Available: https://www.americanprogress.org/issues/lgbtq-rights/news/2017/03/22/428970/repealing-affordable-care-act-bad-medicine-lgbt-communities.

Baker, K.E., Durso, L.E., and Cray, A. (2014). *Moving the Needle: The Impact of the Affordable Care Act on LGBT communities*. Center for American Progress. Available: https://www.americanprogress.org/issues/lgbtq-rights/news/2017/03/22/428970/repealing-affordable-care-act-bad-medicine-lgbt-communities.

Bakko, M. (2019). The effect of survival economy participation on transgender experiences of service provider discrimination. *Sexuality Research and Social Policy, 16*(3), 268–277.

Baumle, A.K., Badgett, M.V.L., and Boutcher, S. (2019). New research on sexual orientation and gender identity discrimination: Effect of state policy on charges filed at the EEOC. *Journal of Homosexuality*, *67*(8), 1135–1144. doi: 10.1080/00918369.2019.1603494.

Baumle, A.K., Compton, D., and Poston, Jr., D.L. (2009). *Same-Sex Partners: The Social Demography of Sexual Orientation.* Albany: State University of New York Press.

Becker, G. (1991). *A Treatise on the Family.* Cambridge, MA: Harvard University Press.

Black, D.A., Sanders, S.G., and Taylor, L.J. (2007). The economics of lesbian and gay families. *Journal of Economic Perspectives, 21*(2), 53–70. doi: 10.1257/jep.21.2.53.

Black, D.A., Makar, H.R., Sanders, S.G., and Taylor, L.J. (2003). The earnings effects of sexual orientation. *Industrial and Labor Relations Review*, *56*(3), 449. doi: 10.2307/3590918.

Blandford, J.M. (2003). The nexus of sexual orientation and gender in the determination of earnings. *Industrial and Labor Relations Review, 56*(4), 622–642. doi: 10.2307/3590960.

Boris, M. (2010). Fighting for equal treatment. *Labor Studies Journal*, *3*(2), 157–180.

Brewster, M.E., Mennicke, A., Velez, B.L., and Tebbe, E. (2014). Voices from beyond: A thematic content analysis of transgender employees' workplace experiences. *Psychology of Sexual Orientation and Gender Diversity, 1*(2), 159–169. doi: 10.1037/sgd0000030.

Briscoe, F., and Safford, S. (2008). The Nixon-in-China Effect: Activism, imitation, and the institutionalization of contentious practices. *Administrative Science Quarterly*, *53*, 460–491.

Brown, S.L., Manning, W.D., and Payne, K.K. (2016). Family structure and children's economic well-being: Incorporating same-sex cohabiting mother families. *Population Research and Policy Review*, *35*(1), 1–21. doi: 10.1007/s11113-015-9375-8.

Brown, T.N.T., Romero, A.P., and Gates, G.J. (2016). *Food Insecurity and SNAP Participation in the LGBT Community*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: http://williamsinstitute.law.ucla.edu/wp-content/uploads/Food-Insecurity-and-SNAP-Participation-in-the-LGBT-Community.pdf.

Buchmueller, T.C., and Carpenter, C.S. (2010). Disparities in health insurance coverage, access, and outcomes for individuals in same-sex versus different-sex relationships, 2000-2007. *American Journal of Public Health*, *100*(3), 489–495. doi: 10.2105/AJPH.2009.160804.

———. (2012). The effect of requiring private employers to extend health benefit eligibility to same-sex partners of employees: Evidence from California. *Journal of Policy Analysis and Management, 31*(2), 388–403. doi: 10.1002/pam.

Burn, I. (2018). Not all laws are created equal: Legal differences in state non-discrimination laws and the impact of LGBT employment protections. *Journal of Labor Research, 39*(4), 462–947. doi: 10.1007/s12122-018-9272-0.

———. (2019). The relationship between prejudice and wage penalties for gay men in the United States. *Industrial and Labor Relations Review, 73*(3), 650–675. doi: 10.1177/0019793919864891.

Burwick, A., Gary, G., Baumgartner, S., and Friend, D. (2014). *Human Services for Low-Income and At-Risk LGBT Populations: An Assessment of the Knowledge Base and Research Needs. OPRE Report Number 2014-79*. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Available: https://www.acf.hhs.gov/sites/default/files/opre/lgbt_hsneeds_assessment_reportfinal1_12_15.pdf.

Carpenter, C.S. (2005). Self-reported sexual orientation and earnings: Evidence from California. *Industrial and Labor Relations Review, 58*(2), 258–273.

Carpenter, C.S., and Eppink, S.T. (2017). Does it get better? Recent estimates of sexual orientation and earnings in the United States. *Southern Economic Journal, 84*(2), 426–441. doi: 10.1002/soej.12233.

Carpenter, C.S., Eppink, S.T., and Gonzales, G. (2020). Transgender status, gender identity, and socioeconomic outcomes in the United States. *Industrial and Labor Relations Review*, *73*(3), 573–599.

Carpenter, C., Eppink S.T., Gonzales, G., and McKay, T. (2018). Effects of access to legal same-sex marriage and health: Evidence from BRFSS. *National Bureau of Economic Research Working Paper 24651*. Cambridge, MA: National Bureau of Economic Research. Available: https://www.nber.org/papers/w24651.

Cech, E.A., and Pham, M.V. (2017). Queer in STEM organizations: Workplace disadvantages for LGBT employees in STEM related federal agencies. *Social Sciences, 6*(1), 12. doi: 10.3390/socsci6010012.

Chai, L., and Maroto, M. (2019). Economic insecurity among gay and bisexual men: Evidence from the 1991–2016 U.S. General Social Survey. *Sociological Perspectives, 63*(1), 50–68 doi: 10.1177/0731121419849100.

Choi, S.K., Wilson, B.D.M., Shelton, J., and Gates, G.J. (2015). *Serving Our Youth 2015: The Needs and Experiences of Lesbian, Gay, Bisexual, Transgender, and Questioning Youth Experiencing Homelessness*. Los Angeles: Williams Institute with True Colors Fund.

Clarke, G., and Sevak, P. (2013). The disappearing gay income penalty. *Economics Letters*, *121*(3), 542–545. doi: 10.1016/j.econlet.2013.10.018.

Conron, K.J., Goldberg, S.K., and Halpern, C.T. (2018). Sexual orientation and sex differences in socioeconomic status: A population-based investigation in the National Longitudinal Study of Adolescent to Adult Health. *Journal of Epidemiology and Community Health*, *27*(11), 1016–1026. doi: 10.1136/jech-2017-209860.

Creed, W., Douglas, E., and Scully, M.A. (2000). Songs of ourselves: Employees' deployment of social identity in workplace encounters. *Journal of Management Inquiry*, *9*(4), 391–412.

Curley, C. (2018). Sexual orientation, sexual history, and inequality in the United States. *Feminist Economics*, *24*(1), 88–113. doi: 10.1080/13545701.2017.1388531.

Cushing-Daniels, B., and Yeung, T.Y. (2009). Wage penalties and sexual orientation: An update using the General Social Survey. *Contemporary Economic Policy, 27*(2), 164–175. doi: 10.1111/j.1465-7287.2008.00132.x.

Cutuli, J.J., Treglia, D., and Herbers, J.E. (2019). Adolescent homelessness and associated features: Prevalence and risk across eight states. *Child Psychiatry and Human Development*, *51*, 48–58. doi: 10.1007/s10578-019-00909-1.

Daneshvary, N., Waddoups, C.J., and Wimmer, B.S. (2008). Educational attainment and the lesbian wage premium. *Journal of Labor Research, 29*(4), 365–379. doi: 10.1007/s12122-007-9024-z.

———. (2009). Previous marriage and the lesbian wage premium. *Industrial Relations*, *48*(3), 432–453. doi: 10.1111/j.1468-232X.2009.00567.x.

Davidson, S. (2016). Gender inequality: Nonbinary transgender people in the workplace. *Cogent Social Sciences, 2*(1). doi: 10.1080/23311886.2016.1236511.

del Río, C., and Alonso-Villar, O. (2019a). Occupational achievements of same-sex couples in the United States by gender and race. *Industrial Relations*, 1–28. doi: 10.1111/irel.12246.

———. (2019b). Occupational segregation by sexual orientation in the U.S.: Exploring its economic effects on same-sex couples. *Review of Economics of the Household, 17*, 439–467. doi: 10.1007/s11150-018-9421-5.

Denier, N., and Waite, S. (2019). Sexual orientation at work: Documenting and understanding wage inequality. *Sociology Compass, 13*(4), 1–17. doi: 10.1111/soc4.12667.

Dietert, M., and Dentice, D. (2010). Gender identity issues and workplace discrimination: The transgender experience. *Journal of Workplace Rights, 14*(1), 121–140. doi: 10.2190/wr.14.1.g.

Douglas, J.H., and Steinberger, M.D. (2015). The sexual orientation wage gap for racial minorities. *Industrial Relations, 54*(1), 59–108. doi: 10.1111/irel.12077.

Downing, J., and Cha, P. (2020). Same-sex marriage and gains in employer-sponsored insurance for US adults, 2008-2017. *American Journal of Public Health*, *110*(4), 537–539.

Drydakis, N. (2015). Sexual orientation discrimination in the United Kingdom's labour market: A field experiment. *Human Relations, 68*(11), 1769–1796. doi: 10.1177/0018726715569855.

Ecker, J., Aubry, T., and Sylvestre, J. (2019). A review of the literature on LGBTQ adults who experience homelessness. *Journal of Homosexuality*, *66*(3), 297–323. doi: 10.1080/00918369.2017.1413277.

Elmslie, B., and Tebaldi, E. (2014). The wage gap against gay men: The leveling of the playing field. *Kyklos, 67*(3), 330–345. doi: 10.1111/kykl.12057.

Equal Rights Center. (2014). *Opening Doors: An Investigation of Barriers to Senior Housing for Same-Sex Couples*. Washington, DC: Equal Rights Center. Available: https://equalrightscenter.org/wp-content/uploads/senior_housing_report.pdf.

Fair Housing Centers of Michigan. (2007). *Sexual Orientation and Housing Discrimination in Michigan: A Report of Michigan's Fair Housing Centers*. Ann Arbor: Fair Housing Centers of Michigan.

Fitzgerald, E., Elspeth S., and Hickey, D. (2015). *Meaningful Work: Transgender Experiences in the Sex Trade*. BestPracticesPolicy.org, Red Umbrella Project, National Center for Transgender Equality. https://transequality.org/sites/default/files/Meaningful%20Work-Full%20Report_FINAL_3.pdf.

Frazer, M.S., and Howe, E.E. (2015). *Transgender Health and Economic Insecurity: A Report from the 2015 LGBT Health and Human Services Needs Assessment Survey.* New York: Empire State Pride Agenda. Available: http://strengthinnumbersconsulting.com/wp-content/uploads/2017/06/TG-health-and-economic-insecurity-report-FINAL.pdf.

Fredriksen-Goldsen, K.I. (2016). The future of LGBT+ aging: A blueprint for action in services, policies, and research. *Generations*, *40*(2), 6–15.

Fredriksen-Goldsen, K.I., Kim, H.J., Barkan, S.E., Muraco, A., and Hoy-Ellis, C.P. (2013). Health disparities among lesbian, gay, and bisexual older adults: Results from a population-based study. *American Journal of Public Health, 103*(10), 1802–1809. doi: 10.2105/AJPH.2012.301110.

Fredriksen-Goldsen, K.I., Cook-Daniels, L., Kim, H.J., Erosheva, E.A., Emlet, C.A., Hoy-Ellis, C.P., Goldsen, J., and Muraco, A. (2014). Physical and mental health of transgender older adults: An at-risk and underserved population. *Gerontologist, 54*(3), 488–500. doi: 10.1093/geront/gnt021.

Friedman, S., Reynolds, A., Scovill, S., Brassier, F.R., Campbell, R, and Ballou, M. (2013). *An Estimate of Housing Discrimination against Same-Sex Couples*. Philadelphia: M. Davis and Company.

Gao, H., and Zhang, W. (2016). Employment non-discrimination acts and corporate innovation. *Management Science, 63*(9), 2982–2999. doi: 10.2139/ssrn.2473250.

Gates, G.J. (2010). *Lesbian, Gay, and Bisexual Men and Women in the US Military: Updated Estimates*. Los Angeles, CA: Williams Institute, UCLA School of Law.

Gates, G.J. (2015). Demographics of married and unmarried same-sex couples. Available: https://williamsinstitute.law.ucla.edu/publications/demo-ss-couples-us.

Gilbert, G., and Ortiz, K. (2015). Health insurance disparities among racial/ethnic minorities in same-sex relationships: An intersectional approach. *American Journal of Public Health, 105*, 1106–1113. doi: 10.2105/AJPH.2014.302459.

Glasser, N., and Labbees, C. (2018). Group health plans cannot categorically exclude coverage for gender dysphoria, say two more federal courts. *National Law Review*. Available: https://www.natlawreview.com/article/group-health-plans-cannot-categorically-exclude-coverage-gender-dysphoria-say-two.

Goldberg, N.G. (2009). *The Impact of Inequality for Same-Sex Partners in Employer- Sponsored Retirement Plans*. Los Angeles, CA: Williams Institute, UCLA School of Law.

Goldin, C. (2016). Human capital. In C. Diebolt and M. Haupert (Eds.), *Handbook of Cliometrics* (pp. 55–86). Heidelberg, Germany: Springer-Verlag.

Gonzales, G., and Blewett, L.A. (2013). Disparities in health insurance among children with same-sex parents. *Pediatrics, 132*(4), 703–711. Available: https://pediatrics.aappublications.org/content/pediatrics/132/4/703.full.pdf.

Grant, J.M., Mottet, L.A., and Tanis, J. (2011). *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. Washington, DC: National Center for Transgender Equality and National Gay and Lesbian Task Force. Available: https://www.thetaskforce.org/wp-content/uploads/2019/07/ntds_full.pdf.

Heck, J.E., Sell, R.L., and Gorin, S.S. (2006). Health care access among individuals involved in same-sex relationships. *American Journal of Public Health, 96*(6), 1111–1118. doi: 10.2105/AJPH.2005.062661.

Herek, G.M. (2009). Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a National Probability Sample. *Journal of Interpersonal Violence*, *24*(1), 54–74.

Holcomb, D. (1999). Domestic partner health benefits: The corporate model vs. the union model. In G. Hunt (Ed.), *Labor for Rights* (pp. 103–120). Philadelphia, PA: Temple University Press.

Human Rights Campaign. (2019). *Corporate Equality Index 2019*. Washington, DC: Human Rights Campaign Foundation. Available: https://assets2.hrc.org/files/assets/resources/CEI-2019-FullReport.pdf.

———. (2020). *Corporate Equality Index 2020*. Washington, DC: Human Rights Campaign Foundation. Available: https://assets2.hrc.org/files/assets/resources/CEI-2020.pdf.

Hunter, L.A., McGovern, A., and Sutherland, C., Eds. (2018). *Intersecting Injustice: Addressing LGBTQ Poverty and Economic Justice for All: A National Call to Action*. New York: Social Justice Sexuality Project, Graduate Center, City University of New York.

James, S.E., Herman, J.L., Rankin, S., Keisling, M., Mottet, L., and Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey.* Washington, DC: National Center for Transgender Equality. Available: https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf.

Jepsen, L.K. (2007). Comparing the earnings of cohabiting lesbians, cohabiting heterosexual women, and married women: Evidence from the 2000 Census. *Industrial Relations*, *46*(4), 699–727. doi: 10.1111/j.1468-232X.2007.00493.x.

Jepsen, C., and Jepsen, L.K. (2009). Does home ownership vary by sexual orientation? *Regional Science and Urban Economics*, *39*(3), 307–315. doi: 10.1016/j.regsciurbeco.2008.11.002.

Johnston, D., and Malina, M.A. (2008). Managing sexual orientation diversity. *Group and Organization Management, 33*(5), 602–625. doi: 10.1177/1059601108321833.

Karpman, M., Skopec, L., and Long, S.K. (2015). QuickTake: Uninsurance rate nearly halved for lesbian, gay, and bisexual adults since mid-2013. *Health Reform Monitoring Survey.* Urban Institute Health Policy Center. Available: http://hrms.urban.org/quicktakes/Uninsurance-Rate-Nearly-Halved-for-Lesbian-Gay-and-Bisexual-Adults-since-Mid-2013.html.

Klawitter, M. (2011). Multilevel analysis of the effects of antidiscrimination policies on earnings by sexual orientation. *Journal of Policy Analysis, 30*(2), 334–358. doi: 10.2307/23018986.

———. (2015). Meta-analysis of the effects of sexual orientation on earnings. *Industrial Relations*, *54*(1), 4–32. doi: 10.1111/irel.12075.

Lauster, N., and Easterbrook, A. (2011). No room for new families? A field experiment measuring rental discrimination against same-sex couples and single parents. *Social Problems*, *58*(3), 389–409.

Leppel, K. (2007). Home-ownership among opposite- and same-sex couples in the US. *Feminist Economics*, *13*(1), 1–30. doi: 10.1080/13545700601075070.

Levy, D.K., Wissoker, D.A., Aranda, C., Howell, B., Pitingolo, R., Sewell, S.H., and Santos, R. (2017). *A Paired-Testing Pilot Study of Housing Discrimination against Same-Sex Couples and Transgender Individuals*. Washington, DC: The Urban Institute. Available: https://www.urban.org/research/publication/paired-testing-pilot-study-housing-discrimination-against-same-sex-couples-and-transgender-individuals.

Li, F., and Nagar, V. (2013). Diversity and performance. *Management Science, 59*(3), 529–544. doi: 10.1287/mnsc.1060.0678.

Lombardi, E.L., and Malouf, D. (2001). Gender violence: Transgender experiences with violence and discrimination. *Journal of Homosexuality, 42*(1), 89–101. doi: 10.1300/J082v42n01_05.

Make the Road New York. (2010). *Transgender Need Not Apply: A Report on Gender Identity Job Discrimination*. Brooklyn, NY: Make the Road New York. Available: http://www.maketheroadny.org/pix_reports/TransNeedNotApplyReport_05.10.pdf.

Martell, M.E. (2018). Identity management: Worker independence and discrimination against gay men. *Contemporary Economic Policy, 36*(1), 136–148. doi.org/10.1111/coep.12233.

———. (2019). Age and the new lesbian earnings penalty. *International Journal of Manpower, 41*(6). doi: 10.1108/IJM-10-2018-0322.

Martell, M.E., and Hansen, M.E. (2017). Sexual identity and the lesbian earnings differential in the U.S. *Review of Social Economy, 75*(2), 159–180. doi: 10.1080/00346764.2016.1219384.

Martorell, P., Miller, T., Daugherty, L., and Borgschulte, M. (2014). *Effects of Military Service on Earnings and Education Revisited: Variation by Service Duration, Occupation, and Civilian Unemployment*. Santa Monica, CA: RAND Corporation. Available: https://www.rand.org/pubs/research_reports/RR342.html.

McCann, E., and Brown, M. (2019). Homelessness among youth who identify as LGBTQ+: A systematic review. *Journal of Clinical Nursing, 28*. doi: 10.1111/jocn.14818.

Miller, J.J., and Park, K.A. (2018). Same-sex marriage laws and demand for mortgage credit. *Review of Economics of the Household, 16*, 229–254. doi: 10.1007/s11150-016-9356-7.

Mishel, E. (2016). Discrimination against queer women in the U.S. workforce: A résumé audit study. *Socius: Sociological Research for a Dynamic World, 2,* 1–13. Available: https://journals.sagepub.com/doi/pdf/10.1177/2378023115621316.

Mize, T.D. (2016). Sexual orientation in the labor market. *American Sociological Review, 81*(6), 1132–1160. doi: 10.1177/0003122416674025.

Movement Advancement Project. (2020). *Healthcare Laws and Policies*. Available: https://www.lgbtmap.org/equality-maps/healthcare_laws_and_policies.

National Public Radio. (2017). *Discrimination in America: Experiences and Views of LGBTQ Americans*. Washington, DC: National Public Radio. Available: https://www.npr.org/documents/2017/nov/npr-discrimination-lgbtq-final.pdf?t=1563962195152.

Organisation for Economic Co-operation and Development. (2020). *Over the Rainbow? The Road to LGBTI Inclusion*. Paris: OECD Publishing. doi: 10.1787/8d2fd1a8-en.

Pearson, J., and Wilkinson, L. (2017). Same-sex sexuality and educational attainment: The pathway to college. *Journal of Homosexuality, 64*(4), 538–576. doi: 10.1080/00918369.2016.1194114.

Pedulla, D.S. (2014). The positive consequences of negative stereotypes: Race, sexual orientation, and the job application process. *Social Psychology Quarterly, 77*(1), 75–94. doi: 10.1177/0190272513506229.

Pichler, S., Blazovich, J.L., Cook, K.A., Huston, J.M., and Strawser, W.R. (2018). Do LGBT-supportive corporate policies enhance firm performance? *Human Resource Management, 57*(1), 263–278. doi: 10.1002/hrm.21831.

Plug, E., and Webbink, D. (2014). Sexual orientation, prejudice, and segregation. *Journal of Labor Economics*, *32*(1), 123–159.

Ponce, N.A., Cochran, S.D., Pizer, J.C., and Mays, V.M. (2010). The effects of unequal access to health insurance for same-sex couples in California. *Health Affairs,* 29(8), 1539–1548. doi: 10.1377/hlthaff.2009.0583.

Prokos, A.H., and Keene, J.R. (2010). Poverty among cohabiting gay and lesbian, and married and cohabiting heterosexual families. *Journal of Family Issues, 31*(7), 934–959. doi: 10.1177/0192513X09360176.

Raeburn, N. (2004). *Changing Corporate America from Inside Out: Lesbian and Gay Workplace Rights*. Minneapolis: University of Minnesota Press.

Rooney, C., Durso L.E., and Gruberg, S. (2016). *Discrimination Against Transgender Women Seeking Access to Homeless Shelters*. Washington, DC: Center for America Progress. Available: https://cdn.americanprogress.org/wp-content/uploads/2016/01/06113001/HomelessTransgender.pdf.

Rooney, C., Whittington, C., and Durso, L.E. (2018). *Protecting Basic Living Standards for LGBTQ People*. Center for American Progress. Available: https://www.americanprogress.org/issues/lgbtq-rights/reports/2018/08/13/454592/protecting-basic-living-standards-lgbtq-people.

Routon, P.W. (2014). The effect of 21st century military service on civilian labor and educational outcomes. *Journal of Labor Research,* 15(1), 15–38. doi: 10.1007/s12122-013-9170-4.

Ruggs, E.N., Hebl, M.R., Martinez, L.R., and Law, C.L. (2015). Workplace “trans”-actions: How organizations, coworkers, and individual openness influence perceived gender identity discrimination. *Psychology of Sexual Orientation and Gender Diversity,* 2(4), 404–412. doi: 10.1037/sgd0000112.

Sabia, J.J. (2014). Sexual orientation and wages in young adulthood: New evidence from Add Health. *Industrial and Labor Relations, 67*(1), 239–267. doi: 10.1177/001979391406700109.

Sansone, D. (2019). LGBT students: New evidence on demographics and educational outcomes. *Economics of Education Review, 73*(April), 101933. doi: 10.1016/j.econedurev.2019.101933.

Schneebaum, A., and Badgett, M.V.L. (2019). Poverty in US lesbian and gay couple households. *Feminist Economics, 25*(1), 1–30. doi: 10.1080/13545701.2018.1441533.

Schwegman, D. (2019). Rental market discrimination against same-sex couples: Evidence from a pairwise-matched email correspondence test. *Housing Policy Debate, 29*(2), 250–272. doi: 10.1080/10511482.2018.1512005.

Semega, J., Kollar, M., Creamer, J., and Mohaty, A. (2019). *Income and Poverty in the United States: 2018*. Washington, DC: Current Population Reports.

Shan, L., Fu, S., and Zheng, L. (2017). Corporate sexual equality and firm performance. *Strategic Management Journal, 38*(9), 1812–1826. doi: 10.1002/smj.

Sun, H., and Gao, L. (2019). Lending practices to same-sex borrowers. *Proceedings of the National Academy of Sciences, 116*(19), 9293–9302. doi: 10.1073/pnas.1903592116.

Tilcsik, A. (2011). Pride and prejudice: Employment discrimination against openly gay men in the United States. *American Journal of Sociology, 117*(2), 586–626. doi: 10.1086/661653.

Tilcsik, A., Anteby, M., and Knight, C.R. (2015). Concealable stigma and occupational segregation: Toward a theory of gay and lesbian occupations. *Administrative Science Quarterly, 60*(3), 446–481. doi: 10.1177/0001839215576401.

Ueno, K., Peña-Talamantes, A.E., and Roach, T.A. (2013). Sexual orientation and occupational attainment. *Work and Occupations, 40*(1), 3–36. doi: 10.1177/0730888412460532.

Ueno, K., Roach, T., and Peña-Talamantes, A.E. (2013). Sexual orientation and gender typicality of the occupation in young adulthood. *Social Forces, 92*(1), 81–108. doi: 10.1093/sf/sot067.

Ueno, K., Vaghela, P., and Nix, A.N. (2018). Gender composition of the occupation, sexual orientation, and mental health in young adulthood. *Stress and Health, 34*(1), 3–14. doi: 10.1002/smi.2755.

U.S. Census Bureau. (n.d.). *Same-Sex Couples*. Available: https://www.census.gov/topics/families/same-sex-couples.html.

U.S. Office of Personnel Management. (n.d.). *Frequently Asked Questions: Benefits for LGBT Federal Employees and Annuitants*. Available: https://www.opm.gov/faqs/topic/benefitsforlgbt/index.aspx?cid=f2dde4b1-d1bf-413f-b3e8-33d46eec6a0c.

Valfort, M. (2017). LGBTI in OECD countries: A review. *OECD Social, Employment and Migration Working Papers*. Paris. doi: 10.1787/d5d49711-en.

Wang, P., and Schwarz, J.L. (2010). Stock price reactions to GLBT nondiscrimination policies. *Human Resource Management, 49*(2), 195–216. doi: 10.1002/hrm.

Wilson, B.D.M., Choi, S.K., Harper, G.W., Lightfoot, M., Russell, S., and Meyer, I.H. (2020). *Homelessness Among LGBT Adults in the U.S.* Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/publications/lgbt-homelessness-us.

Winter, S., Davis-McCabe, C., Russell, C.B., Wilde, D., Ha, C.T., Suparak, A.P., and Wong, J. (2018). *Denied Work: An Audit of Employment Discrimination on the Basis of Gender Identity in South-East Asia*. Bangkok. Available: https://www.asia-pacific.undp.org/content/rbap/en/home/library/democratic_governance/hiv_aids/denied-work.html.

11

Physical and Mental Health

Since the Institute of Medicine report, *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding* (2011), the published literature on the physical and mental health of sexual and gender diverse (SGD) populations has expanded substantially. Recent research emphasizes the complexity of the multilevel and intersecting factors that influence the well-being of SGD people and drive disparities in health status, health care access, and health outcomes in SGD populations. These drivers include stigma; minority stress exposures, such as discrimination; and other behavioral, environmental, and structural risk factors. The intensity and effects of drivers of disparities can vary across the life course and among different SGD communities on the basis of factors such as race, age, and gender. Research has also begun to underscore, however, the degree to which resilience and effective interventions can mitigate health risks and help reduce these disparities.

This chapter reviews the literature on physical and mental health in SGD populations in the United States, identifies major group differences, describes drivers of disparities, and highlights opportunities for interventions to address these disparities. It is outside the scope of this report to assess SGD population health in international contexts, though this is an important area of scholarship. The chapter covers physical health, with a focus on general well-being, health behaviors, cardiovascular disease, and cancer; reproductive and sexual health, including fertility; violence and victimization; and mental and behavioral health. Although these topics are addressed individually to highlight the specific evidence for each, it is important to note that they are deeply intertwined and share cross-cutting influences, such as minority stress and systemic barriers to health care services. Research and interventions to understand and improve the health and well-being of SGD populations need to reflect these complex relationships while also seeking to clarify how both disparities and resilience uniquely manifest in specific groups within the SGD population.

Following this chapter, Chapter 12 looks at SGD population health in the United States in the context of health care access and utilization, with a focus on the importance of SGD people having access to adequate insurance coverage; culturally competent providers; and high-quality, evidence-based health care services, including gender-affirming care for transgender and non-binary people. It also discusses the challenges posed by the continued prevalence of two medical approaches to SGD populations that are not evidence based: unnecessary genital surgeries for children with intersex traits and conversion therapy targeting sexual orientation or gender identity.

The information presented in these two chapters reflects both the current body of research and a multidimensional understanding of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization [WHO], 1948). Health is central to well-being and quality of life for all people, but it is not equally distributed across populations. Health disparities are preventable differences in the burden of disease, morbidity, mortality, or opportunities to achieve optimal health. They are associated with a range of social, economic, and political determinants that are dynamic manifestations of the systems that distribute resources, protection, and power across society (Braveman et al., 2017). These determinants affect health by conferring social, economic, or political advantage on certain population groups, while limiting the resources available to members of disadvantaged groups for maintaining and improving their health and well-being. These determinants also mediate exposure to physical and mental health hazards, such as stigma, violence, discrimination, unhealthy environments, and inadequate medical care (Marmot et al., 2008; WHO, 2008). Health disparities thus represent the human embodiment of disadvantage and inequality in the daily conditions in which SGD people grow up, form families, work, age, and die (WHO, 2011).

Consideration of the social determinants of health introduces a moral and ethical dimension, frequently termed "health equity," into discussions of disparities. Health equity means that everyone should have a fair and just opportunity to be as healthy as possible, and it underscores that health disparities are avoidable and, therefore, unjust and unjustifiable (Braveman et al., 2017). Achieving health equity requires eliminating disparities by removing obstacles to good health such as discrimination, stigma, and their consequences. Health equity thus places an implicit responsibility on policy makers, researchers, health care providers, advocates, and other stakeholders for accountable efforts to improve the health and well-being of populations experiencing disparities.

PHYSICAL HEALTH

General Health and Well-Being

Studies of general health and well-being have revealed that LGBTI adults tend to report worse health, lower health-related quality of life, and greater prevalence of disabilities than non-LGBTI people (Baker, 2019; Charlton et al., 2018; Fredriksen-Goldsen et al., 2013; Gates, 2014; James et al., 2016; Lett, Dowshen, and Baker, 2020; Meyer et al., 2017; Potter and Patterson, 2019; Rapp et al., 2018; Streed et al., 2017; Ward et al., 2014). Disparities in overall health have been found to be particularly substantial for bisexual and transgender people, especially non-binary people (Downing and Przedworski, 2018; Dyar et al., 2019, 2020; Lefevor et al., 2019). Emerging identity groups, such as asexual and pansexual populations, also appear to experience disparities in overall health and well-being (Borgogna et al., 2019; Yule, Brotto, and Gorzalka, 2013). In terms of mortality, there are only a few studies that focus on sexual orientation or gender identity, and none on intersex status. The studies that exist, however, report that mortality may be higher in LGBT than in non-LGBT populations (Asscheman et al., 2011; Asscheman, Gooren, and Eklund, 1989; Blosnich et al., 2014; Cochran, Björkenstam, and Mays, 2016; Cochran and Mays, 2011; Cochran and Mays, 2015; Dhejne et al., 2011; van Kesteren et al., 1997; Wiepjes et al., 2020).

Drivers of General Health and Mortality Disparities

The literature around both general well-being and mortality in SGD populations emphasizes the degree to which stigma and minority stress related to sexual orientation and gender identity (and presumably intersex status as well, though there is no research in this area) are important influences on these disparities (Gonzales and Ehrenfeld, 2018; Russo et al., 2012; Solazzo, Brown, and Gorman, 2018; Streed, McCarthy, and Haas, 2017). Physiologically, minority stress exposures contribute to the dysregulation of cortisol, which adversely affects metabolism, immune function, cardiovascular health, cognition, and mood (Berger and Sarnyai, 2015; DuBois et al., 2017). Minority stress is also associated with higher prevalence of unhealthy behaviors, such as tobacco use and binge drinking, and it is a risk factor for causes of mortality that include HIV and suicide. More research is needed to accurately measure minority stress exposures in SGD populations and to investigate the origins, pathways, and consequences of minority stress for all aspects of health and life expectancy.

Bisexual health disparities, like other SGD health disparities, are often driven by stigma and minority stress (Doan Van et al., 2019; Friedman et al., 2014; Katz-Wise, Mereish, and Woulfe, 2017). While disparities related to minority stress can be buffered by social support, bisexual individuals report lower access to such support both within and outside of sexual minority communities, and they often report feeling socially isolated, invisible, and marginalized in both heterosexual and LGB communities (Meckler et al., 2006; Mulick and Wright, 2011; Saewyc et al., 2009; Yost and Thomas, 2012). Studies have found unfavorable attitudes toward bisexual people among gay and lesbian people as well as among heterosexual people (Dodge et al., 2016). A study using a feeling thermometer technique found that heterosexuals viewed bisexual people less favorably than all other comparison populations (including gays and lesbians and various religious, racial, and political groups) except for injection drug users (Herek, 2002).

For SGD Native American, Black, and other people of color, general health and mortality are additionally affected by exposure to racism. Native Americans, Native Hawaiians and other Pacific Islanders, and Alaska Natives, for example, have experienced centuries of trauma that includes affronts to their cultures and the systematic disruption and destruction of their communities through massacres, transmission of non-Indigenous infectious diseases, and forced migration and assimilation (Brave Heart and Debruyn, 1998; Kirmayer, Gone, and Moses, 2014; Walters and Simoni, 2002; Walters et al., 2011). Trauma from historical slavery and current structural violence, such as police brutality and high rates of incarceration, has similarly had pervasive negative effects on the physical and mental health of Black people (Chae et al., 2020; Williams, 2018). Historical trauma can transmit risk for poorer health and well-being to future generations by depleting psychological resilience and eroding supportive family, community, and economic structures.

Transgenerational transmission of stress- and trauma-related health risks can also occur through inherited epigenetic DNA modifications or in utero maternal-fetal exposure (Conching and Thayer, 2019; Walters et al., 2011). SGD people of color may experience the unique stressors of both racism and ethnocentrism in white SGD communities and rejection of their sexual orientation or gender identity by their racially or ethnically congruent families and communities (Hatzenbuehler, Phelan, and Link, 2013; Isasi et al., 2015; Pascoe and Smart Richman, 2009; Valdiserri et al., 2018; Worthen, 2018). They may therefore face health risks and disparities that differ from and may exceed those facing either white SGD communities or heterosexual and cisgender communities of color (Lett, Dowshen, and Baker, 2020; Tuthill, Denney, and Gorman, 2020).

Interventions to Improve Overall Health and Resilience

Resilience, a process that confers the ability to recover from or adjust to adversity, is an important counterweight to the effects of minority stress on general health and mortality in SGD populations. Studies conducted with a variety of SGD populations indicate that identity affirmation (Fredriksen-Goldsen et al., 2017; Matsuno and Israel, 2018), social support (Baratz, Sharp, and Sandberg, 2014; Sani et al., 2019; Schweizer et al., 2017), family acceptance (Katz-Wise, Rosario, and Tsappis, 2016), and protective laws and policies (Hatzenbuehler and Keyes, 2013; Hatzenbuehler et al., 2014) are associated with positive coping and resilience. Most of the research on resilience interventions has focused on youth. This research provides strong evidence for the role of school-based gay-straight alliances in promoting resilience among LGBTQ youth (Davis, Royne Stafford, and Pullig, 2014; Johns et al., 2019a; Poteat, Calzo, and Yoshikawa, 2016; also see Chapter 9). As of this writing, at least one comparative effectiveness research trial is under way to assess resilience to depression among racial and ethnic minority SGD populations (Vargas et al., 2019). More research is needed to identify effective interventions to promote SGD population resilience.

Health-Related Behaviors

Behavior patterns related to sleep, diet, exercise, and smoking are important determinants of health and well-being. When sleep is inadequate, for instance, people have more illnesses and accidents, and they suffer more chronic mental and physical health problems (Grandner and Pack, 2011; Walker, 2017). Results of recent studies suggest that sleep difficulties, such as reduced sleep duration and lower sleep quality, are more common among LGBT people than among heterosexual and cisgender people (Chen and Shiu, 2017; Cunningham, Dai and Hao, 2017; Harry-Hernandez et al., 2020; Kann et al., 2016; Patterson and Potter, 2019; Patterson et al., 2018; Xu, and Town, 2018). These findings are not completely consistent, however, suggesting that important patterns of disparities may be elucidated by more research on specific groups such as youth and transgender people. There is no evidence about sleep health among people with intersex traits.

Similarly, the evidence about diet and exercise in SGD populations is not entirely consistent. Some studies have found that sexual minority boys and girls were more likely than heterosexual youth to report low intake of fruit and vegetables (Rosario et al., 2014). Others have found no differences by sexual orientation (Boehmer et al., 2012; Laska et al., 2015), and some data suggest that the diets of sexual minority adults are as good as or possibly better than those of heterosexual individuals (VanKim et al., 2017). Likewise, a number of studies have found that sexual minority youth of all genders are less likely than their heterosexual peers to participate in team sports or regular physical activity (Calzo et al., 2014; Laska et al., 2015; Mereish and Poteat, 2015), while other studies show disparities in exercise habits for some gender or age groups but not for all (Boehmer et al., 2012; Rosario et al., 2014).

Cigarette smoking, by contrast, is clearly elevated among LGBT populations. The National Health Interview Survey found that 21 percent of lesbian, gay, or bisexual adults reported being current cigarette smokers, compared with 15 percent of heterosexual adults (Jamal et al., 2018). Smoking prevalence is also higher among transgender populations (Buchting et al., 2017; Hoffman et al., 2018). Smoking is a major risk factor for numerous diseases and conditions, including pulmonary and cardiovascular diseases, cancer, type 2 diabetes, periodontal disease, adverse pregnancy outcomes, and visual loss and blindness (Centers for Disease Control and Prevention [CDC], n.d.).

Drivers of Health Behavior Disparities

The minority stress theory suggests that disparities in sleep, diet, exercise, and smoking among SGD populations are related to experiences of chronic stress due to stigma and discrimination. It is well known that stress exacerbates sleep difficulties, such as insomnia (Akerstedt, 2006). Peer bullying and structural discrimination, such as laws barring transgender youth from participating in school sports, may discourage adolescents from participating in organized sports (Buzuvis, 2016; Cunningham, Buzuvis, and Mosier, 2018; Douall et al., 2018). Consumption of healthy foods, such as fruits and vegetables, is related to access to economic resources at both the household and neighborhood levels, making poverty and employment discrimination key covariates in investigations of diet among SGD populations (French et al., 2019). In addition to stigma and discrimination, risk factors for cigarette smoking among LGBT people include targeted tobacco marketing, lack of access to smoking cessation programs and treatments due to poverty and lack of health insurance, and a lack of cultural competency in smoking cessation programs (Jamal et al., 2018). For transgender people, a lack of access to gender affirmation is also associated with smoking and other health risk behaviors (Menino et al., 2018). Further study is needed on the drivers of health behaviors related to sleep, diet, exercise, and smoking, especially among SGD adolescents and older adults, transgender people, and people with intersex traits.

Interventions to Improve Health Behaviors

A variety of tailored 12- to 16-week interventions for overweight lesbian and bisexual women have included weekly group meetings, nutrition education, and physical activity support, with or without additional components of mindfulness, gym membership, and pedometer use. These tailored interventions have resulted in significant improvements in multiple health behaviors and health indicators, including physical activity, weight, and waist-to-hip ratio (Rizer et al., 2015). Key characteristics of health behavior interventions for sexual minority women include social support, education and goal setting, peer facilitation, and LGBT-friendly environments (Berger and Mooney-Somers, 2017).

Evidence of the efficacy of smoking cessation interventions for LGBT adults exists for community-wide smoke-free policies (Wintemberg et al., 2017), quit-smoking group-based interventions with or without pharmaceutical components (Eliason et al., 2012; Matthews et al., 2019), web-based interventions (Heffner et al., 2020), and social branding campaigns (Fallin et al., 2015). While LGBT-tailored programs are often preferred by LGBT participants, non-tailored programs can demonstrate similar efficacy (Grady et al., 2014). Promising interventions currently under study include tailored social media and app-based smoking cessation interventions for sexual and gender minority youth (Baskerville et al., 2016; Vogel et al., 2019).

Cross-sectional studies suggest that increased access to legal (e.g., gender-congruent identity documents) and medical (e.g., hormone therapy) gender affirmation and decreased exposure to structural discrimination may reduce smoking and increase physical activity among transgender adults (Jones et al., 2018; Myers and Safer, 2017; Shires and Jaffee, 2016). More research is needed into effective interventions to optimize health behaviors among SGD populations, particularly since interventions designed to improve such health behaviors as sleep, diet, exercise, and smoking have important influences on other areas of health that are discussed in more detail below, such as cardiovascular disease and cancer.

Cardiovascular Disease

Some studies have found no difference between groups such as heterosexual adults and gay and bisexual men in cardiovascular disease (CVD) (Fredriksen-Goldsen et al., 2013). A growing body of evidence, however, indicates that LGBTI populations do experience CVD disparities, including elevated prevalence of coronary artery disease and angina and greater incidence of myocardial infarction and stroke (Alzahrani et al., 2019; Caceres, Veldhuis, and Hughes, 2019;

Caceres et al., 2017, 2018, 2019a, 2019b; Donato and Ferreira, 2018; Falhammar et al., 2018; Gonzales and Henning-Smith, 2017; Gonzales, Przedworski, and Henning-Smith, 2016; Hatzenbuehler, McLaughlin, and Slopen, 2013; Lagos, 2018; Lunn et al., 2017; Meads et al., 2018; Operario et al., 2015; Reisner et al., 2016a; Salzano et al., 2016, 2018; Silberbach et al., 2018; Streed et al., 2017). These disparities are greatest among bisexual compared to monosexual people, transgender compared to cisgender people, and Black compared with white lesbian women (Caceres, Veldhuis, and Hughes, 2019). One study also reported that gender-nonconforming individuals may have higher prevalence of coronary artery disease and greater incidence of myocardial infarction than either cisgender or transgender men and women (Downing and Przedworski, 2018).

Drivers of Cardiovascular Disparities

Disparities in CVD are driven by the greater prevalence in SGD populations of risk factors that include smoking, high blood pressure, and elevated levels of C-reactive protein, a biomarker of stress-related inflammation important in the pathogenesis of CVD (Hatzenbuehler, McLaughlin, and Slopen, 2013). Among sexual minority women and bisexual men, metabolic syndrome, which can include signs of insulin resistance, is also a common CVD risk factor (Caceres et al., 2018; Cunningham, Xu, and Town, 2018). As is the case for general health and mortality, many CVD risk factors in SGD populations are related to trauma and other minority stress exposures (Caceres et al., 2019a, 2019b; Rosengren et al., 2004; Sinclair and Wallston, 2004; Yusuf et al., 2004).

CVD risk among people with intersex traits varies by type of intersex trait as well as by experiences with hormonal and surgical therapies (El-Maouche, Arlt, and Merke, 2017; Los et al., 2016 Mooij et al., 2017). The cardiovascular effects of long-term hormones prescribed after gonadectomy are poorly understood (Gomez-Lobo and Amies Oelschlager, 2016). Hormone therapy similarly effects CVD risk among transgender people. Transgender women on estrogen therapy have increased risk of venous thromboembolism compared with cisgender people and transgender men (Dutra et al., 2019; Getahun et al., 2018; Gooren and T'Sjoen, 2018; Irwig, 2018; Quinn et al., 2017), and some studies suggest increased risk for myocardial infarction as well (Connelly et al., 2019). In transgender men, testosterone therapy is associated with elevated prevalence of CVD risk factors such as hypertension, insulin resistance, and dyslipidemia, though not with increases in CVD or mortality (Streed et al., 2017).

Interventions to Improve Cardiovascular Health

Most intervention research on prevention of CVD among SGD populations has focused on smoking cessation among LGBT adults, weight management among sexual minority women, and the benefits versus risks of hormonal therapies among people with intersex traits. Weight management and smoking interventions are discussed above in the section on health behaviors. Data on efficacy of CVD interventions for people with intersex traits are sparse, but several studies suggest early and regular screening and treatment for CVD risk factors such as hypertension and pre-diabetes among groups with elevated risk (Davis and Geffner, 2019; Los et al., 2016; Tamhane et al., 2018).

Cardiovascular health research priorities for SGD populations include the routine use of standardized measures of sexual orientation, gender identity, and intersex status in CVD research studies, especially longitudinal studies; studies that use objective measures of CVD (e.g., biomarkers and electronic health record data) rather than purely self-reported data; and rigorous study designs to investigate the relationship between hormone therapy and CVD risk and outcomes for transgender people and people with intersex traits (Caceres, Brody, and Chyun, 2016). Research is also needed into the impact of and interventions to address intersectional minority stress exposures as risk factors for CVD in SGD populations (Veenstra, 2013).

Cancer

In 2019, the American Cancer Society estimated that 130,000 LGBTQ people were newly diagnosed with cancer, and 45,000 died of cancer. These estimates were derived by applying the estimated percentage of the U.S. population that is LGBTQ to the 2019 projected cancer incidence in the general population. More accurate statistics about the overall prevalence and incidence of cancers among LGBT, intersex, and other SGD populations are precluded by the fact that health care systems, cancer registries, and national repositories of cancer data do not yet routinely capture demographic information about sexual orientation, gender identity, or intersex status (Gomez et al., 2019). Also lacking are population-based prospective studies evaluating cancer-specific risks, mortality, and survivorship issues facing SGD populations (Boehmer, 2018; Kent et al., 2019).

Existing data do suggest, however, that the incidence of certain cancers may be elevated in specific LGBTI populations. These include, for example, anal cancer in gay and bisexual men and breast cancer in lesbian and bisexual women (Quinn et al., 2015). The lifetime risk of germ cell tumors varies considerably across intersex conditions (Pyle and Nathanson, 2017), and gonadal cancers have been associated with a variety of intersex conditions (Gomez-Lobo and Amies Oelschlager, 2016). Despite a low risk of gonadal malignancy before puberty, many intersex people have unnecessary gonadectomy in childhood (see discussion in Chapter 12), which means the risks for some cancers in people with intersex traits are unknown.

Drivers of Cancer Disparities

Elevated rates of cancer in SGD populations result from complex interacting risk factors. These factors can be sociodemographic, such as education and age; economic, such as employment and insurance coverage; environmental, such as food, second-hand smoke exposure, and environmental pollution related to health services, such as access to recommended care and providers' levels of cultural and clinical competency in caring for SGD populations; and individual, such as genetics, birth parity, alcohol and tobacco use, and history of sexually transmitted infections. For example, use of alcohol and tobacco, as well as rates of HIV, human papilloma virus (HPV), and hepatitis C infections, are higher in some LGBT populations than non-LGBT populations, which increases the risk of lung, breast, colorectal, and other cancers associated with these exposures (Herbst et al., 2008; Hughes et al., 2017; Lee, Griffin, and Melvin, 2009).

Evidence also indicates that access to cancer-related preventive services is lower in LGBT populations than other populations, which leads to many missed opportunities for primary and secondary cancer prevention (Cathcart-Rake, 2018; Ceres et al., 2018). For example, lesbian and bisexual women are less likely to receive mammograms than heterosexual women and, if diagnosed with breast cancer, are less likely to be engaged in treatment (Malone et al., 2019). Lesbians are less likely to receive HPV vaccinations for cancer prevention than heterosexual women, and cisgender sexual minority women and transgender people with a cervix are less likely to receive cervical cancer screening than cisgender heterosexual women (Agénor et al., 2018; Braun et al., 2017; Porsch et al., 2019). Rates of routine cancer screening among intersex populations have not been studied (Gomez-Lobo and Amies Oelschlager, 2016).

