Updates on Terminology of Sexual Orientation and Gender Identity Survey Measures

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I. Background and Purpose

In 2016, the Office of Management and Budget's (OMB) Federal Interagency Working Group (IWG) on Measuring Sexual Orientation and Gender Identity (SOGI) released three working papers to address the dearth of data on sexual and gender minority (SGM)[1] populations and the methodological considerations for collecting such data (IWG, 2016a–c).

One of these working papers, *Toward a Research Agenda for Measuring Sexual Orientation and Gender Identity in Federal Surveys*, addresses the knowledge gaps by proposing research priorities and strategies to make the greatest impact on improving SOGI measurement in federal surveys (IWG, 2016c). A primary research priority is the need for further research on the terminology and ordering of response options for SOGI questions. Since 2016, research and data collection efforts have continued to expand, laying the groundwork to address this research priority by reviewing the most recent key terms used in collecting data on SGM populations, as well as the current data collection methodologies. This paper is intended to inform researchers and interested parties beyond the U.S. federal statistical system.

This scoping paper examines recent sexual orientation and gender identity terminology. Sexual orientation is operationally defined as consisting of three constructs—in which "sexual identity" is the construct of interest for how people identify themselves. Gender identity is a separate construct as well —but the literature more broadly uses the terms "SOGI" and "sexual orientation and gender identity" when referring to measurement and question development. Beyond the typical response options (e.g., "straight," "lesbian/gay," "bisexual," or "male," "female," "transgender"), open-ended responses provided by respondents who identify as "something else" (i.e., another sexual orientation or gender identity) are explored in this paper. Item nonresponse and the use of "don't know" or "refused response" options are discussed for sexual and gender minorities who do not see themselves in the identities provided. Recent research examining question format and comprehension of questions and terminology is included. This paper concludes with a discussion of findings surrounding SGM terminology and areas for future research.

This paper highlights insights we identified from the literature reviewed about response option terminology and associated methodological implications. This paper does not reinvestigate research covered in prior SOGI IWG working papers, unless it is particularly relevant to our current study of SOGI terminology. Our intent is to contribute to the broader discussion of measuring SOGI in surveys while contributing possible future research avenues for documenting best practices for SOGI measurement.

II. Describing the Challenge

Providing response options that enable a respondent to identify the response appropriate for them or their household is a central tenet of survey design. We have anecdotal awareness that

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[1] This paper refers to the population of interest as sexual and gender minority (SGM) rather than the more commonly used reference of lesbian, gay, bisexual, and transgender (LGBT). We believe that SGM is more inclusive, because it includes persons not specifically referenced by the identities listed in LGBT.

SOGI terminology is fluid and continues to evolve over time. Past research has also highlighted challenges in selecting question and response terminology that resonates in both the general (i.e., straight cisgender) population and among those who identify as a sexual and/or gender minority.[2] To ensure that our surveys collect quality information about this topic, it is imperative that we carry out research to determine what terminology is most appropriate and effective.

This paper explores recent research about how sexual and gender minorities situate themselves into a response option. The focus of this paper is on those who might be a sexual and/or gender minority and do not see a response with which they identify. Future papers should consider how straight, cisgender people understand and respond to these questions.

During the past few years, the majority of the salient and relevant research on this topic has not focused on the general population. Instead, this research is focused on young people and SGM populations. Young people are identifying with new sexual orientation and gender identity terminology and therefore represent a large sample of interest in recent studies. Recent research includes a few emerging SOGI terminology studies focused on the general population, and the results of these surveys are included in this paper where appropriate.

To conduct the update and assessment of terminology and methodology for collecting SOGI data, we conducted a comprehensive search of the literature and conference proceedings. This search included key word searches (e.g., "sexual orientation," "sexual identity," "gender identity," "transgender," "survey," and "measure") in Google Scholar, PubMed, and the Centers for Disease Control and Prevention (CDC) Library Search.[3] We also reviewed proceedings papers of the American Association for Public Opinion Research (AAPOR), the American Statistical Association's Joint Statistical Meetings (JSM), the Population Association of America (PAA), and other conferences related to the topic of SOGI measurement. This paper reviews 59 references from 2015 to 2019.

III. Reviewing Key Insights

a. Sexual Orientation

Recent research on sexual orientation terminology focuses on three themes: discussion of sexual identity terminology independent of lesbian, gay, and bisexual (LGB) response options;

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[2] Cisgender is the term for a person who identifies with the sex they were assigned at birth. (Retrieved from https://lgbtqia.ucdavis.edu/educated/glossary.)

