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Commentary

Strategies to Improve Measurement of Sexual Orientation and Gender Identity Among Youth

Alison Spock, M.P.P.^{a,*}, Ronna Popkin, Ph.D., M.S.^{b,2}, and Christopher Barnhart, Ph.D.^{c,3}^a Senior Economist, U.S. Department of Labor, Office of the Assistant Secretary for Policy, Washington, DC^b Social and Behavioral Scientist Administrator, National Institutes of Health, Population Dynamics Branch, Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, Maryland^c Health Science Policy Analyst, National Institutes of Health, Division of Program Coordination, Planning, and Strategic Initiatives, Sexual & Gender Minority Research Office, Bethesda, Maryland

Understanding the experiences of sexual and gender minority (SGM)¹ youth is essential for developing policies and programs aimed at improving their health and quality of life. Because SGM youth are more likely than their cisgender and heterosexual peers to experience stigma, discrimination, family disapproval, and social rejection, they are at a significantly higher risk of bullying, violence, drug and alcohol use, sexually transmitted infections, depression, and attempted suicide [1,2]. Family support and social acceptance, however, are linked to better wellbeing for SGM youth, highlighting the need for improved data collection on the factors that shape the social, economic, and health outcomes of SGM youth in the United States.

Although crucial to many spheres of research, collecting sexual orientation and gender identity (SOGI)² data on youth entails a unique set of challenges. The following strategies can help researchers mitigate those challenges.

1. Ask about All Three Dimensions of Sexual Orientation

The process of realizing one's sexual identity usually occurs during the teenage years and early 20s. Adolescents may be experiencing sexual attraction, beginning to engage in sexual behavior, and developing their sexual identity; consequently, they may be unsure of how to respond to survey questions related to sexual orientation [3].

Moreover, young people may separate their sexual identity from their attractions or behaviors due to the stigma attached to SGM labels. Adolescents may be less willing to disclose a stigmatized identity than they are to disclose attractions and behaviors, even in anonymous and confidential surveys [3]. Accordingly, a survey of youth would ideally include all three dimensions of sexual orientation: attraction, behavior, and identity. If only one dimension can be measured, attraction may be the best option because many adolescents have not yet engaged in partnered sexual activity [3].

2. Offer Response Options that Account for a Range of Gender Identities

Gender minority youth vary widely in the ways they identify their gender identity. Many do not identify with the umbrella term

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* Address correspondence to: Alison Spock, M.P.P., Doctoral Student, School of Public Policy, University of Maryland Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250

E-mail address: alison.spock@umbc.edu (A. Spock).

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¹ SGM populations include, but are not limited to, individuals who identify as lesbian, gay, bisexual, asexual, transgender, two-spirit, queer, and/or intersex. Individuals with same-sex or same-gender attractions or behaviors and those with a difference in sex development are also included. These populations also encompass those who do not self-identify with one of these terms but whose sexual orientation, gender identity or expression, or reproductive development is characterized by nonbinary constructs of sexual orientation, gender, and/or sex.

² Sexual orientation has three main dimensions: sexual attraction, sexual behavior, and sexual identity. Sexual attraction refers to the relationship between a person's gender and the gender(s) of the individuals to whom that person is sexually attracted. Sexual behavior refers to the relationship between a person's gender and the gender(s) of the individuals with whom that person engages in sexual activity. Sexual identity refers to the way a person self-identifies with a given sexual orientation. Gender identity refers to a person's internal sense of gender (e.g., man, woman, genderqueer) and potential affiliation with a gender community (e.g., women, transwomen, genderqueer).

“transgender” but instead with such options as “nonbinary,” “gender diverse,” or “gender fluid.” Although a survey cannot list all possible terms, researchers may be able to increase the accuracy of their results by offering a range of response options that are developed in collaboration with youth advisors and then tested and validated among broader youth populations. A write-in option is also valuable for respondents who do not identify with the listed categories or who prefer not to be categorized.

3. Include an “I’m Not Sure Yet” Response Option

One’s sexual orientation or gender identity may evolve over time, and the process can involve uncertainty or questioning, particularly for adolescents as they gain awareness of various forms of attraction, expression, and identity. Moreover, adolescents may experiment with behaviors or identities [3].