These missed opportunities for prevention are often associated with systemic barriers, which include provider misinformation (e.g., the mistaken perception that lesbians do not need Pap smears) and previous patient experiences with and fear of medical maltreatment, which results in reluctance to seek care (Boehmer, 2018). For sexual minority women and transgender men in particular, a lack of access to gender-affirming practices and spaces around breast and cervical cancer screening can be a formidable barrier (Taylor and Bryson, 2015). These spaces are often socially marked as feminine, with pink color schemes, floral gowns, and women's magazines in the waiting rooms. Staff and other patients at such sites are often not prepared to see transgender men or masculine-presenting women, and responses to their presence may range from ignorant to hostile (Kamen et al., 2019). Similarly, health plans or providers may make incorrect assumptions about transgender people's bodies when assessing risk and medical necessity for specific cancer screenings. They also may not be aware that transgender men and non-binary people who retain a cervix require regular Pap tests; transgender women and non-binary people who retain a prostate may require prostate exams, and all people with breast tissue, including transgender men who have had chest reconstruction, may need mammograms (Deutsch, 2016; Pratt-Chapman and Ward, 2020). Barriers to appropriate cancer screenings may be particularly salient for SGD people of color, who may face barriers based on race and ethnicity as well as sexual orientation, gender identity, and intersex status (Malone et al., 2019).

Interventions to Improve Cancer Prevention and Outcomes

Positive, destigmatizing, gender-affirming relationships with health care providers increase acceptance of cervical cancer screening (Agénor et al., 2015; Dhillon et al., 2020) and HPV vaccination (Apaydin et al., 2018) among LGBT people. Sexual minority women and trans-masculine people often prefer self-collected swabs for cervical cancer screening and HPV testing (Goldstein et al., 2020; Johnson et al., 2016; McDowell et al., 2017; Reisner et al., 2018). There is no consensus or national recommendation around screening for anal cancer among gay and bisexual men; however, shared decision making about anal pap smears is recommended for men who have sex with men who are living with HIV (Margolies and Goeren, n.d.; Medical Care Criteria Committee and Brown, 2020).

A brief web-based intervention that provided tailored HPV information and monthly text reminders for gay and bisexual men was associated with increased HPV vaccinations among young sexual minority men (Reiter et al., 2018). Other recommendations for increasing HPV vaccination rates among young sexual minority men include creative use of mobile technology, bundling HPV vaccination with other health services, and increasing vaccine awareness (Fontenot et al., 2016).

The committee found few recent studies of breast cancer interventions for SGD populations. The most recent study described a community-engaged process of developing a culturally tailored breast cancer education program for LGBTQ individuals (Fung et al., 2019). Older studies included a culturally adapted intervention designed to improve breast cancer screening among Black sexual minority women; this intervention trained Black lesbians to be role models and lay health advisors for their community, but no efficacy data from this program have been reported (Washington and

Murray, 2005). Other intervention research included largely white samples: a tailored education intervention increased breast cancer screening in lesbians (Dibble and Roberts, 2003), and a risk counseling intervention with mostly white sexual minority women increased breast cancer screening rates at 24 months (Bowen, Powers, and Greenlee, 2006).

Data suggest that oncology providers could benefit from more education about SGD populations (Lisy et al., 2018; Schabath et al., 2019). A systematic review of LGBTQ anti-bias training for health care providers found that education was effective at increasing knowledge of LGBTQ health issues, experiential learning was effective at increasing comfort levels with LGBTQ patients, and intergroup contact was effective at promoting more tolerant attitudes toward LGBTQ patients (Morris et al., 2019). More research is needed into interventions to improve the full spectrum of cancer prevention, care, and outcomes for SGD populations, including transgender people and people with intersex traits.

SEXUAL AND REPRODUCTIVE HEALTH

HIV and Other Sexually Transmitted Infections

Historically, much of the research on the health of LGBT populations has focused on HIV and other sexually transmitted infections (STIs) (Coulter et al., 2014). This evidence shows that cisgender gay and bisexual men and other men who have sex with men are overrepresented among people living with HIV and represent the largest proportion of new HIV diagnoses every year in the United States (CDC, 2020). Of all the men living with HIV in the United States, 76 percent are gay, bisexual, and other men who have sex with men, and 26,000 men who have sex with men acquire HIV each year (CDC, 2020). Young Black and Latinx men are overrepresented in these numbers (CDC, 2020). Similarly, men who have sex with men are overrepresented among STI incidence and prevalence figures overall (CDC, 2019).

Transgender people, particularly Black and Latina transgender women, are also heavily affected by HIV: a recent meta-analysis found that one in seven transgender women is living with HIV (Becasen et al., 2019). The rates are 44 percent for Black transgender women and 25 percent for Latina transgender women. Data are limited on HIV among transgender men and non-binary people; however, emerging data suggest that transgender men who have sex with men face similar risks for HIV as their cisgender male counterparts (Golub et al., 2019; Reisner et al., 2019). There are fewer and often poorer quality studies of the prevalence of other STIs among transgender people, with estimates that vary substantially by geography, type of STI, and study population (McNulty and Bourne, 2017).

Sexual minority women who inject drugs or have sex with cisgender men face a higher risk for HIV than heterosexual women with the same risk factors (German and Latkin, 2015; Owen et al., 2020). Data on other STIs among sexual minority women are sparse and often low quality; however, they indicate that STI transmission between women does take place (Takemoto et al., 2019). As with many other health conditions, the committee found no published data on HIV or other STIs among intersex people.

Drivers of HIV/STI Disparities

Stigma, violence, and discrimination across multiple axes of identity converge in the lives of LGBT and other SGD people, leading to higher rates of HIV/STI risk behavior and reduced access to and engagement in prevention (e.g., pre-exposure prophylaxis, condoms) and care services (e.g., anti-retroviral therapy) (Earnshaw et al., 2013; McNulty and Bourne, 2017; Mimiaga et al., 2019a; Mustanski et al., 2017; Nuttbrock et al., 2015; Poteat et al., 2016; Reisner et al., 2016b, 2020a; Sevelius et al., 2020a). Reduced access to protective structural assets, such as stable housing, employment opportunities, and affirming health care, are some of the mechanisms linking stigma to HIV/STI disparities for LGBT populations. For example, employment discrimination limits income-generating opportunities for many transgender women (James et al., 2016). As a result, survival sex work is common and, in the context of criminalization, is associated with increased vulnerability to contracting HIV (Becasen et al., 2019). A lack of access to gender-affirming care has also been identified as an HIV risk factor among transgender women (Sevelius et al., 2019).

Interventions to Address HIV and Other STIs

The magnitude of the burden of HIV and other STIs on LGBT populations has generated substantial research into effective interventions to eliminate these disparities. A growing body of data suggests that stigma-reduction interventions may be effective in reducing sexual risk behavior and improving engagement in HIV care (Mimiaga et al., 2018; White Hughto, Reisner, and Pachankis, 2015; Yang et al., 2018). A recent systematic review of multiple stigma reduction interventions to improve HIV prevention and care outcomes among men who have sex with men identified three main approaches: (1) education and mobile health strategies that reduce internalized and anticipated stigma by promoting self-acceptance, leadership, and motivation for behavior change; (2) peer support and training of health care providers to increase social support, knowledge sharing, and empowerment; and (3) community leader sensitization to reduce enacted and anticipated stigma (Dunbar et al., 2020).

There is strong evidence for the efficacy of group- and community-level behavioral interventions to reduce sexual risk behavior among men who have sex with men (Lorimer et al., 2013). Among a review of more than 100 studies, interventions that were based on a theoretical framework, delivered by trained professionals, and focused on skills building were the most consistently effective (Lorimer et al., 2013). HIV/STI prevention research with sexual minority men has increasingly focused on e-health interventions, including web-based, text-based, online-video, computer-assisted, multimedia, social network virtual simulation, and smartphone applications (Nguyen et al., 2019). A recent systematic review (Henny et al., 2018) identified 55 interventions, of which 49 achieved short-term risk-reduction behavior change; however, of the 4 studies with 12-month follow-up, only 1 of them maintained behavior change over this period. In a review of 45 e-health interventions that addressed the HIV care continuum, mobile texting was the technology most commonly reported (44%) (Henny et al., 2018). Medication adherence (60%) was the most common outcome measured, and 20 percent of interventions measured HIV viral suppression. Approximately 75 percent of studies showed preliminary or proven efficacy. Many of them relied on mobile technology and integrated knowledge or cognition as behavior change mechanisms.

HIV pre-exposure prophylaxis (PrEP) has been a particularly powerful innovation in HIV prevention, capable of reducing HIV risk by more than 90 percent for individuals who adhere to prescribed regimens (Fonner et al., 2016). However, PrEP uptake and adherence has been low, particularly among Black and Latinx transgender women and men who have sex with men (Kanny et al., 2019; Poteat et al., 2019). Existing data suggest that addressing intersectional economic, institutional, interpersonal, and psychosocial barriers to PrEP is critical for effective HIV prevention in these populations (Cahill et al., 2017; Poteat et al., 2017). Employment and other structural intervention studies are currently under study to test their efficacy to reduce HIV/STI vulnerability among transgender women (Benotsch and Zimmerman, 2017; HIV Prevention Trials Network, n.d.) and gay and bisexual men (Hill et al., 2020).

Multiple studies with serodiscordant male sexual partners have demonstrated that HIV transmission does not occur when the partner living with HIV is engaged in effective antiretroviral treatment (Yombi and Mertes, 2018). Advocates have led an education campaign using the slogan "U = U"—"undetectable equals untransmittable"—which has been endorsed by multiple organizations, including the Centers for Disease Control and Prevention (Lancet HIV, 2017). Ensuring that SGD people living with HIV have access to affirming health care from providers who are knowledgeable about current best practices in HIV prevention and treatment is critical both to increasing PrEP uptake and to the success of U = U.

The committee identified only one STI intervention designed for cisgender sexual minority women. A group-based, six-session, psychoeducational intervention with cisgender lesbian, bisexual, and queer women significantly increased sexual risk-reduction practices, STI knowledge, and self-efficacy for barrier use six weeks after the intervention ended (Logie et al., 2015). Similarly, the committee found only one intervention tailored specifically for transgender men: LifeSkills for Men, which adapted a small group-based behavioral HIV prevention intervention originally designed for young transgender women to address the unique needs of young transgender men who have sex with men (Reisner et al., 2016c). A pilot test found the intervention to be feasible and acceptable, with trends suggesting reduced HIV/STI risk behaviors across four months of follow-up.

Multiple group-based behavioral HIV prevention interventions developed for transgender women have shown some evidence of efficacy (Poteat et al., 2017). However, most were limited by less rigorous pre-post designs, short follow-up periods, or lack of any outcome evaluation. The only published full-scale behavioral HIV prevention randomized controlled trial for transgender women to date has been Project LifeSkills for young transgender women (Garofalo et al., 2018). This empowerment-based group intervention was delivered in six 2-hour sessions over 3 weeks, and intervention participants reduced condomless sex acts by 40 percent over 12 months of follow-up when compared with participants in a control group. One "status-neutral" peer-led group intervention, Sheroes, has demonstrated high feasibility, acceptability, and preliminary efficacy (Sevelius et al., 2020b). In another study of a couples-based HIV prevention intervention, transgender women and their primary cisgender male partners were randomized to a couples-based HIV prevention intervention comprised of three counseling sessions (two couples-focused sessions, which discussed relationship dynamics, communication, and HIV risk, and one individual-focused session on HIV prevention concerns) or a control condition (one session on general HIV prevention delivered to both partners together). At 3-month follow-up, participants in the intervention condition had 50 percent reduced odds of condomless sex with primary partners and 30 percent reduction with casual partners relative to the control condition (Operario et al., 2017). As part of a Special Project of National Significance, the Health Resources and Services Administration in the Department of Health and Human Services recently funded nine sites across the country to implement and evaluate interventions to improve care engagement for HIV-positive transgender women of color (Rebchook et al., 2017). While each intervention was different, common elements included community outreach, peer navigation, access to gender-affirming medical care (e.g., hormone therapy), case management, and transgender-competent HIV care (Chapter 12 discusses the lessons learned from this project).

Sexual Function

Most sexual health research with SGD populations, particularly transgender women and gay men, has focused on HIV/STIs, with less attention to other sexual health domains, such as desire, arousal, orgasm, pleasure, and other aspects of sexual function (Stephenson et al., 2017; Wade and Harper, 2017). However, evidence indicates that sexual minority men may report lower orgasm frequency, pleasure, and satisfaction than heterosexual men, and bisexual women report greater physical discomfort during sex and fewer orgasms than lesbians (Flynn, Lin, and Weinfurt, 2017). In an online convenience sample of almost 53,000 adults, heterosexual men were most likely to report that they usually or always orgasmed when sexually intimate (95%), followed by gay men (89%), bisexual men (88%), lesbian women (86%), bisexual women (66%), and heterosexual women (65%) (Frederick et al., 2018).

The study of sexual function among transgender people has focused on genital sensation after gender-affirming surgeries (Frey et al., 2017). Though limited by convenience sampling and small sample sizes, existing studies indicate that most transgender adults retain the ability to achieve orgasm and report satisfaction with their sexual functioning after gender-affirming surgeries (Sigurjonsson et al., 2017; Stephenson et al., 2017). A large European study of transgender adults found increases in sexual desire and arousal after surgery (Kerckhof et al., 2019). Data on sexual function among transgender people who have not had gender-affirming surgeries are limited.

Studies on sexuality among people with intersex traits have focused disproportionately on sexual function as an outcome of childhood genital surgery (see Chapter 12). High rates of sexual dissatisfaction, sexual inhibition, and sexual problems have been found across variables of gender, genital difference, specific intersex condition, or having undergone prior surgery (Kreukels et al., 2019). Studies have consistently linked prior history of clitoral surgery with decreased genital sensation and anorgasmia in comparison with intersex individuals who had not undergone clitoral surgery. With or without surgical intervention, concerns about genital appearance may affect sexual function for some intersex people (Gomez-Lobo and Amies Oelschlager, 2016; Meyer-Bahlburg et al., 2018; van der Horst and de Wall, 2017). Multiple studies have found reports of dissatisfaction with genital appearance and satisfaction with genital function among intersex adults (Kreukels et al., 2019). Overall, concerns about long-term effects on sexual function from surgery performed in infancy support arguments to delay surgical intervention until the patient can provide informed consent. Ethical and other considerations around early genital surgeries for infants with intersex traits are discussed in more detail in Chapter 12.

Published studies assessing influences on sexual function among SGD populations are rare, and large gaps remain in understanding the relationship between minority stress and sexual function (Grabski and Kasparek, 2017; Grabski et al., 2018). Research on sexual function among LGBT and intersex people has been limited by the degree to which existing measures center and normalize cisgender, heterosexual, and non-intersex experiences of anatomy, desire, and sexual behavior, as well as researchers' failure to develop and use research instruments that have been validated among SGD populations (McDonagh et al., 2014; Reisner et al., 2020b). Better research tools to assess all domains of sexual health for LGBT, intersex, and other SGD people are needed (Barone et al., 2017; Sobecki-Rausch, Brown, and Gaupp, 2017). Given this lack of basic information about sexual function among SGD people, it is not surprising that no SGD-specific or SGD-inclusive interventions to improve sexual function were identified in the published literature.

Fertility and Contraception

Technological advances have greatly increased reproductive options for SGD populations. However, data on the prevalence and success rates of assisted reproduction among these populations are sparse. A systematic review of donor intrauterine insemination, in vitro fertilization, and gestational surrogacy among sexual minorities suggests that same-sex couples have higher success rates with assisted reproduction than their heterosexual counterparts (Tarin, Garcia-Perez, and Cano, 2015). However, studies have been limited by sampling bias, small sample sizes, and failure to control for influential covariates, such as age, smoking, reproductive history, and variation in intervention protocols.

Young sexual minority women, particularly bisexual women, have a higher rate of unintended pregnancy than their heterosexual peers, but there has been little study of their fertility behaviors (Ela and Budnick, 2017). In a recent longitudinal study of pregnancy risk among sexual minority women that examined possible reasons for this higher rate, which followed participants for 30 months, investigators found that sexual minority women had more partners, more sexual intercourse with men, less frequent contraceptive use, less use of a dual method of contraception (condom plus hormonal method), and more gaps in contraception use than heterosexual women. These findings highlight the importance of counseling on contraception and family planning for sexual minority women (Ela and Budnick, 2017).

Gender-affirming medical or surgical therapies for transgender individuals may result in reduced or complete lack of fertility (Cheng et al., 2019). Suppression of puberty with gonadotropin-releasing hormone analogs can pause the maturation of germ cells and thus affect fertility potential. Testosterone therapy can suppress ovulation and alter ovarian histology, while estrogen therapy can lead to impaired spermatogenesis and testicular atrophy. The effect of hormone therapy on fertility is potentially reversible, but the extent is unclear. Gender-affirming surgery that includes oophorectomy or orchiectomy results in permanent sterility; see Chapter 12.

Research indicates that clinicians should counsel transgender patients on fertility preservation options prior to initiation of gender-affirming therapy (Cheng et al., 2019). A narrative review of fertility preservation among gender minorities found that many transgender adults want the option of fertility preservation (Rowlands and Amy, 2018). The current fertility preservation options for transgender people with ovaries and a uterus are embryo cryopreservation, oocyte cryopreservation, and ovarian tissue cryopreservation. For transgender people with testes, sperm cryopreservation, surgical sperm extraction, and testicular tissue cryopreservation are available. Transgender people face many barriers to fertility care, such as provider discrimination; lack of information; lack of insurance coverage; legal barriers, such as heterosexist and gendered requirements in state fertility coverage mandates; scarcity of fertility centers; financial burden; and emotional cost (Cheng et al., 2019). These barriers mean that all transgender people need to be informed of available fertility preservation options (De Roo et al., 2016; Knudson and De Sutter, 2017).

Data suggest that transgender men have limited access to reproductive health services and information, even if they are able to become pregnant (Cipres et al., 2017). One study of almost 200 transgender men found that many used contraception and had experienced pregnancy and abortion, even after social and hormonal gender affirmation (Light et al., 2018). Some contraceptive options may be undesirable to transgender men due to exposure to gender-incongruent hormones, like progestins or estrogens, or the requirement of pelvic exams for placement of intrauterine devices. Transgender men need gender-affirming counseling and care regarding reproductive health, and systems- and provider-level interventions are needed to create gender-affirming and inclusive reproductive health care environments and services (Hahn et al., 2019). Discrimination and other barriers to clinically appropriate and culturally responsive health care for transgender people are discussed in detail in Chapter 12.

Infertility is a common feature of some, but not all, intersex conditions (El-Maouche et al., 2017; Mooij et al., 2017). At the same time, intersex adolescents and adults who have a uterus and no or infrequent menstrual bleeding may erroneously assume that they do not need contraception and may thus be at risk for an unintended pregnancy. Unplanned pregnancies among people with intersex traits may be associated with higher rates of spontaneous abortions, fetal malformation, and chromosomal abnormalities than among people without intersex traits. Very few data exist on the efficacy of cryopreservation in intersex individuals with viable gametes (Schleedoorn et al., 2019). Even when there has been evidence of efficacy, follow-up data are lacking. Discussion of parenting desires and options, including through adoption, donor gametes, and gestational surrogacy, is an important part of informed consent for hormonal and surgical interventions for individuals with intersex traits (Van Batavia and Kolon, 2016). Access to reproductive health specialists who are knowledgeable about intersex traits and who can discuss options for contraception, fertility preservation, and pregnancy is essential (Gomez-Lobo and Amies Oelschlager, 2016), as is further research on fertility options for intersex individuals.

VIOLENCE AND VICTIMIZATION

Numerous studies show that LGBTQ people experience high rates of violence and victimization that begin early in the life course and persist into adulthood. Specific types of violence documented against LGBTQ people include family violence (McGeough and Sterzing, 2018); intimate partner violence (Edwards, Sylaska, and Neal, 2015; Finneran and Stephenson, 2013; Peitzmeier et al., 2020); sexual violence (Chen et al., 2020; Langenderfer-Magruder et al., 2016); police violence (DeVylder et al., 2017, 2018); and structural violence, such as exclusion and discrimination in health care, employment, education, public accommodations, and other areas of everyday life (Casey et al., 2019). Hate crimes, including physical assault and other forms of bias-motivated violence, are also a serious concern for SGD people (Boynton et al., 2020; Burks et al., 2018; Coston, 2018; Cramer et al., 2018; Herek, 2008; Herek, Gillis, and Cogan, 1999; Katz-Wise and Hyde, 2012; Mills, 2019). Violence and victimization affecting people with intersex traits is an understudied issue, though interviews with families reveal that potential bullying on the basis of intersex traits is often cited by clinicians as a reason to have genital surgery in childhood (Human Rights Watch, 2017).

Evidence indicates that LGBTQ youth disproportionately encounter violence and victimization relative to heterosexual and cisgender youth (Edwards, 2018; Johns et al., 2018, 2019b; Olsen et al., 2017; Poteat et al., 2020; Rostad et al., 2019). These experiences include being bullied electronically or at school, being threatened or injured with a weapon at school, experiencing sexual or physical dating violence, and feeling unsafe at or traveling to or from school. Elevated rates of adverse childhood experiences, including physical and sexual abuse, have also been found in LGBTQ populations (Baams, 2018; Merrick et al., 2018). LGBTQ adolescents have increased rates of polyvictimization—experiencing multiple forms of victimization—relative to their non-LGBTQ peers (Baams, 2018; Schwab-Reese et al., 2018).

SGD people may also experience unique forms of victimization, such as identity abuse (Woulfe and Goodman, 2018), in which perpetrators leverage systems of structural oppression to harm individuals. For instance, perpetrators may use aspects of transphobia, such as withholding gender affirmation or using the threat of "outing," as a form of blackmail to assert power and control over a transgender person (Peitzmeier et al., 2019). So-called "gay panic" or "transgender panic" defenses, in which defendants, typically cisgender men, leverage societal homophobia or transphobia to escape punishment in criminal cases involving the assault or murder of a gay, lesbian, bisexual, or transgender person, are also related to identity abuse (Woods, Sears, and Mallory, 2016). Few studies have characterized perpetrators of violence and victimization against LGBT people (Coston, 2018).

Drivers of Violence and Victimization

The elevated rates of violence and victimization experienced by SGD people are rooted in societal oppression, stigma, and bias against LGBT and other SGD people. There are different patterns of violence and victimization on the basis of gender (i.e., identity as male, female, or non-binary) and transgender status. For example, youth who are both LGBQ and transgender have been shown to be at highest risk of past-year intimate partner violence, indicating that stigmatized sexual orientation and gender identity interact to structure risk of exposure to violence (Walls et al., 2019). Similarly, childhood gender nonconformity (i.e., having a gender expression that differs from societal expectations for feminine or masculine appearance and behavior) is associated with greater violence and victimization, independent of sexual orientation or gender identity (Adhia et al., 2018; Baams, 2018; Gordon et al., 2018; Klemmer et al., 2019; Roberts et al., 2012a, 2013).

Violence and victimization that target people because of their sexual orientation, gender identity, or intersex status are often exacerbated by racism, sexism, and xenophobia. For instance, high homicide rates for Black transgender women reveal increased vulnerability to gender-based violence at the intersection of race and gender identity (Dinno, 2017; Wirtz et al., 2020).

Interventions to Address Violence and Victimization

A systematic review of peer-reviewed literature from 2000 to 2019 on interventions and their effectiveness in preventing or reducing violence and victimization for LGBT youth identified only one intervention, anti-bullying laws (Coulter et al., 2019). These laws have been shown to help reduce bullying victimization, particularly for sexual minority boys (Seelman and Walker, 2018). Protective laws that specifically include sexual orientation reduce the risk of suicide attempts, forced sexual intercourse, and feeling unsafe at school or on the way to or from school among all youth, regardless of sexual orientation (Meyer et al., 2019). In a meta-analysis of 15 primary studies with 62,923 participants, gay-straight alliances were associated with significantly lower levels of self-reported homophobic victimization, safety fears, and hearing homophobic remarks (Marx and Kettrey, 2016; see also Chapter 9). A recent cluster randomized control trial that tested the efficacy of a bystander intervention to reduce violence and violence acceptance for sexual minority male and female high school students in Kentucky was effective at reducing violence for heterosexual students but was less effective for sexual minority youth, particularly sexual minority males (Coker et al., 2020). This outcome points to the need for ongoing research to develop, design, and test interventions to address violence and victimization against LGBTQ youth.

In addition to anti-bullying laws, other structural interventions at the state and federal levels have sought to address violence and victimization against LGBTQ people. As of 2020, 11 states have banned gay and transgender panic defenses (Movement Advancement Project, 2020). Legal equality in the form of state policies for same-sex partnerships, employment nondiscrimination, and hate crimes laws has been shown to decrease the incidence of hate crimes based on sexual orientation (Levy and Levy, 2017). Sexual orientation and gender identity are included in the federal hate crimes law, which provides for enhanced criminal penalties in cases of bias-motivated violence and also requires improved tracking of hate crimes perpetrated against LGBTQ people (Mattson, 2018). Hate crimes laws are controversial, however, because of their potential to be misused against defendants from poor communities or communities of color, which are already over-policed and disproportionately represented in the criminal justice system (Swiffen, 2018).

Trauma-informed interventions are critical to address violence and victimization among LGBTQ people, but these interventions remain underdeveloped (Niolon et al., 2017; Peitzmeier et al., 2020). A recent scoping review found no SGD-specific programs to prevent or address intimate partner violence in SGD people (Subirana-Malaret, Gahagan, and Parker, 2019). However, interventions to mitigate the health-related sequelae of violence for SGD people are being developed and tested. For example, an intervention for HIV-negative men who have sex with men who have history of childhood sexual abuse was developed to address HIV acquisition risk and posttraumatic stress by integrating HIV risk reduction with modified cognitive and behavioral therapy for posttraumatic stress, trauma, and self-care (CBT-TSC). A randomized study of men who have sex with men found that those who were assigned to CBT-TSC had reduced odds of condomless sex with an HIV-positive or unknown status partner; they also had reduced odds of posttraumatic stress disorder (PTSD) and avoidance symptoms relative to those in the control condition assigned only to HIV voluntary counseling and testing (O'Cleirigh et al., 2019). Additional interventional research is needed to prevent and address violence in SGD populations.

MENTAL AND BEHAVIORAL HEALTH

Mental Health

Much of the early literature on the health of LGBT populations centered on mental health disparities and existed in tension with the misuse of mental health diagnoses to justify discrimination against and social exclusion of LGBT people. Since the release of the Institute of Medicine (2011) report, there has been a surge in research empirically evaluating determinants of and interventions for improving the mental health of LGBT and other SGD populations. Research indicates that disparities in SGD population mental health compared with the non-SGD population appear as early as adolescence and may persist even into older adulthood (Fredriksen-Goldsen et al., 2015).

Adolescence is a vulnerable time for the development of mental health symptoms. Studies have consistently found that higher rates of mood and anxiety disorders, PTSD, eating disorders, and substance use disorders emerge in adolescence for LGBT populations (Plöderi and Tremblay, 2015; Russell and Fish, 2016). Suicide is the second leading cause of death for youth aged 10 to 24 (Heron, 2019), and a recent systematic review and meta-analysis of population-based longitudinal studies found a significantly higher risk of suicide attempts for LGB youth relative to same-age heterosexual controls (Haas et al., 2011; Miranda-Mendizábal et al., 2017).

Mental health disparities that begin in adolescence can persist far into adulthood (Fredriksen-Goldsen et al., 2013). LGBT adults are at higher risk than non-LGBT adults for mental health problems, such as depression, anxiety, anorexia nervosa, and bulimia nervosa (Hottes et al., 2016; McClain and Peebles, 2016; Plöderi and Tremblay, 2015). On a spectrum of suicidality anchored at one end by suicide attempts, research has produced evidence identifying increased risk in LGBT populations of other suicidal symptoms, such as non-suicidal self-injury and suicidal ideation (Jackman, Honig, and Bockting, 2016; Liu and Mustanski, 2012). There is also some evidence that severe mental illness—defined by the requirement of extensive psychiatric treatment in inpatient and outpatient settings and resulting in significant disability in one or more major life domains (Parabiaghi et al., 2006)—may occur at higher rates among LGBT populations.

Mental health risks vary among SGD groups. For instance, there is some evidence of higher rates of depression, eating disorders, and suicidality among bisexual people relative to lesbian and gay people (Plöderi and Tremblay, 2015; Pompili et al., 2014). In comparison with cisgender adults, transgender adults report elevated rates of psychiatric diagnoses, such as major depressive disorder, anxiety disorders, PTSD, and eating disorders (Connolly et al., 2016; Dhejne et al., 2016; Fredriksen-Goldsen et al., 2014; James et al., 2016; Marshall et al., 2016; Mueller, De Cuypere, and T'Sjoen, 2017). Among military veterans, there is evidence of higher rates of suicidality for both LGB and transgender people and higher rates of depression, PTSD, serious mental illness, and sexual trauma among transgender people (Blosnich, Bossarte, and Silenzio, 2012; Brown and Jones, 2015).

Less is known about the epidemiology of mental health problems among intersex populations in the United States, as no population surveys currently assess intersex status (Tamar-Mattis et al., 2018). Research is often limited to a primary variable of surgical or medical treatment with identified outcomes of gender dysphoria and general health-related quality of life (Sandberg, Gardner, and Cohen-Kettenis, 2012). When particular psychiatric and neurocognitive outcomes are evaluated, it is generally in the context of a specific intersex condition (differences of sex development [DSD]). For instance, congenital adrenal hyperplasia and Kleinfelter and Turner syndromes have been associated with attention deficit hyperactivity disorder and autism (de Vries et al., 2019).

There has been much more research into the mental health and well-being of parents of infants and children with intersex traits than for people with intersex traits themselves, and much of this research has been in the context of making decisions regarding early genital surgery (Wisniewski, 2017). The dsd-LIFE Group, a multicenter European study that looked at mental health and quality of life among people with intersex traits, is a notable exception that has no current correlate in the United States (de Vries et al., 2019). Among the 1,022 participants in the dsd-LIFE study, all males and some females with specific DSDs reported increased rates of depression and anxiety relative to country-specific reference populations.

Research regarding the mental health of SGD populations of color has yielded mixed findings. For instance, among respondents to the American College Health Association National College Health Assessment-II surveys from 2008 and 2009, there were lower rates of depression for Asian, Black, and Latinx LGB students than for white LGB students (Lytle, De Luca, and Blosnich, 2014). In contrast, relative to white students, Black and multiracial students reported significantly higher rates of suicide attempts, while Latinx students reported lower rates of suicidal ideation and attempts, though this difference was not statistically significant. The 2015 U.S. Transgender Survey (USTS) found that Black, Native American, Asian, Latinx, Middle Eastern, and multiracial transgender adults reported higher rates of past-year and lifetime suicide attempt than white respondents, with the highest rates for Native American and multiracial respondents (James et al., 2016). An analysis of the Aging with Pride: National Health, Aging, and Sexuality/Gender Study population found decreased mental health-related quality of life for the older LGBT participants who were Black and Hispanic relative to white participants (Kim, Jen, and Fredriksen-Goldsen, 2017).

Drivers of Mental Health Disparities

Mental health disparities among LGBT and other SGD populations are consistent with stress responses to external factors, such as stigma, discrimination, and violence (Clements-Nolle et al., 2018; James et al., 2016; Nuttbrock et al., 2014; Perez-Brumer et al., 2017; Reisner et al., 2016d; Whitton et al., 2016). Bias-motivated violence, such as hate crimes based on sexual orientation or gender identity, may have particularly severe psychological consequences for LGBT people (Herek, Gillis, and Cogan, 1999). Internalized stigma and attempts to conceal one's identity to avoid stigma have been associated with psychiatric symptoms and psychological distress among LGBT populations and with suicide attempts among transgender adults (Gevonden et al., 2014; Hatzenbuehler and Pachankis, 2016). Conversion therapy that attempts to change sexual orientation or gender identity is also a mental health stressor for LGBT people: LGBT populations are at risk for exposure to conversion therapy, and exposure to conversion therapy is a risk factor for mental health problems. This topic is discussed in detail in Chapter 12.

Among LGBTQ youth, victimization on the basis of sexual orientation or gender identity is associated with worse depression, more anxiety, lower self-esteem, less school belonging, and higher prevalence of suicidality than for non-LGBTQ youth (Kosciw et al., 2018). Negative mental health symptoms, suicidal ideation and attempts, and risky behaviors among youth have been correlated with living in areas with higher rates of assault-based hate crimes against LGBT people or higher scores on composite indices of structural stigma (Hatzenbuehler and Pachankis, 2016). For example, in a population-based sample of 9th- through 12th-graders in Boston public schools, sexual minority youth residing in neighborhoods with higher rates of LGBT assault hate crimes were significantly more likely to report suicidal ideation and suicide attempts than those living in neighborhoods with lower rates of LGBT assault hate crimes (Duncan and Hatzenbuehler, 2014). No similar associations were found between LGBT assault hate crimes and either suicide ideation or attempt in heterosexual students, indicating that the results were specific to sexual minority adolescents. Furthermore, there were no significant associations for non-LGBT crimes and suicidality in sexual minority adolescents, indicating the specificity of results to LGBT assault hate crimes.

Retrospective reports of adverse childhood experiences are also correlated with negative mental health outcomes and psychiatric illness in LGBT populations (Blosnich and Andersen, 2015; Hughes et al., 2017). A systematic review and meta-analysis of 73 studies that included more than 47,000 LGBT adults found high rates of such events, including interpersonal stigma and victimization, among LGBT participants (Schneeberger et al., 2014). Thus, exposure to higher numbers of adverse childhood experiences may contribute to the elevated rates of negative mental health outcomes found among LGBT people (McLaughlin et al., 2012; Roberts et al., 2012b).

Among SGD populations, some associations between mental health outcomes and exposure to stressors, stigma, and victimization are unique to specific groups. Bisexual women, for example, have a higher lifetime prevalence of rape and sexual assault than lesbian or heterosexual women, which may correlate with poorer mental health outcomes (Schulman and Erickson-Schroth, 2019). LGBT individuals with serious mental illness experience intersecting heterosexism and cisgenderism in psychiatric settings and ableism in LGBT spaces, which may exacerbate disparities (Kidd et al., 2016; Wong et al., 2014).

Though there are no studies of minority stress specifically among intersex populations, the dsd-LIFE study in Europe found that mediating factors for mental health disparities affecting people with intersex traits included self-esteem, openness, and shame (de Vries et al., 2019), which are consistent with experiences of minority stress. Similarly, experiences of social, sexual, and medical stigma have been found to occur among individuals with intersex traits (Ediati et al., 2017; Meyer-Bahlburg et al., 2017a, 2017b, 2018). There are as yet no studies specifically exploring the ways in which structural or interpersonal stigma or minority stressors might influence intersex health disparities.

Military service may confer both risks and benefits to mental health. There is some evidence that LGBT people may be at higher risk of victimization than non-LGBT people while serving (Goldbach and Castro, 2016), though data are limited. Of the 3 percent of 2015 USTS respondents who were on active duty military, nearly 50 percent reported support from their commanding officers in social transition, though only 36 percent reported support in medical transition (James et al., 2016). However, there may also be a benefit to feeling a sense of belonging in a military or veteran population (Matarazzo et al., 2014). Respondents in the 2015 USTS reported nearly twice the rate of prior military service as the general population (15% and 8%, respectively), and despite higher rates of unemployment, serious psychological distress, and suicide attempts relative to the general population, all rates were lower than those reported by nonveteran respondents (James et al., 2016). These findings are consistent with data from a 2014 survey of 183 transgender older adults, for whom prior military service predicted fewer depressive symptoms and greater health-related quality of life (Hoy-Ellis et al., 2017).

SGD populations of color may also experience minority stressors and stigma on the basis of their racial or ethnic identity, which may contribute to some findings of elevated mental health risk. Among older LGBT people of color, mediators of mental health quality of life included markers of stigma and stress, such as income, education, identity affirmation, social support, and discrimination (Kim, Jen, and Fredriksen-Goldsen, 2017). Similarly, disparate rates of mental health problems among respondents of color to the USTS were mediated by victimization events (James et al., 2016).

Interventions to Address Mental Health Disparities

Emerging evidence has revealed interventions that improve mental health outcomes among SGD populations. Among adults, psychotherapies specifically created for LGBT individuals have been associated with improved mental health (Diamond et al., 2012; Hatzenbuehler and Pachankis, 2016; Lucassen et al., 2015). Additional interventional research is under way, including a transdiagnostic treatment approach to specifically address the cognitive, affective, and behavioral effects of minority stress processes for young adult sexual minority men (Pachankis et al., 2019). There are few data to guide interventions for LGBT people with serious mental illness (Evans et al., 2016). Training emphasizing cultural competency in relation to sexual orientation, gender identity, and intersex status for mental health providers and mental illness training for LGBT- and intersex-oriented service providers may be useful in improving care and outcomes, especially if such training results in LGBTI individuals feeling safe in disclosing more aspects of their identity to their providers (Kidd et al., 2016). Robust work has found that supportive home environments, affirming school climates, and laws and policies advancing marriage equality and prohibiting discrimination and bullying correlate with lower rates of suicide ideation and attempts in large, population-based analyses of LGBT youth (Hatzenbuehler and Pachankis, 2016; Raifman et al., 2017).

For transgender individuals, gender-affirming medical treatment and interventions targeted at building self-esteem and resilience through clinical care, support groups, activism, and family support have consistently been associated with improvements in mental health outcomes (Costa et al., 2015; de Vries et al., 2011, 2014; Hughto, Reisner, and Pachankis, 2015).

Family support was strongly associated with lower rates of psychological distress and lifetime suicide attempt in 2015 USTS respondents (James et al., 2016). Peer support has also been associated with improved psychosocial well-being for adults with intersex traits and has been recommended as a routine and essential part of intersex care (Krege et al., 2019; Lee et al., 2016). Unfortunately, there appears to be a relative absence of research on interventions targeted specifically at improving mental health among LGBT older adults, bisexual people, LGBT military personnel and veterans, LGBT people of color, and intersex adults.

Substance Use and Behavioral Health

SGD populations are disproportionately burdened by substance use disorders across the life course, including use of tobacco, alcohol, and other drugs (Azagba, Latham, and Shan, 2019; Azagba et al., 2020; Boyd et al., 2019; Dai and Meyer, 2019; Gattamorta, Salerno, and Castro, 2019; Gonzales and Henning-Smith, 2017; Gonzales, Przedworski, and Henning-Smith, 2016; Hoffman et al., 2018; Kerridge et al., 2017; Krueger, Fish, and Upchurch, 2020; McCabe et al., 2019a, 2019b; Schuler et al., 2018). Substance use rates are consistently high for sexual minorities regardless of whether sexual orientation is measured as sexual identity, sexual attraction, or sexual behavior (Kerridge et al., 2017). There is substantial heterogeneity by gender identity and expression in substance use behaviors among the transgender population (Azagba et al., 2019; Buchting et al., 2017; Hoffman et al., 2018; Lowry et al., 2018; Newcomb et al., 2019; Watson et al., 2020). There is as yet no research on substance use among intersex populations.

Substance use disparities begin early for LGBT populations, with evidence showing that LGBT adolescents are at greater risk of substance use and misuse when compared with their heterosexual and cisgender peers (Day et al., 2017; Johns et al., 2018, 2019b; Johnson et al., 2019; Lowry et al., 2017; McCabe et al., 2013; Mereish, 2019; Phillips et al., 2019; Schuler and Collins, 2019). These substance use disparities may continue into young adulthood (Coulter et al., 2015; Jun et al., 2019) and persist well into older adulthood (Dai and Meyer, 2019).

It is important to consider subgroup differences when assessing substance use among SGD populations. For instance, prevalence and patterns of substance use behaviors, substance use disorders, and substance use morbidities are particularly heightened for bisexual people (Boyd et al., 2019; McCabe et al., 2019a, 2019b) and sexual minority women (Cochran, Björkenstam, and Mays, 2017; Fish, Hughes, and Russell, 2018; Kerridge et al., 2017; Krueger, Fish, and Upchurch, 2020; McCabe et al., 2019a, 2019b; Schuler et al., 2018).

Drivers of Substance Use and Behavioral Health Disparities

Substance use morbidity for LGBT people may result from exposure to high levels of minority stress from their disadvantaged social status; homophobic, biphobic, or transphobic bullying; or maladaptive coping to stressful life events. For example, in the 2013–2014 California Healthy Kids Survey of 316,766 students in 1,500 middle and high schools (grades 7, 9, and 11), gender- and sexuality-based harassment at school was higher for LGB youth relative to heterosexual youth, was independently associated with greater odds of substance use in every grade, and explained many disparities in substance use between LGB and heterosexual youth (Coulter et al., 2018).

In a nationally representative study using data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC)-III, sexual minorities were at substantially higher risk of severe alcohol use disorder than their heterosexual counterparts, and higher levels of sexual orientation discrimination increased the odds of alcohol use disorder in sexual minorities (McCabe et al., 2019b). This finding suggests that substance abuse prevention and treatment strategies should address sexual minority-specific vulnerabilities. Another study using NESARC-III data found that sexual orientation discrimination and stressful life events each accounted for substance use disorder disparities between sexual minority subgroups and heterosexual adults (Krueger, Fish, and Upchurch, 2020). These findings also suggest that pathways to substance use disorder disparities may differ for different sexual minority subgroups. The age at which exposure to social stressors occurs is also relevant for risk of substance use disorders. A nationally representative sample of non-heterosexual adults found that discrimination based on sexual orientation was most prevalent in early young adulthood, but it increased the odds of substance use disorders only if people were exposed to discrimination at older ages (Evans-Polce et al., 2020).

Due to the lack of gender identity data in U.S. health surveillance systems, population data are limited on pathways to social stress-related substance use disparities for transgender people compared to cisgender people. In nonprobability samples of transgender people, however, social stressors such as discrimination, family rejection, a lack of gender affirmation, and bullying and violence victimization are associated with substance use (Day et al., 2017; Gamarel et al., 2016, 2020; Gilbert et al., 2018; Jannat-Khah et al., 2018; Kidd et al., 2019; Klein and Golub, 2016; Menino et al., 2018; Reisner et al., 2015).

Social norms, social networks, and social support have also been implicated in sexual orientation disparities in substance use. With regard to social norms, in a probability study of 3,012 middle and high school students (aged 11 to 18) in a mid-sized school district in the southern United States, sexual minority adolescents had higher perceptions of others' substance use behavior and more permissive perceptions of whether a substance use behavior is approved by others than heterosexual adolescents. These perceptions partially explained disparities for sexual minority youth in both lifetime and current substance use risk (Mereish et al., 2017). The National Longitudinal Study of Adolescent to Adult Health (Add Health) study found that social network factors, including higher frequency or quantity of tobacco use and drinking to intoxication, reflected sexual orientation disparities in alcohol misuse (Hatzenbuehler, McLaughlin, and Xuan, 2015). An analysis of NESARC-III data found that functional support was associated with lower rates of alcohol use disorder for some sexual minorities, while structural support (type and frequency of kin and non-kin contact) increased the risk for other groups (Kahle et al., 2019).

Interventions to Address Substance Use and Behavioral Health Disparities

A review of LGBT substance use research between 2013 and 2017 found an emphasis on individual-level risk factors and a need for additional studies of protective factors and group differences by race and ethnicity, sex assigned at birth, sexual orientation, and gender identity (Kidd et al., 2018). Also needed are nationally representative samples and translation of findings into interventions to prevent and treat substance use for LGBT people. Research on substance abuse treatment utilization is underdeveloped and relies heavily on nonprobability samples (Flentje et al., 2015; Glynn and van den Berg, 2017). In a nationally representative study of adults, among those with any lifetime substance use disorder, some sexual minority adult groups had higher odds of lifetime substance abuse treatment utilization than others (McCabe et al., 2013). Nonetheless, many SGD persons who need substance use treatment do not access it due to stigma and other barriers to care (Allen and Mowbray, 2016) (see Chapter 12). Protective factors for reducing substance use among transgender and gender diverse youth are parent connectedness and higher levels of teacher connectedness (Gower et al., 2018).

There is a dearth of programs and treatments to prevent or intervene on substance use disparities in LGBT populations. In a systematic review of the peer-reviewed literature from 2000 to 2019 on interventions and their effectiveness in preventing or reducing substance use, mental health problems, and violence victimization in LGBT youth, only 12 interventions were identified, of which 2 were for substance use (Coulter et al., 2019). Another review identified large research gaps in the area of tobacco prevention and cessation interventions for SGD youth and young adults (Baskerville et al., 2017). Some interventional research has addressed substance use in the context of sexual risk for HIV acquisition or transmission in gay and bisexual men (Mimiaga et al., 2019b; Parsons et al., 2014). For example, a randomized controlled trial of a tailored, culturally sensitive intervention for homeless gay and bisexual men found significant reductions in stimulant use over time for men assigned to a nurse case management plus contingency management or to a standard education plus contingency management program (Nyamathi et al., 2017). More rigorous research is needed, including studies to determine if adaptations of evidence-based interventions that include minority stress and other SGD-specific concerns are more effective than treatment as usual (Bochicchio et al., 2020). Additional interventional research is needed to understand and mitigate the substance use inequities found in LGBT populations. Research is also needed into the epidemiology, etiology, and treatment of substance use disorders among people with intersex traits.

SUMMARY AND CONCLUSIONS

The physical and mental health of SGD populations, such as lesbian, gay, bisexual, transgender, queer, and intersex people, is substantially affected by external influences that include discrimination, stigma, prejudice, and other social, political, and economic determinants of health. Thus, SGD populations experience both physical and mental health inequities.

In addition to health disparities related to sexual orientation, gender identity, and intersex status, many SGD people also experience health disparities related to intersecting aspects of identity that include but are not limited to race and ethnicity. The associations between stress, stigma, social determinants of health, and health outcomes hold across multiple health conditions. Different social and individual risks may intersect to compound adverse health effects. Cross-cutting resiliency factors appear to mitigate some of these risks and can form the basis for interventions.

> **CONCLUSION 11-1: Sexual and gender diverse populations experience numerous disparities in physical and mental health. These disparities are unevenly distributed in relation to such factors as race and gender.**

In comparison with heterosexual and cisgender populations, SGD populations have less favorable overall health and higher rates of cardiovascular disease, certain cancers, exposure to violence, and HIV and other STIs. Among sexual minority women, lesbian and bisexual women have higher odds of risk factors for cardiovascular disease, such as hypertension and diabetes, as well as more risk factors for breast cancer. Transgender adults may have elevated rates of cardiovascular disease and myocardial infarction compared with their cisgender counterparts.

LGBT people and people with intersex traits are at risk of violence from family members, peers, intimate partners, and strangers as a result of their sexual orientation, gender identity, or intersex status. Some of the highest risks of violence affect bisexual women and transgender people, particularly transgender women of color. Black transgender women are also disproportionately affected by HIV, as are cisgender gay and bisexual men and other men who have sex with men, who are overrepresented among people living with HIV and represent the largest proportion of new HIV diagnoses every year in the United States.

Mental health disparities in SGD populations include heightened anxiety and depressive symptoms and greater suicidality among LGBT people as compared to heterosexual or cisgender individuals. Substance use and behavioral health disparities include greater use of tobacco, alcohol, and other drugs among LGBT people than among heterosexual or cisgender individuals. Sexual minority individuals are also less likely than their heterosexual counterparts to report healthy sleep, and similar disparities may exist for transgender people.

CONCLUSION 11-2: Health disparities affecting sexual and gender diverse populations are often poorly understood due to gaps in research and data collection relevant to sexual orientation, gender identity, and intersex status.

Because both clinical and population research studies rarely include measures of sexual orientation, gender identity, and intersex status, the full scope and magnitude of physical and mental health disparities and their differential effects across and within SGD populations is not known. There is a particular lack of longitudinal research, representative population surveys, experimental trials, and quasi-experimental studies that collect, analyze, and report health-related data in the context of sexual orientation, gender identity, and intersex status.

Examples of health conditions and risks that are understudied in SGD populations include chronic diseases, such as dementia, cardiovascular disease, and cancer; health behaviors, such as diet, exercise, and sleep; suicidality; all-cause and specific mortality; quality of life; the physical, emotional, and sexual health and well-being of people with intersex traits across conditions and across the lifespan, especially among adolescents and adults who did not have genital surgery; and the physical and mental health of transgender people, including non-binary people. In many of these areas, reliable instruments and scales validated for use with SGD populations have not yet been developed. There is also a relative dearth of data on intersections with other aspects of identity such as race, ethnicity, age, and disability. Groups for which research is especially lacking include Black, Indigenous, and other people of color; people with intersex traits; asexual, bisexual, and non-monosexual people; and non-binary people.

> **CONCLUSION 11-3: The physical and mental health disparities experienced by sexual and gender diverse populations are driven by social forces, such as stigma, prejudice, and discrimination; they are not intrinsic personal characteristics related to sexual orientation, gender identity, or intersex status. They may also be compounded by intersecting stressors, such as racism, sexism, and xenophobia.**

There is no innate disorder associated with being an SGD individual. Rather, the disparities affecting SGD populations are driven by experiences of minority stress, which include both structural and interpersonal stigma, prejudice, discrimination, violence, and trauma. Minority stress exposures have many mental and physical consequences. Another important concept in relation to minority stress is resilience, which is the ability to maintain normal physical and psychological functioning when stress and trauma occur. More research is needed to elucidate the origins, pathways, and health consequences of minority stress and the factors that support resilience among SGD populations.

The consequences of minority stress are particularly severe for SGD Black, Indigenous, and other people of color, who are affected by exposure to compounded levels of racism, race-related stress, and trauma from multiple sources. They may therefore face stressors that adversely affect their health in ways that differ from and may exceed the disparities facing white SGD populations or heterosexual and cisgender populations of color. A specific focus on intersecting experiences of minority stress associated with both anti-LGBT bias and other forces of structural oppression is lacking in the minority stress literature.

> **CONCLUSION 11-4: Although a substantial amount of intervention research has been done in some areas of sexual and gender diverse population health (e.g., HIV among gay and bisexual men), there are notable gaps in research on interventions that address the influences of stigma, discrimination, and intersectional minority stress.**

Interventional research in SGD health remains in its infancy. Evidence-based interventions are needed to prevent and address health inequities. These interventions need to address the root causes and multilevel factors driving SGD health disparities. These factors include vulnerabilities uniquely experienced by SGD people, such as stigma, discrimination, and other sexual and gender minority stressors, as well as intersectional stressors experienced by SGD people living at the intersection of multiple marginalized populations (e.g., racism experienced by Black SGD people). Interventions that address individual, interpersonal, and structural determinants of health are necessary to close SGD health disparities. Developing interventions tailored for specific SGD subgroups, including those targeting risks and harmful exposures specific to those groups (e.g., biphobia, transphobia, racism), and testing whether these tailored interventions are more effective than treatment as usual can help improve SGD population health.

Methodologically rigorous approaches are needed to move interventional research forward for SGD populations. This needed work includes implementing randomized controlled trials for intervention efficacy testing, as well as less traditional methods, such as pragmatic trials, natural experiments, and community-level randomization. In addition, rigorous scientific evaluation of existing and new programs, clinical care and service delivery, and policy and legal changes can help inform future opportunities to improve SGD population health. Leveraging resilience, including building upon strategies SGD people have used to resist societal oppression, is an important part of optimizing SGD health and well-being.

REFERENCES

Adhia, A., Gordon, A.R., Roberts, A.L., Fitzmaurice, G.M., Hemenway, D., and Austin, S.B. (2018). Childhood gender nonconformity and intimate partner violence in adolescence and young adulthood. *Journal of Interpersonal Violence*. doi: 10.1177/0886260518770643.

Agénor, M., Bailey, Z., Krieger, N., Austin, S.B., and Gottlieb, B.R. (2015). Exploring the cervical cancer screening experiences of black lesbian, bisexual, and queer women: The role of patient-provider communication. *Women and Health*, *55*(6), 717–736. doi: 10.1080/03630242.2015.1039182.

Agénor, M., Pérez, A.E., Peitzmeier, S.M., Potter, J., and Borrero, S. (2018). Human papillomavirus vaccination initiation among sexual orientation identity and racial/ethnic subgroups of Black and white U.S. women and girls: An intersectional analysis. *Journal of Women's Health*, *27*(11), 1349–1358. doi: 10.1089/jwh.2017.6768.

Akerstedt, T. (2006). Psychosocial stress and impaired sleep. *Scandinavian Journal of Work Environmental Health, 32*(6), 493–501.

Allen, J.L., and Mowbray, O. (2016). Sexual orientation, treatment utilization, and barriers for alcohol related problems: Findings from a nationally representative sample. *Drug and Alcohol Dependence, 161,* 323–330. doi: 10.1016/j.drugalcdep.2016.02.025.

Alzahrani, T., Nguyen, T., Ryan, A., Dwairy, A., McCaffrey, J., Yunus, R., Forgione, J., Krepp, J., Nagy, C., Mazhari., and Reiner, J. (2019). Cardiovascular disease risk factors and myocardial infarction in the transgender population. *Cardiovascular Quality and Outcomes, 12*(4). doi: 10.1161/CIRCOUTCOMES.119.005597.

Apaydin, K.Z., Fontenot, H.B., Shtasel, D., Dale, S.K., Borba, C., Lathan, C.S., Panther, L., Mayer, K.H., and Keuroghlian, A.S. (2018). Facilitators of and barriers to HPV vaccination among sexual and gender minority patients at a Boston community health center. *Vaccine*, *36*(26), 3868–3875. doi: 10.1016/j.vaccine.2018.02.043.

Asscheman, H., Gooren, L.J.G., and Eklund, P.L.E. (1989). Mortality and morbidity in transsexual patients with cross-gender hormone treatment. *Metabolism*, *38*(9), 869–873. doi: 10.1016/0026-0495(89)90233-3.

Asscheman, H., Giltay, E.J., Megens, J.A.J., de Ronde, W.P., van Trotsenburg, M.A.A., and Gooren, L.J.G. (2011). A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. *European Journal of Endocrinology*, *164*(4), 635–642. doi: 10.1530/EJE-10-1038.

Azagba, S., Latham, K., and Shan, L. (2019). Cigarette, smokeless tobacco, and alcohol use among transgender adults in the United States. *International Journal of Drug Policy, 73*, 163–169. doi: 10.1016/j.drugpo.2019.07.024.

Azagba, S., Shan, L., Latham, K., and Qeadan, F. (2020). Disparities in adult cigarette smoking and smokeless tobacco use by sexual identity. *Drug and Alcohol Dependence, 206*. doi: 10.1016/j.drugalcdep.2019.107684.

Baams L. (2018). Disparities for LGBTQ and gender nonconforming adolescents. *Pediatrics, 141*(5). doi: 10.1542/peds.2017-3004.

Baker, K. E. (2019). Findings from the Behavioral Risk Factor Surveillance System on health-related quality of life among US transgender adults, 2014–2017. *JAMA Internal Medicine*. doi: 10.1001/jamainternmed.2018.7931.

Baratz, A.B., Sharp, M.K., and Sandberg, D.E. (2014). Disorders of sex development peer support. *Endocrine Development*, *27*, 99–112. doi: 10.1159/000363634.

Barone, M., Cogliandro, A., Di Stefano, N., Tambone, V., and Persichetti, P. (2017). A systematic review of patient-reported outcome measures following transsexual surgery. *Aesthetic Plastic Surgery*, *41*(3), 700–713. doi: 10.1007/s00266-017-0812-4.

Baskerville, N.B., Dash, D., Wong, K., Shuh, A., and Abramowicz, A. (2016). Perceptions toward a smoking cessation app targeting LGBTQ+ youth and young adults: A qualitative framework analysis of focus groups. *JMIR Public Health And Surveillance*, *2*(2), e165. doi: 10.2196/publichealth.6188.

Baskerville, N.B., Dash, D., Shuh, A., Wong, K., Abramowicz, A., Yessis, J., and Kennedy, R.D. (2017). Tobacco use cessation interventions for lesbian, gay, bisexual, transgender and queer youth and young adults: A scoping review. *Preventive Medicine Reports*, *6*, 53–62. doi: 10.1016/j.pmedr.2017.02.004.

Becasen, J.S., Denard, C.L., Mullins, M.M., Higa, D.H., and Sipe, T.A. (2019). Estimating the prevalence of HIV and sexual behaviors among the US transgender population: A systematic review and meta-analysis, 2006-2017. *American Journal of Public Health, 109*(1), e1–e8. doi: 10.2105/AJPH.2018.304727.

Benotsch, E.G., and Zimmerman, R.S. (2017). *Microeconomic Intervention to Reduce HIV Transmission in Economically Disadvantaged Transgender Women*. Richmond: Virginia Commonwealth University. Available: https://grantome.com/grant/NIH/R34-MH115775-02.

Berger, I., and Mooney-Somers, J. (2017). Smoking cessation programs for lesbian, gay, bisexual, transgender, and intersex people: A content-based systematic review. *Nicotine and Tobacco Research, 19*(12), 1408–1417. doi: 10.1093/ntr/ntw216.

Berger, M., and Sarnyai, Z. (2015). "More than skin deep": Stress neurobiology and mental health consequences of racial discrimination. *Stress (Amsterdam, Netherlands)*, *18*(1), 1–10. doi: 10.3109/10253890.2014.989204.

Blosnich, J.R., and Andersen, J.P. (2015). Thursday's child: The role of adverse childhood experiences in explaining mental health disparities among lesbian, gay, and bisexual US adults. *Social Psychiatry and Psychiatric Epidemiology*, *50*(2), 335–338. doi: 10.1007/s00127-014-0955-4.

Blosnich, J.R., Bossarte, R.M., and Silenzio, V.M. (2012). Suicidal ideation among sexual minority veterans: Results from the 2005–2010 Massachusetts Behavioral Risk Factor Surveillance Survey. *American Journal of Public Health, 102*(S1), S44–S47.

Blosnich, J.R., Farmer, G.W., Lee, J.G.L., Silenzio, V.M.B., and Bowen, D.J. (2014). Health inequalities among sexual minority adults. *American Journal of Preventive Medicine*, *46*(4), 337–349. doi: 10.1016/j.amepre.2013.11.010.

Bochicchio, L., Reeder, K., Ivanoff, A., Pope, H., and Stefancic, A. (2020). Psychotherapeutic interventions for LGBTQ+youth: A systematic review. *Journal of LGBT Youth*, 1–28. doi: 10.1080/19361653.2020.1766393.

Boehmer, U. (2018). LGBT populations' barriers to cancer care. *Seminars in Oncology Nursing, 34*(1), 21–29. doi: 10.1016/j.soncn.2017.11.002.

Boehmer, U., Miao, X., Linkletter, C., and Clark, M.A. (2012). Adult health behaviors over the life course by sexual orientation. *American Journal of Public Health*, *102*(2), 292–300. doi: 10.2105/AJPH.2011.300334.

Borgogna, N.C., McDermott, R.C., Aita, S.L., and Kridel, M.M. (2019). Anxiety and depression across gender and sexual minorities: Implications for transgender, gender nonconforming, pansexual, demisexual, asexual, queer, and questioning individuals. *Psychology of Sexual Orientation and Gender Diversity*, *6*(1), 54–63. doi: 10.1037/sgd0000306

Bowen, D.J., Powers, D., and Greenlee, H. (2006). Effects of breast cancer risk counseling for sexual minority women. *Health Care for Women International*, *27*(1), 59–74. doi: 10.1080/07399330500377119.

Boyd, C.J., Veliz, P.T., Stephenson, R., Hughes, T.L., and McCabe, S.E. (2019). Severity of alcohol, tobacco, and drug use disorders among sexual minority individuals and their "not sure" counterparts. *LGBT Health, 6*(1), 15–22. doi: 10.1089/lgbt.2018.0122.

Boynton, M.H., Gilbert, J., Shook-Sa, B.E., and Lee, J. (2020). Perceived importance of health concerns among lesbian, gay, bisexual, and transgender adults in a national, probability-based phone survey, 2017. *Health Promotion Practice*, *21*(5), 764–768. doi: 10.1177/1524839920908226.

Braun, H., Nash, R., Tangpricha, V., Brockman, J., Ward, K., and Goodman, M. (2017). Cancer in transgender people: Evidence and methodological considerations. *Epidemiologic Reviews, 39*(1), 93–107. doi: 10.1093/epirev/mxw003.

Brave Heart, M.Y.B., and DeBruyn, L.M. (1998). The American Indian Holocaust: Healing historical unresolved grief. *American Indian and Alaska Native Mental Health Research, 8,* 56–78.

Braveman, P., Arkin, E., Orleans, T., Proctor, D., and Plough, A. (2017). *What Is Health Equity? And What Difference Does a Definition Make?* Princeton, NJ: Robert Wood Johnson Foundation. Available: https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html.

Brown, G.R., and Jones, K.T. (2015). Mental health and medical health disparities in 5135 transgender veterans receiving healthcare in the Veterans Health Administration: A case-control study. *LGBT Health, 3*(2), 122–131. doi: 10.1089/lgbt.2015.0058.

Buchting, F.O., Emory, K.T., Scout, Kim, Y., Fagan, P., Vera, L.E., and Emery, S. (2017). Transgender use of cigarettes, cigars, and e-cigarettes in a national study. *American Journal of Preventive Medicine*, *53*(1), e1–e7. doi: 10.1016/j.amepre.2016.11.022.

Burks, A.C., Cramer, R.J., Henderson, C.E., Stroud, C.H., Crosby, J.W., and Graham, J. (2018). Frequency, nature, and correlates of hate crime victimization experiences in an urban sample of lesbian, gay, and bisexual community members. *Journal of Interpersonal Violence*, *33*(3), 402–420. doi: 10.1177/0886260515605298.

Buzuvis, E.E. (2016). As who they really are: Expanding opportunities for transgender athletes to participate in youth and scholastic sports. *Law and Inequality, 34*, 2. Available: https://scholarship.law.umn.edu/lawineq/vol34/iss2/2.

Caceres, B.A., Brody, A., and Chyun, D. (2016). Recommendations for cardiovascular disease research with lesbian, gay and bisexual adults. *Journal of Clinical Nursing, 25*(23–24), 3728–3742. doi: 10.1111/jocn.13415.

Caceres, B.A., Veldhuis, C.B., and Hughes, T.L. (2019). Racial/ethnic differences in cardiometabolic risk in a community sample of sexual minority women. *Health Equity, 3*(1), 350–359. doi: 10.1089/heq.2019.0024.

Caceres, B.A., Brody, A., Luscombe, R.E., Primiano, J.E., Marusca, P., Sitts, E.M., and Chyun, D. (2017). A systematic review of cardiovascular disease in sexual minorities. *American Journal of Public Health, 107*(4), e13–e21. doi: 10.2105/AJPH.2016.303630a.

Caceres, B.A., Brody, A.A., Halkitis, P.N., Dorsen, C., Yu, G., and Chyun, D.A. (2018). Sexual orientation differences in modifiable risk factors for cardiovascular disease and cardiovascular disease diagnoses in men. *LGBT Health, 5*(5), 284–294. doi: 10.1089/lgbt.2017.0220.

Caceres, B.A., Jackman, K.B., Edmondson, D., and Bockting, W.O. (2019a). Assessing gender identity differences in cardiovascular disease in US adults: An analysis of data from the 2014–2017 BRFSS. *Journal of Behavioral Medicine, 43*(2), 329–338. doi: 10.1007/s10865-019-00102-8.

Caceres, B.A., Veldhuis, C.B., Hickey, K.T., and Hughes, T.L. (2019b). Lifetime trauma and cardiometabolic risk in sexual minority women. *Journal of Women's Health, 28*(9), 1200–1217. doi: 10.1089/jwh.2018.7381.

Cahill, S., Taylor, S.W., Elsesser, S.A., Mena, L., Hickson, D., and Mayer, K.H. (2017). Stigma, medical mistrust, and perceived racism may affect PrEP awareness and uptake in black compared to white gay and bisexual men in Jackson, Mississippi and Boston, Massachusetts. *AIDS Care, 29*(11), 1351–1358. doi: 10.1080/09540121.2017.1300633.

Calzo, J.P., Roberts, A.L., Corliss, H.L., Blood, E.A., Kroshus, E., and Austin, S.B. (2014). Physical activity disparities in heterosexual and sexual minority youth ages 12–22 years old: Roles of childhood gender nonconformity and athletic self-esteem. *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, *47*(1), 17–27. doi: 10.1007/s12160-013-9570-y.

Casey, L.S., Reisner, S.L., Findling, M.G., Blendon, R.J., Benson, J.M., Sayde, J.M., and Miller, C. (2019). Discrimination in the United States: Experiences of lesbian, gay, bisexual, transgender, and queer Americans. *Health Services Research, 54*(S2), 1454–1466. doi: 10.1111/1475-6773.13229.

Cathcart-Rake, E.J. (2018). Cancer in sexual and gender minority patients: Are we addressing their needs? *Current Oncology Reports*, *20*(11), 85. doi: 10.1007/s11912-018-0737-3.

Centers for Disease Control and Prevention. (n.d.). *Tips from Former Smokers: Overviews of Diseases/Conditions.* Available: https://www.cdc.gov/tobacco/campaign/tips/diseases/index.html?s_cid=OSH_tips_GL0006.

———. (2019). *Sexually Transmitted Disease Surveillance 2018*. Atlanta: U.S. Department of Health and Human Services. doi: 10.15620/cdc.79370.

———. (2020). Estimated HIV incidence and prevalence in the United States, 2014–2018. *HIV Surveillance Supplemental Report, 25*(1). Available: https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-supplemental-report-vol-25-1.pdf.

Ceres, M., Quinn, G.P., Loscalzo, M., and Rice, D. (2018). Cancer screening considerations and cancer screening uptake for lesbian, gay, bisexual, and transgender persons. *Seminars in Oncology Nursing, 34*(1), 37–51.

Chae, D.H., Wang, Y., Martz, C.D., Slopen, N., Yip, T., Adler, N.E., Fuller-Rowell, T.E., Lin, J., Matthews, K.A., Brody, G.H., Spears, E.C., Puterman, E., and Epel, E.S. (2020). Racial discrimination and telomere shortening among African Americans: The Coronary Artery Risk Development in Young Adults (CARDIA) Study. *Health Psychology, 39*(3), 209–219. doi: 10.1037/hea0000832.

Charlton, B.M., Gordon, A.R., Reisner, S.L., Sarda, V., Samnaliev, M., and Austin, S.B. (2018). Sexual orientation-related disparities in employment, health insurance, healthcare access and health-related quality of life: A cohort study of US male and female adolescents and young adults. *BMJ Open, 8*(6), e020418. doi: 10.1136/bmjopen-2017-020418.

Chen, J., Walters, M.L., Gilbert, L.K., and Patel, N. (2020). Sexual violence, stalking, and intimate partner violence by sexual orientation, United States. *Psychology of Violence, 10*(1), 110–119. doi: 10.1037/vio0000252.

Chen, J-H., and Shiu, C-S. (2017). Sexual orientation and sleep in the U.S.: A national profile. *American Journal of Preventive Medicine, 52*(4), 433–442. doi: 10.1016/j.amepre.2016.10.039.

Cheng, P.J., Pastuszak, A.W., Myers, J.B., Goodwin, I.A., and Hotaling, J.M. (2019). Fertility concerns of the transgender patient. *Translational Andrology and Urology, 8*(3), 209–218. Available: http://tau.amegroups.com/article/view/26091/24253.

Cipres, D., Seidman, D., Cloniger, C., Nova, C., O'Shea, A., and Obedin-Maliver, J. (2017). Contraceptive use and pregnancy intentions among transgender men presenting to a clinic for sex workers and their families in San Francisco. *Contraception, 95*(2), 186–189. doi: 10.1016/j.contraception.2016.09.005.

Clements-Nolle, K., Lensch, T., Baxa, A., Gay, C., Larson, S., and Yang, W. (2018). Sexual identity, adverse childhood experiences, and suicidal behaviors. *Journal of Adolescent Health*, *62*(2), 198–204. doi: 10.1016/j.jadohealth.2017.09.022.

Cochran, S.D., Björkenstam, C. and Mays, V.M. (2016). Sexual orientation and all-cause mortality among U. S. adults aged 18 to 59 years, 2001–2011. *American Journal of Public Health, 106*, 918–920.

———. (2017). Sexual orientation differences in functional limitations, disability, and mental health services use: Results from the 2013–2014 National Health Interview Survey. *Journal of Consulting and Clinical Psychology*, *85*(12), 1111–1121. doi: 10.1037/ccp0000243.

Cochran, S.D., and Mays, V.M. (2011). Sexual orientation and mortality among U.S. men aged 17 to 59 years: Results from the National Health and Nutrition Examination Survey III. *American Journal of Public Health, 101*(6), 1133–1138. doi: 10.2105/AJPH.2010.300013.

———. (2015). Mortality risks among persons reporting same-sex sexual partners: Evidence from the 2008 General Social Survey—National Death Index data set. *American Journal of Public Health, 105*(2), 358–364. doi: 10.2105/AJPH.2014.301974.

Coker, A.L., Bush, H.M., Clear, E.R., Brancato, C.J., and McCauley, H.L. (2020). Bystander program effectiveness to reduce violence and violence acceptance within sexual minority male and female high school students using a cluster RCT. *Prevention Science, 21*(3), 434–444. doi: 10.1007/s11121-019-01073-7.

Conching, A.K.S., and Thayer, Z. (2019). Biological pathways for historical trauma to affect health: A conceptual model focusing on epigenetic modifications. *Social Science and Medicine*, *230*, 74–82. doi: 10.1016/j.socscimed.2019.04.001.

Connelly, P.J., Marie Freel, E., Perry, C., Ewan, J., Touyz, R.M., Currie, G., and Delles, C. (2019). Gender-affirming hormone therapy, vascular health and cardiovascular disease in transgender adults. *Hypertension*, *74*(6), 1266–1274. doi: 10.1161/HYPERTENSIONAHA.119.13080.

Connolly, M.D., Zervos, M.J., Barone, C.J., Johnson, C.C., and Joseph, C.L. (2016). The mental health of transgender youth: Advances in understanding. *Journal of Adolescent Health, 59*(5), 489–495. doi: 10.1016/j.jadohealth.2016.06.012.

Costa, R., Dunsford, M., Skagerberg, E., Holt, V., Carmichael, P., and Colizzi, M. (2015). Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *Journal of Sexual Medicine, 12*(11), 2206–2214. doi: 10.1111/jsm.13034.

Coston, L. (2018). Understanding characteristics of victims and perpetrators of anti-LGBT Hate crimes in the United States. *Violence and Victims, 33*(3), 453–471. doi: 10.1891/0886-6708.v33.i3.453.

Coulter, R.W.S., Kenst, K.S., Bowen, D.J., and Scout. (2014). Research funded by the National Institutes of Health on the health of lesbian, gay, bisexual, and transgender populations. *American Journal of Public Health*, *104*(2), e105–e112. doi: 10.2105/AJPH.2013.301501.

Coulter, R.W.S., Blosnich, J.R., Bukowski, L.A., Herrick, A.L., Siconolfi, D.E., and Stall, R.D. (2015). Differences in alcohol use and alcohol-related problems between transgender- and nontransgender-identified young adults. *Drug and Alcohol Dependence, 154,* 251–259. doi: 10.1016/j.drugalcdep.2015.07.006.

Coulter, R., Bersamin, M., Russell, S.T., and Mair, C. (2018). The effects of gender- and sexuality-based harassment on lesbian, gay, bisexual, and transgender substance use disparities. *Journal of Adolescent Health*, *62*(6), 688–700. doi: 10.1016/j.jadohealth.2017.10.004.

Coulter, R., Egan, J.E., Kinsky, S., Friedman, M.R., Eckstrand, K.L., Frankeberger, J., Folb, B.L., Mair, C., Markovic, N., Silvestre, A., Stall, R., and Miller, E. (2019). Mental health, drug, and violence interventions for sexual/gender minorities: A systematic review. *Pediatrics*, *144*(3), e20183367. doi: 10.1542/peds.2018-3367.

Cramer, R.J., Wright, S., Long, M.M., Kapusta, N.D., Nobles, M.R., Gemberling, T.M., and Wechsler, H.J. (2018). On hate crime victimization: Rates, types, and links with suicide risk among sexual orientation minority special interest group members. *Journal of Trauma and Dissociation*, *19*(4), 476–489. doi: 10.1080/15299732.2018.1451972.

Cunningham, G.B., Buzuvis, E., and Mosier, C. (2018). Inclusive spaces and locker rooms for transgender athletes. *Kinesiology Review*, *7*(4), 365–374.

Cunningham, T.J., Xu, F., and Town, M. (2018). Prevalence of five health-related behaviors for chronic disease prevention among sexual and gender minority adults—25 U.S. states and Guam, 2016. *Morbidity and Mortality Weekly Report*, *67*(32), 888–893. doi: 10.15585/mmwr.mm6732a4.

Dai, H., and Hao, J. (2017). Sleep deprivation and chronic health conditions among sexual minority adults. *Behavioral Sleep Medicine*, 17(3), 254–268. doi: 10.1080/15402002.2017.1342166.

Dai, H., and Meyer, I.H. (2019). A population study of health status among sexual minority older adults in select U.S. geographic regions. *Health Education and Behavior*, *46*(3), 426–435. doi: 10.1177/1090198118818240.

Davis, B., Royne Stafford, M.B., and Pullig, C. (2014). How gay-straight alliance groups mitigate the relationship between gay-bias victimization and adolescent suicide attempts. *Journal of the American Academy of Child and Adolescent Psychiatry*, *53*(12), 1271–1278.e1. doi: 10.1016/j.jaac.2014.09.010.

Davis, S.M., and Geffner, M.E. (2019). Cardiometabolic health in Turner syndrome. *American Journal of Medical Genetics. Part C, Seminars in Medical Genetics*, *181*(1), 52–58. doi: 10.1002/ajmg.c.31678.

Day, J.K., Fish, J.N., Perez-Brumer, A., Hatzenbuehler, M.L., and Russell, S.T. (2017). Transgender youth substance use disparities: Results from a population-based sample. *Journal of Adolescent Health, 61*(6), 729–735. doi: 10.1016/j.jadohealth.2017.06.024

De Roo, C., Tilleman, K., T'Sjoen, G., and De Sutter, P. (2016). Fertility options in transgender people. *International Review of Psychiatry*, 28(1), 112–119. doi: 10.3109/09540261.2015.1084275.

de Vries, A.L., Steensma, T.D., Doreleijers, T.A., and Cohen-Kettenis, P.T. (2011). Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *Journal of Sexual Medicine*, *8*(8), 2276–2283. doi: 10.1111/j.1743-6109.2010.01943.x.

de Vries, A.L., McGuire, J.K., Steensma, T.D., Wagenaar, E.C., Doreleijers, T.A., and Cohen-Kettenis, P.T. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, *134*(4), 696–704. doi: 10.1542/peds.2013-2958.

de Vries, A.L.C., Roehle, R., Marshall, L., Frisén, L., van de Grift, T.C., Kreukels, B.P.C., Bouvattier, C., Köhler, B., Thyen, U., Nordenström, A., Rapp, M., Cohen-Kettenis, P.T., and on behalf of the dsd-LIFE Group. (2019). Mental health of a large group of adults with disorders of sex development in six European countries. *Psychosomatic Medicine*, *81*(7), 629–640. doi: 10.1097/PSY.0000000000000718.

DeVylder, J.E., Oh, H.Y., Nam, B., Sharpe, T.L., Lehmann, M., and Link, B.G. (2017). Prevalence, demographic variation and psychological correlates of exposure to police victimisation in four US cities. *Epidemiology and Psychiatric Sciences*, *26*(5), 466–477. doi: 10.1017/S2045796016000810.

DeVylder, J.E., Jun, H.J., Fedina, L., Coleman, D., Anglin, D., Cogburn, C., Link, B., and Barth, R.P. (2018). Association of exposure to police violence with prevalence of mental health symptoms among urban residents in the United States. *JAMA Network Open*, *1*(7), e184945. doi: 10.1001/jamanetworkopen.2018.4945.

Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A.L.V., Långström, N., and Landén, M. (2011). Long-term follow-up of transsexual persons undergoing sex reassignment surgery: Cohort study in Sweden. *PLoS One*, *6*(2). doi: 10.1371/journal.pone.0016885.

Dhejne, C., Van Vierken, R., Heylens, G., and Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International Review of Psychiatry, 28*(1), 44–57. doi: 10.3109/09540261.2015.1115753.

Dhillon, N., Oliffe, J.L., Kelly, M.T., and Krist, J. (2020). Bridging barriers to cervical cancer screening in transgender men: A scoping review. *American Journal of Men's Health*, *14*(3), 1–10. doi: 10.1177/1557988320925691.

Diamond, G.M., Diamond, G.S., Levy, S., Closs, C., Ladipo, T., and Siqueland, L. (2012). Attachment-based family therapy for suicidal lesbian, gay, and bisexual adolescents: A treatment development study and open trial with preliminary findings. *Psychotherapy*, *49*(1), 62–71. doi: 10.1037/a0026247.

Dibble, S.L., and Roberts, S.A. (2003). Improving cancer screening among lesbians over 50: Results of a pilot study. *Oncology Nursing Forum*, *30*(4), E71–E79. doi: 10.1188/03.ONF.E71-E79.

Dinno, A. (2017). Homicide rates of transgender individuals in the United States: 2010-2014. *American Journal of Public Health*, *107*(9), 1441–1447. doi: 10.2105/AJPH.2017.303878.

Doan Van, E.E., Mereish, E.H., Woulfe, J.M., and Katz-Wise, S.L. (2019). Perceived discrimination, coping mechanisms, and effects on health in bisexual and other non-monosexual adults. *Archives of Sexual Behavior*, *48*(1), 159–174. doi: 10.1007/s10508-018-1254-z.

Dodge, B., Herbenick, D., Friedman, M.R., Schick, V., Fu, T.-C. (Jane), Bostwick, W., Bartelt, E., Muñoz-Laboy, M., Pletta, D., Reece, M., and Sandfort, T.G.M. (2016). Attitudes toward bisexual men and women among a nationally representative probability sample of adults in the United States. *PLoS One*, *11*(10), e0164430. doi: 10.1371/journal.pone.0164430.

Donato, B., and Ferreira, M.J. (2018). Cardiovascular risk in Turner syndrome. *Revista Portuguesa de Cariologia (Portuguese Journal of Cardiology)*, *37*(7), 607–621. doi: 10.1016/j.repc.2017.08.008.

Douall, M., Watson, R.J., Smith, A., Homma, Y., and Saewyc, E. (2018). Are we leveling the playing field? Trends and disparities in sports participation among sexual minority youth in Canada. *Journal of Sport and Health Science,* 7, 218–226.

Downing, J.M., and Przedworski, J.M. (2018). Health of transgender adults in the U.S., 2014–2016. *American Journal of Preventative Medicine, 55*(3), 336–344. doi: 10.1016/j.amepre.2018.04.045.

DuBois, L.Z., Powers, S., Everett, B.G., and Juster, R.P. (2017). Stigma and diurnal cortisol among transitioning transgender men. *Psychoneuroendocrinology, 82*, 59–66. doi: 10.1016/j.psyneuen.2017.05.008.

Dunbar, W., Labat, A., Raccurt, C., Sohler, N., Pape, J.W., Maulet, N., and Coppieters, Y. (2020). A realist systematic review of stigma reduction interventions for HIV prevention and care continuum outcomes among men who have sex with men. *International Journal of STD and AIDS*, *31*(8), 712–723. doi: 10.1177/0956462420924984.

Duncan, D.T., and Hatzenbuehler, M.L. (2014). Lesbian, gay, bisexual, and transgender hate crimes and suicidality among a population-based sample of sexual-minority adolescents in Boston. *American Journal of Public Health*, *104*(2), 272–278. doi: 10.2105/AJPH.2013.301424.

Dutra, E., Lee, J., Torbati, T., Garcia, M., Merz, C.N.B., and Shufelt, C. (2019). Cardiovascular implications of gender-affirming hormone treatment in the transgender population. *Maturitas, 129*, 45–49. doi: 10.1016/j.maturitas.2019.08.010.

Dyar, C., Taggart, T.C., Rodriguez-Seijas, C., Thompson, R.G., Elliott, J.C., Hasin, D.S., and Eaton, N.R. (2019). Physical health disparities across dimensions of sexual orientation, race/ethnicity, and sex: Evidence for increased risk among bisexual adults. *Archives of Sexual Behavior*, *48*(1), 225–242. doi: 10.1007/s10508-018-1169-8.

Dyar, C., Feinstein, B.A., Stephens, J., Zimmerman, A.R., Newcomb, M.E., and Whitton, S.W. (2020). Nonmonosexual stress and dimensions of health: Within-group variation by sexual, gender, and racial/ethnic identities. *Psychology of Sexual Orientation and Gender Diversity*, *7*(1), 12–25. doi: 10.1037/sgd0000348.

Earnshaw, V.A., Bogart, L.M., Dovidio, J.F., and Williams, D.R. (2013). Stigma and racial/ethnic HIV disparities: Moving toward resilience. *American Psychologist, 68*(4), 225–236. doi: 10.1037/a0032705.

Ediati, A., Juniarto, A.Z., Birnie, E., Okkerse, J., Wisniewski, A., Drop, S., Faradz, S.M.H., and Dessens, A. (2017). Social stigmatisation in late identified patients with disorders of sex development in Indonesia. *BMJ Paediatrics Open*, *1*(1). doi: 10.1136/bmjpo-2017-000130.

Edwards, K.M. (2018). Incidence and outcomes of dating violence victimization among high school youth: The role of gender and sexual orientation. *Journal of Interpersonal Violence, 33*(9), 1472–1490. doi: 10.1177/0886260515618943.

Edwards, K.M., Sylaska, K.M., and Neal, A.M. (2015). Intimate partner violence among sexual minority populations: A critical review of the literature and agenda for future research. *Psychology of Violence, 5*(2), 112–121. doi: 10.1037/a0038656.

Ela, E.J., and Budnick, J. (2017). Non-heterosexuality, relationships, and young women's contraceptive behavior. *Demography, 54*(3), 887–909. doi: 10.1007/s13524-017-0578-y.

Eliason, M.J., Dibble, S.L., Gordon, R., and Soliz, G.B. (2012). The last drag: An evaluation of an LGBT-specific smoking intervention. *Journal of Homosexuality*, *59*(6), 864–878. doi: 10.1080/00918369.2012.694770.

El-Maouche, D., Arlt, W., and Merke, D.P. (2017). Congenital adrenal hyperplasia. *Lancet, 390*(10108), 2194–2210. doi: 10.1016/S0140-6736(17)31431-9.

Evans, T.S., Berkman, N., Brown, C., Gaynes, B., and Weber, R.P. (2016). *Disparities within Serious Mental Illness*. Technical Brief No. 25. AHRQ Publication No. v16-EHC027-EF. Rockville, MD: Agency for Healthcare Research and Quality. Available: https://effectivehealthcare.ahrq.gov/products/mental-illness-disparities/technical-brief.

Evans-Polce, R.J., Veliz, P.T., Boyd, C.J., Hughes, T.L., and McCabe, S.E. (2020). Associations between sexual orientation discrimination and substance use disorders: Differences by age in US adults. *Social Psychiatry and Psychiatric Epidemiology*, *55*(1), 101–110. doi: 10.1007/s00127-019-01694-x.

Falhammar, H., Claahsen-van der Grinten, H., Reisch, N., Slowikowska-Hilczer, J., Nordenström, A., Roehle, R., Bouvattier, C., Kreukels, B., Köhler, B., and dsd-LIFE Group. (2018). Health status in 1040 adults with disorders of sex development (DSD): A European multicenter study. *Endocrine Connections*, *7*(3), 466–478. doi: 10.1530/EC-18-0031.

Fallin, A., Neilands, T.B., Jordan, J.W., and Ling, P.M. (2015). Social branding to decrease lesbian, gay, bisexual, and transgender young adult smoking. *Nicotine and Tobacco Research*, *17*(8), 983–989. doi: 10.1093/ntr/ntu265.

Fethers, K., Marks, C., Mindel, A., and Estcourt, C.S. (2000). Sexually transmitted infections and risk behaviours in women who have sex with women. *Sexually Transmitted Infections, 76*(5), 345–349. doi: 10.1136/sti.76.5.345.

Finneran, C., and Stephenson, R. (2013). Intimate partner violence among men who have sex with men: A systematic review. *Trauma, Violence and Abuse*, *14*(2), 168–185. doi: 10.1177/1524838012470034.

Fish, J.N., Hughes, T.L., and Russell, S.T. (2018). Sexual identity differences in high-intensity binge drinking: Findings from a US national sample. *Addiction*, *113*(4), 749–758. doi: 10.1111/add.14041.

Flentje, A., Livingston, N.A., Roley, J., and Sorensen, J.L. (2015). Mental and physical health needs of lesbian, gay, and bisexual clients in substance abuse treatment. *Journal of Substance Abuse Treatment*, *58*, 78–83. doi: 10.1016/j.jsat.2015.06.022.

Flynn, K.E., Lin, L., and Weinfurt, K.P. (2017). Sexual function and satisfaction among heterosexual and sexual minority U.S. adults: A cross-sectional survey. *PLoS One*, *12*(4), e0174981. doi: 10.1371/journal.pone.0174981.

Fonner, V.A., Dalglish, S.L., Kennedy, C.E., Baggaley, R., O'Reilly, K.R., Koechlin, F.M., Rodolph, M., Hodges-Mameletzis, I., and Grant, R.M. (2016). Effectiveness and safety of oral HIV preexposure prophylaxis for all populations. *AIDS*, *30*(12), 1973–1983. doi: 10.1097/QAD.0000000000001145.

Fontenot, H.B., Fantasia, H.C., Vetters, R., and Zimet, G.D. (2016). Increasing HPV vaccination and eliminating barriers: Recommendations from young men who have sex with men. *Vaccine*, *34*(50), 6209–6216. doi: 1016/j.vaccine.2016.10.075.

Frederick, D.A., John, H.K.S., Garcia, J.R., and Lloyd, E.A. (2018). Differences in orgasm frequency among gay, lesbian, bisexual, and heterosexual men and women in a U.S. national sample. *Archives of Sexual Behavior, 24*(1), 273–288. doi: 10.1007/s10508-017-0939-z.

Fredriksen-Goldsen, K.I., Kim, H.J., Barkan, S.E., Muraco, A., and Hoy-Ellis, C.P. (2013). Health disparities among lesbian, gay, and bisexual older adults: Results from a population-based study. *American Journal of Public Health, 103*(10), 1802–1809. doi: 10.2105/ajph.2012.301110.

Fredriksen-Goldsen, K.I., Cook-Daniels, L., Kim, H.J., Erosheva, E.A., Emlet, C.A., Hoy-Ellis, C.P., Goldsen, J., and Muraco, A. (2014). Physical and mental health of transgender older adults: An at-risk and underserved population. *Gerontologist*, *54*(3), 488–500. doi: 10.1093/geront/gnt021.

Fredriksen-Goldsen, K.I., Kim, H.J., Shiu, C., Goldsen, J., and Emlet, C.A. (2015). Successful aging among LGBT older adults: Physical and mental health-related quality of life by age group. *Gerontologist*, *55*(1), 154–168. doi: 10.1093/geront/gnu081.

Fredriksen-Goldsen, K.I., Kim, H.J., Bryan, A.E., Shiu, C., and Emlet, C.A. (2017). The cascading effects of marginalization and pathways of resilience in attaining good health among LGBT older adults. *Gerontologist*, *57*(Suppl 1), S72–S83. doi: 10.1093/geront/gnw170.

French, S.A., Tangney, C.C., Crane, M.M., Wang, Y., and Appelhans, B.M. (2019). Nutrition quality of food purchases varies by household income: The SHoPPER study. *BMC Public Health*, *19*(1), 231. doi: 10.1186/s12889-019-6546-2.

Frey, J.D., Poudrier, G., Chiodo, M.V., and Hazen, A. (2017). An update on genital reconstruction options for the female-to-male transgender patient: A review of the literature. *Plastic and Reconstructive Surgery, 139*(3), 728–737. doi: 10.1097/prs.0000000000003062.

Friedman, M.R., Dodge, B., Schick, V., Herbenick, D., Hubach, R., Bowling, J., Goncalves, G., Krier, S., and Reece, M. (2014). From bias to bisexual health disparities: Attitudes toward bisexual men and women in the United States. *LGBT Health*, *1*(4), 309–318. doi: 10.1089/lgbt.2014.0005.

Fung, J., Vang, S., Margolies, L.R., Li, A., Blondeau-Lecomte, E., Li, A., and Jandorf, L. (2019). Developing a culturally and linguistically targeted breast cancer educational program for a multicultural population. *Journal of Cancer Education*. doi: 10.1007/s13187-019-01643-x.

Gamarel, K.E., Mereish, E.H., Manning, D., Iwamoto, M., Operario, D., and Nemoto, T. (2016). Minority stress, smoking patterns, and cessation attempts: Findings from a community-sample of transgender women in the San Francisco Bay Area. *Nicotine and Tobacco Research, 18*(3), 306–313. doi: 10.1093/ntr/ntv066.

Gamarel, K.E., Watson, R.J., Mouzoon, R., Wheldon, C.W., Fish, J.N., and Fleischer, N.L. (2020). Family rejection and cigarette smoking among sexual and gender minority adolescents in the USA. *International Journal of Behavioral Medicine*, *27*(2), 179–187. doi: 10.1007/s12529-019-09846-8.

Garofalo, R., Kuhns, L.M., Reisner, S.L., Biello, K., and Mimiaga, M.J. (2018). Efficacy of an empowerment-based, group-delivered HIV prevention intervention for young transgender women: The Project LifeSkills randomized clinical trial. *JAMA Pediatrics*, *172*(10), 916–923. doi: 10.1001/jamapediatrics.2018.1799.

Gates, G.J. (2014, August 25). *LGBT Americans Report Lower Well-Being*. Gallup. Available: www.gallup.com/poll/175418/lgbt-americans-report-lower.aspx.

Gattamorta, K.A., Salerno, J.P., and Castro, A.J. (2019). Intersectionality and health behaviors among US high school students: Examining race/ethnicity, sexual identity, and sex. *Journal of School Health*, *89*(10), 800–808. doi: 10.1111/josh.12817.

German, D., and Latkin, C.A. (2015). HIV risk, health, and social characteristics of sexual minority female injection drug users in Baltimore. *AIDS and Behavior*, *19*(7), 1361–1365. doi: 10.1007/s10461-014-0972-z.

Getahun, D., Nash, R., Flanders, W.D., Baird, T.C., Becerra-Culqui, T.A., Cromwell, L., Hunkeler, E., Lash, T.L., Millman, A., Quinn, V.P., Robinson, B., Roblin, D., Silverberg, M.J., Safer, J., Slovis, J., Tangpricha, V., and Goodman, M. (2018). Cross-sex hormones and acute cardiovascular events in transgender persons: A cohort study. *Annals of Internal Medicine*, *169*(4), 205–213. doi: 10.7326/M17-2785.

Gevonden, M.J., Selten, J.P., Myin-Germeys, I., de Graaf, R., ten Have, M., van Dorsselaer, S., van Os, J., and Veling, W. (2014). Sexual minority status and psychotic symptoms: Findings from the Netherlands Mental Health Survey and Incidence Studies (NEMESIS). *Psychological Medicine*, *44*(2), 421–433. doi: 10.1017/S0033291713000718.

Gilbert, P.A., Pass, L.E., Keuroghlian, A.S., Greenfield, T.K., and Reisner, S.L. (2018). Alcohol research with transgender populations: A systematic review and recommendations to strengthen future studies. *Drug and Alcohol Dependence*, *186*, 138–146. doi: 10.1016/j.drugalcdep.2018.01.016.

Glynn, T.R., and van den Berg, J.J. (2017). A systematic review of interventions to reduce problematic substance use among transgender individuals: A call to action. *Transgender Health*, *2*(1), 45–59. doi: 10.1089/trgh.2016.0037.

Goldbach, J.T., and Castro, C.A. (2016). Lesbian, gay, bisexual, and transgender (LGBT) service members: Life after don't ask, don't tell. *Current Psychiatry Reports, 18*(6), 56. doi: 10.1007/s11920-016-0695-0.

Goldstein, Z., Martinson, T., Ramachandran, S., Lindner, R., and Safer, J.D. (2020). Improved rates of cervical cancer screening among transmasculine patients through self-collected swabs for high-risk human papillomavirus DNA testing. *Transgender Health*, *5*(1), 10–17. doi: 10.1089/trgh.2019.0019.

Golub, S.A., Fikslin, R.A., Starbuck, L., and Klein, A. (2019). High rates of PrEP eligibility but low rates of PrEP access among a national sample of transmasculine individuals. *Journal of Acquired Immune Deficiency Syndromes, 82*(1), e1–e7. doi: 10.1097/QAI.0000000000002116.

Gomez, S.L., Duffy, C., Griggs, J.J., and John, E.M. (2019). Surveillance of cancer among sexual and gender minority populations: Where are we and where do we need to go? *Cancer*, *125*(24), 4360–4362. doi: 10.1002/cncr.32384.

Gomez-Lobo, V., and Amies Oelschlager, A.M. (2016). Disorders of sexual development in adult women. *Obstetrics and Gynecology, 128*(5), 1162–1173. doi: 10.1097/AOG.0000000000001672.

Gonzales, G., and Ehrenfeld, J.M. (2018). The association between state policy environments and self-rated health disparities for sexual minorities in the United States. *International Journal of Environmental Research and Public Health*, *15*(6), 1136. doi: 10.3390/ijerph15061136.

Gonzales, G., and Henning-Smith, C. (2017). Health disparities by sexual orientation: Results and implications from the behavioral risk factor surveillance system. *Journal of Community Health*, *42*(6), 1163–1172. doi: 10.1007/s10900-017-0366-z.

Gonzales, G., Przedworski, J., and Henning-Smith, C. (2016). Comparison of health and health risk factors between lesbian, gay, and bisexual adults and heterosexual adults in the United States: Results from the National Health Interview Survey. *JAMA Internal Medicine*, *176*(9), 1344–1351. doi: 10.1001/jamainternmed.2016.3432.

Gooren, L.J., and T'Sjoen, G. (2018). Endocrine treatment of aging transgender people. *Reviews in Endocrine and Metabolic Disorders, 19*(3), 253–262. doi: 10.1007/s11154-018-9449-0.

Gordon, A.R., Conron, K.J., Calzo, J.P., White, M.T., Reisner, S.L., and Austin, S.B. (2018). Gender expression, violence, and bullying victimization: Findings from probability samples of high school students in 4 US school districts. *Journal of School Health*, *88*(4), 306–314. doi: 10.1111/josh.12606.

Gower, A.L., Rider, G.N., Brown, C., McMorris, B.J., Coleman, E., Taliaferro, L.A., and Eisenberg, M.E. (2018). Supporting transgender and gender diverse youth: Protection against emotional distress and substance use. *American Journal of Preventive Medicine, 55*(6), 787–794. doi: 10.1016/j.amepre.2018.06.030.

Grabski, B., and Kasparek, K. (2017). Sexual dysfunctions in non-heterosexual men: Literature review. *Psychiatria Polska*, *51*(1), 85–94. doi: 10.12740/PP/63768.

Grabski, B., Dora, M., Iniewicz, G., Mijas, M., and Müldner-Nieckowski, Ł. (2018). The character of sexual function of women who have sex with women. *Psychiatria Polska*, *52*(6), 1075–1085. doi: 10.12740/PP/OnlineFirst/75109.

Grady, E.S., Humfleet, G.L., Delucchi, K.L., Reus, V.I., Muñoz, R.F., and Hall, S.M. (2014). Smoking cessation outcomes among sexual and gender minority and nonminority smokers in extended smoking treatments. *Nicotine and Tobacco Research*, *16*(9), 1207–1215. doi: 10.1093/ntr/ntu050.

Grandner, M.A., and Pack, A.I. (2011). Sleep disorders, public health, and public safety. *Journal of the American Medical Association*, *306*(23), 2616–2617. doi: 10.1001/jama.2011.1833.