Young people may feel more confident answering questions about directly observable aspects of themselves and their behaviors (e.g., the gender of their romantic partners) than about aspects that are not directly observable (e.g., their sexual or gender identity) [4]. Therefore, an “I’m not sure yet” response option for sexual and gender identity measures may help youth who are questioning or uncertain of their status see themselves in the choices provided [5].

4. Collect SOGI Data with Each Administration of a Longitudinal Survey

SGM identity development can be a complex and nonlinear process. Some people experience changes in their sexual attractions, sexual behaviors, and sexual identity over the course of their lives. For adolescents, in particular, their sexual identity and the gender of their sexual partners may change and not be consistent over time [1]. In addition to changes in sexual identity and behavior, people’s gender expression or gender identity may also change over time. Referred to as gender fluidity, these changes may be a means of exploring gender before landing on a more stable gender expression or identity. For others, gender fluidity may continue indefinitely as part of their life experience with gender [6].

SOGI questions can be difficult for youth to answer because choosing a response option may imply a degree of permanence in their identity with which they are not comfortable [4]. Longitudinal studies should collect SOGI data with each wave of data collection to accurately capture changes in identity over time and enable respondents to update how they identify upon readministration of the survey. Despite the increased respondent burden, the benefits of gathering accurate, updated SOGI data can outweigh the costs.

5. Ensure Privacy and Confidentiality during Survey Administration

Researchers should ensure that participants are able to respond to surveys privately and their responses will be kept confidential. Young respondents may be hesitant to reveal their sexual orientation or gender identity if they are concerned about their responses being seen or disclosed, especially when their responses can be linked back to them [5]. Respondents must be convinced that privacy strategies are effective; otherwise, the stigma associated with SGM labels may reduce response rates or increase social desirability bias [7].

Social desirability bias also affects responses to items on sensitive topics, such as sexual behavior, especially when in the

presence of an interviewer. Research suggests that young people respond more truthfully to questions about sensitive topics when questionnaires are self-administered, answered in a private setting, and administered at school rather than at home [8]. When conducting research in schools, researchers should work with school district officials to ensure compliance with local, state, and federal policies regarding school-based surveys, such as the Protection of Pupil Rights Amendment.³

When policy permits and it is scientifically and ethically appropriate, researchers should consider seeking a waiver of parental consent from their institutional review board to increase the participation and candor of SGM youth.⁴ Requiring parental consent can be a barrier to research with SGM youth because those who have not come out to their parents or whose parents are not supportive of their SGM status may be apprehensive about requesting their parents’ permission [9]. This situation leads to self-selection bias and limits the generalizability of study results [10]. Reducing this barrier to participation can be worthwhile for minimal risk data collection efforts that protect the privacy and confidentiality of respondents.

Conclusion

Nationally representative U.S. data on the number and characteristics of SGM youth, particularly transgender and gender diverse youth, are limited. Many surveys measure binary sex (male/female) but not gender identity, in part because the two-step approach that is recommended for surveys of adult populations has not been fully tested and validated among adolescents [11]. Since 2015, national data on sexual identity have been available through the Centers for Disease Control and Prevention Youth Risk Behavior Survey (YRBS), but as of 2021 the national YRBS questionnaire does not include a measure of gender identity [12,13].⁵ Some state-level and municipality-level representative data on SGM youth are available through household-based or school-based surveys of adolescents, including some state and local versions of the YRBS [12–15]. However, these data

³ The Protection of Pupil Rights Amendment is a federal law that gives parents/guardians the right to inspect school-based surveys before they will be administered to minor students when the surveys are sponsored by the U.S. Department of Education or administered at schools that receive U.S. Department of Education funds. When surveys collect information on sexual behavior or attitudes and are required as part of the curriculum, the Protection of Pupil Rights Amendment mandates explicit parental/guardian consent. For surveys that are not required, parents/guardians must be given an opportunity to opt their children out of participation.