Haas, A.P., Eliason, M., Mays, V.M., Mathy, R.M., Cochran, S.D., D'Augelli, A.R., Silverman, M.M., Fisher, P.W., Hughes, T., Rosario, M., Russell, S.T., Malley, E., Reed, J., Litts, D.A., Haller, E., Sell, R.L., Remafedi, G., Bradford, J., Beautrais, A.L., Brown, G.K., Diamond, G.M., Friedman, M.S., Garofalo, R., Turner, M.S., Hollibaugh, A., and Clayton, P.J. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality*, *58*(1), 10–51. doi: 10.1080/00918369.2011.534038.

Hahn, M., Sheran, N., Weber, S., Cohan, D., and Obedin-Maliver, J. (2019). Providing patient-centered perinatal care for transgender men and gender-diverse individuals: A collaborative multidisciplinary team approach. *Obstetrics and Gynecology*, *134*(5), 959–963. doi: 10.1097/AOG.0000000000003506.

Harry-Hernandez, S., Reisner, S.L., Schrimshaw, E.W., Radix, A., Mallick, R., Callander, D., Suarez, L., Dubin, S., Khan, A., and Duncan, D.T. (2020). Gender dysphoria, mental health, and poor sleep health among transgender and gender nonbinary individuals: A qualitative study in New York City. *Transgender Health*, *5*(1), 59–68. doi: 10.1089/trgh.2019.0007.

Hatzenbuehler, M.L., and Keyes, K.M. (2013). Inclusive anti-bullying policies and reduced risk of suicide attempts in lesbian and gay youth. *Journal of Adolescent Health, 53*(1 Suppl), S21–S26. doi: 10.1016/j.jadohealth.2012.08.010.

Hatzenbuehler, M.L., and Pachankis, J.E. (2016). Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender youth: Research evidence and clinical implications. *Pediatric Clinics of North America*, *63*(6), 985–997. doi: 10.1016/j.pcl.2016.07.003.

Hatzenbuehler, M.L., McLaughlin, K.A., and Slopen, N. (2013). Sexual orientation disparities in cardiovascular biomarkers among young adults. *American Journal of Preventative Medicine, 44*(6), 612–621. doi: 10.1016/j.amepre.2013.01.027.

Hatzenbuehler, M.L., McLaughlin, K.A., and Xuan, Z. (2015). Social networks and sexual orientation disparities in tobacco and alcohol use. *Journal of Studies on Alcohol and Drugs, 76*, 117–126. doi: 10.15288/jsad.2015.76.117.

Hatzenbuehler, M.L., Phelan, J.C., and Link, B.G. (2013). Stigma as a fundamental cause of population health inequalities. *American Journal of Public Health, 103*(5), 813–821. doi: 10.2105/ajph.2012.301069.

Hatzenbuehler, M.L., Birkett, M., Van Wagenen, A., and Meyer, I.H. (2014). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health*, *104*(2), 279–286. doi: 10.2105/AJPH.2013.301508.

Heffner, J.L., Mull, K.E., Watson, N.L., McClure, J.B., and Bricker, J.B. (2020). Long-term smoking cessation outcomes for sexual minority versus nonminority smokers in a large randomized controlled trial of two web-based interventions. *Nicotine and Tobacco Research*, *22*(9), 1596–1604. doi: 10.1093/ntr/ntz112.

Henny, K.D., Wilkes, A.L., McDonald, C.M., Denson, D.J., and Neumann, M.S. (2018). A rapid review of ehealth interventions addressing the continuum of HIV care (2007–2017). *AIDS and Behavior*, *22*(1), 43–63. doi: 10.1007/s10461-017-1923-2.

Herbst, J.H., Jacobs, E.D., Finlayson, T.J., McKleroy, V.S., Neumann, M.S., Crepaz, N., and HIV/AIDS Prevention Research Synthesis Team. (2008). Estimating HIV prevalence and risk behaviors of transgender persons in the United States: A systematic review. *AIDS and Behavior*, *12*(1), 1–17. doi: 10.1007/s10461-007-9299-3.

Herek, G.M. (2002). Heterosexuals' attitudes toward bisexual men and women in the United States. *Journal of Sex Research*, 39, 264–274.

———. Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence*, *24*(1), 54–74. doi: 10.1177/0886260508316477.

Herek, G.M., Gillis, J.R., and Cogan, J.C. (1999). Psychological sequelae of hate crime victimization among lesbian, gay, and bisexual adults. *Journal of Consulting and Clinical Psychology*, *67,* 945–951.

Heron, M. (2019). Deaths: Leading causes for 2017. *National Vital Statistics Reports, 68*(6). https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_06-508.pdf.

Hill, B.J., Motley, D.N., Rosentel, K., VandeVusse, A., Garofalo, R., Schneider, J.A., Kuhns, L.M., Kipke, M.D., Reisner, S., Rupp, B.M., Sanchez, M., McCumber, M., Renshaw, L., and Loop, M.S. (2020). An employment intervention program (Work2Prevent) for young men who have sex with men and transgender youth of color (phase 1): Protocol for determining essential intervention components using qualitative interviews and focus groups. *JMIR Research Protocols*, *9*(8), e16384. doi: 10.2196/16384.

HIV Prevention Trials Network. (n.d.). *HPTN 091*. Available: https://www.hptn.org/research/studies/hptn091.

Hoffman, L., Delahanty, J., Johnson, S.E., and Zhao, X. (2018). Sexual and gender minority cigarette smoking disparities: An analysis of 2016 Behavioral Risk Factor Surveillance System data. *Preventive Medicine*, *113*, 109–115. doi: 10.1016/j.ypmed.2018.05.014.

Hottes, T.S., Bogaert, L., Rhodes, A.E., Brennan, D.J., and Gesink, D. (2016). Lifetime prevalence of suicide attempts among sexual minority adults by study sampling strategies: A systematic review and meta-analysis. *American Journal of Public Health*, *106*(5), e1–e12. doi: 10.2105/AJPH.2016.303088.

Hoy-Ellis, C.P., Shiu, C., Sullivan, K.M., Kim, H.J., Sturges, A.M., and Fredriksen-Goldsen, K.I. (2017). Prior military service, identity stigma, and mental health among transgender older adults. *Gerontologist*, *57*(Suppl 1), S63–S71. doi: 10.1093/geront/gnw173.

Hughes, K., Bellis, M.A., Hardcastle, K.A., Sethi, D., Butchart, A., Mikton, C., Jones, L., and Dunne, M.P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *Lancet Public Health*, *2*(8), e356–e366. doi: 10.1016/S2468-2667(17)30118-4.

Hughto, J.M.W., Reisner, S.L., and Pachankis, J.E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine, 147*, 222–231. doi: 10.1016/j.socscimed.2015.11.010.

Human Rights Watch. (2017). *"I Want to Be Like Nature Made Me": Medically Unnecessary Surgeries on Intersex Children in the US*. Available: https://www.hrw.org/sites/default/files/report_pdf/lgbtintersex0717_web_0.pdf.

Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities. Washington, DC: The National Academies Press. Available: http://www.ncbi.nlm.nih.gov/books/NBK64806/.

Irwig, M.S. (2018). Cardiovascular health in transgender people. *Reviews in Endocrine and Metabolic Disorders*, *19*(3), 243–251. doi: 10.1007/s11154-018-9454-3.

Isasi, C.R., Parrinello, C.M., Jung, M.M., Carnethon, M.R., Birnbaum-Weitzman, O., Espinoza, R.A., Penedo, F.J., Perreira, K.M., Schneiderman, N., Sotres-Alvarez, D., Van Horn, L., and Gallo, L.C. (2015). Psychosocial stress is associated with obesity and diet quality in Hispanic/Latino adults. *Annals of Epidemiology*, *25*(2), 84–89. doi: 10.1016/j.annepidem.2014.11.002.

Jackman, K., Honig, J., and Bockting, W. (2016). Nonsuicidal self-injury among lesbian, gay, bisexual and transgender populations: An integrative review. *Journal of Clinical Nursing*, *25*(23–24), 3438–3453. doi: 10.1111/jocn.13236.

Jamal, A., Phillips, E., Gentzke, A.S., Homa, D.M., Babb, S.D., King, B.A., and Neff, L.J. (2018). Current cigarette smoking among adults—United States, 2016. *Morbidity and Mortality Weekly Report*, *67*(2), 53–59. doi: 15585/mmwr.mm6702a1.

James, S.E., Herman, J.L., Rankin, S., Keisling, M., Mottet, L., and Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. Washington, DC: National Center for Transgender Equality. Available: https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF.

Jannat-Khah, D.P., Dill, L.J., Reynolds, S.A., and Joseph, M.A. (2018). Stress, socializing, and other motivations for smoking among the lesbian, gay, bisexual, transgender, and queer community in New York City. *American Journal of Health Promotion*, *32*(5), 1178–1186. doi: 10.1177/0890117117694449.

Johns, M.M., Lowry, R., Rasberry, C.N., Dunville, R., Robin, L., Pampati, S., Stone, D.M., and Mercer Kollar, L.M. (2018). Violence victimization, substance use, and suicide risk among sexual minority high school students—United States, 2015–2017. *Morbidity and Mortality Weekly Report*, *67*(43), 1211–1215. doi: 10.15585/mmwr.mm6743a4.

Johns, M.M., Poteat, V.P., Horn, S.S., and Kosciw, J. (2019a). Strengthening our schools to promote resilience and health among LGBTQ youth: Emerging evidence and research priorities from The State of LGBTQ Youth Health and Wellbeing symposium. *LGBT Health*, *6*(4), 146–155. doi: 10.1089/lgbt.2018.0109.

Johns, M.M., Lowry, R., Andrzejewski, J., Barrios, L.C., Demissie, Z., McManus, T., Rasberry, C.N., Robin, L., and Underwood, J.M. (2019b). Transgender identity and experiences of violence victimization, substance use, suicide risk, and sexual risk behaviors among high school students—19 states and large urban school districts, 2017. *Morbidity and Mortality Weekly Report*, *68*(3), 67–71. doi: 10.15585/mmwr.mm6803a3.

Johnson, M.J., Nemeth, L.S., Mueller, M., Eliason, M.J., and Stuart, G.W. (2016). Qualitative study of cervical cancer screening among lesbian and bisexual women and transgender men. *Cancer Nursing*, *39*(6), 455–463. doi: 10.1097/NCC.0000000000000338.

Johnson, S.E., O'Brien, E.K., Coleman, B., Tessman, G.K., Hoffman, L., and Delahanty, J. (2019). Sexual and gender minority U.S. youth tobacco use: Population Assessment of Tobacco and Health (PATH) Study Wave 3, 2015–2016. *American Journal of Preventive Medicine*, *57*(2), 256–261. doi: 10.1016/j.amepre.2019.03.021.

Jones, B.A., Haycraft, E., Bouman, W.P., and Arcelus, J. (2018). The levels and predictors of physical activity engagement within the treatment-seeking transgender population: A matched control study. *Journal of Physical Activity and Health*, *15*(2), 99–107. doi: 10.1123/jpah.2017-0298.

Jun, H.J., Webb-Morgan, M., Felner, J.K., Wisdom, J.P., Haley, S.J., Austin, S.B., Katuska, L.M., and Corliss, H.L. (2019). Sexual orientation and gender identity disparities in substance use disorders during young adulthood in a United States longitudinal cohort. *Drug and Alcohol Dependence*, *205*, 107619. doi: 10.1016/j.drugalcdep.2019.107619.

Kahle, E.M., Veliz, P., McCabe, S.E., and Boyd, C.J. (2019). Functional and structural social support, substance use and sexual orientation from a nationally representative sample of US adults. *Addiction*, *115*(3), 546–558. doi: 10.1111/add.14819.

Kamen, C.S., Alpert, A., Margolies, L., Griggs, J.J., Darbes, L., Smith-Stoner, M., Lytle, M., Poteat, T., Scout, N., and Norton, S.A. (2019). "Treat us with dignity": A qualitative study of the experiences and recommendations of lesbian, gay, bisexual, transgender, and queer (LGBTQ) patients with cancer. *Supportive Care in Cancer*, *27*(7), 2525–2532. doi: 10.1007/s00520-018-4535-0.

Kann, L., Olsen, E.O., McManus, T., Harris, W.A., Shanklin, S.L., Flint, K.H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Yamakawa, Y., Brener, N., and Zaza, S. (2016). Sexual identity, sex of sexual contacts, and health-related behaviors among students in grades 9-12—United States and selected sites, 2015. *Morbidity and Mortality Weekly Report Surveillance Summaries, 65*(9), 1–202. doi: 10.15585/mmwr.ss6509a1.

Kanny, D., Jeffries, W.L., 4th, Chapin-Bardales, J., Denning, P., Cha, S., Finlayson, T., Wejnert, C., and National HIV Behavioral Surveillance Study Group. (2019). Racial/ethnic disparities in HIV preexposure prophylaxis among men who have sex with men—23 urban areas, 2017. *Morbidity and Mortality Weekly Report*, *68*(37), 801–806. doi: 10.15585/mmwr.mm6837a2.

Katz-Wise, S., and Hyde, J. (2012). Victimization experiences of lesbian, gay, and bisexual individuals: A meta-analysis. *Journal of Sex Research*, *49*(2/3), 142–167. doi: 10.1080/00224499.2011.637247.

Katz-Wise, S.L., Mereish, E.H., and Woulfe, J. (2017). Associations of bisexual-specific minority stress and health among cisgender and transgender adults with bisexual orientation. *Journal of Sex Research*, *54*(7), 899–910. doi: 10.1080/00224499.2016.1236181.

Katz-Wise, S.L., Rosario, M., and Tsappis, M. (2016). Lesbian, gay, bisexual, and transgender youth and family acceptance. *Pediatric Clinics of North America*, *63*(6), 1011–1025. doi: 10.1016/j.pcl.2016.07.005.

Kent, E.E., Wheldon, C.W., Smith, A.W., Srinivasan, S., and Geiger, A.M. (2019). Care delivery, patient experiences, and health outcomes among sexual and gender minority patients with cancer and survivors: A scoping review. *Cancer, 125*(24), 4371–4379. doi: 10.1002/cncr.32388.

Kerckhof, M.E., Kreukels, B., Nieder, T.O., Becker-Hébly, I., van de Grift, T.C., Staphorsius, A.S., Köhler, A., Heylens, G., and Elaut, E. (2019). Prevalence of sexual dysfunctions in transgender persons: Results from the ENIGI Follow-Up Study. *Journal of Sexual Medicine*, *16*(12), 2018–2029. doi: 10.1016/j.jsxm.2019.09.003.

Kerridge, B.T., Pickering, R.P., Saha, T.D., Ruan, W.J., Chou, S.P., Zhang, H., Jung, J., and Hasin, D.S. (2017). Prevalence, sociodemographic correlates and DSM-5 substance use disorders and other psychiatric disorders among sexual minorities in the United States. *Drug and Alcohol Dependence*, *170*, 82–92. doi: 10.1016/j.drugalcdep.2016.10.038.

Kidd, J.D., Jackman, K.B., Wolff, M., Veldhuis, C.B., and Hughes, T.L. (2018). Risk and protective factors for substance use among sexual and gender minority youth: A scoping review. *Current Addiction Reports*, *5*(2), 158–173. doi: 10.1007/s40429-018-0196-9.

Kidd, J.D., Levin, F.R., Dolezal, C., Hughes, T.L., and Bockting, W.O. (2019). Understanding predictors of improvement in risky drinking in a U.S. multi-site, longitudinal cohort study of transgender individuals: Implications for culturally-tailored prevention and treatment efforts. *Addictive Behaviors*, *96*, 68–75. doi: 10.1016/j.addbeh.2019.04.017.

Kidd, S.A., Howison, M., Pilling, M., Ross, L.E., and McKenzie, K. (2016). Severe mental illness in LGBT populations: A scoping review. *Psychiatric Services, 67*(7), 779–783. doi: 10.1176/appi.ps.201500209.

Kim, H.J., Jen, S., and Fredriksen-Goldsen, K.I. (2017). Race/ethnicity and health-related quality of life among LGBT older adults. *Gerontologist*, *57*(Suppl 1), S30–S39. doi: 10.1093/geront/gnw172.

Kirmayer, L.J., Gone, J.P., and Moses, J. (2014). Rethinking historical trauma. *Transcultural Psychiatry*, *51*(3), 299–319. doi: 10.1177/1363461514536358.

Klein, A., and Golub, S.A. (2016). Family rejection as a predictor of suicide attempts and substance misuse among transgender and gender nonconforming adults. *LGBT Health*, *3*(3), 193–199. doi: 10.1089/lgbt.2015.0111.

Klemmer, C.L., Rusow, J., Goldbach, J., Kattari, S.K., and Rice, E. (2019). Socially assigned gender nonconformity and school violence experience among transgender and cisgender adolescents. *Journal of Interpersonal Violence*. doi: 10.1177/0886260519844781.

Knudson, G., and De Sutter, P. (2017). Fertility options in transgender and gender diverse adolescents. *Acta Obstetricia et Gynecologica Scandinavica*, *96*(10), 1269–1272. doi: 10.1111/aogs.13188.

Kosciw, J.G., Greytak, E.A., Zongrone, A.D., Clark, C.M., and Truong, N.L. (2018). *The 2017 National School Climate Survey: The Experiences of Lesbian, Gay, Bisexual, Transgender, and Queer Youth in Our Nation's Schools*. New York: GLSEN.

Krege, S., Eckoldt, F., Richter-Unruh, A., Kohler, B., Leuschner, I., Mentzel, H.J., Moss, A., Schweizer, K., Stein, R., Werner-Rosen, K., Wieacker, P., Wiesemann, C., Wünsch, L., and Richter-Appelt, H. (2019). Variations of sex development: The first German interdisciplinary consensus paper. *Journal of Pediatric Urology*, *15*(2), 114–123. doi: 10.1016/j.jpurol.2018.10.008.

Kreukels, B.P.C., Cohen-Kettenis, P.T., Roehle, R., van de Grift, T.C., Slowikowska-Hilczer, J., Claahsen van der Grinten, H., Lindén Hirschberg, A., de Vries, A., Reisch, N., Bouvattier, C., Nordenström, A., Thyen, U., Köhler, B., and on behalf of the dsd-LIFE Group. (2019). Sexuality in adults with differences/disorders of sex development (DSD): Findings from the dsd-LIFE Study. *Journal of Sex and Marital Therapy*, *45*(8), 688–705. doi: 10.1080/0092623X.2019.1610123.

Krueger, E.A., Fish, J.N., and Upchurch, D.M. (2020). Sexual orientation disparities in substance use: Investigating social stress mechanisms in a national sample. *American Journal of Preventive Medicine, 58*(1), 59–68. doi: 10.1016/j.amepre.2019.08.034.

Lagos, D. (2018). Looking at population health beyond "male" and "female": Implications of transgender identity and gender nonconformity for population health. *Demography*. doi: 10.1007/s13524-018-0714-3.

Lancet HIV. (2017). U=U taking off in 2017. *Lancet HIV*, *4*(11), e475. doi: 10.1016/S2352-3018(17)30183-2.

Langenderfer-Magruder, L., Walls, N.E., Kattari, S.K., Whitfield, D.L., and Ramos, D. (2016). Sexual victimization and subsequent police reporting by gender identity among lesbian, gay, bisexual, transgender, and queer adults. *Violence and Victims, 31*(2), 320–331. doi: 10.1891/0886-6708.VV-D-14-00082.

Laska, M.N., VanKim, N.A., Erickson, D.J., Lust, K., Eisenberg, M.E., and Rosser, B.R.S. (2015). Disparities in weight and weight behaviors by sexual orientation in college students. *American Journal of Public Health*, *105*(1), 111–121. doi: 10.2105/AJPH.2014.302094.

Lee, G.L., Griffin, G.K., and Melvin, C.L. (2009). Tobacco use among sexual minorities in the USA: 1987 to May 2007: A systematic review. *Tobacco Control, 18*, 275–282.

Lee, P.A., Nordenström, A., Houk, C.P., Ahmed, S.F., Auchus, R., Baratz Dalke, K., Liao, L-M., Lin-Su, K., Looijenga, L.H.J., Mazu, T., Meyer-Bahlburg, H.F.L., Mouriquand, P., Quigley, C.A., Sandberg, D.E, Vilain, E., Witchel, S., and the Global DSD Update Consortium. (2016). Global disorders of sex development update since 2006: Perceptions, approach and care. *Hormone Research in Paediatrics, 85*, 158–180. doi: 10.1159/000442975.

Lefevor, G.T., Boyd-Rogers, C.C., Sprague, B.M., and Janis, R.A. (2019). Health disparities between genderqueer, transgender, and cisgender individuals: An extension of minority stress theory. *Journal of Counseling Psychology*, *66*(4), 385–395. doi: 10.1037/cou0000339.

Lett, E., Dowshen, N.L., and Baker, K.E. (2020). Intersectionality and health inequities for gender minority blacks in the U.S. *American Journal of Preventive Medicine*. doi: 10.1016/j.amepre.2020.04.013.

Levy, B.L., and Levy, D.L. (2017). When love meets hate: The relationship between state policies on gay and lesbian rights and hate crime incidence. *Social Science Research*, *61*, 142–159. doi: 10.1016/j.ssresearch.2016.06.008.

Light, A., Wang, L.-F., Zeymo, A., and Gomez-Lobo, V. (2018). Family planning and contraception use in transgender men. *Contraception*, *98*(4), 266–269. doi: 10.1016/j.contraception.2018.06.006.

Lisy, K., Peters, M., Schofield, P., and Jefford, M. (2018). Experiences and unmet needs of lesbian, gay, and bisexual people with cancer care: A systematic review and meta-synthesis. *Psycho-oncology*, *27*(6), 1480–1489. doi: 10.1002/pon.4674.

Liu, R.T., and Mustanski, B. (2012). Suicidal ideation and self-harm in lesbian, gay, bisexual, and transgender youth. *American Journal of Preventive Medicine, 43*(3), 221–228. doi: 10.1016/j.amepre.2011.023.

Logie, C.H., Lacombe-Duncan, A., Weaver, J., Navia, D., and Este, D. (2015). A pilot study of a group-based HIV and STI prevention intervention for lesbian, bisexual, queer, and other women who have sex with women in Canada. *AIDS Patient Care and STDs*, *29*(6), 321–328. doi: 10.1089/apc.2014.0355.

Lorimer, K., Kidd, L., Lawrence, M., McPherson, K., Cayless, S., and Cornish, F. (2013). Systematic review of reviews of behavioural HIV prevention interventions among men who have sex with men. *AIDS Care*, *25*(2), 133–150. doi: 10.1080/09540121.2012.699672.

Los, E., Quezada, E., Chen, Z., Lapidus, J., and Silberbach, M. (2016). Pilot study of blood pressure in girls with Turner syndrome: An awareness gap, clinical associations, and new hypotheses. *Hypertension*, *68*(1), 133–136. doi: 10.1161/HYPERTENSIONAHA.115.07065.

Lowry, R., Johns, M.M., Robin, L.E., and Kann, L.K. (2017). Social stress and substance use disparities by sexual orientation among high school students. *American Journal of Preventive Medicine*, *53*(4), 547–558. doi: 10.1016/j.amepre.2017.06.011.

Lowry, R., Johns, M.M., Gordon, A.R., Austin, S.B., Robin L.E., and Kann, L.K. (2018). Nonconforming gender expression and associated mental distress and substance use among high school students. *JAMA Pediatrics, 172*(11), 1020–1028. doi: 10.1001/jamapediatrics.2018.2140.

Lucassen, M.F., Merry, S.N., Hatcher, S., and Frampton, C.M. (2015). Rainbow SPARX: A novel approach to addressing depression in sexual minority youth. *Cognitive and Behavioral Practice, 22*(2), 203–216.

Lunn, M.R., Cui, W., Zack, M.M., Thompson, W.W., Blank, M.B., and Yehia, B.R. (2017). Sociodemographic characteristics and health outcomes among lesbian, gay, and bisexual U.S. adults using Healthy People 2020: Leading health indicators. *LGBT Health, 4*(4), 283–294. doi: 10.1089/lgbt.2016.0087.

Lytle, M.C., De Luca, S.M., and Blosnich, J.R. (2014). The influence of intersecting identities on self-harm, suicidal behaviors, and depression among lesbian, gay, and bisexual individuals. *Suicide and Life-Threatening Behavior*, *44*(4), 384–391.

Malone, J., Snguon, S., Dean, L.T., Adams, M.A., and Poteat, T. (2019). Breast cancer screening and care among Black sexual minority women: A scoping review of the literature from 1990 to 2017. *Journal of Women's Health*, *28*(12), 1650–1660. doi: 10.1089/jwh.2018.7127.

Margolies, L., and Goeren, B. (n.d.). *Anal Cancer, HIV and Gay/Bisexual Men*. National LGBT Cancer Network. Available: https://cancer-network.org/cancer-information/gay-men-and-cancer/anal-cancer-hiv-and-gaybisexual-men/.

Marmot, M., Friel, S., Bell, R., Houweling, T.A., and Taylor, S. (2008). Closing the gap in a generation: Health equity through action on the social determinants of health. *Lancet*, *372*(9650), 1661–1669. doi: 10.1016/S0140-6736(08)61690-6.

Marshall, E., Claes, L., Bouman, W.P., Witcomb, G.L., and Arcelus, J. (2015). Non-suicidal self-injury and suicidality in trans people: A systematic review of the literature. *International Review of Psychiatry, 28*(1), 58–69. doi: 10.3109/09540261.2015.1073143.

Marx, R.A., and Kettrey, H.H. (2016). Gay-straight alliances are associated with lower levels of school-based victimization of LGBTQ+ youth: A systematic review and meta-analysis. *Journal of Youth and Adolescence,* 45(7), 1269–1282. doi: 10.1007/s10964-016-0501-7.

Matarazzo, B.B., Barnes, S.M., Pease, J.L., Russell, L.M., Hanson, J.E., Soberay, K.A., and Gutierrez, P.M. (2014). Suicide risk among lesbian, gay, bisexual, and transgender military personnel and veterans: What does the literature tell us? *Suicide and Life-Threatening Behavior*, *44*(2), 200–217.

Matsuno, E., and Israel, T. (2018). Psychological interventions promoting resilience among transgender individuals: Transgender resilience intervention model (TRIM). *Counseling Psychologist, 46*(5), 632–655. doi: 10.1177/0011000018787261.

Matthews, A.K., Steffen, A.D., Kuhns, L.M., Ruiz, R.A., Ross, N.A., Burke, L.A., Li, C.C., and King, A.C. (2019). Evaluation of a randomized clinical trial comparing the effectiveness of a culturally targeted and nontargeted smoking cessation intervention for lesbian, gay, bisexual, and transgender smokers. *Nicotine and Tobacco Research*, *21*(11), 1506–1516. doi: 10.1093/ntr/nty184.

Mattson, R.A. (2018). Hate crimes against LGBTQ communities and persons. In D. Neacsu and D.B. Hold (Eds.), *Sexual Orientation, Gender Identities, and the Law: A Research Bibliography, 2006–2016*. Getzville, NY: William S. Hein & Co.

McCabe, S.E., West, B.T., Hughes, T.L., and Boyd, C.J. (2013). Sexual orientation and substance abuse treatment utilization in the United States: Results from a national survey. *Journal of Substance Abuse Treatment, 44*(1), 4–12. doi: 10.1016/j.jsat.2012.01.007.

McCabe, S.E., Hughes, T.L., Matthews, A.K., Lee, J., West, B.T., Boyd, C.J., and Arslanian-Engoren, C. (2019a). Sexual orientation discrimination and tobacco use disparities in the United States. *Nicotine and Tobacco Research*, *21*(4), 523–531. doi: 10.1093/ntr/ntx283.

McCabe, S.E., Hughes, T.L., West, B.T., Veliz, P., and Boyd, C.J. (2019b). DSM-5 alcohol use disorder severity as a function of sexual orientation discrimination: A national study. *Alcoholism: Clinical and Experimental Research, 43*(3), 497–508. doi: 10.1111/acer.13960.

McClain, Z., and Peebles, R. (2016). Body image and eating disorders among lesbian, gay, bisexual, and transgender youth. *Pediatric Clinics of North America*, *63*(6), 1079–1090.

McDonagh, L.K., Bishop, C.J., Brockman, M., and Morrison, T.G. (2014). A systematic review of sexual dysfunction measures for gay men: How do current measures measure up? *Journal of Homosexuality*, *61*(6), 781–816. doi: 10.1080/00918369.2014.870452.

McDowell, M., Pardee, D.J., Peitzmeier, S., Reisner, S.L., Agénor, M., Alizaga, N., Bernstein, I., and Potter, J. (2017). Cervical cancer screening preferences among trans-masculine individuals: Patient-collected human papillomavirus vaginal swabs versus provider-administered pap tests. *LGBT Health*, *4*(4), 252–259. doi: 10.1089/lgbt.2016.0187.

McGeough, B.L., and Sterzing, P.R. (2018). A systematic review of family victimization experiences among sexual minority youth. *Journal of Primary Prevention, 39*(5), 491–528. doi: 10.1007/s10935-018-0523-x.

McLaughlin, K.A., Hatzenbuehler, M.L., Xuan, Z., and Conron, K.J. (2012). Disproportionate exposure to early-life adversity and sexual orientation disparities in psychiatric morbidity. *Child Abuse and Neglect, 36*(9), 645–655. doi: 10.1016/j.chiabu.2012.07.004.

McNulty, A., and Bourne, C. (2017). Transgender HIV and sexually transmissible infections. *Sexual Health*, *14*(5), 451–455. doi: 10.1071/SH17050.

Meads, C., Martin, A., Grierson, J., and Varney, J. (2018). Systematic review and meta-analysis of diabetes mellitus, cardiovascular and respiratory condition epidemiology in sexual minority women. *BMJ Open*, *8*(4), e020776. doi: 10.1136/bmjopen-2017-020776.

Meckler, G.D., Elliott, M.N., Kanouse, D.E., Beals, K.P., and Schuster, M.A. (2006). Nondisclosure of sexual orientation to a physician among a sample of gay, lesbian, and bisexual youth. *Archives of Pediatrics and Adolescent Medicine, 160*, 1248.

Medical Care Criteria Committee, and Brown, G. (2020). *Screening for Anal Dysplasia and Cancer in Patients with HIV*. Clinical Guidelines Program. Available: https://www.hivguidelines.org/hiv-care/anal-dysplasia-cancer/#tab_3.

Menino, D.D., Katz-Wise, S.L., Vetters, R., and Reisner, S.L. (2018). Associations between the length of time from transgender identity recognition to hormone initiation and smoking among transgender youth and young adults. *Transgender Health*, 3(1), 82–87. doi: 10.1089/trgh.2018.0002.

Mereish, E.H. (2019). Substance use and misuse among sexual and gender minority youth. *Current Opinion in Psychology,* 30, 123–127. doi: 10.1016/j.copsyc.2019.05.002.

Mereish, E.H., and Poteat, V.P. (2015). Let's get physical: Sexual orientation disparities in physical activity, sports involvement, and obesity among a population-based sample of adolescents. *American Journal of Public Health, 105,* 1842–1848. doi: 10.2105/AJPH.2015.302682.

Mereish, E.H., Goldbach, J.T., Burgess, C., and DiBello, A.M. (2017). Sexual orientation, minority stress, social norms, and substance use among racially diverse adolescents. *Drug and Alcohol Dependence*, *178*, 49–56. doi: 10.1016/j.drugalcdep.2017.04.013.

Merrick, M.T., Ford, D.C., Ports, K.A., and Guinn, A.S. (2018). Prevalence of adverse childhood experiences from the 2011–2014 Behavioral Risk Factor Surveillance System in 23 states. *JAMA Pediatrics, 172*(11), 1038–1044. doi: 10.1001/jamapediatrics.2018.2537.

Meyer, I.H., Brown, T.N.T., Herman, J.L., Reisner, S.L., and Bockting, W.O. (2017). Demographic characteristics and health status of transgender adults in select US regions: Behavioral Risk Factor Surveillance System, 2014. *American Journal of Public Health*, e1–e8. doi: 10.2105/AJPH.2016.303648.

Meyer, I.H., Luo, F., Wilson, B.D.M., and Stone, D.M. (2019). Sexual orientation enumeration in state antibullying statutes in the United States: Associations with bullying, suicidal ideation, and suicide attempts among youth. *LGBT Health*, *6*(1), 9–14. doi: 10.1089/lgbt.2018.0194.

Meyer-Bahlburg, H.F., Reyes-Portillo, J.A., Khuri, J., Ehrhardt, A.A., and New, M.I. (2017a). Syndrome-related stigma in the general social environment as reported by women with classical congenital adrenal hyperplasia. *Archives of Sexual Behavior*, *46*(2), 341–351. doi: 10.1007/s10508-016-0862-8.

Meyer-Bahlburg, H.F.L., Khuri, J., Reyes-Portillo, J., and New, M.I. (2017b). Stigma in medical settings as reported retrospectively by women with congenital adrenal hyperplasia (CAH) for their childhood and adolescence. *Journal of Pediatric Psychology, 2*(5), 496–503. doi: 10.1093/jpepsy/jsw034.

Meyer-Bahlburg, H.F.L., Khuri, J., Reyes-Portillo, J., Ehrhardt, A.A., and New, M.I. (2018). Stigma associated with classical congenital adrenal hyperplasia in women's sexual lives. *Archives of Sexual Behavior, 47*(4), 943–951.

Mills, C.E. (2019). Gay visibility and disorganized and strained communities: A community-level analysis of anti-gay hate crime in New York City. *Journal of Interpersonal Violence*. doi: 10.1177/0886260519848784.

Mimiaga, M.J., Thomas, B., Mayer, K.H., Regenauer, K.S., Dange, A., Andres Bedoya, C., Rawat, S., Balu, V., O'Cleirigh, C., Biello, K., Anand, V., Swaminathan, S., and Safren, S.A. (2018). A randomized clinical efficacy trial of a psychosocial intervention to strengthen self-acceptance and reduce HIV risk for MSM in India: Study protocol. *BMC Public Health*, *18*(1), 890–890. doi: 10.1186/s12889-018-5838-2.

Mimiaga, M.J., Hughto, J.M.W., Biello, K.B., Santostefano, C.M., Kuhns, L.M., Reisner, S.L., and Garofalo, R. (2019a). Longitudinal analysis of syndemic psychosocial problems predicting HIV risk behavior among a multicity prospective cohort of sexually active young transgender women in the United States. *Journal of Acquired Immune Deficiency Syndromes, 81*(2), 184–192. doi: 10.1097/QAI.0000000000002009.

Mimiaga, M.J., Pantalone, D.W., Biello, K.B., Hughto, J., Frank, J., O'Cleirigh, C., Reisner, S. L., Restar, A., Mayer, K.H., and Safren, S.A. (2019b). An initial randomized controlled trial of behavioral activation for treatment of concurrent crystal methamphetamine dependence and sexual risk for HIV acquisition among men who have sex with men. *AIDS Care*, *31*(9), 1083–1095. doi: 10.1080/09540121.2019.1595518.

Miranda-Mendizábal, A., Castellvi, P., Parés-Badell, O., Almenara, J., Alonso, I., Biasco, M.J., Cebrià, A., Gabilondo, A., Gili, M., Lagares, C., Piqueras, J.A., Roca, M., Rodriguez-Marin, J., Rodriquez-Jiménez, T., Soto-Sanz, V., Vilagut, G., and Alonso, J. (2017). Sexual orientation and suicidal behavior in adolescents and young adults: Systematic review and meta-analysis. *British Journal of Psychiatry, 211*(2), 77–87. doi: 10.1192/bjp.bp.116.196345.

Mooij, C.F., Webb, E.A., Claahsen van der Grinten, H.L., and Krone, N. (2017). Cardiovascular health, growth and gonadal function in children and adolescents with congenital adrenal hyperplasia. *Archives of Disease in Childhood*, *102*(6), 578–584. doi: 10.1136/archdischild-2016-311910.

Morris, M., Cooper, R.L., Ramesh, A., Tabatabai, M., Arcury, T.A., Shinn, M., Im, W., Juarez, P., and Matthews-Juarez, P. (2019). Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: A systematic review. *BMC Medical Education*, *19*(1), 325. doi: 10.1186/s12909-019-1727-3.

Movement Advancement Project. (2020). *Gay/Trans Panic Defense Laws*. Available: https://www.lgbtmap.org/img/maps/citations-panic-defense-bans.pdf.

Mueller, S.C., De Cuypere, G., and T'Sjoen, G. (2017). Transgender research in the 21st century: A selective critical review from a neurocognitive perspective. *American Journal of Psychiatry*, *174*(12), 1155–1162. doi: 10.1176/appi.ajp.2017.17060626.

Mulick, P.S., and Wright, L.W. (2011). The biphobia scale a decade later: Reflections and additions. *Journal of Bisexuality, 11*, 453–457.

Mustanski, B., Phillips, G. Ryan, D.T., Swann, G., Kuhns, L., and Garofalo, R. (2017). Prospective effects of a syndemic on HIV and STI incidence and risk behaviors in a cohort of young men who have sex with men. *AIDS and Behavior, 21*(3), 845–857. doi: 10.1007/s10461-016-1607-3.

Myers, S.C., and Safer, J.D. (2017). Increased rates of smoking cessation observed among transgender women receiving hormone treatment. *Endocrine Practice*, *23*(1), 32–36. doi: 10.4158/EP161438.OR.

Newcomb, M.E., Hill, R., Buehler, K., Ryan, D.T., Whitton, S.W., and Mustanski, B. (2019). High burden of mental health problems, substance use, violence, and related psychosocial factors in transgender, non-binary, and gender diverse youth and young adults. *Archives of Sexual Behavior.* doi: 10.1007/s10508-019-01533-9.

Nguyen, L.H., Tran, B.X., Rocha, L., Nguyen, H., Yang, C., Latkin, C.A., Thorson, A., and Strömdahl, S. (2019). A systematic review of ehealth interventions addressing HIV/STI prevention among men who have sex with men. *AIDS and Behavior*, *23*(9), 2253–2272. doi: 10.1007/s10461-019-02626-1.

Niolon, P.H., Kearns, M., Dills, J., Rambo, K., Irving, S., Armstead, T., and Gilbert, L. (2017). *Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available: https://www.cdc.gov/violenceprevention/pdf/ipV-technicalpackages.pdf.

Nuttbrock, L., Bockting, W., Rosenblum, A., Hwahng, S., Mason, M., Macri, M., and Becker, J. (2014). Gender abuse, depressive symptoms, and substance use among transgender women: A 3-year prospective study. *American Journal of Public Health, 104*(11), 2199–2206. doi: 10.2105/AJPH.2014.302106.

Nuttbrock, L., Bockting, W., Rosenblum, A., Hwahng, S., Mason, M., Macri, M., and Becker, J. (2015). Gender abuse and incident HIV/STI among transgender women in New York City: Buffering effect of involvement in a transgender community. *AIDS and Behavior, 19*(8), 1446–1453. doi: 10.1007/s10461-014-0977-7.

Nyamathi, A., Reback, C.J., Shoptaw, S., Salem, B.E., Zhang, S., and Yadav, K. (2017). Impact of tailored interventions to reduce drug use and sexual risk behaviors among homeless gay and bisexual men. *American Journal of Men's Health*, *11*(2), 208–220. doi: 10.1177/1557988315590837.

O'Cleirigh, C., Safren, S.A., Taylor, S.W., Goshe, B.M., Bedoya, C.A., Marquez, S.M., Boroughs, M.S., and Shipherd, J.C. (2019). Cognitive behavioral therapy for trauma and self-care (CBT-TSC) in men who have sex with men with a history of childhood sexual abuse: A randomized controlled trial. *AIDS and Behavior*, *23*(9), 2421–2431. doi: 10.1007/s10461-019-02482-z.

Olsen, E.O., Vivolo-Kantor, A., and Kann, L. (2017). Physical and sexual teen dating violence victimization and sexual identity among U.S. high school students, 2015. *Journal of Interpersonal Violence*. doi: 10.1177/0886260517708757.

Operario, D., Gamarel, K.E., Grin, B.M., Lee, J.H., Kahler, C.W., Marshall, B.D., van den Berg, J., and Zaller, N.D. (2015). Sexual minority health disparities in adult men and women in the United States: National Health and Nutrition Examination Survey, 2001–2010. *American Journal of Public Health, 105*(10), e27–e34. doi: 10.2105/ajph.2015.302762.

Operario, D., Gamarel, K.E., Iwamoto, M., Suzuki, S., Suico, S., Darbes, L., and Nemoto, T. (2017). Couples-focused prevention program to reduce HIV risk among transgender women and their primary male partners: Feasibility and promise of the Couples HIV Intervention Program. *AIDS and Behavior*, *21*(8), 2452–2463. doi: 10.1007/s10461-016-1462-2.

Owen, B.N., Baggaley, R.F., Maheu-Giroux, M., Elmes, J., Adimora, A.A., Ramirez, C., Edmonds, A., Sosanya, K., Taylor, T., Plankey, M., Cederbaum, J., Seidman, D., Weber, K.M., Golub, E.T., Sheth, A.N., Bolivar, H., Konkle-Parker, D., and Boily, M.-C. (2020). Patterns and trajectories of anal intercourse practice over the life course among US women at risk of HIV. *Journal of Sexual Medicine*, *17*(9), 1629–1642. doi: 10.1016/j.jsxm.2020.06.007.

Pachankis, J.E., McConocha, E.M., Reynolds, J.S., Winston, R., Adeyinka, O., Harkness, A., Burton, C.L., Behari, K., Sullivan, T.J., Eldahan, A.I., Esserman, D.A., Hatzenbuehler, M.L., and Safren, S.A. (2019). Project ESTEEM protocol: A randomized controlled trial of an LGBTQ-affirmative treatment for young adult sexual minority men's mental and sexual health. *BMC Public Health*, *19*(1), 1086. doi: 10.1186/s12889-019-7346-4.

Parabiaghi, A., Bonetto, C., Ruggeri, M., Lasalvia, A., and Leese, M. (2006). Severe and persistent mental illness: A useful definition for prioritizing community-based mental health service interventions. *Social Psychiatry and Psychiatric Epidemiology, 41*(6), 457–463.

Parsons, J.T., Lelutiu-Weinberger, C., Botsko, M., and Golub, S.A. (2014). A randomized controlled trial utilizing motivational interviewing to reduce HIV risk and drug use in young gay and bisexual men. *Journal of Consulting and Clinical Psychology*, *82*(1), 9–18. doi: 10.1037/a0035311.

Pascoe, E.A., and Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*(4), 531–554. doi: 10.1037/a0016059.

Patterson, C.J., and Potter, E.C. (2019). Sexual orientation and sleep difficulties: A review of research. *Sleep Health*, *5*, 227–235.

Patterson, C.J., Tate, D.P., Sumontha, J., and Xu, R. (2018). Sleep difficulties among sexual minority adults: Associations with family relationship problems. *Psychology of Sexual Orientation and Gender Diversity*, *5*, 109–116.

Peitzmeier, S.M., Hughto, J.M.W., Potter, J., Deutsch, M.B., and Reisner, S.L. (2019). Development of a novel tool to assess intimate partner violence against transgender individuals. *Journal of Interpersonal Violence, 34*(11), 2376–2397. doi: 10.1177/0886260519827660.

Peitzmeier, S.M., Malik, M., Kattari, S.K., Marrow, E., Stephenson, R., Agénor, M., and Reisner, S.L. (2020). Intimate partner violence in transgender populations: Systematic review and meta-analysis of prevalence and correlates. *American Journal of Public Health*, *110*(9), e1–e14. doi: 10.2105/AJPH.2020.305774.

Perez-Brumer, A., Day, J.K., Russell, S.T., and Hatzenbuehler, M.L. (2017). Prevalence and correlates of suicidal ideation among transgender youth in California: Findings from a representative, population-based sample of high school students. *Journal of the American Academy of Child and Adolescent Psychiatry, 56*(9), 739–746. doi: 10.1016/j.jaac.2017.06.010.

Phillips, I.G., Turner, B., Felt, D., Han, Y., Marro, R., and Beach, L.B. (2019). Trends in alcohol use behaviors by sexual identity and behavior among high school students, 2007–2017. *Journal of Adolescent Health, 65*(6), 760–768. doi: 10.1016/j.jadohealth.2019.06.007.

Plöderi, M., and Tremblay, P. (2015). Mental health of sexual minorities. A systematic review. *International Review of Psychiatry*, *27*(5), 367–85. doi: 10.3109/09540261.2015.1083949.

Pompili, M., Lester, D., Forte, A., Seretti, M. E., Erbuto, D., Lamis, D. A., and Girardi, P. (2014). Bisexuality and suicide: A systematic review of the current literature. *Journal of Sexual Medicine, 11*(8), 1903–1913.

Porsch, L.M., Zhang, H., Dayananda, I., and Dean, G. (2019). Comparing receipt of cervical cancer screening and completion of human papillomavirus vaccination using a new construct of sexual orientation: A serial cross-sectional study. *LGBT Health*, *6*(4), 184–191. doi: 10.1089/lgbt.2018.0196.

Poteat, T., Scheim, A., Xavier, J., Reisner, S., and Baral, S. (2016). Global epidemiology of HIV infection and related syndemics affecting transgender people. *Journal of Acquired Immune Deficiency Syndromes*, *72*(Suppl 3), S210–S219. doi: 10.1097/QAI.0000000000001087.

Poteat, T., Malik, M., Scheim, A., and Elliott, A. (2017). HIV prevention among transgender populations: Knowledge gaps and evidence for action. *Current HIV/AIDS Reports*, *14*(4), 141–152. doi: 10.1007/s11904-017-0360-1.

Poteat, T., Wirtz, A., Malik, M., Cooney, E., Cannon, C., Hardy, W.D., Arrington-Sanders, R., Lujan, M., and Yamanis, T. (2019). A gap between willingness and uptake: Findings from mixed methods research on HIV prevention among black and Latina transgender women. *Journal of Acquired Immune Deficiency Syndrome*, *82*(2), 131–140. doi: 10.1097/qai.0000000000002112.

Poteat, V.P., Birkett, M., Turner, B., Wang, X., and Phillips, G.J. (2020). Changes in victimization risk and disparities for heterosexual and sexual minority youth: Trends from 2009 to 2017. *Journal of Adolescent Health,* 66(2), 202–209. doi: 10.1016/j.jadohealth.2019.08.009.

Poteat, V.P., Calzo, J.P., and Yoshikawa, H. (2016). Promoting youth agency through dimensions of gay-straight alliance involvement and conditions that maximize associations. *Journal of Youth and Adolescence*, *45*(7), 1438–1451. doi: 10.1007/s10964-016-0421-6.

Potter, E., and Patterson, C. (2019). Health-related quality of life among lesbian, gay and bisexual adults: The burden of health disparities in 2016 BRFSS data. *LGBT Health*, *6*, 357–369.

Pratt-Chapman, M.L., and Ward, A.R. (2020). Provider recommendations are associated with cancer screening of transgender and gender-nonconforming people: A cross-sectional urban survey. *Transgender Health*, *5*(2), 80–85. doi: 10.1089/trgh.2019.0083.

Pyle, L.C., and Nathanson, K.L. (2017). A practical guide for evaluating gonadal germ cell tumor predisposition in differences of sex development. *American Journal of Medical Genetics*, *175*(2), 304–314. doi: 10.1002/ajmg.c.31562.

Quinn, G.P., Sanchez, J.A., Sutton, S.K., Vadaparampil, S.T., Nguyen, G.T., Green, B.L., Kanetsky, P.A., and Schabath, M.B. (2015). Cancer and lesbian, gay, bisexual, transgender/ transsexual, and queer/questioning (LGBTQ) populations. *CA: A Cancer Journal for Clinicians*, *65*(5), 384–400.

Quinn, V.P., Nash, R., Hunkeler, E., Contreras, R., Cromwell, L., Becerra-Culqui, T.A., Getahun, D., Giammattei, S., Lash, T.L., Millman, A., Robinson, B., Roblin, D., Silverberg, M., Slovis, J., Tangpricha, V., Tolsma, D., Valentine, C., Ward, K., Winter, S., and Goodman, M. (2017). Cohort profile: Study of Transition, Outcomes and Gender (STRONG) to assess health status of transgender people. *BMJ Open*, *7*(12), e018121. doi: 10.1136/bmjopen-2017-018121.

Raifman, J., Moscoe, E., Austin, S.B., and McConnell, M. (2017). Difference-in-differences analysis of the association between state same-sex marriage policies and adolescent suicide attempts [Published corrections appear in *JAMA Pediatrics*, *171*(4), 399 and in *JAMA Pediatrics*, *171*(6), 602.] *JAMA Pediatrics*, *171*(4), 350–356.

Rapp, M., Mueller-Godeffroy, E., Lee, P., Roehle, R., Kreukels, B.P.C., Köhler, B., Nordenström, A., Bouvattier, C., and Thyen, U. (2018). Multicentre cross-sectional clinical evaluation study about quality of life in adults with disorders/differences of sex development (DSD) compared to country specific reference populations (dsd-LIFE). *Health and Quality of Life Outcomes*, *16*. doi: 10.1186/s12955-018-0881-3.

Rebchook, G., Keatley, J., Contreras, R., Perloff, J., Molano, L.F., Reback, C.J., Ducheny, K., Nemoto, T., Lin, R., Birnbaum, J., Woods, T., Xavier, J., and SPNS Transgender Women of Color Study Group. (2017). The Transgender Women of Color Initiative: Implementing and evaluating innovative interventions to enhance engagement and retention in HIV Care. *American Journal of Public Health*, *107*(2), 224–229. doi: 10.2105/AJPH.2016.303582.

Reisner, S.L., Greytak, E.A., Parsons, J.T., and Ybarra, M.L. (2015). Gender minority social stress in adolescence: Disparities in adolescent bullying and substance use by gender identity. *Journal of Sex Research*, *52*(3), 243–256. doi: 10.1080/00224499.2014.886321.

Reisner, S.L., Poteat, T., Keatley, J., Cabral, M., Mothopeng, T., Dunham, E., Holand, C.E., Max, R., and Baral, S. (2016a). Global health burden and needs of transgender populations: A review. *Lancet*, *388*, 412–436.

Reisner, S.L., White Hughto, J.M., Pardee, D., and Sevelius, J. (2016b). Syndemics and gender affirmation: HIV sexual risk in female-to-male trans masculine adults reporting sexual contact with cisgender males. *International Journal of STD and AIDS*, *27*(11), 955–966. doi: 10.1177/0956462415602418.

Reisner, S.L., Hughto, J.M., Pardee, D.J., Kuhns, L., Garofalo, R., and Mimiaga, M.J. (2016c). LifeSkills for Men (LS4M): Pilot evaluation of a gender-affirmative HIV and STI prevention intervention for young adult transgender men who have sex with men. *Journal of Urban Health, 93*(1), 189–205. doi: 10.1007/s11524-015-0011-z.

Reisner, S.L., White Hughto, J.M., Gamarel, K.E., Keuroghlian, A.S., Mizock, L., and Pachankis, J.E. (2016d). Discriminatory experiences associated with posttraumatic stress disorder symptoms among transgender adults. *Journal of Counseling Psychology*, *63*(5), 509–519.

Reisner, S.L., Deutsch, M.B., Peitzmeier, S.M., White Hughto, J.M., Cavanaugh, T.P., Pardee, D.J., McLean, S.A., Panther, L.A., Gelman, M., Mimiaga, M.J., and Potter, J.E. (2018). Test performance and acceptability of self-versus provider-collected swabs for high-risk HPV DNA testing in female-to-male trans masculine patients. *PLoS One*, *13*(3), 1–21. doi: 10.1371/journal.pone.0190172.

Reisner, S.L., Moore, C.S., Asquith, A., Pardee, D.J., Sarvet, A., Mayer, G., and Mayer, K.H. (2019). High risk and low uptake of pre-exposure prophylaxis to prevent HIV acquisition in a national online sample of transgender men who have sex with men in the United States. *Journal of the International AIDS Society*, *22*(9), e25391. doi: 10.1002/jia2.25391.

Reisner, S.L., Moore, C.S., Asquith, A., Pardee, D.J., and Mayer, K.H. (2020a). Gender nonaffirmation from cisgender male partners: Development and validation of a brief stigma scale for HIV research with transgender men who have sex with men (trans msm). *AIDS and Behavior*, *24*(1), 331–343. doi: 10.1007/s10461-019-02749-5.

Reisner, S.L., Pletta, D.R., Potter, J., and Deutsch, M.B. (2020b). Initial psychometric evaluation of a brief sexual functioning screening tool for transmasculine adults: Transmasculine sexual functioning index. *Sexual Medicine*, *8*(3), 350–360. doi: 10.1016/j.esxm.2020.05.006.

Reiter, P.L., Katz, M.L., Bauermeister, J.A., Shoben, A.B., Paskett, E.D., and McRee, A.L. (2018). Increasing human papillomavirus vaccination among young gay and bisexual men: A randomized pilot trial of the outsmart HPV intervention. *LGBT Health*, *5*(5), 325–329. doi: 10.1089/lgbt.2018.0059.

Rizer, A.M., Mauery, D.R., Haynes, S.G., Couser, B., and Gruman, C. (2015). Challenges in intervention research for lesbian and bisexual women. *LGBT Health*, *2*(2), 105–112. doi: 10.1089/lgbt.2014.0122.

Roberts, A.L., Rosario, M., Corliss, H.L., Koenen, K.C., and Austin, S.B. (2012a). Elevated risk of posttraumatic stress in sexual minority youths: Mediation by childhood abuse and gender nonconformity. *American Journal of Public Health, 102*(8), 1587–1593. doi: 10.2105/AJPH.2011.300530.

Roberts, A.L., Rosario, M., Corliss, H.L., Koenen, K.C., and Austin, S.B. (2012b). Childhood gender nonconformity: A risk indicator for childhood abuse and posttraumatic stress in youth. *Pediatrics, 129*(3), 410–417. doi: 10.1542/peds.2011-1804.

Roberts, A.L., Rosario, M., Slopen, N., Calzo, J.P., and Austin, S.B. (2013). Childhood gender nonconformity, bullying victimization, and depressive symptoms across adolescence and early adulthood: An 11-year longitudinal study. *Journal of the American Academy of Child and Adolescent Psychology*, *52*(2), 143–152. doi: 10.1016/j.jaac.2012.11.006.

Rosario, M., Corliss, H.L., Everett, B.G., Reisner, S.L., Austin, S.B., Buchting, F.O., and Birkett, M. (2014). Sexual orientation disparities in cancer-related risk behaviors of tobacco, alcohol, sexual behaviors, and diet and physical activity: Pooled Youth Risk Behavior Surveys. *American Journal of Public Health*, *104*(2), 245–254. doi: 10.2105/AJPH.2013.301506.

Rosengren, A., Hawken, S., Ounpuu, S., Sliwa, K., Zubaid, M., Almahmeed, W.A., Black, K., Sitthi-amorn, C., Sato, H., and Yusuf, S. (2004). Association of psychosocial risk factors with risk of acute myocardial infarction in 11119 cases and 13648 controls from 52 countries (the INTERHEART study): Case-control study. *Lancet*, *364*(9438), 953–962. doi: 10.1016/s0140-6736(04)17019-0.

Rostad, W.L., Clayton, H.B., Estefan, L.F., and Johns, M.M. (2019). Substance use and disparities in teen dating violence victimization by sexual identity among high school students. *Prevention Science*. doi: 10.1007/s11121-019-01049-7.

Rowlands, S., and Amy, J.J. (2018). Preserving the reproductive potential of transgender and intersex people. *European Journal of Contraception and Reproductive Health Care*, *23*(1), 58–63. doi: 10.1080/13625187.2017.1422240.

Russell, S.T., and Fish, J.N. (2016). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annual Review of Clinical Psychology*, *12*(1), 465–487.

Russo, S.J., Murrough, J.W., Han, M-H., Charney, D.S., and Nestler, E.J. (2012). Neurobiology of resilience. *Nature Neuroscience*, *15*(11), 1475–1484.

Saewyc, E.M., Homma, Y., Skay, C.L., Bearinger, L.H., Resnick, M.D., and Reis, E. (2009). Protective factors in the lives of bisexual adolescents in North America. *American Journal of Public Health, 99*, 110–117.

Salzano, A., Arcopinto, M., Marra, A.M., Bobbio, E., Esposito, D., Accardo, G., Giallauria, F., Bossone, E., Vigorito, C., Lenzi, A., Pasquali, D., Isidori, A., and Cittadini, A. (2016). Klinefelter syndrome, cardiovascular system, and thromboembolic disease: Review of literature and clinical perspectives. *European Journal of Endocrinology*, *175*(1), R27–40. doi: 10.1530/eje-15-1025.

Salzano, A., D'Assante, R., Heaney, L.M., Monaco, F., Rengo, G., Valente, P., Pasquali, D., Bossone, E., Gianfilli, D., Lenzi, A., Cittadini, A., Marra, A., and Napoli, R. (2018). Klinefelter syndrome, insulin resistance, metabolic syndrome, and diabetes: Review of literature and clinical perspectives. *Endocrine*, *61*(2), 194–203. doi: 10.1007/s12020-018-1584-6.

Sandberg, D.E., Gardner, M., and Cohen-Kettenis, P.T. (2012). Psychological aspects of the treatment of patients with disorders of sex development. *Seminars in Reproductive Medicine*, *30*(5), 443–452. doi: 10.1055/s-0032-1324729.

Sani, A.M., Soh, K.L., Ismail, I.A., Arshad, M.M., Mungadi, I.A., Yau, S.L., and Soh, K.G. (2019). Experiences of people living with disorders of sex development and sex reassignment: Meta-ethnography of qualitative studies. *Journal of Advanced Nursing*, *75*(2), 277–290. doi: 10.1111/jan.13833.

Schabath, M.B., Blackburn, C.A., Sutter, M.E., Kanetsky, P.A., Vadaparampil, S.T., Simmons, V.N., Sanchez, J.A., Sutton, S.K., and Quinn, G.P. (2019). National survey of oncologists at National Cancer Institute-Designated Comprehensive Cancer Centers: Attitudes, knowledge, and practice behaviors about LGBTQ patients with cancer. *Journal of Clinical Oncology*, *37*(7), 547–558. doi: 10.1200/JCO.18.00551.

Schleedoorn, M.J., van der Velden, A., Braat, D.D.M., Peek, R., and Fleischer, K. (2019). To freeze or not to freeze? An update on fertility preservation in females with Turner Syndrome. *Pediatric Endocrinology Reviews*, *16*(3), 369–382. doi: 10.17458/per.vol16.2019.svb.tofreezeornot.

Schneeberger, A.R., Dietl, M.F., Muenzenmaier, K.H., Huber, C.G., and Lang, U.E. (2014). Stressful childhood experiences and health outcomes in sexual minority populations: A systematic review. *Social Psychiatry and Psychiatric Epidemiology*, *49*, 1427–1445. doi: 10.1007/s00127-014-0854-8.

Schuler, M.S., and Collins, R.L. (2019). Early alcohol and smoking initiation: A contributor to sexual minority disparities in adult use. *American Journal of Preventive Medicine*, *57*(6), 808–817. doi: 10.1016/j.amepre.2019.07.020.

Schuler, M.S., Rice, C.E., Evans-Polce, R.J., and Collins, R.L. (2018). Disparities in substance use behaviors and disorders among adult sexual minorities by age, gender, and sexual identity. *Drug and Alcohol Dependence*, *189*, 139–146. doi: 10.1016/j.drugalcdep.2018.05.008.

Schulman, J., and Erickson-Schroth, L. (2019). Mental health in sexual minority and transgender women. *Medical Clinics of North America*, *103*, 723–733. doi: 10.1016/j.mcna.2019.02.005.

Schwab-Reese, L.M., Currie, D., Mishra, A.A., and Peek-Asa, C. (2018). A comparison of violence victimization and polyvictimization experiences among sexual minority and heterosexual adolescents and young adults. *Journal of Interpersonal Violence*. doi: 10.1177/0886260518808853.

Schweizer, K., Brunner, F., Gedrose, B., Handford, C., and Richter-Appelt, H. (2017). Coping with diverse sex development: Treatment experiences and psychosocial support during childhood and adolescence and adult well-being. *Journal of Pediatric Psychology*, *42*(5), 504–519. doi: 10.1093/jpepsy/jsw058.

Seelman, K.L., and Walker, M.B. (2018). Do anti-bullying laws reduce in-school victimization, fear-based absenteeism, and suicidality for lesbian, gay, bisexual, and questioning youth? *Journal of Youth and Adolescence, 47*(11), 2301–2319. doi: 10.1007/s10964-018-0904-8.

Sevelius, J., Chakravarty, D., Neilands, T.B., Keatley, J., Shade, S.B., Johnson, M.O., and Rebchook, G. (2019). Evidence for the model of gender affirmation: The role of gender affirmation and healthcare empowerment in viral suppression among transgender women of color living with HIV. *AIDS and Behavior*. doi: 10.1007/s10461-019-02544-2.

Sevelius, J.M., Neilands, T.B., Dilworth, S., Castro, D., and Johnson, M.O. (2020b). Sheroes: Feasibility and acceptability of a community-driven, group-level HIV intervention program for transgender women. *AIDS and Behavior*, *24*(5), 1551–1559. doi: 10.1007/s10461-019-02683-6.

Sevelius, J.M., Poteat, T., Luhur, W.E., Reisner, S.L., and Meyer, I.H. (2020a). HIV testing and PrEP use in a national probability sample of sexually active transgender people in the United States. *Journal of Acquired Immune Deficiency Syndromes*, *84*(5), 437–442. doi: 10.1097/QAI.0000000000002403.

Shires, D.A., and Jaffee, K.D. (2016). Structural discrimination is associated with smoking status among a national sample of transgender individuals. *Nicotine and Tobacco Research*, *18*(6), 1502–1508. doi: 10.1093/ntr/ntv221.

Sigurjonsson, H., Mollermark, C., Rinder, J., Farnebo, F., and Lundgren, T.K. (2017). Long-term sensitivity and patient-reported functionality of the neoclitoris after gender reassignment surgery. *Journal of Sexual Medicine*, *14*(2), 269–273. doi: 10.1016/j.jsxm.2016.12.003.

Silberbach, M., Roos-Hesselink, J.W., Andersen, N.H., Braverman, A.C., Brown, N., Collins, R. T., Backer, J., Eagle, K., HIratzka, L., Johnson, W., Kadian-Dodov, D., Lopez, L., Mortensen, K., Prakash, S., Ratchford, E., Saidi, A., van Hagen, I., and Young, L.T. (2018). Cardiovascular health in Turner Syndrome: A scientific statement from the American Heart Association. *Circulation, Genomic and Precision Medicine*, *11*(10), e000048. doi: 10.1161/hcg.0000000000000048.

Sinclair, V.G., and Wallston, K.A. (2004). The development and psychometric evaluation of the Brief Resilient Coping Scale. *Assessment*, *11*(1), 94–101. doi: 10.1177/1073191103258144.

Sobecki-Rausch, J.N., Brown, O., and Gaupp, C.L. (2017). Sexual dysfunction in lesbian women: A systematic review of the literature. *Seminars in Reproductive Medicine*, *35*(5), 448–459. doi: 10.1055/s-0037-1604455.

Solazzo, A., Brown, T.N., and Gorman, B.K. (2018). State-level climate, anti-discrimination law, and sexual minority health status: An ecological study. *Social Science and Medicine (1982)*, *196*, 158–165. doi: 10.1016/j.socscimed.2017.11.033.

Stephenson, R., Riley, E., Rogers, E., Suarez, N., Metheny, N., Senda, J., Saylor, K., and Bauermeister, J.A. (2017). The sexual health of transgender men: A scoping review. *Journal of Sex Research*, *54*(4–5), 424–445. doi: 10.1080/00224499.2016.1271863.

Streed, C.G., Jr., McCarthy, E.P., and Haas, J.S. (2017). Association between gender minority status and self-reported physical and mental health in the United States. *JAMA Internal Medicine*, *177*(8), 1210–1212. doi: 10.1001/jamainternmed.2017.1460.

Streed, C.G., Jr., Harfouch, O., Marvel, F., Blumenthal, R.S., Martin, S.S., and Mukherjee, M. (2017). Cardiovascular disease among transgender adults receiving hormone therapy: A narrative review. *Annals of Internal Medicine*, *167*(4), 256–67.

Subirana-Malaret, M., Gahagan, J., and Parker, R. (2019). Intersectionality and sex and gender-based analyses as promising approaches in addressing intimate partner violence treatment programs among LGBT couples: A scoping review. *Cogent Social Sciences, 5*(1), 1644982.

Swiffen, A. (2018). New resistance to hate crime legislation and the concept of law. *Law, Culture and the Humanities*, *14*(1), 121–139. doi: 10.1177/1743872114534017.

Takemoto, M., Menezes, M.O., Polido, C., Santos, D.S., Leonello, V.M., Magalhães, C.G., Cirelli, J.F., and Knobel, R. (2019). Prevalence of sexually transmitted infections and bacterial vaginosis among lesbian women: Systematic review and recommendations to improve care. *Cadernos de Saude Publica*, *35*(3), e00118118. doi: 10.1590/0102-311X00118118.

Tamar-Mattis, S., Gamarel, K.E., Kantor, A., Baratz, A., Tamar-Mattis, A., and Operario, D. (2018). Identifying and counting individuals with differences of sex development conditions in population health research. *LGBT Health*, *5*(5), 320–324. doi: 10.1089/lgbt.2017.0180.

Tamhane, S., Rodriguez-Gutierrez, R., Iqbal, A.M., Prokop, L.J., Bancos, I., Speiser, P.W., and Murad, M.H. (2018). Cardiovascular and metabolic outcomes in congenital adrenal hyperplasia: A systematic review and meta-analysis. *Journal of Clinical Endocrinology and Metabolism*, *103*(11), 4097–4103. doi: 10.1210/jc.2018-01862.

Tarin, J.J., Garcia-Perez, M.A., and Cano, A. (2015). Deficiencies in reporting results of lesbians and gays after donor intrauterine insemination and assisted reproductive technology treatments: A review of the first emerging studies. *Reproductive Biology and Endocrinology*, *13*, 52. doi: 10.1186/s12958-015-0053-9.

Taylor, E.T., and Bryson, M.K. (2015). Cancer's margins: Trans* and gender nonconforming people's access to knowledge, experiences of cancer health, and decision-making. *LGBT Health*, *3*(1), 79–89. doi: 10.1089/lgbt.2015.0096.

Tuthill, Z., Denney, J.T., and Gorman, B. (2020). Racial disparities in health and health behaviors among gay, lesbian, bisexual and heterosexual men and women in the BRFSS-SOP. *Ethnicity and Health*, *25*(2), 177–188. doi: 10.1080/13557858.2017.1414157.

UCSF Transgender Care. (2016). *Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People* (2nd ed.). M.B. Deutsch, Ed. San Francisco, CA: Department of Family and Community Medicine, University of California San Francisco. Available: transcare.ucsf.edu/guidelines.

Valdiserri, R.O., Holtgrave, D.R., Poteat, T.C., and Beyrer, C. (2018). Unraveling health disparities among sexual and gender minorities: A commentary on the persistent impact of stigma. *Journal of Homosexuality*, 1–19. doi: 10.1080/00918369.2017.1422944.

Van Batavia, J.P., and Kolon, T.F. (2016). Fertility in disorders of sex development: A review. *Journal of Pediatric Urology*, *12*(6), 418–425. doi: 10.1016/j.jpurol.2016.09.015.

van der Horst, H.J.R., and de Wall, L.L. (2017). Hypospadias, all there is to know. *European Journal of Pediatrics*, *176*(4), 435–441. doi: 10.1007/s00431-017-2864-5.

van Kesteren, P.J.M., Asscheman, H., Megens, J.A.J., and Gooren, L.J.G. (1997). Mortality and morbidity in transsexual subjects treated with cross-sex hormones. *Clinical Endocrinology*, *47*(3), 337–343. doi: 10.1046/j.1365-2265.1997.2601068.x.

VanKim, N.A., Austin, S.B., Jun, H.-J., Hu, F.B., and Corliss, H.L. (2017). Dietary patterns during adulthood among lesbian, bisexual, and heterosexual women in the Nurses' Health Study II. *Journal of the Academy of Nutrition and Dietetics*, *117*(3), 386–395. doi: 10.1016/j.jand.2016.09.028.

Vargas, S.M., Wennerstrom, A., Alfaro, N., Belin, T., Griffith, K., Haywood, C., Jones, F., Lunn, M.R., Meyers, D., Miranda, J., Obedin-Maliver, J., Pollock, M., Sherbourne, C.D., Springgate, B.F., Sugarman, O.K., Rey, E., Williams, C., Williams, P., and Chung, B. (2019). Resilience Against Depression Disparities (RADD): A protocol for a randomised comparative effectiveness trial for depression among predominantly low-income, racial/ethnic, sexual and gender minorities. *BMJ Open*, *9*(10), e031099. doi: 10.1136/bmjopen-2019-031099.

Veenstra, G. (2013). Race, gender, class, sexuality (RGCS) and hypertension. *Social Science and Medicine*, *89*, 16–24. doi: 10.1016/j.socscimed.2013.04.014.

Vogel, E.A., Belohlavek, A., Prochaska, J.J., and Ramo, D.E. (2019). Development and acceptability testing of a Facebook smoking cessation intervention for sexual and gender minority young adults. *Internet Interventions*, *15*, 87–92. doi: 10.1016/j.invent.2019.01.002.

Wade, R.M., and Harper, G.W. (2017). Young black gay/bisexual and other men who have sex with men: A review and content analysis of health-focused research between 1988 and 2013. *American Journal of Men's Health*, *11*(5), 1388–1405. doi: 10.1177/1557988315606962.

Walker, M. (2017). *Why We Sleep*. New York: Scribner.

Walls, N.E., Atteberry-Ash, B., Kattari, S.K., Peitzmeier, S., Kattari, L., and Langenderfer-Magruder, L. (2019). Gender identity, sexual orientation, mental health, and bullying as predictors of partner violence in a representative sample of youth. *Journal of Adolescent Health*, *64*(1), 86–92. doi: 10.1016/j.jadohealth.2018.08.011.

Walters, K.L., and Simoni, J.M. (2002). Reconceptualizing native women's health: An "indigenist" stress-coping model. *American Journal of Public Health*, *92*(4), 520–524. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447108.

Walters, K.L., Mohammed, S.A., Evans-Campbell, T., Beltrán, R.E., Chae, D.H., and Duran, B. (2011). Bodies don't just tell stories, they tell histories. *Du Bois Review: Social Science Research on Race*, *8*(1), 179–189. doi: 10.1017/S1742058X1100018X.

Ward, B.W., Dahlhamer, J.M., Galinsky, A.M., and Joestl, S.S. (2014). Sexual orientation and health among U.S. adults: National Health Interview Survey, 2013. *National Health Statistics Reports*, *77*, 1–10.

Washington, T.A., and Murray, J.P. (2005). Practice notes. *Journal of Gay and Lesbian Social Services, 18*(1), 89–96. doi: 10.1300/J041v18n01_07.

Watson, R.J., Fish, J.N., McKay, T., Allen, S.H., Eaton, L., and Puhl, R.M. (2020). Substance use among a national sample of sexual and gender minority adolescents: Intersections of sex assigned at birth and gender identity. *LGBT Health*, *7*(1), 37–46. doi: 10.1089/lgbt.2019.0066.

White Hughto, J.M., Reisner, S.L., and Pachankis, J.E. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science and Medicine (1982)*, *147*, 222–231. doi: 10.1016/j.socscimed.2015.11.010.

Whitton, S.W., Newcomb, M.E., Messinger, A.M., Byck, G., and Mustanski, B. (2016). A longitudinal study of IPV victimization among sexual minority youth. *Journal of Interpersonal Violence*. doi: 0886260516646093.

WHO (World Health Organization). (1948). *Constitution*. Available: https://www.who.int/about/who-we-are/constitution

———. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health: Commission on Social Determinants of Health final report*. Commission on Social Determinants of Health. Available: https://apps.who.int/iris/bitstream/handle/10665/43943/9789241563703_eng.pdf;jsessionid=C5B775B5017D7DDB8A90F893A6D4C4C2?sequence=1.

———. (2011). *Rio Political Declaration on Social Determinants of Health*. Available: https://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf?ua=1.

Wiepjes, C.M., Heijer, M. den, Bremmer, M.A., Nota, N.M., Blok, C.J.M. de, Coumou, B.J.G., and Steensma, T.D. (2020). Trends in suicide death risk in transgender people: Results from the Amsterdam Cohort of Gender Dysphoria study (1972–2017). *Acta Psychiatrica Scandinavica*, *141*(6), 486–491. doi: 10.1111/acps.13164.

Williams, D.R. (2018). Stress and the mental health of populations of color: Advancing our understanding of race-related stressors. *Journal of Health and Social Behavior*, *59*(4), 466–485. doi: 10.1177/0022146518814251.

Wintemberg, J., McElroy, J.A., Ge, B., and Everett, K.D. (2017). Can smoke-free policies reduce tobacco use disparities of sexual and gender minorities in Missouri? *Nicotine and Tobacco Research*, *19*(11), 1308–1314. doi: 10.1093/ntr/ntx078.

Wirtz, A.L., Poteat, T.C., Malik, M., and Glass, N. (2020). Gender-based violence against transgender people in the United States: A call for research and programming. *Trauma Violence Abuse*, *21*(2), 227–241. doi: 10.1177/1524838018757749.

Wisniewski, A.B. (2017). Psychosocial implications of DSD treatment for parents. *Current Opinion in Urology*, *27*(1), 11–13. doi: 10.1097/MOU.0000000000000344.

Wong, Y-L.I., Stanton, M.C., and Sands, R.G. (2014). Rethinking social inclusion: Experiences of persons in recovery from mental illness. *American Journal of Orthopsychiatry*, *84*, 685–695.

Woods, J.B., Sears, B., and Mallory, C. (2016). *Model Legislation for Eliminating the Gay and Trans Panic Defenses*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Model-Legisl-Gay-Trans-Panic-Defense-Sep-2016.pdf.

Worthen, M.G.F. (2018). "Gay equals white"? Racial, ethnic, and sexual identities and attitudes toward LGBT individuals among college students at a Bible Belt university. *Journal of Sex Research*, *55*(8), 995–1011. doi: 10.1080/00224499.2017.1378309.

Woulfe, J.M., and Goodman, L.A. (2018). Identity abuse as a tactic of violence in LGBTQ communities: Initial validation of the identity abuse measure. *Journal of Interpersonal Violence*. doi: 10.1177/0886260518760018.

Yang, J.P., Simoni, J.M., Dorsey, S., Lin, Z., Sun, M., Bao, M., and Lu, H. (2018). Reducing distress and promoting resilience: A preliminary trial of a CBT skills intervention among recently HIV-diagnosed MSM in China. *AIDS Care*, *30*(Supp 5), S39–S48. doi: 10.1080/09540121.2018.1497768.

Yombi, J.C., and Mertes, H. (2019). Treatment as prevention for HIV infection: Current data, challenges, and global perspectives. *AIDS Reviews*, *20*(3). doi: 10.24875/aidsrev.m18000024.

Yost, M.R., and Thomas, G.D. (2012). Gender and binegativity: Men's and women's attitudes toward male and female bisexuals. *Archives of Sexual Behavior*, *41*, 691–702.

Yule, M.A., Brotto, L.A., and Gorzalka, B.B. (2013). Mental health and interpersonal functioning in self-identified asexual men and women. *Psychology and Sexuality*, *4*(2), 136–151. doi: 10.1080/19419899.2013.774162.

Yusuf, S., Hawken, S., Ounpuu, S., Dans, T., Avezum, A., Lanas, F., Andrzej, B., Prem, P., Varios, J., and Lisheng, L. (2004). Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): Case-control study. *Lancet*, *364*(9438), 937–952. doi: 10.1016/s0140-6736(04)17018-9.

12

Coverage, Access, and Utilization of Evidence-Based Health Care

Research indicates that access to adequate insurance coverage, culturally responsive providers, and high-quality, evidence-based health care services has the potential to significantly reduce the effects of health disparities on sexual and gender diverse (SGD) populations. This chapter first reviews the literature on access to care, insurance coverage, and health services utilization in SGD populations. It then discusses in detail three topics that are particularly critical to ensure that clinical and policy approaches to health care for SGD populations are evidence based: gender-affirming care for transgender people, conversion therapy targeting sexual orientation or gender identity, and early genital surgeries for infants with intersex traits.

The importance of grounding clinical protocols and health-related policies on a firm evidence base is a central component of providing high-quality care to SGD people and developing effective strategies to improve SGD population health. Evidence indicates that gender-affirming medical care can significantly improve the health and well-being of transgender people. Conversely, virtually all major medical authorities agree that both "conversion therapy" to change the sexual orientation or gender identity of LGBTQ people and procedures to "normalize" the sex characteristics of children with intersex traits who are too young to participate in consent lack evidence of benefit and show evidence of physical and mental health harms.

Over the past decade, the evidence regarding the importance of gender-affirming care for transgender people has grown exponentially, with increasingly robust data on improvements in mental health outcomes and overall well-being in particular. With regard to conversion therapy and early genital surgeries on infants with intersex traits, however, the evidence base has evolved in the opposite direction, indicating that these procedures have harmful consequences for the health of SGD people.

COVERAGE, ACCESS, AND UTILIZATION

SGD people often encounter barriers to health care services. These barriers include individual factors, such as health literacy; interpersonal factors, such as individual experiences of discrimination by health care providers and insurers; and broader structural factors, such as lower rates of health insurance coverage and higher rates of poverty among lesbian, gay, bisexual, and transgender (LGBT) communities and households headed by same-sex couples, which puts health care financially out of reach for many. Another common barrier is a widespread lack of training for providers in SGD population health, which means that many individuals, particularly transgender and people with intersex traits, struggle to find culturally and clinically competent health care providers.

This section discusses insurance coverage, access to care, and utilization of health care services by SGD people. It focuses first on discrimination in access to health care and health insurance, which is an important influence on the well-being of SGD populations. It then discusses other insurance coverage issues for SGD people, followed by what is known about health services utilization in SGD populations, including considerations of care quality and health professions training.

Discrimination in Health Care and Health Insurance Coverage

Despite cultural and legal shifts such as the nationwide expansion of marriage equality for same-sex couples, discrimination against LGBT people in health care and coverage remains pervasive in the United States. A 2017 survey conducted by National Public Radio (NPR), the Harvard School of Public Health, and the Robert Wood Johnson Foundation found that 16 percent of LGBT people reported encountering discrimination on the basis of their sexual orientation or gender identity when seeking medical care (NPR, Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health, 2017). Transgender people are particularly likely to encounter discrimination in health care settings. According to the 2015 U.S. Transgender Survey (USTS), 33 percent of transgender people who had seen a health care provider in the previous year had at least one negative experience related to being transgender, such as being verbally harassed, physically assaulted, or refused treatment (James et al., 2016). A 2019 review found that, across eight studies, 27 percent (range: 19–40%)

of transgender people reported having been denied health care outright (Kcomt, 2019).

In health insurance, discrimination against SGD people has historically taken many forms. Some types of insurance discrimination prevent people from being able to obtain or afford a health insurance plan at all. These include denials of family coverage to same-sex couples, including legally married spouses (CCIIO, 2014), and preexisting condition exclusions targeting conditions such as cancer and HIV (CCIIO, n.d.). Those who do obtain a plan may then encounter barriers to using their coverage. For SGD people living with HIV, these barriers include adverse tiering (when insurers place certain drugs, such as HIV antiretrovirals, in high cost-sharing levels) and coverage exclusions for pre- and post-exposure prophylaxis (Jacobs and Sommers, 2015; Underhill, 2012). For other SGD people, frequent coverage barriers include difficulty accessing preventive screenings (Agénor et al., 2014; CMS, 2015; Tabaac et al., 2018) and exclusion of coverage for such services as mental and behavioral health care, infertility treatments for same-sex couples, and gender-affirming care for transgender people (American Society for Reproductive Medicine, 2013; Baker, 2017; Coursolle, 2019). Among USTS respondents with insurance, 25 percent reported insurance discrimination on the basis of their gender identity (James et al., 2016). Their experiences included being denied coverage for what are often construed as “gender-specific” services, such as mammograms, cervical cancer screenings, and prostate exams (13%); being denied coverage for care not related to gender affirmation (7%); and being denied coverage for gender-affirming surgery (55%) or hormone therapy (25%). Gender-affirming medical care for transgender people is discussed in detail below.

As described in Chapter 11, discrimination has direct negative consequences for health and well-being and exacerbates the significant health disparities that affect LGBT, intersex, and other SGD populations. Encounters with discrimination in health care settings also jeopardize health by engendering avoidance. In the NPR et al. study, 18 percent of LGBT people reported not seeking health care when they needed it for fear of discrimination; in the 2015 USTS, 23 percent of transgender respondents had not sought care they needed in the last year for fear of mistreatment (James et al., 2016; NPR, Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health, 2017). Similarly, people with intersex traits may avoid routine health care due to previous negative experiences with medical providers (Lambda Legal, 2018).

Given the health consequences of discrimination, laws and policies that prohibit discrimination are a critical intervention for protecting and improving the health and well-being of LGBT, intersex, and other SGD people. Both public and private entities have increasingly established nondiscrimination protections that include these populations. Beginning in 2006, the U.S. Department of Health and Human Services (HHS) promulgated a number of regulations that sought to ensure that discrimination on the basis of sexual orientation or gender identity did not hinder beneficiaries' access to a wide range of programs, including Medicare's Program of All-Inclusive Care for the Elderly,[1] HHS grants and services,[2] HealthCare.gov and the state-based health insurance marketplaces,[3] Medicaid managed care plans,[4] plans covering the essential health benefits outlined in the Affordable Care Act (ACA),[5] qualified health plans,[6] and ACA-regulated health insurance plans more broadly.[7] In 2011, the Joint Commission, which accredits approximately 80 percent of U.S. hospitals, began requiring accredited entities to establish nondiscrimination policies inclusive of sexual orientation and gender identity (Joint Commission, 2011).

In 2016, HHS released a regulation outlining its enforcement of Section 1557 of the ACA.[8] This ACA provision, sometimes known as the Health Care Rights Law, prohibits discrimination on the basis of race, color, national origin, age, disability (including HIV status), or sex in any federally supported health program or activity.[9] The 2016 regulation clarified that the sex nondiscrimination protections in Section 1557 include gender identity and intersex status (as well as pregnancy status) (Baker, 2016). The department also invited complaints of sexual orientation discrimination as a form of sex stereotyping prohibited under Section 1557. In addition to requiring equal access to health care services and health insurance coverage, the regulation clarified that such actions as refusing to use a transgender person's correct name and pronoun, assigning a transgender person to a hospital room or other facility on the basis of their sex assigned at birth, or excluding coverage for all care related to gender affirmation constitute discrimination (insurance coverage for gender-affirming care is covered in more detail below). Evidence indicates that this regulation was effective in addressing numerous forms of discrimination against LGBT people in health care settings (Gruberg and Bewkes, 2018).

As this report goes to press, the Section 1557 regulation is being contested through lawsuits in federal court regarding the scope of its protec-

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[1] 42 C.F.R. § 460.98(b)(3) and § 460.112(a).

[2] 45 C.F.R. § 75.300.

[3] 45 C.F.R. § 155.120(c)(ii) and § 155.220(j)(2).

[4] 42 C.F.R. § 438.3(d)(4), § 438.206(c)(2), and § 440.262.

[5] 45 C.F.R. § 156.125(a) and (b).

[6] 45 C.F.R. § 156.200(e) and § 156.1230(b)(3).

[7] 45 C.F.R. § 147.104(e).

[8] 45 C.F.R. Part 92.

[9] 42 U.S.C. 18116.

tions for sex nondiscrimination. It is expected, however, that the Supreme Court's decision in the case of *Bostock v. Clayton County*, in which the Court ruled that the sex nondiscrimination protections in Title VII of the Civil Rights Act include gender identity and sexual orientation (see Chapter 5), will supersede contradicting interpretations of the ACA's sex nondiscrimination provision and lead to SGD populations being protected under Section 1557 (Keith, 2020). Still unresolved, however, are such issues as access to abortion and other health care services that are increasingly targeted by laws allowing health care providers to opt out of nondiscrimination requirements that they claim conflict with their religious beliefs (Keith, 2019). The impact of religious refusal laws on the health and well-being of SGD populations is a critical and understudied issue.

Health Insurance Coverage

Several factors have changed the landscape of health insurance coverage for LGBT people over the past decade. In addition to the nondiscrimination protections described above, these factors include marriage equality for same-sex couples and the implementation of coverage expansions under the ACA.

Legal relationship recognition expands the availability of health insurance coverage for same-sex couples. Prior to the 2015 Supreme Court decision legalizing marriage equality nationwide, state recognition of same-sex domestic partnerships, civil unions, or marriage was associated with narrower coverage gaps for same-sex couples and their children relative to families headed by different-sex couples (Gonzales, 2015; Gonzales and Blewett, 2013, 2014). The effects of the Supreme Court decision itself are difficult to discern given their overlap with the major expansion of coverage driven by the ACA. The ACA, which was enacted in 2010 and went into full effect in 2014, expanded the availability of coverage in two main ways. First, the law created sliding-scale tax credits intended to facilitate the purchase of health insurance coverage through new health insurance marketplaces, such as HealthCare.gov. Second, under the Supreme Court's 2012 interpretation of the ACA, states were given the choice to expand the eligible income ranges for their Medicaid programs.

Both of these mechanisms are important pathways to coverage for LGBT people, who tend to have lower incomes and higher rates of uninsurance than non-LGBT people. In the first half of 2013, prior to the full implementation of the ACA, 34 percent of a nationally representative sample of LGBT people making less than $45,000 per year (the income range eligible for health insurance marketplace subsidies) were uninsured (Baker, Durso, and Cray, 2014). Following the opening of the marketplaces in fall 2013, uninsurance among LGBT people in this income bracket dropped to

26 percent in 2014 and to 22 percent in 2017 (Baker and Durso, 2017). Data from the Urban Institute's Health Reform Monitoring Survey similarly indicate that the share of LGB adults without health insurance across all income ranges decreased from 21.7 percent in 2013 to 11.1 percent in 2015 (Karpman, Skopec, and Long, 2015). In 2015, uninsurance among transgender USTS respondents stood at 14 percent (James et al., 2016). A 2017 study based on Gallup data, however, found that the adult LGBT population as a whole remained more likely to be uninsured than the non-LGBT population—15 percent and 12 percent, respectively—though this analysis did not account for a greater proportion of young people in the LGBT group.[10]

One risk factor for uninsurance among LGB adults in the post-ACA era is being just older than 26, when coverage for young people through their parents' plans often ends (Gonzales, Driscoll, and Quinones, 2019). Living in the South or Midwest is also a risk factor for uninsurance. These regions comprise the bulk of the states that have not expanded their Medicaid programs and are home to substantial numbers of LGBT people living in poverty. Williams Institute estimates that 24 and 23 percent of LGBT people living in the South and the Midwest, respectively, have incomes below the federal poverty level (Choi, Badgett, and Wilson, 2019). An analysis of data from the 2014 Behavioral Risk Factor Surveillance System (BRFSS) indicated that a lack of Medicaid expansion is associated with higher prevalence of uninsurance among lower-income LGB adults: LGB adults with annual household incomes under $25,000 in states that did not expand Medicaid in 2014 had higher rates of uninsurance than LGB adults in states that did expand Medicaid—37.5 and 23.3 percent, respectively—though this analysis could not confirm that all of the uninsured would have been eligible for expanded Medicaid (Gonzales and Henning-Smith, 2017a).

Beyond providing coverage to low-income people, Medicaid is also particularly important for LGBT people with specific health care needs, such as people with disabilities and people living with HIV. Both population-based and purposive sampling studies indicate that the prevalence of disability is higher among LGBT people than in the general population. An analysis of Washington state BRFSS data, for instance, found that 35.5 percent of lesbians and 36.2 percent of bisexual women had a disability, compared with 25.9 percent of heterosexual women; 26.2 percent of gay men and 40.1 percent of bisexual men had a disability, compared with 22.5 percent of heterosexual men (Fredriksen-Goldsen, Kim, and Barkan, 2012). Among transgender people, 39 percent of 2015 USTS respondents reported having a disability, compared with 15 percent of the general population (James et

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[10] See: https://williamsinstitute.law.ucla.edu/visualization/lgbt-stats/?topic=LGBT#economic.

al., 2016). In comparison with binary-identified transgender people, nonbinary transgender adults in a pooled BRFSS sample from 30 states and Guam between 2014 and 2016 were more likely to report activity limitations due to physical, mental, or emotional problems (adjusted odds ratio [aOR]: 2.44; 95% confidence interval [CI]: 1.36, 4.34) (Streed, McCarthy, and Haas, 2018).

Though precise statistics are not available, disability for some LGBT people is related to living with HIV. To qualify for Medicaid coverage under pre-ACA eligibility rules, people living with HIV had to have both low incomes and a disability (or otherwise be categorically eligible by, for example, being a parent) (Kaiser Family Foundation, 2019). This led to situations in which people living with HIV could not afford treatment and had to allow their health to deteriorate to a disabling AIDS diagnosis before being able to access Medicaid coverage that could have kept them healthy (IOM, 2011a). The ACA resolved this problem in states that expanded their Medicaid programs. Access to care for people living with HIV is one of the many reasons that Medicaid expansion or broader health system reform, such as “Medicare for All” or another form of universal coverage, is a critical health issue for SGD populations.

Medicaid is also an important source of health insurance coverage for transgender people for both income and medical reasons. In the 2015 USTS, 29 percent of transgender respondents were living below 124 percent of the federal poverty line, which is nearly twice the rate of poverty among the general population (14%). Rates of poverty were higher among transgender respondents who were living with HIV (51%), had a disability (45%), or belonged to communities of color (43, 41, 40, and 38% among Latinx, Native American, multiracial, and Black respondents, respectively). The proportion of USTS respondents insured by Medicaid, however, was slightly smaller (13%) than the general population (15%). Barriers to Medicaid coverage for transgender people include restrictive income eligibility requirements in states that have not expanded Medicaid and the checkered history of Medicaid coverage for gender-affirming services, which is discussed in more detail in a later section of this chapter.

Health Services Utilization

Factors that can encourage or discourage care seeking include insurance coverage and benefit design; income and education; health status, including chronic conditions and acute care needs; health literacy; clinical and cultural competency among medical providers; geographic availability and physical accessibility of providers; and previous positive or negative experiences in health care settings (Committee on Health Care Utilization and Adults with Disabilities, 2018). Given the complexity of this constellation of factors, it is difficult to characterize or predict broad trends in care utilization among SGD populations. For instance, the establishment of new legal protections may improve SGD population health and thus lead to fewer care visits; at the same time, however, the existence of new protections may encourage SGD people to seek care instead of avoiding it for fear of discrimination, which might lead to more care visits.

Some evidence suggests that sexual minority populations have high baseline care utilization. An analysis of data from the 2003–2011 nationwide Medical Expenditure Panel Survey, adjusted for sociodemographic factors, health risk behaviors, and health conditions, found that both men and women in same-sex partnerships had 67 percent (aOR: 1.67; 95% CI: 1.04, 2.67) increased odds of past-year emergency department visits and 51 percent (aOR: 1.51; 95% CI: 1.11, 2.07) increased odds of more than three physician visits in the previous year in comparison with people in different-sex partnerships (Blosnich et al., 2016). This finding is in keeping with the minority stress model, which suggests that sexual and gender minorities have worse health related to their lower social status and thus may require more medical care than their heterosexual and cisgender peers. Also in keeping with this model, Hatzenbuehler and colleagues (2012) observed a decline in medical care visits and mental health care visits among both partnered and single sexual minority men in the 12 months following the establishment of marriage equality for same-sex couples in Massachusetts.

Among transgender people, an analysis of data from the California Health Interview Survey found that transgender respondents had lower utilization rates of both primary and specialty care than non-transgender respondents (Ehrenfeld, Zimmerman, and Gonzales, 2018). Similarly, a study of transgender Medicare beneficiaries found a decreasing trend in mental health care use between 2009 and 2014 (Progovac et al., 2019). Use of gender-affirming health care services, however, has been rising since 2000 (Canner et al., 2018). This trend is likely related to a combination of a growing transgender population in the United States, improved coding practices that make it easier to identify transgender people and gender-affirming medical services in data sources such as insurance claims, and removal of barriers to insurance coverage for these services.

Further complicating assessments of care utilization is evidence that barriers to care can persist even after coverage becomes more available. Using data from the 2013–2015 National Health Interview Survey, for instance, Hsieh and Ruther (2017) documented numerous issues facing sexual minority people seeking health care, including ongoing use of emergency departments for primary care; delayed or unmet care needs due to cost; and delayed or unmet care needs for nonfinancial reasons, such as not being able to get an appointment with a medical provider or lacking transportation to a provider's office. Gonzales and Henning-Smith (2017b) similarly found that gender-nonconforming people in a 2014–2015 BRFSS sample from 27 states and Guam were almost twice as likely as a reference group of cisgender women to have unmet care needs due to financial issues (aOR: 1.93; 95% CI: 1.02, 3.67), and they were more than twice as likely not to have received a routine check-up in the previous year (aOR: 2.41; 95% CI: 1.41, 4.12). There is a lack of data on utilization among people with intersex traits.

Quality of Care and Health Professions Training

Common frameworks for quality improvement in health care include the six aims of safety, timeliness, effectiveness, efficiency, patient-centeredness, and equity set forth by the Institute of Medicine (2001) and the "triple aim" of improved patient experiences of care, improved population health outcomes, and reduced costs developed by the Institute for Healthcare Improvement (Berwick, Nolan, and Whittington, 2008). Scant research has explored quality of care issues, including definitions, priority outcomes, and measurement, among SGD populations. Another aspect of care quality is attention to the social determinants of health at the population level and to the social needs of individuals in health care contexts. Major negative social influences on the health of SGD populations include but are not limited to discrimination and a lack of access to culturally responsive providers; family and peer rejection and bullying; unemployment and poverty; and a dearth of feelings of community cohesion, safety, and participation (IOM, 2011b). These generate social needs such as trauma, housing insecurity, financial strain, and social isolation, particularly among groups such as SGD youth and older adults. It is important for researchers, care providers, and policy makers to develop and evaluate targeted efforts to address social determinants of health and meet social needs for SGD people. The experiences of SGD patients have also not been fully explored in the context of new care delivery models intended to improve quality, coordinate care, and restrain costs, such as accountable care organizations and patient-centered medical homes (National LGBT Health Education Center, 2016).

Regardless of how care delivery is organized, providing cultural and clinical competency training about SGD populations for the entire health workforce is critical to ensuring that SGD people can access high-quality care. Training in providing culturally responsive and clinically appropriate care for SGD people needs to begin early for medical students and other health professions trainees, including but not limited to nurses, physician assistants, and nurse practitioners (AMA, 2019; Obedin-Maliver et al., 2011; Streed et al., 2019b). The American Association of Medical Colleges has published curriculum resources to support early clinician training in SGD health topics (Hollenbach, Eckstrand, and Dreger, 2014).[11]

Another strategy for promoting cultural responsiveness to SGD concerns in health care settings is encouraging the career development of SGD-identified health professionals. Sexual and gender diversity, alongside other forms of representation such as racial diversity, strengthens the health care workforce by bringing in new perspectives to inform the delivery of care and helping patients build trust with providers whose backgrounds mirror theirs (Tanner, 2020). Unfortunately, research indicates that SGD people remain significantly underrepresented in the scientific workforce, and many workforce diversity initiatives—such as those supported by the National Institutes of Health (NIH)—do not include SGD populations despite the designation of sexual and gender minorities as an NIH health disparity population in 2016 (Freeman, 2018).

In terms of SGD cultural responsiveness among practicing providers, a 2016 systematic review by the Agency for Healthcare Research and Quality called for clearer definitions of cultural competency for LGBT populations, clarification on the relationship between cultural competence and patient-centered care, and greater availability and assessment of training curricula (Butler et al., 2016). In 2020, the Human Rights Campaign's Healthcare Equality Index, which provides training and assesses LGBT cultural competency at hospitals and other health care organizations across the country, reported that the 765 health care facilities evaluated nationwide in the previous year had accumulated more than 150,000 hours of LGBT-specific cultural competency training (Human Rights Campaign Foundation, 2020).