⁴ For research involving youth, institutional review boards adhere to the Federal Policy for the Protection of Human Subjects, or the Common Rule (45 CFR 46 Subpart A), which requires research institutions to protect the rights and welfare of their subjects. The Additional Protections for Children Involved as Subjects in Research (45 CFR 46 Subpart D) provides guidelines for requiring parental consent and child assent in research. Assent differs from consent in that assent is the agreement of a person who is too young to give legal consent. Researchers can seek a waiver of parental consent from their institutional review board if their research will involve only minimal risk to the subjects (45 CFR 46.116).

⁵ The sample for the national YRBS is distinct from, and not a combination of, the samples from each of the state and local YRBS surveys. Similarly, the national questionnaire is different from the standard state and local questionnaire, and states and local school districts can also select optional modules to include. In 2017 and 2019, the Centers for Disease Control and Prevention piloted an item on transgender identity in an optional module for the state and local YRBS that was used by 10 states and 9 large urban school districts in 2017 and by 15 states and 15 school districts in 2019. However, as of 2021, the national YRBS questionnaire included a measure of binary sex but none on gender identity.

represent only a portion of the youth population in the United States and are biased toward localities with more supportive SGM policy climates. Implementing the strategies described above in research on youth, including studies in domains beyond the health and behavioral sciences, will help researchers fill the data gaps and enhance scientific understanding of the health, development, and experiences of SGM youth.

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References

- [1] Institute of Medicine. *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a foundation for better understanding*. Washington, DC: The National Academies Press; 2011. <https://doi.org/10.17226/13128>.
- [2] Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance — United States, 2017. *MMWR Surveill Summ* 2018;67:1–114.
- [3] Saewyc EM, Bauer GR, Skay CL, et al. Measuring sexual orientation in adolescent health surveys: Evaluation of eight school-based surveys. *J Adolesc Health* 2004;35:345.e1–345.e15.
- [4] Austin SB, Conron KJ, Patel A, Freedner N. Making sense of sexual orientation measures: Findings from a cognitive processing study with adolescents on health survey questions. *J LGBT Health Res* 2007;3:55–65.
- [5] Temkin D, Belford J, McDaniel T, et al. Improving measurement of sexual orientation and gender identity among middle and high school students. *Child Trends* 2017;22:1–64.
- [6] Katz-Wise SL. Gender fluidity: What it means and why support matters. Harvard Health Blog. 2020. <https://www.health.harvard.edu/blog/gender-fluidity-what-it-means-and-why-support-matters-2020120321544>. Accessed July 27, 2022.
- [7] Best Practices for asking questions about sexual orientation on surveys. 2009. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Best-Practices-SO-Surveys-Nov-2009.pdf>. Accessed July 27, 2022.
- [8] Tourangeau R, Yan T. Sensitive questions in surveys. *Psychol Bull* 2007;133:859–83.
- [9] Macapagal K, Coventry R, Arbeit MR, et al. “I won’t out myself just to do a survey”: Sexual and gender minority adolescents’ perspectives on the risks and benefits of sex research. *Arch Sex Behav* 2016;46:1393–409.
- [10] Liu C, Cox RB, Washburn IJ, et al. The effects of requiring parental consent for research on adolescents’ risk behaviors: A meta-analysis. *J Adolesc Health* 2017;61:45–52.
- [11] Bates N, Chin M, Becker T, eds. *Measuring Sex, Gender Identity, and Sexual Orientation*. Washington, DC: National Academies Press; 2022. <https://doi.org/10.17226/26424>.
- [12] Redfield R, Bunnell R, Greenspan A, et al. Morbidity and Mortality Weekly Report Centers for Disease Control and Prevention MMWR Editorial and Production Staff (Serials) MMWR Editorial Board. *MMWR* 2020;69.
- [13] Johns MM, Lowry R, Andrzejewski J, et al. 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. *MMWR Morbidity Mortality Weekly Rep* 2019;68:67–71.
- [14] Data Reports and Analytics. [public.education.mn.gov](https://public.education.mn.gov/MDEAnalytics/DataTopic.jsp?TOPICID=242), <https://public.education.mn.gov/MDEAnalytics/DataTopic.jsp?TOPICID=242>. Accessed September 5, 2022.
- [15] Design & Methods | UCLA Center for Health Policy Research. healthpolicy.ucla.edu, <https://healthpolicy.ucla.edu/chis/design/Pages/questionnaires-English.aspx>. Accessed September 5, 2022.