Another resource related to cultural responsiveness in working with SGD patients are the federal Culturally and Linguistically Appropriate Services Standards, which include sexual orientation and gender identity among aspects of patient identity that require attention and respect from care providers (Office of Minority Health, 2013). The federal Substance Abuse and Mental Health Services Administration (SAMHSA) also promotes cultural competency training around sexual and gender diversity (SAMHSA, 2020), and the Health Resources and Services Administration (HRSA), which oversees the community health centers program and the Ryan White program, funds the National LGBT Health Education Center at Fenway Health, a federally qualified community health center located in Boston that specializes in serving LGBTQ people and people living with HIV.[12] The National LGBT Health Education Center provides a variety of downloadable resources and continuing medical education modules on

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[11] See https://www.aamc.org/what-we-do/mission-areas/diversity-inclusion/lgbt-health-resources.

[12] See https://www.lgbthealtheducation.org.

culturally responsive and clinically appropriate care for LGBTQ people and people with intersex traits.

In addition to the National LGBT Health Education Center, HRSA supports the Center of Excellence for Transgender Health at the University of California at San Francisco, which conducts research and publishes care guidelines and other resources about various aspects of transgender health, particularly in relation to HIV.[13] Between 2012 and 2017, HRSA partnered with the Center of Excellence and several other community-based organizations on a Special Project of National Significance that investigated strategies for engaging and retaining HIV-positive transgender women of color in high-quality care. Important factors identified in this project included providing transgender-specific cultural and clinical competency training for the health care workforce; addressing social determinants of health, such as housing, as part of the provision of health care services; and recognizing the central role that gender-affirming services and personal empowerment can play in improving care and outcomes for transgender people living with HIV, particularly transgender women of color (Health Resources and Services Administration, n.d.; Rebchook et al., 2017). Resources on serving other specific SGD populations have also been created by both public and private entities: in 2010, the federal Administration on Aging (now the Administration for Community Living) funded the creation of the National Resource Center on LGBT Aging to provide information and resources for health care personnel working with LGBT elders,[14] and organizations such as Lambda Legal have published guidelines for hospitals on establishing affirming policies for transgender people (Lambda Legal, 2016) and people with intersex traits (Lambda Legal, 2018).

Alongside cultural and clinical competency training and a diverse health professions workforce, data collection about sexual orientation, gender identity, and intersex status in health care and public health activities is a critical component of understanding and effectively addressing health disparities among SGD populations. Both *Healthy People 2020*, released in 2010, and *Healthy People 2030*, released in 2020, call for an increase in the number of population health surveys that include sexual orientation and gender identity measures,[15] and federal regulations governing incentive programs for electronic medical records require that certified systems have the capacity to collect, store, and retrieve structured data on sexual orientation and gender identity (Cahill et al., 2016). The NIH Sexual and Gender Minority Research Office also promotes research into the health of

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[13] See https://prevention.ucsf.edu/transhealth.

[14] See https://www.lgbtagingcenter.org.

[15] See https://www.healthypeople.gov.

SGD populations[16] (see Chapter 4 for a more detailed discussion of data collection).

GENDER-AFFIRMING CARE FOR TRANSGENDER PEOPLE

The first U.S. clinics providing gender-affirming care to transgender individuals opened in the 1960s and 1970s. Practice and research in the field of transgender health, however, was stymied in the 1980s and 1990s by the spread of public and private insurance exclusions for gender-affirming care. As these exclusions have begun to be removed, there has been exponential growth in evidence regarding the medical necessity of this care, and gender affirmation has emerged as a core intervention to improve the health and well-being of transgender people. This section reviews the components of and clinical and population evidence concerning gender affirmation.

Components of Gender Affirmation

Broadly speaking, gender affirmation is a process by which people who identify as transgender, non-binary, or gender diverse take steps to fully express their true gender. (An older but still common term for the process of gender affirmation is gender transition.) Gender affirmation may have social, legal, and medical components. Socially, people may use a name or pronoun different from those they were assigned at birth, or they may change aspects of their gender expression, such as hairstyle and clothing. Legal affirmation may include name or gender marker changes on identification documents—such as passports, driver's licenses, and birth certificates—which are affected by state and federal laws and policies. Gender-affirming clinical care may include psychosocial support, hormone therapy, and surgeries.

Psychosocial support for gender affirmation typically focuses on reducing emotional distress and supporting decision making regarding social, legal, and medical steps. Some young transgender people and their families opt for medication to delay the onset of puberty. Adults and some adolescents may take feminizing or masculinizing hormones to achieve gender-congruent secondary sex traits, often in conjunction with medications that suppress menses or block androgens. Many transgender adults and older adolescents undergo surgery to align the appearance of their face, chest or breasts, body shape, and genitals with their gender, and some may also pursue speech therapy or hair removal. Gender affirmation is different for every person: some people may take only social or legal steps, while others may need gender-affirming prescriptions or medical procedures. Regardless

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[16] See https://dpcpsi.nih.gov/sgmro.

of an individual's path in relation to gender affirmation, social support and integrated, multidisciplinary care are essential for all transgender people, especially youth, and are consistently associated with improved mental health, social involvement, and self-esteem (Rafferty, Committee on Psychosocial Aspects of Child and Family Health, and Committee on Adolescence, 2018).

Guidelines and Policies Related to Gender Affirmation

Clinicians who provide gender-affirming psychosocial and medical services in the United States are informed by expert evidence-based guidelines. In 2012, the World Professional Association for Transgender Health (WPATH) published version 7 of the *Standards of Care for the Health of Transgender, Transsexual, and Gender-Nonconforming People*, which have been continuously maintained since 1979, and revisions for version 8 are currently under way (Coleman et al., 2012). Two newer guidelines have also been published by the Endocrine Society (Hembree et al., 2017) and the Center of Excellence for Transgender Health (UCSF Transgender Care, 2016). Each set of guidelines is informed by the best available data and is intended to be flexible and holistic in application to individual people. All of the guidelines recommend psychosocial support in tandem with physical interventions and suggest timing interventions to optimize an individual's ability to give informed consent. Mental and physical health problems need not be resolved before a person can begin a process of medical gender affirmation, but they should be managed sufficiently such that they do not interfere with treatment.

A major success of these guidelines has been identifying evidence and establishing expert consensus that gender-affirming care is medically necessary and, further, that withholding this care is not a neutral option (World Professional Association for Transgender Health, 2016). A number of professional medical organizations have joined WPATH in recognizing that gender-affirming care is medically necessary for transgender people because it reduces distress and promotes well-being, while withholding care increases distress and decreases well-being (American Academy of Family Physicians, 2012; American Academy of Pediatrics, 2018; American College of Nurse Midwives, 2012; American College of Obstetricians and Gynecologists, 2011; AMA, 2008; American Psychiatric Association, 2018; American Psychological Association (APA), 2008, 2015; Endocrine Society, 2017). Accordingly, public and private insurers have expanded access to gender-affirming care; some have done so proactively, while others have been required by state and federal nondiscrimination laws to remove coverage exclusions (Baker, 2017).

Coverage requirements for gender-affirming care typically rely on an overarching principle of parity between medically necessary services for transgender and cisgender people. Treatments that are gender affirming for transgender patients are covered by public and private insurers for intersex and cisgender people for a variety of conditions, including genital difference, endocrine disorders, cancer prevention or treatment, and reconstructive surgeries following an injury. Examples of these services include testosterone or estrogen replacement therapy after surgery or menopause, vaginoplasty after pelvic surgery or for women with vaginal agenesis in the context of an intersex condition, and phalloplasty for cisgender male service members injured in war (Baker et al., 2012; Balzano and Hudak, 2018; Spade et al., 2009).

As this report goes to press, 24 states and the District of Columbia have enacted laws or made administrative changes prohibiting transgender-specific insurance exclusions in private coverage (Movement Advancement Project, 2020a). However, Medicaid programs in 10 states continue to explicitly exclude gender-affirming care for transgender individuals, and many states do not address the issue of this coverage in Medicaid (Mallory and Tentindo, 2019). At the federal level, the Medicare program removed its exclusion for "transsexual surgery" in 2014 (HHS, 2014), though coverage decisions related to gender-affirming surgeries are still made on a case-by-case basis (CMS, 2016). As discussed above, Section 1557 of the Affordable Care Act also has substantial ramifications for coverage of gender-affirming care: the 2016 HHS regulation embraced the principle of parity and prohibited categorical exclusions of gender-affirming care under the rubric of sex nondiscrimination. This aspect of the regulation remains contested in court, but it is expected that the original regulation's specific protections for transgender people will be found to be well within the scope of federal law and the agency's authority (Keith, 2020).

In order to justify coverage for gender-affirming care, insurance providers in the United States and most other countries require a supporting diagnosis. In 2013, the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), 5th edition (American Psychiatric Association, 2013) replaced the diagnosis of gender identity disorder with gender dysphoria. Whereas gender identity disorder was perceived as pathologizing a person's gender identity, gender dysphoria emphasizes the clinically significant distress and impairment that can accompany incongruence between assigned sex and gender identity (Robles et al., 2016). A person who experiences no distress or impairment due to this incongruence will not meet diagnostic criteria for gender dysphoria. More recently, the *International Classification of Diseases*, 11th revision (WHO, n.d.) has replaced transsexualism and gender identity disorder with gender incongruence and moved the diagnosis out of the mental and behavioral disorders chapter and into a new chapter on sexual health.

Many insurers and some health care providers require documentation that an individual meets guideline requirements, including diagnostic criteria for gender dysphoria, as a prerequisite for hormonal or surgical treatment. Because of the power differential inherent in this construct, this practice has been described as "gatekeeping" and can function as a significant barrier to accessing care. In a survey of transgender adolescents, for instance, participants described distress at having to prove to a mental health provider that they were "trans enough," having to wait for approval for treatment, and perceiving that their therapist feared legal liability should a person later regret the treatment (Gridley et al., 2016). Even transgender people with insurance coverage and access to providers report difficulty in navigating diagnosis-based requirements imposed by providers and insurers (James et al., 2016). Over the past 10 years, some U.S. medical professional organizations have increasingly moved to reduce psychiatric gatekeeping by shifting toward an informed consent and shared decision-making model, especially for adults (Schulz, 2018). Some countries have further underscored that transgender identity is not a pathology by recognizing gender affirmation as fundamental to the human right to self-definition and removing requirements that transgender people seeking gender-affirming medical care present with a diagnosis such as gender dysphoria (Arístegui et al., 2017).

Outcomes of Gender-Affirming Interventions

The evidence base for gender affirmation across age groups has grown rapidly over the last decade. For transgender youth who have not yet reached puberty, social affirmation and support are primary interventions. Using data from electronic records from the Kaiser Permanente system, recent work has suggested that prepubescent transgender children experience increased rates of mental health problems, especially anxiety, depression, and attention deficit disorders, relative to cisgender children (Becerra-Culqui et al., 2018). However, research also shows that, when transgender children in this age group are socially affirmed and supported by their families, their rates of depression are much nearer to those of cisgender children (Durwood, McLaughlin, and Olson, 2017). In one study, transgender youth who were socially affirmed had elevated rates of anxiety relative to their cisgender peers, but this difference was not clinically significant and may have reflected ongoing social stigma and minority stress (Olson et al., 2016). Another study found that using transgender youths' chosen names in home and at school was associated with reduced depression, suicidal ideation, and suicidal behavior (Russell et al., 2018).

Puberty blockers, typically gonadotropin-releasing hormone analogs, have been used since at least the late 1990s to prevent development of irreversible secondary sex traits and to give youth more time to explore their gender identity (Cohen-Kettenis and Van Goozen, 1998). In 2014, a landmark paper provided longitudinal data from a cohort of youth in the Netherlands: among this group, puberty suppression, followed several years later by gender-affirming hormones and surgery, was effective in reducing gender dysphoria and restoring well-being equal to or better than same-age cisgender young adults (de Vries et al., 2014). Though most data on puberty suppression are limited and drawn from convenience samples in European clinics, this fully reversible gender-affirming intervention appears to confer improved psychological functioning and may reduce gender dysphoria (Mahfouda et al., 2017).

There is inconsistent and limited evidence regarding risks of irreversible low bone density and infertility (Chew et al., 2018; Mahfouda et al., 2017; Rafferty, Committee on Psychosocial Aspects of Child and Family Health, and Committee on Adolescence, 2018). In recognition of these risks, guidelines recommend monitoring bone density and counseling on fertility preservation prior to treatment (Hembree et al., 2017). Of note, while evidence indicates that social affirmation and puberty suppression are low risk and effective interventions for young transgender youth, there may be a significant delay between recognition and disclosure of gender incongruence: in one cohort, participants reported identification of gender incongruence on average at age 8 and disclosure to caregivers on average at age 17 (Olson et al., 2015). Support from parents and affirmation of gender diversity are critical to creating safe opportunities for young people to access the psychosocial and medical care that they need in a timely manner.

Hormone therapy with testosterone or estrogen is a common gender-affirming treatment for transgender adults and older adolescents. Though limited by heterogeneity of methodology, regimen, and outcomes measures, systematic reviews and meta-analyses consistently find that gender-affirming hormone treatment is associated with significant reductions in gender dysphoria, psychological symptoms, and psychiatric diagnoses and with improved markers of well-being, including quality of life, interpersonal functioning, psychological adjustment, sexual function, body satisfaction, and self-esteem (Costa and Colizzi, 2016; Dhejne et al., 2016; Keo-Meier et al., 2015; Murad et al., 2010; Nguyen et al., 2018; Rowniak, Bolt, and Sharifi, 2019; White Hughto and Reisner, 2016).

Both the WPATH and Endocrine Society guidelines identify age 16 as a general starting point for gender-affirming hormones, with the recognition that some adolescents benefit from earlier treatment (Coleman et al., 2012; Hembree et al., 2017). Evidence for hormone therapy in adolescents comes largely from outside of the United States and inconsistently tracks outcomes (Chew et al., 2018; Olson-Kennedy et al., 2016). The data available suggest that hormone therapy in adolescents likely yields reductions in dysphoria and distress and improvements in well-being similar to those in adults (Mahfouda et al., 2019). Gender-affirming hormone therapy can be managed for most patients by primary care providers, as it typically involves long-term maintenance on doses similar to those used for cisgender patients with conditions such as hypogonadism (Wylie et al., 2016).

Surgeries involving the genitals or secondary sex characteristics can also improve health and well-being among transgender people and are an important and medically necessary aspect of gender-affirming care (Bailey, Ellis, and McNeil, 2014; Castellano et al., 2015; Murad et al., 2010; Passos et al., 2020; Wernick et al., 2019). Many factors affect an individual's need for and access to gender-affirming surgeries. In the 2015 USTS, only 25 percent of respondents had undergone some form of gender-affirming surgery, such as genital reconstruction or chest reconstruction, and having surgery was correlated with higher incomes (James et al., 2016). Respondents also reported varying degrees of experience with or need for specific procedures: 97 percent of transgender men had or needed chest reconstruction surgery, and 22 percent of transgender men had or needed phalloplasty. Similarly, 95 percent of transgender women had or needed hair removal procedures, and 76 percent had or needed vaginoplasty. Non-binary individuals generally had and needed fewer surgeries than their binary-identified counterparts: 48 percent of non-binary individuals assigned female at birth had or needed chest surgery, and 12 percent of non-binary individuals assigned male at birth had or needed vaginoplasty.

Surgeries for transgender men and other trans-masculine people may include bilateral chest reconstruction, salpingo-oophrectomy (removal of the ovaries and fallopian tubes), hysterectomy, genital reconstruction (metoidioplasty or phalloplasty with or without prosthesis), and, rarely, vocal surgery. Chest reconstruction, which involves removal of breast tissue and nipple preservation, is associated with significant improvements in mental health and well-being among trans-masculine adolescents and adults (Agarwal et al., 2018; Mahfouda et al., 2019; Van Boerum et al., 2019). A systematic review of studies of genital surgeries that included metoidioplasty indicated that 93 percent of patients were satisfied with the outcome, including preserved erogenous sensitivity, despite significant rates of postoperative complications (Morrison et al., 2016). A systematic review of penile prosthetic outcomes for 792 transgender men over a mean follow-up period of three years found inconsistent reporting of sensory, urinary, satisfaction, and sexual outcomes after surgery, with 36 percent reporting prosthesis complications (Rooker et al., 2019).

Surgeries for transgender women and other trans-feminine people may include breast augmentation, facial feminization, vocal surgery, orchiectomy, and vaginoplasty. Some studies have shown improvements in quality of life and high patient satisfaction following facial feminization procedures for trans-feminine individuals, including reshaping the contours of the face and larynx (Ainsworth and Spiegel, 2010; Van Boerum et al., 2019). A systematic review of vaginoplasty for transfeminine individuals identified 26 studies with a total of 1,563 patients; although measures used to track outcomes varied between studies, and complications were frequent, with neovaginal stenosis the most common, patients tended to report high ratings in both sexual function and satisfaction after surgery (Horbach et al., 2015).

The research regarding outcomes for surgery in youth under 18 is sparse, in part because it is generally not clinically recommended for legal minors, though there is only a small amount of low-quality evidence that supports this limitation (Hembree et al., 2017). Chest masculinization is sometimes appropriate for youth 16 or older (Coleman et al., 2012), and some surgeons perform vaginoplasty on minors under specific circumstances (Milrod and Karasic, 2017). Several studies provide positive evidence regarding the benefits of chest reconstruction in minors, with reduced depressive and anxious symptoms and improved chest dysphoria; the most common complications were changes in sensation and scar cosmesis (Mahfouda et al., 2019). There are very few data regarding genitoplasty for minors.

As noted above, available evidence generally indicates that gender-affirming medical interventions, including surgeries, are associated with improvements in gender dysphoria, mental health, and quality of life for transgender people. Evidence also suggests, however, that mental health conditions can persist after treatment: for instance, a 2011 Swedish registry study of 324 patients who had undergone gender-affirming surgeries between 1973 and 2003 found increased rates of suicide attempts and psychiatric hospitalizations relative to population controls (Dhejne et al., 2011). The study notes that surgeries did alleviate gender dysphoria, and the study was unable to determine how patients might have fared without surgery. When a more recent Swedish registry study tracked mental health treatment utilization among people with a gender incongruence diagnosis relative to people without gender incongruence between 2005 and 2015 (N = 2,679), time since gender-affirming surgery was associated with reduced need for mental health services (aOR: 0.92; 95% CI: 0.87, 0.98) (Bränström and Pachankis, 2019). A reanalysis of these data compared individuals with gender incongruence who had gender-affirming surgery with those who did not and found comparable rates of reduced need for treatment for mood disorders between the groups, but higher rates of treatment for anxiety disorders among the group who did have surgery (aOR: 1.40; 95% CI: 1.00, 1.97) (Bränström and Pachankis, 2020). The authors note that the comparator nonsurgical group is heterogeneous, including a mixture of patients who both did and did not want surgery. Furthermore, as was discussed in detail in Chapter 11, transgender people have significantly elevated rates of mental health problems due not just to the experience of gender dysphoria but also because of minority stress and stigma. While social and medical affirmation reduce gender dysphoria and can mitigate the impact of social factors, such as discrimination and family rejection, medical affirmation may not fully resolve or protect from experiences of stigma and stress. Future studies examining outcomes of gender affirmation should assess and control for these factors. Related research needs include exploration of factors that can promote resilience in different family and community settings and across the life course (Bockting et al., 2016).

Another major limitation in research on postsurgical outcomes is the absence of patient-reported outcome measures that have been validated in transgender and non-binary post-operative patient populations (Andréasson et al., 2018; Barone et al., 2017; Dy et al., 2019). Recent data overall suggest that satisfaction after gender-affirming surgeries is high and risk of regret is very low. For example, the Center of Expertise on Gender Dysphoria at the Free University Medical Center in Amsterdam published results from 43 years of clinical care in which regret was reported in only 14 patients (0.5%) of the more than 5,300 patients who underwent gonadectomy as part of gender affirmation (Wiepjes et al., 2018). A smaller study found that only 1 of 68 patients who received chest masculinization surgery experienced regret "sometimes" (Olson-Kennedy et al., 2018), consistent with findings from older research (Gijs and Brewaeys, 2007). Similarly, a 2018 systematic review and meta-analysis of 46 articles with 3,716 cases of vaginoplasty for transgender women reported a cumulative rate of regret of 1 percent, compared with an overall satisfaction rate of 92 percent across different surgical techniques (Manrique et al., 2018). While many studies do not qualitatively assess degree and reasons for regret, in one study patients who reported regret with surgeries reported mild regret and attributed this to cosmetic or functional outcomes rather than the decision to have surgery (van de Grift et al., 2017).

Substantial progress has been made over the past decade in research on outcomes of gender-affirming interventions, and there are ample opportunities for improvement. To address the scarcity of data and difficulties extrapolating findings from relatively homogeneous European samples, a United States-based comprehensive registry that tracks patient-centered outcomes for both youth and adults could lead to valuable insights on the benefits of medically supervised gender affirmation (Kimberly et al., 2018). Much remains to be learned regarding optimal timing and risk profiles for surgeries and other medical interventions, aided by standardized and validated tools for body satisfaction, gender-related quality of life, gender dysphoria, and mental health (Olson et al., 2016). Standardized assessment and reporting of outcomes are particularly essential for helping clinicians and patients understand surgical options. In this area, too, more attention is needed to populations that tend to be invisible or underrepresented in clinical research, especially transgender people of color and non-binary individuals. Very little is known about the experiences and options for treatment for transgender individuals with intersex traits, especially those who had irreversible treatments as children. Overall, however, the evidence indicates that gender-affirming interventions, including social affirmation, hormonal treatment, and surgeries, are medically necessary for reducing distress and improving the health and well-being of transgender people.

CONVERSION THERAPY

Efforts to change sexual orientation or gender identity, which initially gained traction in the 1960s and which are often referred to as conversion or reparative therapies, assume that non-cisgender and non-heterosexual identities are abnormal. In 2009 the APA produced a landmark report that systematically reviewed the evidence of efficacy for sexual orientation change efforts (APA, 2009). Most of this research was conducted prior to 1981, and very few studies were experimental in design. The task force found that some people sought sexual orientation change efforts due to distress over their sexual orientation but that the treatments were unable to reduce same-sex attractions or increase other-sex attractions. Furthermore, there was evidence that individuals experienced harm from these treatments, including sexual dysfunction, depression, anxiety, and suicidality. With regard to gender identity, while interest in the so-called "desistence" of transgender identity has been informed by studies suggesting that as high as 80 percent of prepubertal youth presenting to pediatric gender clinics ultimately do not identify as transgender, many of the youth included in these studies did not meet full DSM criteria for a gender incongruence diagnosis (Olson, 2009). Recent evidence supports that early social affirmation of transgender identity is associated with good outcomes (Olson et al., 2016; Durwood, McLaughlin, and Olson, 2017) and that lack of social affirmation correlates with depression, anxiety, and suicidality (de Vries et al., 2016; James et al., 2016).

Consequently, sexual orientation and gender identity conversion efforts have fallen out of favor in mainstream psychological and psychiatric practice. By the time of the 2011 Institute of Medicine report, many medical organizations had issued statements condemning sexual orientation change efforts based on the lack of efficacy and evidence of harm. Many of these organizations have since updated their positions to decry conversion therapy for both sexual orientation and gender identity (AMA and GLMA: Medical Professionals Advancing LGBTQ Equality, 2018; American Academy of Child and Adolescent Psychiatry, 2018; Rafferty, Committee on Psychosocial Aspects of Child and Family Health, and Committee on Adolescence, 2018; SAMHSA, 2015; Streed et al., 2019a).

However, there is recent evidence that LGBTQ youth and adults continue to be exposed to conversion therapy. A 2019 report from Williams Institute estimated that 698,000 adults between ages 18 and 59 have undergone conversion therapy from a licensed professional or religious advisor, of whom 350,000 were adolescents when treated (Mallory, Brown, and Conron, 2019). The same study estimated that an additional 57,000 youth will receive conversion therapy from a health care or religious provider before 18 years of age. Among 25,000 LGBTQ youth respondents to a 2019 national survey, 67 percent reported that someone attempted to convince them to change their gender identity or sexual orientation (Trevor Project, 2019). A survey of 762 marriage and family therapists and members of the American Academy of Marriage and Family Therapists, which has a position statement against conversion therapy, found that 19.4 percent of respondents believed it was ethical to practice sexual orientation change therapy, and 3.5 percent of respondents had done so. This belief was associated with higher levels of negative beliefs about LGB clients than those of other therapists (McGeorge, Carlson, and Toomey, 2015).

A recent survey was among the first to evaluate the link between sexual orientation change therapy and the health of young people: among 245 white and Latinx LGBT individuals between the ages of 21 and 25, exposure to conversion efforts within or outside of their families during adolescence was associated with higher family religiosity, lower family socioeconomic status, and higher individual gender nonconformity (Ryan et al., 2018). In addition, exposure to conversion efforts during adolescence was significantly associated with increased suicidal ideation, suicide attempts, and depression, as well as diminished life satisfaction, self-esteem, social support, educational attainment, and lower income in young adulthood.

A systematic narrative review of gender identity conversion efforts found few data and a notable absence of research about their effects on both adolescents and adults (Wright, Candy, and King, 2018). However, a recent study using data from the 2015 USTS found that 14 percent of respondents had been exposed to gender identity conversion therapy during their lifetimes; exposure was associated with significantly higher rates of past-month severe psychological distress and lifetime suicide attempts compared with respondents who had not been exposed to such therapy (Turban et al., 2019). Exposure to gender identity conversion therapy before age 10 was associated with nearly twice the rate of lifetime suicide attempts.

The available evidence suggests that sexual orientation and gender identity conversion efforts are ineffective and dangerously detrimental to the health of SGD populations, especially for minors who are unable to give informed consent. As of early 2020, 20 states, the District of Columbia, Puerto Rico, and a number of municipalities had outlawed sexual orientation and gender identity conversion therapy for minors (Movement Advancement Project, 2020b). As growing numbers of professional organizations and governments call for or legislate an end to conversion therapy, particularly for minors, it is important for clinicians working with SGD populations to understand the effects that these experiences can have on individuals, even many years later. Research on strategies for helping individuals who have experienced conversion therapy to heal and recover is essential. In order to end the practice of conversion therapy, it is not sufficient for professional organizations to recommend against conversion therapy; rather, professionals may require dedicated and specific training on the inefficacy and danger of conversion treatments, and insurance providers should consider limiting coverage for these non-evidence-based practices.

INTERSEX GENITAL SURGERY

The most expansive estimations of the prevalence of intersex traits, including any variation in any marker of sex (chromosomes, internal reproductive anatomy, external genital shape, and secondary sex traits), concludes that up to 1.7 percent of the population has an intersex trait (Fausto-Sterling, 2000). Estimates based on the number of people with clinically identifiable sexual or reproductive anatomic variations are closer to 0.5 percent (Nordenvall et al., 2014). Estimates for prevalence of infants born with obvious genital diversity, sometimes known as ambiguous genitalia, range from 0.03 percent to 0.1 percent (Blackless et al., 2000; Hughes et al., 2007; Thyen et al., 2006). Such variations can include differences in the length of the genital tubercule or glans (as in a shorter penis or longer clitoris), a narrow or absent vaginal opening, or presence of partially fused labia or a partially separated scrotum. This section focuses primarily on early genital surgery for children born with obvious genital diversity, which remains the most contentious area of clinical care—and increasingly, health law and policy—for persons with intersex traits (Dalke et al., 2020).

Genital Diversity and Early Genital Surgeries

Although some infants with genital diversity require urgent surgery to address urinary obstruction or exposed pelvic organs (Woo, Thomas, and Brock, 2010), many have no immediate medical concerns and do not require urgent medical treatment (Romao and Pippi Salle, 2017). Because the appearance of the external genitals is typically the primary datum for the sex assigned to infants at birth, genital diversity can lead to uncertainty about which sex a child with intersex traits should be assigned. Similarly, eventual gender identity cannot be readily predicted for many people with intersex traits based on the appearance of their genitals at birth (see more detailed discussion below). Currently, clinicians and advocates alike typically recommend a binary but flexible sex assignment, informed by the balance of sex markers and the specific intersex condition the child has, which will contribute to the person's gender identity later in life.

Early genital surgeries primarily seek to align genitalia with assigned sex. Feminizing surgeries reduce the size of a clitoris, shape a vulva, or create or lengthen the vagina of a child assigned female. Masculinizing surgeries may reposition a urethra that is not located at the tip of the penis or create a phallus for a child assigned male. Early removal of gonadal tissue may also be recommended to reduce risk of malignancy or the pubertal production of hormones (and therefore secondary sex traits) that are discordant with the child's assigned sex. In the United States, many of these surgeries are performed in infancy.

In 2016, an international consensus group offered an update on genital surgery for children with obvious genital difference and identified a broad set of benefits for surgeries (Mouriquand et al., 2016). Physically, surgeries seek to promote "functional genital anatomy to allow future penetrative intercourse (as a male or a female)" (p. 141), as well as fertility, urinary function, menstruation, and the avoidance of malignancy and secondary sex traits that are discordant with assigned sex. Psychosocially, surgeries also purportedly "foster development of 'individual' and 'social identities'," reduce genital-related stigma, and support "the parents' desire to bring up a child in the best possible conditions" (p. 142). Since the early 1990s, however, intersex advocates have called attention to the physical and emotional harms of surgery, especially when performed before a child is old enough to participate in the decision. Indeed, in the absence of cloacal exstrophy (exposure of pelvic organs), urinary obstruction, or current malignancy, there is no medical urgency for such surgeries; they can be safely deferred until a child is older. At the core of the debate is a question as to what to do and when: what, if any, surgeries should be performed on very young children? This question ultimately calls for the weighing of relative physical and emotional risks, benefits, and alternatives to such surgeries.

Synthesis of the evidence base is complicated by significant heterogeneity of anatomic and medical considerations, surgical procedures, and dynamic psychosocial aspects over the life course. The available research on outcomes also has significant methodological limitations, with many outcomes reported from single surgeons or programs and inconsistency in measurement instruments, study designs, sample sizes, reported outcomes, and follow-up periods. Studies often have insufficient postsurgical follow-up to evaluate outcomes of childhood interventions on adult physical, sexual, and psychological well-being. Many studies also lack an effective comparator group, as there are no standard nonsurgical pathways for children with genital difference.

A review of these surgeries follows, along with an assessment of what is known about the outcomes of these interventions. The risks and benefits of each group of surgeries are discussed together, as these tend to be specific to the physical intervention itself. Some psychosocial outcomes, however, are discussed in aggregate, to reflect more limited data and overlaps in psychosocial experiences among intersex variations.

Gonadectomy

Removal of the gonads yields two potential benefits in the form of risk reduction: avoiding gonadal malignancy and undesired secondary sex traits. The risk of malignancy tends to be higher for intra-abdominal testes or atypically developed gonads, but it has to be balanced against the potential benefits of hormone-producing tissue (Pyle and Nathanson, 2017). Individuals with complete androgen insensitivity syndrome (AIS) have very low risk of testicular malignancy in childhood or adolescence, do not develop masculine secondary sex traits in puberty, and derive a high bone health benefit from endogenous hormone production; in these cases, it is generally recommended to defer gonadectomy until after puberty. Individuals with gonadal dysgenesis (in which gonads do not fully develop into ovarian or testicular tissue) have a higher risk of malignancy with little hormone production, and childhood gonadectomy is consistently recommended (Mouriquand et al., 2016). Some assigned girls with a 46,XY karyotype, testicular tissue, and full or partial androgen response, as in partial AIS or 5-alpha reductase deficiency, have moderate or low risk of malignancy and less predictable responses to hormone production at puberty. Gonadectomy is sometimes considered for these children to reduce distress and uncertainty around a "mixed" puberty (Mouriquand et al., 2016).

There are significant risks from gonadectomy. Some people with typically developed intra-abdominal testes, as in complete AIS and 5-alpha reductase deficiency, may be capable of producing mature sperm with assisted reproductive technology (Finlayson et al., 2017; Kang et al., 2014). For such people, gonadectomy can amount to sterilization. Removal of sex hormone-producing gonadal tissue can lead to low bone mass, genital changes, sexual dysfunction, and mood changes, for which individuals may require a lifetime of hormone replacement therapy. If the surgery is performed prior to puberty, people may be prescribed hormones congruent with their assigned sex rather than identified gender. Importantly, recent evidence suggests that puberty blockers may be a viable nonsurgical alternative to support gender identity exploration and allow time for informed consent, and in most cases, surgery need not be done in early childhood (Canalichio et al., 2020).

Feminizing Surgeries

Feminizing surgeries include clitoral and vaginoplasty surgeries. Clitoral surgery is most often recommended for 46,XX children with congenital adrenal hyperplasia (CAH) who are assigned female, with concerns primarily about genital "ambiguity" (Mouriquand et al., 2016). In recognition of inadequacies of earlier techniques, like clitoral amputation and recession, microsurgical approaches aim to preserve clitoral nerve and vascular supply, and in some cases they "bury" rather than remove parts of the clitoris should an individual wish to reverse the surgery in the future (Mouriquand et al., 2016). Vaginoplasty may also be recommended for assigned girls whose vaginas do not connect to the perineum, thereby limiting penetrative sex and impairing fertility and outflow of menstrual blood (Mouriquand et al., 2016). For assigned girls with shorter or absent vaginas and without uteruses (as in AIS, gonadal dysgenesis, or Mullerian agenesis), vaginoplasty carries the sole benefit of allowing penetrative intercourse.

There is some evidence that 46,XX women with CAH were satisfied with feminizing genital surgeries (Mouriquand et al., 2016). Reviewers have concluded from surveys of women who had undergone feminizing genitoplasty as children that women prefer earlier timing of surgery (de Jesus, 2018). Indeed, in one survey of adult women with CAH or AIS who had genital surgeries at an average of 3.8 years, 17 out of 24 reported that surgery had been done at the proper age (Fagerholm et al., 2011). However, these surveys are small and limited. Importantly, a large systematic review and meta-analysis found that only two studies surveyed 46,XX female CAH patients' satisfaction with surgery, of which the majority were satisfied (Almasri et al., 2018).

Long-term data regarding the reversibility of and sensory and sexual outcomes from these procedures are lacking, especially for more novel microsurgical approaches. Data regarding preserved sexual function after clitoral surgery is challenged by studies revealing significant rates of long-term sexual dysfunction and anorgasmia (de Jesus, 2018). Because studies of sexual quality of life may be confounded by psychosocial issues, attempts have been made to study postsurgical sensitivity objectively with a device capable of analyzing thermal and vibratory sensation. Many patients, however, have refused to participate in such studies, which may reflect discomfort or even trauma associated with previous experiences of medical care (de Jesus, 2018). Limited data suggest unfavorable patient satisfaction with cosmesis after vaginoplasty, as well as a high incidence of postsurgical vaginal stenosis. If this occurs, patients may experience pain with intercourse and require self-dilation or repeat surgery. While there has been some evidence supporting benefit of surgery for women with CAH, multiple studies of adult women with CAH find less frequent sexual activity and lower frequency of orgasm, including among the small reported number of people with CAH who did not undergo surgery (de Jesus, 2018). Notably, there are no objective scales validated to assess sexual function in women with intersex traits. There are few data evaluating long-term urological complications after feminizing genitoplasty.

Masculinizing Surgeries

Masculinizing surgeries aim to facilitate standing urination, penetrative intercourse, and a "cosmetically pleasing appearance" (Winship, Rushton, and Pohl, 2017). These procedures include hypospadias repair and phalloplasty. Hypospadias is characterized along a spectrum from distal (urethra opening near, but not at, the tip of the penis) to proximal (urethra opening at the base of the penis). Most individuals with distal hypospadias do not have differences of sex development (DSD), so this variation is not reviewed here.

Proximal hypospadias is often associated with diversity of penile and scrotal appearance, and at least one of three children born with proximal hypospadias and an undescended gonad will have other features of a DSD, such as non-XY karyotype (Romao and Pippi Salle, 2017). Phalloplasty may be recommended for 46,XY assigned boys born with a smaller than usual, or absent, penis. Although many of these children were historically assigned female, longitudinal data have revealed higher rates of gender dysphoria for those assigned girls than those assigned boys (Meyer-Bahlburg, 2005), and there is some evidence that urologists increasingly favor male sex assignment (Diamond et al., 2011).

The primary cited benefit of proximal hypospadias repair is avoidance of distress due to difference and stigma (Bush and Snodgrass, 2017), which is accomplished through achieving decreased spraying with urination and capacity for penetrative intercourse. Although long-term outcome studies for proximal hypospadias do not consistently track lower urinary tract symptoms, some studies have reported rates of lower urinary tract symptoms as high as 100 percent after proximal hypospadias surgeries (Gong and Cheng, 2017). Multiple studies have found persistent penile curvature and dissatisfaction with cosmesis after masculinizing surgeries (Tourchi and Hoebeke, 2013), and there is no commonly used objective measure of penile appearance after surgery (Gong and Cheng, 2017). Very few outcome studies for masculinizing surgeries have evaluated erectile dysfunction, and "most pediatric urologists do not follow patients into adulthood and have little experience in sexual medicine" (Winship, Rushton, and Pohl, 2017, p. 287). One study found that more than two-thirds of adult men with proximal hypospadias reported some sexual dysfunction and decreased sexual quality of life after surgery (Chertin et al., 2013). Reoperations and complications may contribute to urinary and sexual dysfunction, with complication rates ranging from 4 to 68 percent, and reoperation rates ranging from 23 to 52 percent (Gong and Cheng, 2017). Higher rates of reoperations and complications are associated with longer durations of follow-up, suggesting that long follow-up periods may be important elements of studies examining adverse postoperative outcomes (Gong and Cheng, 2017).

Psychosocial Outcomes after Genital Surgery

Patient Considerations

The absence of holistic and validated tools for assessment of sexual well-being and gender identity, patient satisfaction, and patient-centered surgical outcome measures present significant challenges in identifying robust conclusions regarding the psychosocial risks and benefits of early surgery. There are, however, some data regarding the outcomes of psychosocial distress and gender identity in the context of surgery.

Avoidance of distress due to social stigma and bodily difference has been offered as an indication for feminizing surgeries (de Jesus, 2018), masculinizing surgeries (Bush and Snodgrass, 2017), and gonadectomy for patients who may develop discordant secondary sex traits at puberty (Mouriquand et al., 2016). Of note, as discussed in Chapter 11, evidence indicates greater rates of psychological distress for individuals with intersex traits than the general population, but there is very little research exploring why. Rather, much of the research and clinical discourse reveals an implicit bias that genital or sexual difference is *de facto* abnormal and distressing and that "normalizing" surgery is a solution to this problem (Dalke, Baratz, and Greenberg, 2020). One series of qualitative studies suggested that 46,XX assigned and identified females with CAH experience stigma in medical, social, and sexual settings related to their genitalia and secondary sex traits; however, these studies included both women who did and did not have surgery, suggesting that surgery did not fully protect women from experiencing stigma (Meyer-Bahlburg et al., 2017a, 2017b, 2018). Of note, there are very few robust data exploring the benefits of surgery for patients with intersex traits, especially those who do not have CAH. Because standard practice has been to perform surgery early, however, there are few studies evaluating rates of psychosocial distress or satisfaction among individuals who did not undergo surgery, nor is there clear evidence that genital surgery itself reduces psychosocial stress (Roen, 2019). In a series of interviews, parents of children who did not undergo genital surgery reported that their children had attended school, had friends, and had not experienced bullying or harassment (Human Rights Watch, 2017).

There is some evidence that early genital surgery may unintentionally compound psychosocial distress. Multiple studies report that genital examinations in childhood can be experienced as intrusive, aversive, stigmatizing, and objectifying, particularly when children are not engaged in dialog with their providers (Roen, 2019). Qualitative research suggests that shame and a sense of “differentness” are correlated with both feminizing and masculinizing interventions: “going through surgery as a child might highlight bodily difference as stigmatising rather than facilitating the management of shame” (Roen, 2019, p. 517). This finding is consistent with information from intersex people themselves, who report experiences of anger, guilt, and trauma related to early surgery that was carried out without their consent, especially when they did not receive adequate information about their bodies or the procedures that were performed on them (Human Rights Watch, 2017).

Of particular interest in genital surgery is gender outcomes, particularly given the risk of developing a gender identity discordant with a sex that was assigned at birth and then surgically reinforced. Some intersex traits, such as complete AIS, complete gonadal dysgenesis, and proximal hypospadias without DSD, are associated with very low likelihood of gender dysphoria (Meyer-Bahlburg et al., 2016). Other intersex traits are associated with much higher rates, such as 46,XY individuals with cloacal exstrophy who are assigned female (Meyer-Bahlburg, 2005). A systematic review and meta-analysis found that 8 to 13 percent of 46,XX assigned female individuals with CAH did not identify as female (Almasri et al., 2018), which is much higher than the estimated 0.6 percent population prevalence of transgender identity among the general population (Flores et al., 2016). One very small, non-U.S. study found 46,XX assigned males with CAH can also experience gender dysphoria (de Jesus, Costa, and Dekermacher, 2019). Few data have been published on gender identity among individuals with partial AIS, 5-alpha reductase deficiency, or 17-beta hydroxysteroid dehydrogenase deficiency. Most studies evaluating gender identity among individuals with intersex traits have taken a binary view of gender, which could underreport rates of non-cisgender identities. Sex assignment at birth has become increasingly nuanced and focused on patient-specific recommendations (Kolesinska et al., 2014). Early and irreversible interventions may limit opportunities for gender affirmation later in life, which supports deferral of surgeries until the person’s gender identity and ability to participate in the decision are established.

Parental Considerations

As is discussed in Chapter 11, much of the psychosocial research on intersex issues focuses on the mental health of parents. This work suggests that parents of children with genital difference experience stress similar to parents of children with chronic illness and, in some cases, also have depression, anxiety, and decreased mental health quality of life (Wisniewski, 2017). Parents report fearing that their children will be teased, excluded, or stigmatized because of their genital differences (Wisniewski, 2017), and reduction of parental distress is often cited as a benefit of early genital surgery. However, there have been no studies examining experiences of bullying among children with intersex traits, and thus no evidence is available to indicate that surgery reduces the risk of bullying. Surgeons may be more likely to find a child's preoperative genital appearance unsatisfactory than parents (Nokoff et al., 2017), and this possibility raises the question of whether parents' perceptions of their child's genitals are influenced by the medical team's implicit bias. Overall, there is no evidence that genitoplasty directly targets parental distress, nor is there evidence that parental distress is intolerable or cannot be addressed in other ways (Roen, 2019).

An important consideration around parents is the process by which they make decisions about their child's health care. One ethical concern involved in this process is informed consent. Ethicists generally assume that parents can give informed consent for their child's health care as actors in the child's best interests (AMA, 2018). However, some scholars have suggested that, because the uniqueness of intersex surgery might affect a child's fundamental human rights, a court order might be required for the parent to give informed consent (Dalke et al., 2020). Evidence has also challenged the integrity of informed consent at a micro-ethics level. One study of self-identified DSD clinics found gaps in informed consent processes: more than two-thirds of the clinics did not document discussion of risks of surgery, including additional procedures, sexual dysfunction, psychosocial distress, gender uncertainty, and that interventions could be deferred until a later time (Rolston et al., 2017). Even with sufficient information, the informed consent process may not be adequate when carried out with parents of a minor child, given the distress that parents experience (Tamar-Mattis et al., 2013). Many families lack access to psychological services to assist in information processing despite multiple consensus recommendations for such services (Rolston et al., 2017). There are emerging data suggesting that the way information is framed can bias families' decision making. For instance, adopting a position of equipoise and patient-centeredness can unintentionally move families toward the surgeon's recommended course of action (Timmermans et al., 2018), and several studies have suggested that families feel as though their options are "surgery or nothing" (Roen, 2019).

Alternatives to Genital Surgery

There is very little research regarding alternatives to surgical intervention. Some doctors have suggested that gonadotropin-releasing hormone analogs can be used in place of gonadectomy for pubertal suppression in children whose gender identity or pubertal development is uncertain and that hormonal management of CAH can reduce the size of a clitoris as an alternative to surgery (Mouriquand et al., 2016). Vaginal dilation may be an option in place of vaginoplasty for some. The contours of psychosocial support, including limiting genital exams and engaging patients and families over time to involve them in decision making, are beginning to emerge but as yet have minimal supporting data (Roen, 2019). This approach offers the possibility of helping families and young people learn to cope with and reduce the distress that surgery seeks to, but may not, avert.

In an appraisal of the literature and expert opinion, the Endocrine Society has recommended that parents be counseled on the risks and benefits of surgery and be permitted to make what they feel is the best decision for their child (Speiser et al., 2018). Timmermans and colleagues (2018) found that this approach biases families toward surgery. A growing number of consensus groups and professional medical organizations, including the American Academy of Family Physicians[17] and Physicians for Human Rights,[18] have interpreted the risk-benefit ratio as unfavorable for early genital surgery in instances where the individual is too young to participate in the consent process (Elders, Sacher, and Armona, 2017; Krege et al., 2019; Toler and GLMA Policy and Government Affairs Committee, 2016). These organizations advise the provision of psychosocial support for both parents and children and deferral of early genital surgeries until the child can participate in the decision.

Several international human rights groups have identified early surgery in the absence of informed consent as a violation of the child's human rights to autonomy and an open future, and even as a kind of medical torture (Amnesty International, 2017; Human Rights Watch, 2017; United Nations General Assembly Human Rights Council, 2013; WHO, 2014). In July 2020, Lurie Children's Hospital in Chicago, Illinois, became the first hospital in the nation to publicly acknowledge the harms of early genital surgeries and to adopt a policy that "irreversible genital procedures should not be performed until patients can participate meaningfully in making the decision for themselves, unless medically necessary" (Shanley et al., 2020). Of note, while the statement committed to pausing all genital surgeries that were not medically necessary, it did indicate that there may be a difference in approach for individuals with intersex traits who have CAH relative to people who do not.

Overall, there is mixed evidence that surgery achieves its physical goals and scant evidence that it confers psychosocial benefit. The existing research does provide strong evidence of the risk of irreversible harm from

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[17] See https://www.aafp.org/about/policies/all/genital-surgeries.html.

[18] See https://phr.org/news/unnecessary-surgery-on-intersex-children-must-stop/.

early genital surgery, including immediate postoperative complications and later revisions, as well as the potentially catastrophic risk of incorrect, surgically reinforced gender assignment. The absence of data on alternative affirming pathways means that there is very little evidence of benefit from deferring surgery. It also means, however, that there is very little evidence of harm from deferring surgery. Factoring in the human rights of children and evidence that individuals with diverse sexualities, bodies, and genders can and do thrive with affirmation and support from parents, peers, and communities, there is insufficient evidence of benefit to justify early genital surgery. Therefore, the deferral of surgery until a child can participate in the decision, except in scenarios with urgent medical need, such as urinary obstruction or immediate cancer risk, may optimize the benefits of informed consent, autonomy, and patients' physical, social, and emotional well-being.

SUMMARY AND CONCLUSIONS

Access to comprehensive, affirming, and high-quality health care services is a human right for all people. Ensuring access to care for SGD populations includes building supportive and protective structures at all levels, from the broad societal level to the level of individual provider practices. At the societal level, laws that guarantee access to health care services, health insurance coverage, and public health programs for all, regardless of sexual orientation, gender identity, and intersex status, are critical to the health and well-being of SGD people. Laws and policies that provide affordable, comprehensive health insurance coverage, such as Medicaid expansion by all states or some form of universal coverage, could combat health risks such as uninsurance and poverty among SGD populations.

CONCLUSION 12-1: Sexual and gender diverse populations need access to a full range of preventive, chronic, and acute health care services delivered in settings that are welcoming, affirming, and both clinically appropriate and culturally responsive.

Health services and procedures that are particularly important for the health and well-being of SGD populations include but are not limited to pre- and post-exposure prophylaxis for HIV; HIV treatment and care; abortion, fertility, and other reproductive health services; affirming mental and behavioral health care services; and gender-affirming care for transgender people. Transgender people, as well as lesbians and bisexual women, also need access to timely and anatomically appropriate preventive screenings.

Important aspects of providing culturally responsive and clinically appropriate care for SGD populations include but are not limited to creating affirming health care environments; using forms that are inclusive of diverse identities and family structures; seeking to address social determinants of health and social needs; and requiring routine, high-quality cultural and clinical training on working with SGD populations for the health care and public health workforce. Efforts to promote quality of care and care coordination may have differential effects on populations experiencing disparities, making it important to assess the effects of these efforts on groups such as LGBT people, people with intersex traits, and intersectional groups such as LGBT people of color and people living with HIV. Entities that provide resources and guidance on affirming health care policies and environments for SGD populations include the Academy of Physician Assistants, GLMA: Health Professionals Advancing LGBTQ Equality, Association of American Medical Colleges, American Psychological Association, American Academy of Pediatrics, American Medical Association, National LGBT Health Education Center, and The Joint Commission.

CONCLUSION 12-2: Gender-affirming care, including puberty delay medications, mental health services, hormone therapy, and surgeries, is associated with improved mental and physical health for transgender people.

Gender-affirming care for transgender people, including non-binary and other gender diverse people, is an essential and medically necessary intervention to improve health and well-being. Provision of this care needs to be individualized and conducted in partnership between patients and their providers. Insurance coverage of gender-affirming services and procedures by public and private payers, according to the most updated expert standards in the field and without inappropriate age or other restrictions, is necessary to facilitate access to these services and to avoid discrimination on the basis of sex and gender identity.

CONCLUSION 12-3: Conversion therapy to change sexual orientation or gender identity and elective genital surgeries on children with intersex traits who are too young to participate in consent are dangerous to the health and well-being of sexual and gender diverse people.

Conversion therapy to change sexual orientation or gender identity can cause significant and life-long trauma. Elective genital surgeries on children with intersex traits who cannot participate in consent are similarly detrimental to health and well-being. The American Medical Association, American Academy of Family Physicians, American Academy of Pediatrics, American Psychiatric Association, American Psychological Association, GLMA: Health Professionals Advancing LGBTQ Equality, Physicians for Human Rights, the U.S. Department of Health and Human Services, and the World Health Organization recommend that these procedures not be promoted or performed.

REFERENCES

Agarwal, C.A., Scheefer, M.F., Wright, L.N., Walzer, N.K., and Rivera, A. (2018). Quality of life improvement after chest wall masculinization in female-to-male transgender patients: A prospective study using the BREAST-Q and Body Uneasiness Test. *Journal of Plastic, Reconstructive and Aesthetic Surgery*, *71*(5), 651–657. doi: 10.1016/j.bjps.2018.01.003.

Agénor, M., Krieger, N., Austin, S.B., Haneuse, S., and Gottlieb, B.R. (2014). At the intersection of sexual orientation, race/ethnicity, and cervical cancer screening: Assessing Pap test use disparities by sex of sexual partners among Black, Latina, and white U.S. women. *Social Science and Medicine*, *116*, 110–118. doi: 10.1016/j.socscimed.2014.06.039.

Ainsworth, T.A., and Spiegel, J.H. (2010). Quality of life of individuals with and without facial feminization surgery or gender reassignment surgery. *Quality of Life Research*, *19*(7), 1019–1024. doi: 10.1007/s11136-010-9668-7.

Almasri, J., Zaiem, F., Rodriguez-Gutierrez, R., Tamhane, S.U., Iqbal, A.M., Prokop, L.J., Speiser, P., Baskin, L., Bancos, I., and Murad, M.H. (2018). Genital reconstructive surgery in females with congenital adrenal hyperplasia: A systematic review and meta-analysis. *Journal of Clinical Endorinology and Metabolism, 103*(11), 4089–4096. doi: 10.1210/jc.2018-01863.

American Academy of Child and Adolescent Psychiatry Committee on Sexual Orientation and Gender Identity Issues. (2018). *Conversion Therapy*. Available: https://www.aacap.org/AACAP/Policy_Statements/2018/Conversion_Therapy.aspx.

American Academy of Family Physicians. (2012). *Resolution No. 1004: Transgender Care*. Available: https://www.aafp.org/dam/AAFP/documents/about_us/special_constituencies/2012RCAR_Advocacy.pdf.

———. (2018). *Genital Surgeries in Intersex Children*. Available: https://www.aafp.org/about/policies/all/genital-surgeries.html.

American Academy of Pediatrics. (2018). *Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents*. Available: https://pediatrics.aappublications.org/content/pediatrics/early/2018/09/13/peds.2018-2162.full.pdf.

American College of Nurse Midwives. (2012). *Transgender/Transsexual/Gender Variant Health Care*. Available: http://www.midwife.org/acnm/files/ACNMLibraryData/UPLOADFILENAME/000000000278/Transgender%20Gender%20Variant%20Position%20Statement%20December%202012.pdf.

American College of Obstetricians and Gynecologists. (2011). *Committee Opinion No. 512: Health Care for Transgender Individuals*. Available: https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2011/12/health-care-for-transgender-individuals.

American Medical Association. (2008). *Resolution H-185.950: Removing Financial Barriers to Care for Transgender Patients*. Available: https://policysearch.ama-assn.org/policyfinder/detail/financial%20barriers%20transgender?uri=%2FAMADoc%2FHOD.xml-0-1128.xml.

———. (2018). *Amendment to E-2.2.1: Pediatric Decision Making*. Available: https://www.ama-assn.org/system/files/2018-11/i18-refcomm-conby.pdf.

———. (2019). *Policy Statement H-295.878 on Eliminating Health Disparities: Promoting Awareness and Education of Lesbian, Gay, Bisexual, and Transgender (LGBT) Health Issues in Medical Education*. Available: https://policysearch.ama-assn.org/policyfinder/detail/gender%20identity?uri=%2FAMADoc%2FHOD.xml-0-2177.xml.

American Medical Association and GLMA: Health Professionals Advancing LGBTQ Equality. (2018). *Issue Brief: LGBTQ Change Efforts ("Conversion Therapy")*. Available: https://www.ama-assn.org/system/files/2019-03/transgender-conversion-issue-brief.pdf.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*. Washington, DC: American Psychiatric Association.

———. (2018). *Position Statement on Access to Care for Transgender and Gender Diverse Individuals*. Available: www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-2018-Discrimination-Against-Transgender-and-Gender-Diverse-Individuals.pdf.

American Psychological Association. (2008). *Policy on Transgender, Gender Identity & Gender Expression Non-Discrimination*. Available: https://www.apa.org/about/policy/resolution-gender-identity.pdf.

———. (2009). *Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation*. Available: http://www.apa.org/pi/lgbc/publications/therapeutic-resp.html.

———. (2015). *Resolution on Gender and Sexual Orientation Diversity in Children and Adolescents in Schools*. Available: https://www.apa.org/about/policy/orientation-diversity.

American Society for Reproductive Medicine. (2013). *Access to Fertility Treatment by Gays, Lesbians, and Unmarried Persons: A Committee Opinion*. Available: https://www.asrm.org/globalassets/asrm/asrm-content/news-and-publications/ethics-committee-opinions/access_to_fertility_treatment_by_gays_lesbians_and_unmarried_persons-pdfmembers.pdf.

Amnesty International. (2017). *First Do No Harm: Ensuring the Right of Children Born Intersex*. Available: https://www.amnesty.org/en/latest/campaigns/2017/05/intersex-rights.

Andréasson, M., Georgas, K., Elander, A., and Selvaggi, G. (2018). Patient-reported outcome measures used in gender confirmation surgery: A systematic review. *Plastic and Reconstructive Surgery*, *141*(4), 1026–1039. doi: 10.1097/PRS.0000000000004254.

Arístegui, I., Radusky, P.D., Zalazar, V., Romero, M., Schwartz, J., and Sued, O. (2017). Impact of the gender identity law in Argentinean transgender women. *International Journal of Transgenderism*, *18*, 446–456.

Bailey, L., Ellis, S.J., and McNeil, J. (2014). Suicide risk in the UK trans population and the role of gender transition in decreasing suicidal ideation and suicide attempt. *Mental Health Review Journal*, *19*(4), 209–220.

Baker, K.E., (2016, June 6). LGBT protections in the Affordable Care Act Section 1557. *Health Affairs Blog*. Available: http://healthaffairs.org/blog/2016/06/06/lgbt-protections-in-affordable-care-act-section-1557.

Baker, K.E., (2017). The future of transgender coverage. *New England Journal of Medicine, 376*(19), 1801–1804. doi: 10.1056/NEJMp1702427.

Baker, K.E., and Durso, L.E. (2017, March 22). Why repealing the Affordable Care Act is bad medicine for LGBT community. *Center for American Progress*. Available: https://www.americanprogress.org/issues/lgbtq-rights/news/2017/03/22/428970/repealing-affordable-care-act-bad-medicine-lgbt-communities/.

Baker, K.E., Durso, L.E., and Cray, A. (2014). *Moving the Needle: The Impact of the Affordable Care Act on LGBT Communities*. Washington, DC: Center for American Progress. Available: https://cdn.americanprogress.org/wp-content/uploads/2014/11/LGBTandACA-report.pdf.

Baker, K.E., Minter, S.P., Wertz, K., and Wood, M. (2012). A new approach to health care equality for transgender people: California's insurance gender non-discrimination act. *LGBTQ Policy Journal at the Harvard Kennedy School, 2*, 35-43. Available: https://lgbtq.hkspublications.org/wp-content/uploads/sites/20/2015/10/LGBTQ_3_29_12.pdf.

Balzano, F.L., and Hudak, S.J. (2018). Military genitourinary injuries: Past, present, future. *Translational Andrology and Urology, 7*(4), 646–652. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6127528/.

Barone, M., Cogliandro, A., Stefano, N.D., Tambone, V., and Persichetti, P. (2017). A systematic review of patient-reported outcome measures following transsexual surgery. *Aesthetic Plastic Surgery*, 1–14. doi: 10.1007/s00266-017-0812-4.

Becerra-Culqui, T.A., Liu, Y., Nash, R., Cromwell, L., Flanders, W.D., Getahun, D., Giammattei, E., Lash, T., Millman, A., Quinn, V., Robinson B., Roblin, D., Sandberg, D., Silverberg, M., Tangpricha, V., and Goodman, M. (2018). Mental health of transgender and gender nonconforming youth compared with their peers. *Pediatrics, 141*(5). doi: 10.1542/peds.2017-3845.

Berwick, D.M., Nolan, T.W., and Whittington, J. (2008). The triple aim: Care, health and cost. *Health Affairs, 27*(3), 759–769.

Blackless, M., Charuvastra, A., Derryck, A., Fausto-Sterling, A., Lauzanne, K., and Lee, E. (2000). How sexually dimorphic are we? Review and synthesis. *American Journal of Human Biology*, *12*(2), 151–166.

Blosnich, J.R., Hanmer, J., Yu, L., Matthews, D.D., and Kavalieratos, D. (2016). Health care use, health behaviors, and medical conditions among individuals in same-sex and opposite-sex partnerships: A cross-sectional observational analysis of the Medical Expenditures Panel Survey (MEPS), 2003–2011. *Medical Care*, *54*(6), 547–554. doi: 10.1097/MLR.0000000000000529.

Bockting, W., Coleman, E., Deutsch, M. B., Guillamon, A., Meyer, I., Meyer, W., Reisner, S., Sevelius, J., and Ettner, R. (2016). Adult development and quality of life of transgender and gender nonconforming people. *Current Opinion in Endocrinology, Diabetes, and Obesity*, *23*(2), 188–197. doi: 10.1097/MED.0000000000000232.

Bränström, R., and Pachankis, J.E. (2019). Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: A total population study. *American Journal of Psychiatry, 177*(8), 727–734. doi: 10.1176/appi.ajp.2019.19010080.

———. (2020). Toward rigorous methodologies for strengthening causal inference in the association between gender-affirming care and transgender individuals' mental health: Response to letters. *American Journal of Psychiatry, 177*(8), 769–772. doi: 10.1176/appi.ajp.2020.20050599.

Bush, N.C., and Snodgrass, W. (2017). RE: Winship BB, Rushton HG, Pohl HG: In pursuit of the perfect penis: Hypospadias repair outcomes. *Journal of Pediatric Urology, 13*(6), 652–653. doi: 10.1016/j.jpurol.2017.08.011.

Butler, M., McCreedy, E., Schwer, N., Burgess, D., Call, K., Przedworski, J., Rosser, S., Larson, S., Allen, M., Fu, S., and Kane, R.L. (2016). *Improving Cultural Competence to Reduce Health Disparities*. Comparative Effectiveness Review No. 170. Rockville, MD: Agency for Healthcare Research and Quality. Available: https://effectivehealthcare.ahrq.gov/sites/default/files/pdf/cultural-competence_research.pdf.

Cahill, S.R., Baker, K.E., Deutsch, M.B., Keatley, J., and Makadon, H.J. (2016). Inclusion of sexual orientation and gender identity in stage 3 meaningful use guidelines: A huge step forward for LGBT health. *LGBT Health*, *3*(2), 100–102. doi: 10.1089/lgbt.2015.0136.

Canalichio, K.L., Shnorhavorian, M., Oelschlager, A.A., Ramsdell, L., Fisher, C., Adam, M.P., and Fechner, P.Y. (2020). A non-surgical approach to 46,XY differences in sex development through hormonal suppression at puberty: A single-center case series study. *Endocrine, 70*, 170–177. doi: 10.1007/s12020-020-02409-y.

Canner, J.K., Harfouch, O., Kodadek, L.M., Pelaez, D., Coon, D., Offodile, A.C., Haider, A.H., and Lau, B.D. (2018). Temporal trends in gender-affirming surgery among transgender patients in the United States. *JAMA Surgery, 153*(7), 609–616. doi: 10.1001/jamasurg.2017.6231.

Castellano, E., Crespi, C., Dell'Aquila, C., Rosato, R., Catalano, C., Mineccia, V., Motta, G., Botto, E., and Manieri, C. (2015). Quality of life and hormones after sex reassignment surgery. *Journal of Endocrinological Investigation*, *38*(12), 1373–1381. doi: 10.1007/s40618-015-0398-0.

Center for Consumer Information and Insurance Oversight. (n.d.). *At Risk: Pre-Existing Conditions Could Affect 1 in 2 Americans: 129 Million People Could Be Denied Affordable Coverage without Health Reform*. Centers for Medicare & Medicaid Services. Available: https://www.cms.gov/CCIIO/Resources/Forms-Reports-and-Other-Resources/preexisting.

———. (2014). *Frequently Asked Question on Coverage of Same-Sex Spouses*. Centers for Medicare & Medicaid Services. Available: https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/frequently-asked-questions-on-coverage-of-same-sex-spouses.pdf.

Centers for Medicare & Medicaid Services. (2015). *Frequently Asked Questions about Affordable Care Act Implementation (Part XXVI)*. Available: https://www.cms.gov/CCIIO/Resources/Fact-Sheets-and-FAQs/Downloads/aca_implementation_faqs26.pdf.

———. (2016). *Decision Memo for Gender Dysphoria and Gender Reassignment Surgery (CAG-00446N)*. Available: https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=282.

Chertin, B., Natsheh, A., Ben-Zion, I., Prat, D., Kocherov, S., Farkas, A., and Shenfeld, O.Z. (2013). Objective and subjective sexual outcomes in adult patients after hypospadias repair performed in childhood. *Journal of Urology*, *190*(4S), 1556–1560.

Chew, D., Anderson, J., Williams, K., May, T., and Pang, K. (2018). Hormonal treatment in young people with gender dysphoria: A systematic review. *Pediatrics*, *141*(4), e20173742.

Choi, S.K., Badgett, M.V.L., and Wilson, B.D.M. (2019). *State Profiles of LGBT Poverty in the United States*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/State-LGBT-Poverty-Dec-2019.pdf.

Cohen-Kettenis, P.T., and Van Goozen, S. (1998). Pubertal delay as an aid in diagnosis and treatment of a transsexual adolescent. *European Child and Adolescent Psychiatry*, *7*, 246–248.

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., Fraser, L., Green, J., Knudson, G., Meyer, W.J., Monstrey, S., Adler, R.K., Brown, G.R., Devor, A.H., Ehrbar, R., Ettner, R., Eyler, E., Garofalo, R., Karasic, D.H., Lev, A.I., Mayer, G., Meyer-Bahlburg, H.F.L., Hall, B.P., Pfäfflin, F., Rachlin, K., Robinson, B., Schechter, L.S., Tangpricha, V., van Trotsenburg, M., Vitale, A., Winter, S., Whittle, S., Wylie, K.R., and Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people. *International Journal of Transgenderism*, *13*(4), 165–232. doi: 10.1080/15532739.2011.70873.

Committee on Health Care Utilization and Adults with Disabilities. (2018). Factors that affect health-care utilization. In *Health-Care Utilization as a Proxy in Disability Determination*. Washington, DC: National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division, Board on Health Care Services. Available: https://www.ncbi.nlm.nih.gov/books/NBK500097/.

Costa, R., and Colizzi, M. (2016). The effect of cross-sex hormonal treatment on gender dysphoria individuals' mental health: A systematic review. *Neuropsychiatric Disease and Treatment*, *12*, 1953–1966. doi: 10.2147/NDT.S95310.

Coursolle, A. (2019). *Protections for LGBTQ People with Behavioral Health Needs*. Available: https://healthlaw.org/resource/protections-for-lgbtq-people-with-behavioral-health-needs.

Dalke, K.B., Baratz, A.B., and Greenberg, J.A. (2020). Protecting children with intersex traits: Legal, ethical, and human rights considerations. In M. Legato (Ed.), *The Plasticity of Sex*. doi: 10.1016/B978-0-12-815968-2.00010-4.

de Jesus, L.E. (2018). Feminizing genitoplasty: Where are we now? *Journal of Pediatric Urology*, *14*(5), 407–415. doi: 10.1016/j.jpurol.2018.03.020.

de Jesus, L.E., Costa, E.C., and Dekermacher, S. (2019). Gender dysphoria and XX congenital adrenal hyperplasia: How frequent is it? Is male-sex rearing a good idea? *Journal of Pediatric Surgery.* doi: 10.1016/j.jpedsurg.2019.01.062.

de Vries, A.L., McGuire, J.K., Steensma, T.D., Wagenaar, E.C., Doreleijers, T.A., and Cohen-Kettenis, P.T. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics, 134*(4), 696–704. doi: 10.1542/peds.2013-2958.

de Vries, A.L., Steensma, T.D., Cohen-Kettenis, P.T., VanderLaan, D.P., and Zucker, K.J. (2016). Poor peer relations predict parent- and self-reported behavioral and emotional problems of adolescents with gender dysphoria: A cross-national, cross-clinic comparative analysis. *European Child and Adolescent Psychiatry, 25*(6), 579–588. doi: 10.1007/s00787-015-0764-7

Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A.L., Langstrom, N., and Landén, M. (2011). Long-term follow-up of transsexual persons undergoing sex reassignment surgery: Cohort study in Sweden. *PLoS One, 6*(2), e16885. doi: 10.1371/journal.pone.0016885.

Dhejne, C., Van Vlerken, R., Heylens, G., and Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International Review of Psychiatry, 28*(1), 44–57. doi: 10.3109/09540261.2015.1115753.

Diamond, D.A., Burns, J.P., Huang, L., Rosoklija, I., and Retik, A.B. (2011). Gender assignment for newborns with 46XY cloacal exstrophy: A 6-year followup survey of pediatric urologists. *Journal of Urology*, *186*, 1642–1648. doi: 10.1016/j.juro.2011.03.101.

Durwood, L., McLaughlin, K.A., and Olson, K.R. (2017). Mental health and self-worth in socially transitioned transgender youth. *Journal of the American Academy of Child and Adolescent Psychiatry*, *56*(2), 116–123.e2. doi: 10.1016/j.jaac.2016.10.016.

Dy, G.W., Nolan, I.T., Hotaling, J., and Myers, J.B. (2019). Patient reported outcome measures and quality of life assessment in genital gender confirming surgery. *Translational Andrology and Urology*, *8*(3), 228–240. doi: 10.21037/tau.2019.05.04.

Ehrenfeld, J.M., Zimmerman, D.R., and Gonzales, G. (2018). Healthcare utilization among transgender individuals in California. *Journal of Medical Systems*, *42*(5), 77. doi: 10.1007/s10916-018-0923-8.

Elders, J., Sacher, D., and Armona, R. (2017). *Re-Thinking Genital Surgeries on Intersex Infants*. Palm Center. Available: https://www.palmcenter.org/wp-content/uploads/2017/06/Re-Thinking-Genital-Surgeries-1.pdf.

Endocrine Society. (2017). *Transgender Health*. Available: https://www.endocrine.org/-/media/endocrine/files/advocacy/position-statement/position_statement_transgender_health-updated-august-2020.pdf.

Fagerholm, R., Santtila, P., Miettinen, P. J., Mattila, A., Rintala, R., and Taskinen, S. (2011). Sexual function and attitudes toward surgery after feminizing genitoplasty. *Journal of Urology, 185*(5), 1900–1904. doi: 10.1016/j.juro.2010.12.099.

Fausto-Sterling, A. (2000). *Sexing the Body: Gender Politics and the Construction of Sexuality*. New York: Basic Books.

Finlayson, C., Fritsch, M.K., Johnson, E.K., Rosoklija, I., Gosiengfiao, Y., Yerkes, E., Madonna, M.B., Woodruff, T., and Cheng, E. (2017). Presence of germ cells in disorders of sex development: implications for fertility potential and preservation. *Journal of Urology, 197*(3 Pt 2), 937–943.

Flores, A.R., Herman, J.L., Gates, G.J., and Brown, T.N.T. (2016). How many adults identify as transgender in the United States? Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/How-Many-Adults-Identify-as-Transgender-in-the-United-States.pdf.

Fredriksen-Goldsen, K.I., Kim, H.-J., and Barkan, S.E. (2012). Disability among lesbian, gay, and bisexual adults: Disparities in prevalence and risk. *American Journal of Public Health*, *102*(1), e16–e21. doi: 10.2105/AJPH.2011.300379.

Freeman, J. (2018). LGBTQ scientists are still left out. *Nature*, *559*(7712), 27–28. doi: 10.1038/d41586-018-05587-y

Gijs, L., and Brewaeys, A. (2007). Surgical treatment of gender dysphoria in adults and adolescents: Recent developments, effectiveness, and challenges. *Annual Review of Sex Research, 18*(1), 178–224.

Gong, E.M., and Cheng, E.Y. (2017). Current challenges with proximal hypospadias: We have a long way to go. *Journal of Pediatric Urology, 13*(5), 457–467.

Gonzales, G. (2015). Association of the New York State marriage equality act with changes in health insurance coverage. *Journal of the American Medical Association*, *314*(7), 727–728. doi: 10.1001/jama.2015.7950.

Gonzales, G., and Blewett, L.A. (2013). Disparities in health insurance among children with same-sex parents. *Pediatrics*, *132*(4), 703–711. doi: 10.1542/peds.2013-0988.

———. (2014). National and state-specific health insurance disparities for adults in same-sex relationships. *American Journal of Public Health*, *104*(2), e95–e104. doi: 10.2105/AJPH.2013.301577.

Gonzales, G., and Henning-Smith, C. (2017a). The Affordable Care Act and health insurance coverage for lesbian, gay, and bisexual adults: Analysis of the Behavioral Risk Factor Surveillance System. *LGBT Health*, *4*(1), 62–67. doi: 10.1089/lgbt.2016.0023.

———. (2017b). Barriers to care among transgender and gender nonconforming adults. *The Milbank Quarterly*, *95*(4), 726–748. doi: 10.1111/1468-0009.12297.

Gonzales, G., Driscoll, R., and Quinones, N. (2019). Who are the remaining uninsured sexual minority adults under the Affordable Care Act? *LGBT Health*, *6*(6), 319–325. doi: 10.1089/lgbt.2019.0007.

Gridley, S.J., Crouch, J.M., Evans, Y., Eng, W., Antoon, E., Lyapustina, M., Schimmel-Bristow, A., Woodward, J., Dundon, K., Schaff, R., McCarty, C., Ahrens, K., and Breland, D.J. (2016). Youth and caregiver perspectives on barriers to gender-affirming health care for transgender youth. *Journal of Adolescent Health, 59*(3), 254–261. doi: 10.1016/j.jadohealth.2016.03.017.

Gruberg, S., and Bewkes, F.J. (2018). *The ACA's LGBTQ Nondiscrimination Regulations Prove Crucial*. Available: https://www.americanprogress.org/issues/lgbtq-rights/reports/2018/03/07/447414/acas-lgbtq-nondiscrimination-regulations-prove-crucial.

Hatzenbuehler, M.L., O'Cleirigh, C., Grasso, C., Mayer, K., Safren, S., and Bradford, J. (2012). Effect of same-sex marriage laws on health care use and expenditures in sexual minority men: A quasi-natural experiment. *American Journal of Public Health*, *102*(2), 285–291. doi: 10.2105.

Health Resources and Services Administration. (n.d.). *SPNS Initiative: Enhancing Engagement and Retention in Quality HIV Care for Transgender Women of Color, 2012-2017*. Available: https://hab.hrsa.gov/about-ryan-white-hivaids-program/spns-transgender-women-color.

Hembree, W.C., Cohen-Kettenis, P.T., Gooren, L., Hannema, S., Meyer, W., Murad, M., Rosenthal, S., Safer, J., Tangpricha, V., and T'Sjoen, G. (2017). Endocrine treatment of gender-dysphoric/gender-incongruent persons: An endocrine society clinical practice guideline. *Journal of Clinical Endocrinology and Metabolism*, *102*(11), 3869–3903.

Hollenbach, A.D., Eckstrand, K.L., and Dreger, A.D. (Eds.). (2014). *Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD: A Resource for Medical Educators*. Washington, DC: Association of American Medical Colleges.

Horbach, S.E.R., Bouman, M-B., Smit, J.M., Özer, M., Buncamper, M.E., and Mullender, M.G. (2015). Outcome of vaginoplasty in male-to-female transgenders: A systematic review of surgical techniques. *Journal of Sexual Medicine, 12*, 1499–1512.

Hsieh, N., and Ruther, M. (2017). Despite increased insurance coverage, nonwhite sexual minorities still experience disparities in access to care. *Health Affairs*, *36*(10), 1786–1794. doi: 10.1377/hlthaff.2017.0455.

Hughes, I.A., Nihoul-Fékété, C., Thomas, B., and Cohen-Kettenis, P.T. (2007). Consequences of the ESPE/LWPES guidelines for diagnosis and treatment of disorders of sex development. *Best Practice and Research: Clinical Endocrinology and Metabolism*, *21*(3), 351.

Human Rights Campaign Foundation. (2020). *Healthcare Equality Index 2020*. Washington, DC: Human Rights Campaign Foundation. Available: https://hrc-prod-requests.s3-us-west-2.amazonaws.com/resources/HEI-2020-FinalReport.pdf.

Human Rights Watch. (2017). *"I Want to be Like Nature Made Me": Medically Unnecessary Surgeries on Intersex Children in the US*. New York: Human Rights Watch. Available: https://www.hrw.org/sites/default/files/report_pdf/lgbtintersex0717_web_0.pdf.

Institute of Medicine. (2001). *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: The National Academies Press. doi: 10.17226/10027.

———. (2011a). *HIV Screening and Access to Care: Exploring the Impact of Policies on Access and Provision of HIV Care*. Washington, DC: The National Academies Press. doi: 10.17226/13057.

———. (2011b). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: The National Academies Press. doi: 10.17226/13128.

Jacobs, D.B., and Sommers, B.D. (2015). Using drugs to discriminate—Adverse selection in the insurance marketplace. *New England Journal of Medicine*, *372*(5), 397–399.

James, S.E., Herman, J.L., Rankin, S., Keisling, M., Mottet, L., and Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. Washington, DC: National Center for Transgender Equality. Available: https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF.

Joint Commission. (2011). *Advancing Effective Communication, Cultural Competence, and Patient- and Family Centered Care for the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community: A Field Guide*. Oak Brook, IL: The Joint Commission. Available: www.jointcommission.org/assets/1/18/LGBTFieldGuide.pdf.

Kaiser Family Foundation. (2019). *Medicaid and HIV*. Available: https://www.kff.org/hivaids/fact-sheet/medicaid-and-hiv/#.

Kang, H.J., Imperato-McGinley, J., Zhu, Y.S., and Rosenwaks, Z. (2014). The effect of 5alpha-reductase-2 deficiency on human fertility. *Fertility and Sterility*, *101*(2), 310–316. doi: 10.1016/j.fertnstert.2013.11.128.

Karpman, M., Skopec, L., and Long, S.K. (2015, April 16). QuickTake: Uninsurance rate nearly halved for lesbian, gay, and bisexual adults since mid-2013. *Urban Institute Health Policy Center*. Available: http://hrms.urban.org/quicktakes/Uninsurance-Rate-Nearly-Halved-for-Lesbian-Gay-and-Bisexual-Adults-since-Mid-2013.html.

Kcomt, L. (2019). Profound health-care discrimination experienced by transgender people: Rapid systematic review. *Social Work in Health Care, 58*(2), 201–219. doi: 10.1080/00981389.2018.1532941.

Keith, K. (2019). Trump administration finalizes broad religious and moral exemptions for health care workers. *Health Affairs Blog*. Available: https://www.healthaffairs.org/do/10.1377/hblog20190503.960127/abs/.

———. (2020). Supreme court finds LGBT people are protected from employment discrimination: Implications for the ACA. *Health Affairs Blog*. Available: https://www.healthaffairs.org/do/10.1377/hblog20200615.475537/full/.

Keo-Meier, C.L., Herman, L.I., Reisner, S.L., Pardo, S.T., Sharp, C., and Babcock, J.C. (2015). Testosterone treatment and MMPI–2 improvement in transgender men: A prospective controlled study. *Journal of Consulting and Clinical Psychology*, *83*(1), 143–156.

Kimberly, L.L., Folkers, K.M., Friesen, P., Sultan, D., Quinn, G.P., Bateman-House, A., Parent, B., Konnoth, C., Janssen, A., Shah, L.D., Bluebond-Langner, R., and Sales-Humara, C. (2018). Ethical issues in gender-affirming care for youth. *Pediatrics*, *142*(6), e20181537.

Kolesinska, Z., Ahmed, S.F., Niedziela, M., Bryce, J., Molinska-Glura, M., Rodie, M., Jiang, J., Sinnott, R., Hughes, I, Darendeliler, F., Hiort, O., van der Zwan, Y., Cools, M., Guran, T., Holterhus, P., Bertelloni, S., Lisa, L., Arlt, W., Krone, N., Ellaithi, M., Balsamo, A., Mazen, I., Nordenstrom, A., Lachlan, K., Alkhawari, M., Chatelain, P., and Weintrob, N. (2014). Changes over time in sex assignment for disorders of sex development. *Pediatrics*, *134*(3), e710–e715.

Krege, S., Eckoldt, F., Richter-Unruh, A., Kohler, B., Leuschner, I., Mentzel, H.J., Moss, A., Schweizer, K., Stein, R., Werner-Rosen, K., Wieacker, P., Wiesemann, C., Wünsch, L., and Richter-Appelt, H. (2019). Variations of sex development: The first German interdisciplinary consensus paper. *Journal of Pediatric Urology*, *15*(2), 114–123. doi: 10.1016/j.jpurol.2018.10.008.

Lambda Legal. (2016). *Creating Equal Access to Quality Health Care for Transgender Patients: Transgender-Affirming Hospital Policies*. New York: Lambda Legal. Available: https://www.lambdalegal.org/know-your-rights/article/trans-affirming-hospital-policies.

———. (2018). *Intersex-Affirming Hospital Policy Guide: Providing Ethical and Compassionate Health Care to Intersex Patients*. New York: Lambda Legal. Available: https://www.lambdalegal.org/sites/default/files/publications/downloads/resource_20180731_hospital-policies-intersex.pdf.

Mahfouda, S., Moore, J.K., Siafarikas, A., Zepf, F.D., and Lin, A. (2017). Puberty suppression in transgender children and adolescents. *Lancet Diabetes and Endocrinology*, *5*(10), 816–826.

Mahfouda, S., Moore, J.K., Siafarikas, A., Hewitt, T., Ganti, U., Lin, A., and Zepf, F.D. (2019). Gender-affirming hormones and surgery in transgender children and adolescents. *Lancet Diabetes and Endocrinology*, *7*(6), 484–498.

Mallory, C., and Tentindo, W. (2019). *Medicaid Coverage for Gender-Affirming Care*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Medicaid-Gender-Care-Oct-2019.pdf.

Mallory, C., Brown, T.N.T., and Conron, K.J. (2019). *Conversion Therapy and LGBT Youth Update*. Los Angeles, CA: Williams Institute, UCLA School of Law. Available: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Conversion-Therapy-Update-Jun-2019.pdf.

Manrique, O.J., Adabi, K., Martinez-Jorge, J., Ciudad, P., Nicoli, F., and Kiranantawat, K. (2018). Complications and patient-reported outcomes in male-to-female vaginoplasty—Where we are today: A systematic review and meta-analysis. *Annals of Plastic Surgery, 80*(6), 684–691. doi: 10.1097/SAP.0000000000001393.

McGeorge, C.R., Carlson, T.S., and Toomey, R.B. (2015). An exploration of family therapists' beliefs about the ethics of conversion therapy: The influence of negative beliefs and clinical competence with lesbian, gay, and bisexual clients. *Journal of Marital and Family Therapy*, *41*(1), 42–56. doi: 10.1111/jmft.12040.

Meyer-Bahlburg, H.F.L. (2005). Gender identity outcome in female-raised 46,XY persons with penile agenesis, cloacal exstrophy of the bladder, or penile ablation. *Archives of Sexual Behavior*, *34*(4), 423–438.

Meyer-Bahlburg, H.F.L., Dalke, K.B., Berenbaum, S.A., Cohen-Kettenis, P.T., Hines, M., and Schober, J.M. (2016). Gender assignment, reassignment and outcome in disorders of sex development: Update of the 2005 Consensus Conference. *Hormone Research in Paediatrics*, *85*, 112–118. doi: 10.1159/000442386.

Meyer-Bahlburg, H.F.L., Khuri, J., Reyes-Portillo, J., and New, M.I. (2017a). Stigma in medical settings as reported retrospectively by women with congenital adrenal hyperplasia (CAH) for their childhood and adolescence. *Journal of Pediatric Psychology*, (5), 496–503. doi: 10.1093/jpepsy/jsw034.

Meyer-Bahlburg, H.F., Reyes-Portillo, J.A., Khuri, J., Ehrhardt, A.A., and New, M.I. (2017b). Syndrome-related stigma in the general social environment as reported by women with classical congenital adrenal hyperplasia. *Archives of Sexual Behavior*, *46*(2), 341–351. doi: 10.1007/s10508-016-0862-8.

Meyer-Bahlburg, H., Khuri, J., Reyes-Portillo, J., Ehrhardt, A.A., and New, M.I. (2018). Stigma associated with classical congenital adrenal hyperplasia in women's sexual lives. *Archives of Sexual Behavior*, *47*(4), 943–951. doi: 10.1007/s10508-017-1003-8.

Milrod, C., and Karasic, D.H. (2017). Age is just a number: WPATH-affiliated surgeons' experiences and attitudes toward vaginoplasty in transgender females under 18 years of age in the United States. *Journal of Sexual Medicine*, *14*(4), 624–634.

Morrison, S.D., Shakir, A., Vyas, K.S., Kirby, J., Crane, C.N., and Lee, G.K. (2016). Phalloplasty: A review of techniques and outcomes. *Plastic and Reconstructive Surgery*, *138*(3), 594–615. doi: 10.1097/PRS.0000000000002518.

Mouriquand, P.D., Gorduza, D.B., Gay, C.L., Meyer-Bahlburg, H.F., Baker, L., and Baskin, L.S. (2016). Surgery in disorders of sex development (DSD) with a gender issue: If (why), when, and how? *Journal of Pediatric Urology*, *12*(3), 139–149. doi: 10.1016/j.jpurol.2016.04.001.

Movement Advancement Project. (2020a). *Equality Maps: Healthcare Laws and Policies*. Available: https://www.lgbtmap.org/equality-maps/healthcare_laws_and_policies.

———. (2020b). *Equality Maps: Conversion "Therapy" Laws*. Available: https://www.lgbtmap.org/equality-maps/conversion_therapy.

Murad, M.H., Elamin, M.B., Garcia, M.Z., Mullan, R.J., Murad, A., Erwin, P.J., and Montori, V.M. (2010). Hormonal therapy and sex reassignment: A systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clinical Endocrinology, 72*(2), 214–31. doi: 10.1111/j.1365-2265.2009.03625.x.

National LGBT Health Education Center. (2016). *Building Patient-Centered Medical Homes for Lesbian, Gay, Bisexual, and Transgender Patients and Families*. Boston, MA: National LGBT Health Education Center. Available: https://www.lgbthealtheducation.org/wp-content/uploads/Building-PCMH-for-LGBT-Patients-and-Families.pdf.

Nguyen, H.B., Chavez, A.M., Lipner, E., Hantsoo, L., Kornfield, S.L., Davies, R.D, and Epperson, C.N. (2018). Gender-affirming hormone use in transgender individuals: Impact on behavioral health and cognition. *Current Psychiatry Reports*, *20*(12), 110. doi: 10.1007/s11920-018-0973-0.

Nokoff, N.J., Palmer, B., Mullins, A.J., Aston, C.E., Austin, P., Baskin, L., Bernabé, K., Chan, Y., Cheng, E., Diamond, D., Fried, A., Frimberger, D., Galan, D., Gonzalez, L., Greenfield, S., Kolon T., Kropp, B., Lakshmanan, Y., Meyer, S., Meyer, T., Mullins, L., Paradis, A., Poppas, D., Reddy, P., Schulte, M., Scott Reyes, K., Swartz, J., Wolfe-Christensen, C., Yerkes, E., and Wisniewski, A. (2017). Prospective assessment of cosmesis before and after genital surgery. *Journal of Pediatric Urology*, *13*(1), 28.e1–28.e6. doi: 10.1016/j.jpurol.2016.08.017.

Nordenvall, A.S., Frisen, L., Nordenstrom, A., and Lichtenstein, N.A. (2014). Population based nationwide study of hypospadias in Sweden, 1973 to 2009: Incidence and risk factors. *Journal of Urology, 191*, 783–789.

National Public Radio, Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health. (2017). *Discrimination in America: Experiences and Views of LGBTQ Americans*. Available: https://www.npr.org/documents/2017/nov/npr-discrimination-lgbtq-final.pdf.

Obedin-Maliver, J., Goldsmith, E.S., Stewart, L., White, W., Tran, E., Brenman, S., Wells, M., Fetterman, D.M., Garcia, G., and Lunn, M.R. (2011). Lesbian, gay, bisexual, and transgender–related content in undergraduate medical education. *Journal of the American Medical Association*, *306*(9), 971–977. doi: 10.1001/jama.2011.1255.

Office of Minority Health. (2013). *National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care: A Blueprint for Advancing and Sustaining CLAS Policy and Practice*. Rockville, MD: Author. Available: https://thinkculturalhealth.hhs.gov/assets/pdfs/EnhancedCLASStandardsBlueprint.pdf.

Olson, C.L. (2009). Transgender foster youth: A forced identity. *Texas Journal of Women and the Law, 19*(1), 25–57.

Olson, J., Schrager, S.M., Belzer, M., Simons, L.K., and Clark, L.F. (2015). Baseline physiologic and psychosocial characteristics of transgender youth seeking care for gender dysphoria. *Journal of Adolescent Health, 57*(4), 374–380. doi: 10.1016/j.jadohealth.2015.04.027.

Olson, K.R., Durwood, L., DeMeules, M., and McLaughlin, K.A. (2016). Mental health of transgender children who are supported in their identities. *Pediatrics*, *137*(3), e20153223.

Olson-Kennedy, J., Cohen-Kettenis, P.T., Kreukels, B.P., Meyer-Bahlburg, H.F., Garofalo, R., Meyer, W., and Rosenthal, S.M. (2016). Research priorities for gender nonconforming/transgender youth: Gender identity development and biopsychosocial outcomes. *Current Opinion in Endocrinology, Diabetes, and Obesity*, *23*(2), 172.

Olson-Kennedy, J., Warus, J., Okonta, V., Belzer, M., and Clark, L.F. (2018). Chest reconstruction and chest dysphoria in transmasculine minors and young adults: Comparisons of nonsurgical and postsurgical cohorts. *JAMA Pediatrics, 172*(5), 431–436. doi: 10.1001/jamapediatrics.2017.5440.

Passos, T.S., Teixeira, M.S., and Almeida-Santos, M.A. (2020). Quality of life after gender affirmation surgery: A systematic review and network meta-analysis. *Sexuality Research and Social Policy*, *17*(2), 252–262. doi: 10.1007/s13178-019-00394-0.

Physicians for Human Rights. (2017). *Unnecessary Surgery on Intersex Children Must Stop*. Available: https://phr.org/news/unnecessary-surgery-on-intersex-children-must-stop/.

Progovac, A.M., Mullin, B.O., Creedon, T.B., McDowell, A., Sanchez-Roman, M.J., Hatfield, L.A., Schuster, M.A., and Cook, B.L. (2019). Trends in mental health care use in Medicare from 2009 to 2014 by gender minority and disability status. *LGBT Health, 6*(6), 297–305. doi: 10.1089/lgbt.2018.0221.

Pyle, L.C., and Nathanson, K.L. (2017). A practical guide for evaluating gonadal germ cell tumor predisposition in differences of sex development. *American Journal of Medical Genetics*, *175*(2), 304–314. doi: 10.1002/ajmg.c.31562.

Rafferty, J., Committee on Psychosocial Aspects of Child and Family Health, and Committee on Adolescence. (2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics*, *142*(4). doi: 10.1542/peds.2018-2162.

Rebchook, G., Keatley, J., Contreras, R., Perloff, J., Molano, L.F., Reback, C.J., Ducheny, K., Nemoto, T., Lin, R., Birnbaum, J., Woods, T., Xavier, J., and SPNS Transgender Women of Color Study Group. (2017). The Transgender Women of Color Initiative: Implementing and evaluating innovative interventions to enhance engagement and retention in HIV Care. *American Journal of Public Health*, *107*(2), 224–229. doi: 10.2105/AJPH.2016.303582.

Robles, R., Fresán, A., Vega-Ramírez, H., Cruz-Islas, J., Rodríguez-Pérez, V., Domínguez-Martínez, T., and Reed, G. (2016). Removing transgender identity from the classification of mental disorders: A Mexican field study for ICD-11. *Lancet Psychiatry*, *3*, 850–859.

Roen, K. (2019). Intersex or diverse sex development: Critical review of psychosocial health care research and indications for practice. *Journal of Sex Research*, *56*(4-5), 511–528.

Rolston, A.M., Gardner, M., van Leeuwen, K., Mohnach, L., Keegan, C., Délot, E., Vilain, E., Sandberg, D.E, and members of the DSD-TRN Advocacy, Advisory Network Accord Alliance. (2017). Disorders of sex development (DSD): Clinical service delivery in the United States. *American Journal of Medical Genetics Party C Seminars in Medical Genetics*, *175*(2), 268–278. doi: 10.1002/ajmg.c.31558.

Romao, R.L.P., and Pippi Salle, J.L. (2017). Update on the surgical approach for reconstruction of the male genitalia. *Seminars in Perinatology, 41*(4), 218–226. doi: 10.1053/j.semperi.2017.03.015.

Rooker, S.A., Vyas, K.S., DiFilippo, E.C., Nolan, I.T., Morrison, S.D., and Santucci, R.A. (2019). The rise of the neophallus: A systematic review of penile prosthetic outcomes and complications in gender-affirming surgery. *Journal of Sexual Medicine*, (5), 661–672. doi: 10.1016/j.jsxm.2019.03.009.

Rowniak, S., Bolt, L., and Sharifi, C. (2019). Effect of cross-sex hormones on the quality of life, depression and anxiety of transgender individuals: A quantitative systematic review. *JBI Database of Systematic Reviews and Implementation Reports*, *17*(9), 1826–1854. doi: 10.11124/JBISRIR-2017-003869.

Russell, S.T., Pollitt, A.M., Li, G., and Grossman, A.H. (2018). Chosen name use is linked to reduced depressive symptoms, suicidal ideation, and suicidal behavior among transgender youth. *Journal of Adolescent Health*. doi: 10.1016/j.jadohealth.2018.02.003.

Ryan, C., Toomey, R.B., Diaz, R.M., and Russell, S.T. (2018). Parent-initiated sexual orientation change efforts with LGBT adolescents: Implications for young adult mental health and adjustment. *Journal of Homosexuality*, 1–15. doi: 10.1080/00918369.2018.1538407.

Substance Abuse and Mental Health Services Administration. (2015). *Ending Conversion Therapy: Supporting and Affirming LGBTQ Youth*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

———. (2020). *LGBT Training Curricula for Behavioral Health and Primary Care Practitioners*. Available: https://www.samhsa.gov/behavioral-health-equity/lgbt/curricula.

Schulz, S.L. (2018). The informed consent model of transgender care: An alternative to the diagnosis of gender dysphoria. *Journal Humanistic Psychology*, *58*, 72–92.

Shanley, T., Wheeler, D., Cheng, E., and Garofalo, R. (2020). *Intersex Care at Lurie Children's and Our Sex Development Clinic*. Available: https://www.luriechildrens.org/en/blog/intersex-care-at-lurie-childrens-and-our-sex-development-clinic.

Spade, D., Arkles, G., Duran, P., and Gehi, P. (2009). Medicaid policy and gender-confirming healthcare for trans people: An interview with advocates. *Seattle Journal for Social Justice, 8*(1), 497–514. Available: https://digitalcommons.law.seattleu.edu/sjsj/vol8/iss2/4.

Speiser, P.W., Arlt, W., Auchus, R.J., Baskin, L.S., Conway, G.S., Merke, D.P., Meyer-Bahlburg, H., Miller, W., Murad, M., OBerfield, S., and White, P.C. (2018). Congenital adrenal hyperplasia due to steroid 21-hydroxylase deficiency: An Endocrine Society Clinical Practice Guideline. *Journal of Clinical Endocrinology and Metabolism*, *103*(11), 4043–4088.

Streed, C.G., McCarthy, E.P., and Haas, J.S. (2018). Self-reported physical and mental health of gender nonconforming transgender adults in the United States. *LGBT Health*, *5*(7), 443–448. doi: 10.1089/lgbt.2017.0275.

Streed, C.G., Anderson, J.S., Babits, C., and Ferguson, M.A. (2019a). Changing medical practice, not patients: Putting an end to conversion therapy. *New England Journal of Medicine*, *381*(6), 500.

Streed, C.G., Hedian, H.F., Bertram, A., and Sisson, S.D. (2019b). Assessment of internal medicine resident preparedness to care for lesbian, gay, bisexual, transgender, and queer/questioning patients. *Journal of General Internal Medicine*, *34*(6), 893–898. doi: 10.1007/s11606-019-04855-5.

Tabaac, A.R., Sutter, M.E., Wall, C.S.J., and Baker, K.E. (2018). Gender identity disparities in cancer screening behaviors. *American Journal of Preventive Medicine*, *54*(3), 385–393. doi: 10.1016/j.amepre.2017.11.009.

Tamar-Mattis, A., Baratz, A., Baratz Dalke, K., and Karkazis, K. (2013). Emotionally and cognitively informed consent for clinical care for differences of sex development. *Psychology and Sexuality*, *5*(1), 44–55.

Tanner, L. (2020). U.S. medical schools boost LGBTQ students, doctor training. *Associated Press*. Available: https://apnews.com/985d50d0a7b1b593acd0dd791e8c3118.

Thyen, U., Lanz, K., Holterhus, P.M, and Hiort, E. (2006). Epidemiology and initial management of ambiguous genitalia at birth in Germany. *Hormone Research*, *66*(4), 195–203.

Timmermans, S., Yang, A., Gardner, M., Keegan, C.E., Yashar, B.M., Fechner, P.Y., Shnorhavorian, M., Vilain, E., and Sandberg, D.E. (2018). Does patient-centered care change genital surgery decisions? The strategic use of clinical uncertainty in disorders of sex development clinics. *Journal of Health and Social Behavior*, *59*(4), 520–535. doi: 10.1177/0022146518802460.

Toler, J., and GLMA Policy and Government Affairs Committee. (2016). *Medical and Surgical Intervention of Patients with Differences in Sex Development*. Available: http://glma.org/index.cfm?fuseaction=document.viewdocument&ID=CEB9FEE4B8DD8B7F4F7575376BD476C3A433379DD853BEA17913AFCCB8270299C0731320B03D2F5E1022F1C15602FBEA.

Tourchi, A., and Hoebeke, P. (2013). Long-term outcome of male genital reconstruction in childhood. *Journal of Pediatric Urology*, *9*(6), 980–989.

Trevor Project. (2019). *National Survey on LGBTQ Mental Health*. Available: https://www.thetrevorproject.org/wp-content/uploads/2019/06/The-Trevor-Project-National-Survey-Results-2019.pdf.

Turban, J.L., Beckwith, N., Reisner, S.L., and Keuroghlian, A.S. (2019). Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *JAMA Psychiatry*, 1–9. doi: 10.1001/jamapsychiatry.2019.2285.

UCSF Transgender Care. (2016). *Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People* (2nd ed.). M.B. Deutsch (Ed.). San Francisco, CA: Department of Family and Community Medicine, University of California San Francisco. Available: transcare.ucsf.edu/guidelines.

Underhill, K. (2012). Paying for prevention: Challenges to health insurance coverage for biomedical HIV prevention in the United States. *American Journal of Law and Medicine*, *38*(4), 607–666. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4041033.

United Nations General Assembly Human Rights Council. (2013). *Report of the Special Rapporteur on Torture and other Cruel, Inhuman or Degrading Treatment or Punishment*. Available: http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session22/A.HRC.22.53_English.pdf.

U.S. Department of Health and Human Services. (2014). *NCD 140.3, Transsexual Surgery. Docket No. A-13-87, Decision No. 2576*. Available: https://www.hhs.gov/sites/default/files/static/dab/decisions/board-decisions/2014/dab2576.pdf.

van de Grift, T.C., Elaut, E., Cerwenka, S.C., Cohen-Kettenis, P.T., and Kreukels, B.P.C. (2017). Surgical satisfaction, quality of life, and their association after gender-affirming surgery: A follow-up study. *Journal of Sex and Marital Therapy, 44*(2), 138–148. doi: 10.1080/0092623X.2017.1326190.

Van Boerum, M.S., Salibian, A.A., Bluebond-Langner, R., and Agarwal, C. (2019). Chest and facial surgery for the transgender patient. *Translational Andrology and Urology*, *8*(3), 219–227. doi: 10.21037/tau.2019.06.18.

Wernick, J.A., Busa, S., Matouk, K., Nicholson, J., and Janssen, A. (2019). A systematic review of the psychological benefits of gender-affirming surgery. *Urologic Clinics of North America*, *46*(4), 475–486. doi: 10.1016/j.ucl.2019.07.002.

White Hughto, J.M., and Reisner, S.L. (2016). A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. *Transgender Health*, *1*(1), 21–31. doi: 10.1089/trgh.2015.0008.

Wiepjes, C.M., Nota, N.M., de Blok, C.J.M., Klaver, M., de Vries, A.L.C., Wensing-Kruger, S.A., de Jongh, R.T., Bouman, M.B., Steensma, T.D., Cohen-Kettenis, P., Gooren, L.J.G., Kreukels, B.P.C., and den Heijer, M. (2018). The Amsterdam Cohort of Gender Dysphoria study (1972–2015): Trends in prevalence, treatment, and regrets. *Journal of Sexual Medicine, 15*(4), 582–590. doi: 10.1016/j.jsxm.2018.01.016.

Winship, B.B., Rushton, H.G., and Pohl, H.G. (2017). In pursuit of the perfect penis: hypospadias repair outcomes. *Journal of Pediatric Urology*, *13*(3), 285–288.

Wisniewski, A.B. (2017). Psychosocial implications of DSD treatment for parents. *Current Opinion in Urology*, *27*(1), 11–13. doi: 10.1097/MOU.0000000000000344.

Woo, L.L., Thomas, J.C., and Brock, J.W. (2010). Cloacal exstrophy: A comprehensive review of an uncommon problem. *Journal of Pediatric Urology*, *6*(2), 102–111.

World Health Organization. (n.d.). *Brief—Transgender Health in the Context of ICD-11*. Available: http://www.euro.who.int/en/health-topics/health-determinants/gender/gender-definitions/whoeurope-brief-transgender-health-in-the-context-of-icd-11.

———. (2014). *Eliminating Forced, Coercive and Otherwise Involuntary Sterilization: An Interagency Statement*. Available: http://www.who.int/reproductivehealth/publications/gender_rights/eliminating-forced-sterilization/en.

World Professional Association for Transgender Health. (2016). Position Statement on Medical Necessity of Treatment, Sex Reassignment, and Insurance Coverage in the U.S.A. Available: https://www.wpath.org/media/cms/Documents/Web%20Transfer/Policies/WPATH-Position-on-Medical-Necessity-12-21-2016.pdf.

Wright, T., Candy, B., and King, M. (2018). Conversion therapies and access to transition-related healthcare in transgender people: A narrative systematic review. *BMJ Open*, *8*(12), e022425. doi: 10.1136/bmjopen-2018-022425.

Wylie, K., Knudson, G., Khan, S.I., Bonierbale, M., Watanyusakul, S., and Baral, S. (2016). Serving transgender people: Clinical care considerations and service delivery models in transgender health. *Lancet, 388*, 401–411.

Part IV

Research Needs

13

Recommendations

Sexual and gender diverse (SGD) populations are dynamic, rapidly growing, and continually evolving. In recent years, trends in data collection have shifted, creating new opportunities to study sexual orientation, gender identity, intersex status, and other relevant components of SGD identities, such as sexual attraction and sexual behavior. However, the existing data and the research methodologies behind current study measures are not sufficient to capture and convey the richness of SGD communities or to capture the varied effects that unique and intersecting identities have on health and well-being outcomes for SGD people.

As discussed in Chapter 4, existing sexual orientation and gender identity questions are presented inconsistently across data collection tools, often separated from other demographic measures, and frequently use binary assessments of gender, which do not effectively describe gender diversity. Furthermore, research efforts to date have focused on lesbian women and gay men; although there has been increased attention in recent years to bisexual and transgender people, intersex populations (also known as those with differences of sex development) have been almost wholly ignored. The committee emphasizes that there is an urgent need for robust scientific evidence that includes not just lesbian, gay, bisexual, and transgender people, but also intersex people, people with same-sex or same-gender attractions or behaviors, and people who identify as asexual, Two Spirit, queer, or other terms under the SGD umbrella.

In the wake of social change and ongoing legal developments regarding protections for SGD people in employment, health care, military service, family formation, and other key areas of life, it is increasingly important to understand how the provision or the denial of access to opportunities and resources effects SGD people over the entire life course. There is also a critical need to collect and analyze data that seek to understand how experiences differ within SGD populations according to such factors as gender, race, and ethnicity. A varied, comprehensive, and inclusive research infrastructure for SGD populations is essential in understanding the unique and shared challenges these individuals and communities face and for guiding actions to improve their well-being across all domains of life, including social justice and legal equality, health and health care, employment, education, and housing.

The report of the Institute of Medicine (2011) on the LGBT population noted that LGBT populations are often considered a single monolithic group, which obscures important differences among individuals and communities. While the report did not include specific reference to people with intersex traits and other SGD groups, it noted that an essential step in understanding and addressing the needs of LGBT communities is collecting more and better demographic data about sexual orientation and gender identity. The 2011 report recommended that these data be collected in federally funded surveys administered by the U.S. Department of Health and Human Services and in other relevant population surveys, as well as in research studies funded by the National Institutes of Health and in electronic health records.

This current committee finds that collecting data on the identities and experiences of SGD people is an essential step toward understanding the ways in which outcomes for SGD groups differ from those of heterosexual and cisgender populations. Effectively addressing disparities related to sexual orientation, gender identity, and intersex status will require collaborative and coordinated efforts among federal, state, and private stakeholders. In addition, it will be important to involve SGD communities themselves, including SGD people of color, in all aspects of the research process. Meaningful community participation is a critical way that SGD population research can be accountable and accurately reflect the lives and experiences of the communities being studied.

In the past decade there has been significant progress in the development of metrics that measure sexual orientation and gender identity. Validated and standardized versions of questions about sexual orientation, sexual behavior, and sexual attraction are increasingly used in population surveys, but there is much room for improvement. For example, the Census Bureau's American Community Survey and Current Population Survey allow identification of same-sex couples, which is a useful though imperfect proxy for sexual orientation, but the surveys do not ask about gender identity or intersex status. Several important surveys used in research on health, housing, wages, employment, and education outcomes do not include questions on sexual orientation, gender identity, or intersex status.

Other surveys measure gender identity using a single-item design (e.g., "are you male, female, or transgender?"), which has been shown to substantially undercount transgender and other gender diverse people in comparison with a two-step question that asks about both current gender identity and sex assigned at birth. Intersex status questions still need to be developed, field-tested, and validated for use in population surveys.

The health and well-being of SGD populations across the Unites States could be improved by the addition of sexual orientation, gender identity, and intersex status measures to publicly and privately sponsored data collection activities at national, state, county, municipal, school district, and tribal levels. Types of data collection activities in which these data could be collected include survey research; nonsurvey research, such as clinical trials and program evaluations; and administrative data systems, including intake forms and applications for federal and state programs. It is also essential to collect these data in electronic health records and other clinical records.

It is important to use a variety of methodological approaches when studying SGD populations, including but not limited to quasi-experimental designs, longitudinal cohort studies, and ethnographic and historical research. Study designs that allow for causal inference about associations between exposures, such as discrimination, and outcomes, such as depression, are also critical. Using context-rich research designs that respect and elevate the multifaceted identities and lived experiences of SGD people is another key component of understanding the needs of these communities. In all research activities, SGD communities should be treated as partners rather than solely as research subjects, and all data need to be collected and analyzed in ways that ensure respondent privacy and confidentiality and provide robust protections from discrimination.

The growing and dynamic nature of SGD populations challenges researchers and policy makers to collect more and better data and to consider the degree to which research reflects the most pressing needs of these populations and the multiple contemporary challenges they face. There are a number of data system reforms that could help advance knowledge related to how laws, political institutions, and public policies shape the well-being of SGD populations. A key need is developing systems and methods that identify geographic indicators for SGD respondents and remove barriers in access to, or use of, such indicators in datasets. Improving research infrastructure will facilitate the generation of high-quality scientific evidence that can inform evidence-based interventions in a variety of sectors to promote the well-being of SGD people; optimize the social, political, and economic determinants of their health; and promote their resilience and well-being.

The committee's recommendations aim to identify opportunities to advance understanding of how individuals experience sexuality and gender and how sexual orientation, gender identity, and intersex status affect SGD people over the life course. Our recommendations are in five categories: (1) population data; (2) measurement challenges related to understanding SGD populations; (3) critical data gaps; (4) improvement of the research community's ability to use these data; and (5) the use of data for the development of high-quality, evidence-based interventions and programs. In each category, the committee makes efforts to identify the specific actors that are best positioned to respond to particular aspects of the research landscape. The committee has concluded that investing in research infrastructure and in a robust and comprehensive program of research in the ways described below will support the development of stronger, evidence-based policies and practices in the areas addressed in this report.

POPULATION DATA

In order to make valid claims about the status of SGD populations in the United States, researchers, policy makers, and practitioners need accurate and representative population-level data that describe SGD populations in all their complexity. Researchers have worked for decades to develop sound approaches for the collection of data about sexual orientation and gender identity, but such data are not collected consistently or completely across surveys, and population-level data for certain groups (e.g., people with intersex traits) do not exist.

Addressing the challenges highlighted in this report will require collaboration by a coalition of actors. In addressing national population data needs, the committee considers the following stakeholders central to implementing these recommendations:

- entities throughout the federal statistical system, particularly the Census Bureau at the Department of Commerce; the Bureau of Labor Statistics at the Department of Labor; the National Center for Education Statistics at the Department of Education; the National Agricultural Statistics Service and the Economic Research Service at the Department of Agriculture; the National Center for Health Statistics at the Department of Health and Human Services; the Bureau of Justice Statistics at the Department of Justice; the National Center for Science and Engineering Statistics at the National Science Foundation; the Statistics of Income Division at the Internal Revenue Service; and the Office of Research, Evaluation, and Statistics at the Social Security Administration;
- other federal agencies and entities that collect demographic data on individuals and populations, including but not limited to the National Institutes of Health, the Centers for Disease Control and

Prevention, and the Agency for Healthcare Research and Quality at the Department of Health and Human Services and the Departments of Defense, Homeland Security, Housing and Urban Development, State, and Veterans Affairs;

- state, local, and tribal statistical agencies, offices, and other entities (e.g., state health departments, school districts); and
- surveys and research conducted or sponsored by universities and private foundations, such as NORC at the University of Chicago, the Gallup Daily Tracking Survey, and the Understanding America Study at the University of Southern California.

RECOMMENDATION 1: Entities throughout the federal statistical system; other federal agencies; state, local, and tribal departments and agencies; private entities; and other relevant stakeholders should consider adding measures of sexual orientation, gender identity, and intersex status to all data collection efforts and instruments, such as population-based surveys, administrative records, clinical records, and forms used to collect demographic data.

At the national level, a federal interagency working group at the U.S. Office of Management and Budget (OMB) has played a key role in assessing the status of data collection on sexual orientation and gender identity across the federal statistical agencies. OMB has the ability to create standards for demographic data collection that must be used by all entities within the federal statistical system. The absence of that authoritative federal role has had consequences for both the availability and accuracy of LGBTQI+ population-level data in the United States.

As part of implementing Recommendation 1, OMB should reconvene the Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys and charge it with developing government-wide standards for the collection of data on sexual orientation, gender identity, and intersex status. An OMB standard for collecting these data would give the federal agencies necessary guidance while also allowing certain modifications to ensure these data are being collected in an accurate and appropriate manner for different populations and types of data collection activities. These data can be used to identify disparities and evaluate efforts to address them by tracking population-level trends in such areas as employment, educational attainment, health status, and access to care. They can also be used to measure, track, and improve person-level outcomes and to ensure compliance with relevant civil rights and other nondiscrimination laws.

The establishment of measurement standards for sexual orientation, gender identity, and intersex status could bolster high-priority data collection activities in federal, state, local, and tribal health agencies, and nongovernmental health entities, including but not limited to hospitals, health plan providers, and physician practices. It could also prompt the Census Bureau and the Bureau of Labor Statistics to expand important data collection activities to include measures that capture a fuller range of sexual and gender diversity in the population, starting with adding established measures of sexual orientation and gender identity to surveys, especially including the American Community Survey, the Current Population Survey, and the American Time Use Survey. Finally, measurement standards would aid federal statistical agencies in providing support to state and local entities in the collection of population data specific to their local contexts. For example, the National Center for Education Statistics could assist education researchers in collecting data that capture sexual orientation, gender identity, and intersex status in studies of students and school personnel.

MEASUREMENT CHALLENGES

There are considerable challenges in the collection of data that capture diverse, complex characteristics of SGD populations. Because of the complicated ways that race, class, sex, gender identity, sexual orientation, and other factors interact in people's experiences, current measures do not always sufficiently reflect the lived experiences of these populations. Research stakeholders have a role to play in helping to address methodological challenges associated with collecting accurate and complete data about SGD communities.

> **RECOMMENDATION 2: Federal statistical agencies, state, local, and tribal departments and agencies; private entities; and other relevant stakeholders should fund and conduct methodological research to develop, improve, and expand measures that capture the full range of sexual and gender diversity in the population—including but not limited to intersex status and emerging sexual and gender identities, sexual behaviors, and intersecting identities—as well as determinants of well-being for sexual and gender diverse populations.**

OMB's role as a coordinating body would have particular value for this effort by working with the federal statistical agencies to standardize measures for gender identity and sexual orientation identity, behavior, and attraction, as well as to develop and validate measures relevant to people with intersex traits. OMB could support the consistent use of reliable, validated assessment tools with large representative samples of SGD populations, as well as with other important research. The routine inclusion of sexual orientation, gender identity, and intersex status questions on federally supported surveys and in other research could also advance the generation and use of measures that help researchers understand how such factors as stigma and disclosure affect the health and well-being of SGD populations across the life course.

As an example of what this kind of investment might look like in one policy sphere, the National Center for Education Statistics and other federal and state agencies would be able to assess their funded surveys and data collection instruments for inclusion of measures that permit analysis of the experiences of SGD students and education personnel in educational settings. Measures that evaluate the implementation of policies and practices known to be associated with positive educational environments for SGD students and staff could also be included in this work. By funding research on priority areas of need based on these assessments, federal agencies would be better able to implement policies that have the potential to improve education environments for SGD students.

CRITICAL DATA GAPS

Not all topics can be explored efficiently or effectively through the use of data drawn from representative samples of a population; when focusing on underrepresented groups, it is sometimes necessary to use different methods that capture adequate samples of the population in question for effective study. In addition to data from representative samples, the committee identified additional needs for data in a variety of topical areas; some gaps could be addressed through observational studies of specific populations, while others might require experimental studies that randomly assign participants to different treatment groups, qualitative explorations of specific topics, or other methods. Data needs of this kind are particularly important for the study of small groups, such as transgender women of color, Native American Two Spirit people, and people with intersex traits. For decades, SGD organizations have published written works that highlight social and cultural advancements within their communities. These works and other ethnographies have shaped contemporary studies and social movements and could also be used to inform the creation of community-based and culturally sensitive qualitative data collection methods.

RECOMMENDATION 3: Public and private funders should support and researchers should conduct studies using a variety of methods and sampling techniques—driven by the questions under study—in order to examine family and other social relationships, community, health, education, economic, and legal issues that will enhance understanding of sexual and gender diverse populations.

DATA USE

Once comprehensive, accurate data are collected, it is critical that researchers have the ability to access these data to address emerging research questions. Currently, many sources of available data across populations and levels of government are not linked. This lack significantly impairs the ability of the researchers to develop scientific evidence to help address critical policy, social, and economic concerns relevant to SGD populations. By improving researchers' ability to access, link, and use existing data, stakeholders could substantially advance the relevance and impact of research.

> **RECOMMENDATION 4: The U.S. Office of Management and Budget should convene federal, state, and private funders, as well as other relevant stakeholders, to address significant problems in linking data from different datasets to facilitate research on the health status and well-being of sexual and gender diverse people. These stakeholders will differ by content area but could include researchers, legal advocacy groups, research institutions and centers, think tanks, policy-tracking groups, health, and surveillance organizations.**

The goal of this recommendation is to allow data that have been housed in only one or a few agencies or industries to be linked in ways that provide the research community a more complete picture of the prevalence, distribution, and lived experiences of SGD populations. The results of the recommended convenings could include the following:

- developing systems and methods that permit the linkage of datasets—such as matching individual Social Security records that capture name and gender marker changes with administrative records of earnings and occupational attainment—to advance understanding of determinants of SGD well-being;
- developing systems and methods that identify geographic indicators for SGD respondents (e.g., state or city of residence) and remove barriers in appropriate access to, and use of, such indicators in datasets; and
- prioritizing individuals' privacy and confidentiality by establishing guidelines for working with and sharing potentially identifiable personal data among researchers and practitioners who are bound by professional and legal obligations to maintain data confidentiality and security.

EVIDENCE-BASED PROGRAMMING AND INTERVENTIONS

The charge for this report was to review available data and assess future data needs for SGD populations, but the committee is cognizant that work does not stop once data are collected or even when they are analyzed. Although the urgent task for the research community at large is to develop metrics that will lead to enhanced understanding of SGD populations, the ultimate goal of collecting more accurate and relevant data should be to enhance understanding of the mediating factors that can highlight the positive differences and close the disparities that exist between SGD and heterosexual or cisgender populations. Comprehensive and accurate population-level data can play a critical role in the development, implementation, and evaluation of programs, services, and interventions that support the health and well-being of SGD populations. The data deficits described throughout this report have contributed to a relative dearth of programming to address the specific needs of these populations, as well as an absence of evidence-based processes to evaluate programs.

As discussed in Chapter 7, an increase in the prevalence and visibility of SGD populations in recent years prompted community-based health organizations to respond by offering increased support for SGD patients. Reactions such as those to notable shifts in SGD populations could be supported through the timely collection of relevant empirical SGD population data. Placing scientific evidence at the forefront of program planning will allow researchers, policy makers, and public and private stakeholders to develop services and interventions that can benefit SGD communities.

RECOMMENDATION 5: Public and private research funders, together with federal statistical agencies, should prioritize research into the development, implementation, and evaluation of evidence-based services, programs, and interventions that promote the well-being of sexual and gender diverse populations.

The recommended activities could include, but are not limited to, the following:

- evaluations of social service programs in federal agencies—such as the Department of Health and Human Services, Department of Housing and Urban Development, Department of Education, and Department of Labor—to ensure the absence of bias and other barriers in service acquisition and delivery processes for members of SGD populations;

- evaluations of public and private social service agencies and programs—such as those for food and housing assistance, runaway and homeless youth, family and youth services, and workforce development—to increase inclusivity and reduce disparities for SGD people;
- increased evidence-based support for existing SGD community-based organizations and health centers, including federally qualified community health centers;
- development of programs, policies, and practices relevant to systems in which SGD populations are involved—such as family courts, criminal justice, immigration, and child welfare—that enhance cultural competency and reduce disparities in treatment of SGD populations;
- development of programs, policies, and practices that reduce stigma and discrimination against members of SGD populations in all the domains discussed in this report; and
- implementation of policies, programs, and practices known to be associated with positive environments for SGD populations, including educational, workplace, health care settings, and places of public accommodation.

CONCLUSION

The increase in prevalence and visibility of SGD populations illuminates the need for greater understanding of the ways in which current laws, systems, and programs affect their well-being. Individuals who identify as lesbian, gay, bisexual, asexual, transgender, non-binary, queer, or intersex and those who express same-sex or same-gender attractions or behaviors will have experiences across their life course that differ from those of cisgender and heterosexual individuals. Characteristics such as age, race and ethnicity, and geographic location intersect to play a distinct role in the challenges and opportunities SGD people face. This report underscores the need for researchers to seek to understand disparities and advance equity both within and across SGD population groups.

REFERENCE

Institute of Medicine. (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: The National Academies Press. doi: 10.17226/13128.

Appendix A

Summary of Prior Related National Academies Reports and Activities

LESBIAN HEALTH: CURRENT ASSESSMENT AND DIRECTIONS FOR THE FUTURE (1999)

The Institute of Medicine (IOM) report *Lesbian Health: Current Assessment and Directions for the Future* was the first IOM report to focus on the health of a sexually diverse population. The committee noted several important reasons for future research to focus on lesbian health issues, and it argued in favor of situating the health of lesbian women within larger social contexts in order to understand the role that discrimination and the stigmatization of homosexuality play in generating health disparities for this population. The report said there was no evidence that lesbian women are at higher risk for any specific health problem as a function of their sexual orientation, although that finding was due in part to the limited amount of available data comparing the health of lesbian women with that of heterosexual women. The report did note, however, that lesbians faced differential risks due to differences in the prevalence of risk and protective factors and because of diminished access to health care services.

The report recommended that researchers routinely consider including questions about sexual orientation on data collection forms in behavioral and biomedical sciences and that significant efforts should be made to protect the confidentiality and privacy of the study population. In addition, the report recommended that federal agencies should make long-term commitments to funding research on lesbian health and to organizing multidisciplinary conferences at which the research could be presented and its findings disseminated to health care providers, researchers, and the public.

THE HEALTH OF LESBIAN, GAY, BISEXUAL, AND TRANSGENDER PEOPLE: BUILDING A FOUNDATION FOR BETTER UNDERSTANDING (2011)

This IOM report identified three key issues that made studying lesbian, gay, bisexual, and transgender (LGBT) populations challenging: difficulties in assessment of sexual orientation and gender identity; reluctance of research participants to identify as LGBT or to answer questions about their sexual orientation or gender identity due to stigma; and the rarity of these populations in the general population. Moreover, much of the limited available research on LGBT populations focused on lesbian women and gay men, with the health of bisexual and transgender persons largely unexamined. The report said little was known about LGBT children, elder LGBT persons, or about racial and ethnic LGBT groups.

The report did describe several key findings about the health of LGBT populations, including that LGBT people are frequently targets of stigma, discrimination, and violence, and that these have negative effects on health. The report recommended that the National Institutes of Health (NIH), the sponsor of the study that produced the report, focus its future research agenda on five key areas to provide better understanding of the health of LGBT populations: studies of demographic issues, social influences on the lives of LGBT people, inequities in the health care system, interventions to improve LGBT health, and transgender-specific health care. The report also recommended that federally funded surveys and electronic health records should collect data on sexual orientation and gender identity. To aid this process, the report recommended that NIH fund research to develop valid, standardized measures of sexual orientation and gender identity.

SEXUAL ORIENTATION AND GENDER IDENTITY DATA COLLECTION IN ELECTRONIC HEALTH RECORDS: WORKSHOP SUMMARY (2013)

At this workshop, presenters described steps that federal agencies had taken to begin collecting sexual orientation information in electronic health records. They noted that the 2010 Affordable Care Act and the 2009 Health Information Technology for Economic and Clinical Health Act encouraged the federal government to develop and expand sexual orientation and gender identity data collection in federal health surveys and electronic health records as part of an effort to reduce health disparities.

Participants agreed that sexual orientation can be seen as having three facets: sexual behavior, sexual attraction, and sexual identity. Considering these facets separately may be important in the context of health surveys and medical records. For example, sexual behavior may be more relevant than sexual identity when evaluating a patient's risk for sexually transmitted diseases, such as HIV. However, in assessing risk for depression or suicide among adolescents and young adults, sexual attraction or identity may be more relevant than sexual behavior. Thus, assessment procedures should be tailored to fit specific research aims.

Several presenters noted that knowing a transgender person's gender identity is not sufficient for medical providers to provide adequate care. Furthermore, if patients' current gender identity as recorded in their electronic health record does not match their sex at birth, billing systems will often reject requests for sex-specific testing or procedures for these patients. For these reasons, several presenters proposed using a two-step sequence that collects both current gender identity and sex assigned at birth. Participants noted that, in addition to increasing reporting of transgender status, using the two-step method and learning and using patients' preferred name and pronouns help them feel empowered.

PLANNING MEETING ON THE DEMOGRAPHY OF SEXUAL AND GENDER MINORITIES (2018)

This planning meeting, hosted by the Committee on Population (CPOP) and sponsored by NIH, laid the foundation for the consensus study that produced this report. The meeting highlighted data gaps and research opportunities centered around sexual and gender minority (SGM) populations, the term then used. Participants discussed how such characteristics as sexuality and gender, race and ethnicity, and socioeconomic class can affect individuals' outcomes differently across the life course. Experts discussed topics related to family formation and planning, as well as social stratification and mobility. They emphasized the linkages between health, well-being, and policy, noting how structural discrimination can affect the social and behavioral pathways associated with positive health outcomes.

Participants agreed that the well-being of SGM populations spans a broad range of dimensions, including social, civic, economic, and health. Although SGM people are often categorized as a single subpopulation, there is significant diversity among them. Patterns of intersectionality by race, ethnicity, socioeconomic status, and other characteristics are also complex. While progress is being made with regard to measuring and collecting data on SGM populations, many complex issues have yet to be addressed. Participants identified key measurement needs focused around improved research design and methodological considerations for measuring SGM populations.

EXPERT MEETING ON THE DEMOGRAPHY OF SEXUAL AND GENDER MINORITIES (2019)

Building on knowledge exchanged at the 2018 planning meeting, this meeting, also hosted by CPOP and sponsored by NIH, focused on understanding the effects of intersectionality on sexual and gender minorities and helped to illuminate the less-thought-of nuances that add a unique layer of complexity to collection of data about SGM populations.

Participants discussed how stigmatization occurs at multiple levels—the personal level (perceived racism or homophobia), the service level (lack of cultural sensitivity among health providers), and the system level (state and federal law, health coverage)—and can cause isolation from health resources. They also noted that a person's needs also do not remain static throughout the life course: for example, there is a different configuration of risks for older SGM populations than for younger SGM populations.

Race, ethnicity, gender, and sexuality are some of the intersections that are often considered, but gender expression, which can vary greatly within LGBT subgroups, can affect an individual's experience in many systems. There is also a significant overrepresentation of certain SGM subgroups in some systems, such as juvenile justice and foster care. Suicide rates vary widely across sexuality and gender identities.

Participants noted that operationalizing intersectionality is difficult, especially in the context of SGM data collection, since the population is small relative to the overall population. Presenters underscored the need to use qualitative work and individuals' reports of their own experiences to guide quantitative data collection. They also discussed tapping into community resources (not just legal and scientific institutions) to better support the SGM community and learn how to care for the whole person.

Appendix B

Agenda: Public Seminar on Amplifying Visibility and Increasing Capacity for Sexual and Gender Diverse Populations

Monday, August 5, 2019
9 am – 4 pm
Keck Center of the National Academies of Sciences,
Engineering, and Medicine
500 Fifth Street, NW, Washington, DC
Room 100

Amplifying Visibility

9:00 am **Welcome and Introduction**
Monica Feit, *Deputy Director, Division of Behavioral and Social Sciences and Education*
Charlotte Patterson, *Consensus Study Cochair*

9:15 am **Culture, Representation, and Community Frameworks**
Two Spirit American Indian/Alaska Native Health
Jane Simoni, *University of Washington*

Trans Queer Resistance: Building with LGBT Migrant Communities
Dagoberto Bailon, *Trans Queer Pueblo*

Promoting Safe Spaces for Black Transwomen of Color
Charmaine Eccles, *Casa Ruby*

#MuslimAnd Queer, Young, & Powerful: Lessons from the Muslim Youth Leadership Council
Khadija Khan, *Muslim Youth Leadership Council of Advocates for Youth*

10:30 am **Break**

10:40 am **Intersex Individuals and Families—Panel Discussion**
Moderator – Katharine Dalke, *Committee Member*
Discussants:
Alesdair Ittelson, *interACT Advocates*
Sean Saifa Wall, *Intersex Justice Project*
Eric and Stephani Lohman, authors, *"Raising Rosie"*
Arlene Baratz, *University of Pittsburgh Medical Center/ interACT Advocates*

11:40 am *Non-Binary and Plurisexual Identities*
Is Seeing Believing? The Contradictions of Bisexual In/Visibility
Wendy Bostwick, *University of Illinois at Chicago*

Transgender Health: Disparities and Protective Factors
Jae Sevelius, *University of California, San Francisco*

Two Spirit/Indigenous LGBTQ Healing, Activism, HIV, and Complex Traumas
Gabriel Estrada, *California State University Long Beach*

12:30 pm **Lunch**

Building Capacity

1:30 pm **Sexual and Gender Diversity Law and Policy**
Data and Design: LGBTQ Cyberharassment Case Study
Ari Waldman, *Innovation Center for Law and Technology, New York University Law School (via Zoom)*

Physician Leadership in Support of LGBTQ Health and Health Equity
Jesse Ehrenfeld, *American Medical Association; Vanderbilt University*

Policy Barriers and Solutions for Transgender Patients
Harper Jean Tobin, *National Center for Transgender Equality*

2:30 pm **Break**

2:45 pm **Civic Engagement—Panel Discussion**
Moderator – Andrew Flores, *Committee Member*

Discussants:
Todd Snovel, *Pennsylvania Commission on LGBTQ Affairs*
Earl Fowlkes, *Center for Black Equity, LGBT Chair, Democratic National Committee*
Nancy Bates, *U.S. Census Bureau*
Mary Anne Adams, *Zami NOBLA*

3:45 pm **Wrap-Up; Committee's Next Steps**
Mark Hatzenbuehler, *Committee Member*

4:00 pm **Adjourn**

Appendix C

Biographical Sketches of Committee Members and Staff

CHARLOTTE J. PATTERSON (*Cochair*) is professor of psychology in the Psychology Department at the University of Virginia. Her research focuses on the role of sexual orientation in human development and family lives, particularly the study of child development in lesbian- and gay-parented families. She is a coeditor of the *Handbook of Psychology and Sexual Orientation*. She is a fellow of the American Psychological Association (APA) and the Association for Psychological Science (APS). She is the recipient of APA's Distinguished Contributions to Research in Public Policy Award, Distinguished Scientific Contribution Award from APA's Society for the Psychology of Sexual Orientation and Gender Diversity, Outstanding Achievement Award from APA's Committee on Lesbian, Gay, and Bisexual Concerns, and the Carolyn Attneave Diversity Award from APA's Society for Couple and Family Psychology. Patterson's Ph.D. in psychology is from Stanford University.

MARTÍN-JOSÉ SEPÚLVEDA (*Cochair*) is an IBM fellow and serves as a senior executive advisor to IBM and to five health technology start-up companies. He is also CEO of CLARALUZ LLC, a health, data, technology, and analytics consulting firm. He previously served as IBM vice president of integrated health services, and led health policy and strategy, health benefits innovation and purchasing, occupational health, and well-being services for IBM globally. He is a member of the National Academy of Medicine, the Florida Academy of Science Engineering and Medicine, and the Connecticut Academy of Science and Technology. He serves on the Council on Health Research for Development, the University of Iowa College of Public Health

Board of Advisors, and the University of Pennsylvania Board of Overseers. He has an M.P.H. and an M.D. from Harvard University and a Doctor of Science from the University of Iowa.

M.V. LEE BADGETT is professor of economics at the University of Massachusetts, Amherst and serves on the faculty of the School of Public Policy. She is also a distinguished scholar at the Williams Institute at the University of California, Los Angeles. Her current research focuses on poverty in the LGBT community, employment discrimination against LGBT people in the United States, and the cost of homophobia and transphobia in global economies. She has published many journal articles and reports on economic and policy issues for LGBT people, including her most recent book, *The Economic Case for LGBT Equality: Why Fair and Equal Treatment Benefits Us All*. Her other books analyze the positive U.S. and European experiences with marriage equality for gay couples and debunks economic myths about LGBT people. She has a Ph.D. in economics from the University of California, Berkeley.

MARLON M. BAILEY is associate professor of women and gender studies, African and African American studies, and faculty coordinator of the LGBT Studies Certificate Program in the School of Social Transformation at Arizona State University. Bailey is a former visiting professor with the Center for AIDS Prevention Studies at the University of California, San Francisco. His book, *Butch Queens Up in Pumps: Gender, Performance, and Ballroom Culture in Detroit* was awarded the Alan Bray Memorial Book Prize by the GL/Q Caucus of the Modern Language Association. His work has appeared in numerous publications, including *American Quarterly*; *Gay and Lesbian Quarterly*; *Signs*, *Feminist Studies*, *Souls*, *Gender, Place, and Culture*; *The Journal of Gay and Lesbian Social Services*; *AIDS Patient Care & STDs*; *LGBT Health;* and in several book collections. He is also the recipient of the Joan Heller Bernard fellowship from the CLAGS Center for LGBT Studies in New York City. He has a Ph.D. in African American studies with a designated emphasis in women, gender, and sexuality from the University of California, Berkeley.

KELLAN BAKER (*Project Consultant*) is the centennial scholar and a Robert Wood Johnson health policy research scholar in the Department of Health Policy and Management at the Johns Hopkins Bloomberg School of Public Health, where his research focuses on evaluation of insurance reforms affecting the transgender population. Previously, he was a senior fellow at the Center for American Progress in Washington, D.C., where he worked on health equity and data collection policy. He was also a founding steering committee member of Out2Enroll, a nationwide campaign in partnership with the White House and the U.S. Department of Health and Human Services to connect low-income LGBT populations with coverage under the Affordable Care Act. He is the board chair of the Equality Federation, a training and advocacy organization supporting LGBT equality organizations that is active in 44 states, and he has consulted on health equity issues with a range of organizations. He has a B.A. with high honors from Swarthmore College, an M.P.H. from the George Washington University, and an M.A. in international development from the Elliott School of International Affairs at the George Washington University.

TARA BECKER is a program officer for the Committee on National Statistics and the Committee on Population in the Division of Behavioral and Social Sciences and Education at the National Academies. In addition to this study, she serves as the study director for a study examining the older workforce and employment at older ages and as a program officer for a study investigating the recent rise in midlife mortality in the United States. Previously, she was a senior public administration analyst and senior statistician for the California Health Interview Survey at the Center for Health Policy Research at the University of California, Los Angeles, where she conducted research on disparities in health insurance coverage and access to health care, as well as on survey data quality and methodology. She was a postdoctoral fellow in the Department of Health Policy and Management at the University of California, Los Angeles and a biostatistician at the University of Wisconsin–Madison Department of Biostatistics and Medical Informatics. She has a B.A. in sociology and mathematics, an M.S. in sociology, an M.S. in statistics, and a Ph.D. in sociology from the University of Wisconsin–Madison.

KATHARINE B. DALKE is a psychiatrist at the Pennsylvania Psychiatric Institute in Harrisburg, with a clinical focus on the psychiatric care and support of LGBTQ and intersex adolescents and adults. Dalke is also an assistant professor in the departments of Psychiatry and Behavioral Health and Humanities, and the director of the Office for Culturally Responsive Health Care Education at Penn State College of Medicine. Her academic efforts center on LGBTQ and intersex mental health, medical education, and cultural competency within an intersectional framework. She is a longtime advocate for people with intersex conditions/differences of sex development, and she has been recognized with an appointment to the Pennsylvania Commission on LGBTQ Affairs. She has an M.D. and an M.A. in Bioethics from the Perelman School of Medicine at the University of Pennsylvania. She trained in psychiatry at the Hospital of the University of Pennsylvania, with additional clinical training in transgender health at the Children's Hospital of Philadelphia.

KENNE DIBNER is a senior program officer with the Board on Science Education at the National Academies. She has served as study director for *Reopening K-12 Schools During the COVID-19 Pandemic: Prioritizing Health, Equity, and Communities* and *Science Literacy: Concepts, Contexts, and Consequences,* as well as a recently completed assessment of NASA's Science Mission Directorate's education portfolio. Prior to this position, she worked as a research associate at Policy Studies Associates, Inc., where she conducted evaluations of education policies and programs for government agencies, foundations, and school districts, and as a research consultant with the Center on Education Policy. She has a B.A. in English literature from Skidmore College and a Ph.D. in education policy from Michigan State University.

ANDREW R. FLORES is assistant professor of government in the School of Public Affairs at American University and affiliated scholar at the Williams Institute at the University of California, Los Angeles. His research focuses on attitude formation and change about marginalized groups, particularly LGBT and the implementation of LGBTQ-related policies as a result of such attitudes. He also studies the political behavior of LGBT people with a central focus on the role of linked fate in LGBTQ politics. His work has also examined the demography of LGBT people, and he has published estimates of the number of adults who identify as transgender in the United States. He has also documented the experiences of LGBT people when interacting with state institutions and the effect of LGBTQ-related public policies and elections on LGBTQ people and the general public. His research has been published widely, including in *Science Advances*; *Proceedings of the National Academy of Sciences*; *American Journal of Public Health*; *Public Opinion Quarterly*; and *Political Psychology*. He has a Ph.D. in political science from the University of California, Riverside.

GARY J. GATES was the Blachford-Cooper distinguished scholar and research director at the Williams Institute at the University of California, Los Angeles. He also previously served as a senior researcher at Gallup and as a research associate at the Urban Institute in Washington, D.C. He has published extensively on the demographic and economic characteristics of the LGBT population, and he coauthored *The Gay and Lesbian Atlas*. As a recognized expert on the geography and demography of the LGBT population, he provided expert witness testimony in one of the four cases challenging state bans on marriage for same-gender couples heard by the U.S. Supreme Court as part of the case that led to the decision that same-gender couples have a constitutional right to marriage. He has a Ph.D. in public policy and management from the Heinz College at Carnegie Mellon University.

MARY GHITELMAN is a senior program assistant for the Committee on Population in the Division of Behavioral and Social Sciences and Education. She has been with the National Academies since 2015, working on reports including *The Integration of Immigrants into American Society*; *Valuing Climate Damages*; *Transforming the Financing of Early Care and Education*; and *The Promise of Adolescence*. She received her B.A. in psychology from Beloit College and studied abroad in Copenhagen, Denmark, with a focus in cross-cultural psychology.

ANGELIQUE C. HARRIS is the director of faculty development at Boston University Medical Campus and director of faculty development and diversity in the Department of Medicine at the Boston University School of Medicine. Harris works to design, implement, and lead innovative programs and initiatives aimed at providing and promoting more equitable learning and working environments for faculty, staff, and students. An applied medical sociologist, her research examines health, wellness, and resilience within marginalized communities and her areas of research expertise are in race and ethnicity, gender and sexualities, health and illness, social movements, cultural studies, and urban studies. More specifically, her research studies how groups construct health issues and how the marginalization and stigmatization they experience impact their access to resources. Harris has authored and co-authored dozens of books, articles, and essays, including the books *Queer People of Color: Connected but Not Comfortable* and the *Intersections of Race and Sexuality* book series. She has a Ph.D. in sociology from the Graduate Center at the City University of New York.

MARK L. HATZENBUEHLER is the John L. Loeb associate professor of the social sciences in the Department of Psychology at Harvard University. His research examines the role of stigma in shaping population health inequalities, with a particular focus on the mental health consequences of structural and systemic forms of stigma. He has published widely, including in *Proceedings of the National Academy of Sciences*; *Psychological Bulletin*; *American Psychologist*; *American Journal of Public Health*; *JAMA Pediatrics*; and *JAMA Psychiatry.* He is a recipient of the Louise Kidder Early Career Award from the Society for the Psychological Study of Social Issues, the Early Career Award for Distinguished Contributions to Psychology in the Public Interest from the American Psychological Association (APA), the Janet Taylor Spence Award for Transformational Early Career Contributions from the Association for Psychological Science, and the Distinguished Scientific Contribution Award from APA's Society for the Psychology of Sexual Orientation and Gender Diversity. He is an elected fellow of the Academy of Behavioral Medicine Research, the premier honorary organization for scientists working at the interface of behavior and medicine. He has a Ph.D. in clinical psychology from Yale University.

NAN D. HUNTER is the Scott K. Ginsburg professor of law at Georgetown University Law Center. Her scholarship spans multiple fields, including sexuality and gender law; social movements and law; feminist legal theory; and health law. She is coauthor of *Sexuality, Gender, and the Law* (4th ed.), the first law school textbook to conceptualize sexuality and gender as a mutually dynamic relationship for purposes of state regulation. Her current project is a book on civil rights movements, law, and culture. Prior to teaching, she specialized in constitutional and civil rights law for the American Civil Liberties Union, where she founded the LGBT Rights Project. She also previously served as deputy general counsel at the U.S. Department of Health and Human Services and as associate dean at Georgetown University Law Center. She is a fellow of the New York Academy of Medicine. Her awards include the Pioneer of Courage award from the American Foundation for AIDS Research, the inaugural Dan Bradley award from the LGBT Bar Association, and the Edie Windsor Lifetime Achievement Award from Equality Florida. She has a B.A. from Northwestern University and a J.D. from Georgetown University.

MALAY K. MAJMUNDAR directs the Committee on Population (CPOP). He is currently overseeing projects on mid-life mortality and socioeconomic disparities, forced migration and refugee movements, sexual and gender diverse populations, the workplace and aging, and family planning and women's empowerment. He is also developing a future research portfolio for CPOP. While at the National Academies, he has worked on studies on demography, criminal justice, immigration enforcement and statistics, and the federal budget. He has a B.A. in political science from Duke University, a J.D. from Yale University, and a Ph.D. in public policy from the University of Chicago.

TONIA C. POTEAT is assistant professor in the Department of Social Medicine at the University of North Carolina, Chapel Hill and a core faculty member in the university's Center for Health Equity Research. She is also a certified physician assistant who provides care for people living with HIV at the university's Infectious Disease Clinic. Her research, teaching, and clinical practice focus on LGBTQ health and HIV, with particular attention to the role of stigma in driving health disparities. She has published widely on the health of transgender adults and serves as associate editor for the journal *LGBT Health*. She recently served on the Sexual and Gender Minority Working Group for the Sexual and Gender Minority Research Office of the National Institutes of Health. She has a Ph.D. in international health/social and behavioral interventions from the John Hopkins Bloomberg School of Public Health.

SARI L. REISNER is assistant professor in the Department of Medicine at Harvard Medical School, based in the Division of Endocrinology, Diabetes and Hypertension at Brigham and Women's Hospital. He is also assistant professor in the Department of Epidemiology at the Harvard T.H. Chan School of Public Health and director of transgender health research at the Fenway Institute at Fenway Health. His research addresses health disparities in sexual and gender minority populations, with specialization in transgender health and in adolescent and young adult health. Reisner is an investigator of multiple LGBTQ health studies funded domestically and internationally, including a project to enroll and follow physical and mental health outcomes in a cohort of 4,500 transgender and gender diverse patients in Boston and New York City. He has coauthored many articles in LGBTQ health and was profiled in *The Lancet* as a global leader in transgender health. He has a Sc.D. in social and psychiatric epidemiology from the Harvard T.H. Chan School of Public Health.

STEPHEN T. RUSSELL is the Priscilla Pond Flawn regents professor in child development in the Department of Human Development and Family Sciences and a faculty member in the Population Research Center, both at the University of Texas at Austin. He studies adolescent development, with an emphasis on adolescent sexuality, LGBT youth, and parent–adolescent relationships. Using data from the National Longitudinal Study of Adolescent to Adult Health, he published a series of papers that were the first to document significant health risks among sexual minority adolescents. He also studies health risk and resilience among this population, with an emphasis on gender and cultural differences, and he serves as an expert in the role of school policies, programs, and practices in supporting adolescent adjustment, achievement, and health. His community work has included serving as human relations commissioner in Durham, North Carolina; Davis, California; and Tucson, Arizona. He has served as president of the Society for Research on Adolescence, and on the governing boards of the Society for Research in Child Development, the National Council on Family Relations, and SIECUS: Sex Ed for Social Change. He has a Ph.D. in sociology from Duke University.

DEBRA J. UMBERSON is Centennial professor of liberal arts and director of the Center on Aging and Population Sciences at the University of Texas at Austin. Her research focuses on social determinants of health across the life course, with attention to social ties, health disparities, and the use of blended research methods. Much of her recent work considers how spouses influence each other's health-related behavior, mental health, and health care, and how these processes vary across gay, lesbian, and heterosexual unions. Her work also documents racial and ethnic differences in exposure to the death of family members over the life course and implications for health. She is an elected fellow of the Gerontological Society of America. Her awards from the American Sociological Association include the 2015 Matilda White Riley Distinguished Scholar Award for research on aging, the 2016 Leonard I. Pearlin Award for Distinguished Contributions to the Sociological Study of Mental Health, the 2020 Leo G. Reeder Award for career contributions to medical sociology, and the 2020 Distinguished Career Award for research on families. She has a Ph.D. in sociology from Vanderbilt University.

JORDYN WHITE (*Study Director*) is a program officer in the Division on Behavioral and Social Sciences and Education at the National Academies of Sciences, Engineering, and Medicine. In addition to this study, she is directing a study on sustainability partnerships in the U.S.–Mexico Drylands Region, which is a binational collaboration between the U.S. National Academies and the Mexican Academy of Sciences, Academy of Engineering, and National Academy of Medicine. Her previous projects include a study on the National Assessment of Educational Progress and workshops on estimating human trafficking in the United States and on principles and practices of federal program evaluation. Previously, at the U.S. Census Bureau, she worked on methodology, implementation, and nonresponse follow-up design for the American Community Survey and the 2020 census. She is a member of the D.C. Mayor's Advisory Committee to the Office of LGBTQ Affairs. She has a B.S. in psychology from the University of Pittsburgh and an M.S. in criminal justice from St. Joseph's University.