[3] Specific search terms included "Sexual and Gender Minorities"/ OR (Gender ADJ2 ident*) OR (gender ADJ2 orient*) OR (sexual ADJ2 identity) OR (sexual ADJ2 orientation) OR (gender ADJ2 minorit*) OR (gender ADJ2 varian*) OR (sex ADJ2 assign*) OR (sex ADJ2 reassign*) OR lgbt* OR trangender* OR transsex* OR (gender ADJ2 presentation*) OR (gender ADJ2 expression*) OR cisgender* OR cissexual* AND
Exp Data Collection/mt OR exp Data Collection/st OR (data collection OR health survey* OR surveillance OR questionnaire* OR interview* OR terminology OR lexicon OR population definition* OR self-identif* OR self-report*).ti,ab."

the rejection of sexual orientation labels; and the spectrum or fluidity of sexual orientation. This section examines insights drawn from the literature reviewed on sexual orientation terminology centered on these three themes.

Terms used in the most commonly fielded questions on sexual identity do not exhaustively describe respondents' identities.

The most commonly fielded questions on sexual identity in federal surveys use the terms "gay," "lesbian," "straight," and "bisexual" (IWG, 2016a). The sexual orientation question wording might vary, but the response options tend to be similar. For example, the National Health Interview Survey (NHIS) asks respondents (National Center for Health Statistics, 2019) the following question:

> *Do you think of yourself as gay/lesbian; straight, that is not gay/lesbian; bisexual; something else; or you don't know the answer?*
> *Gay/lesbian*
> *Straight, that is not gay/lesbian*
> *Bisexual*
> *Something else*
> *I don't know the answer*
> *Refused*
> *Don't know*

Alternatively, the sexual orientation question on the National Crime Victimization Survey (NCVS) is worded differently, but the response options are consistent with those in the NHIS (Bureau of Justice Statistics, 2018):

> *Which of the following best represents how you think of yourself?*
> *Gay/lesbian*
> *Straight, that is not gay/lesbian*
> *Bisexual*
> *Something else*
> *I don't know the answer*
> *Refused*

Although these questions might include the additional response option of "something else," which sometimes allows respondents to enter additional information, these terms do not describe respondents' identities exhaustively. This section focuses on sexual identities outside those used most frequently as survey response options. We have summarized qualitative research in which respondents suggested the inclusion of additional identities. When possible, we have provided quantitative estimates about the prevalence of these identities. It should be noted that the majority of this research was conducted with youth or young adults, who might be particularly likely to identify with sexual identities other than "gay," "lesbian," "straight," or "bisexual" (IWG, 2016a).

Qualitative research, particularly cognitive interviews with youth, has explored whether additional closed response options for sexual identity are warranted. For example, Temkin et al. (2017) probed 20 middle and high school students during cognitive interviews about how they would interpret the response option of "something else." More than half of the students correctly interpreted this to mean another identity not listed, although about one-quarter could not explain why someone might choose this option. Their pilot questionnaire administered to middle and high school students in Washington, D.C., used the response option "something else (e.g., asexual,[4] aromantic,[5] pansexual,[6] etc.)," and this option was selected by 2 percent of the 3,054 responding students who answered the question.

Another set of cognitive interviews, conducted in preparation for the third wave of the National Survey of Youth in Custody (NSYC-3) with 35 youth respondents ages 13 to 21 in both correctional facilities and the general population, also generated suggestions of additional sexual identities to add to the sexual orientation question (Steiger et al., 2017). Five participants would have selected the response option "something else" as the term that best described them (rather than "[lesbian or] gay; straight, that is, not [lesbian or] gay; bisexual; not sure"). Participants suggested additional identities that could be added as response options—in particular, pansexual, demisexual,[7] asexual, and aromantic—but noted that these fell under the broader category of "something else." For the full NSYC-3 administration, there were no plans to modify response options by adding additional categories or by adding specific examples to "something else."

The Preventing School Harassment Survey—administered to California middle and high school students in 2003, 2004, and 2005—provides additional insight into the identities of young respondents (Russell, Clarke & Clary, 2009). Students were given the response options of "gay/lesbian," "straight/heterosexual," "bisexual," "queer,"[8] "questioning," and "write-in." Both "queer" and "questioning" were added because of feedback received during cognitive testing, and "write-in" was suggested as a neutral replacement for "other." Overall, 2 percent

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[4] "[Asexual orientation is] generally characterized by not feeling sexual attraction or a desire for partnered sexuality. Asexuality is distinct from celibacy, which is the deliberate abstention from sexual activity. Some asexual people do have sex. There are many diverse ways of being asexual." (Retrieved from https://lgbtqia.ucdavis.edu/educated/glossary.)

[5] "[Aromantic orientation is] generally characterized by not feeling romantic attraction or a desire for romance. Aromantic people can be satisfied by friendship and other non-romantic relationships." (Retrieved from https://lgbtqia.ucdavis.edu/educated/glossary.)

[6] "[Pansexual is] used to describe people who have romantic, sexual or affectional desire for people of all genders and sexes." (Retrieved from https://lgbtqia.ucdavis.edu/educated/glossary.)

[7] "Demisexuality is a sexual orientation in which someone feels sexual attraction only to people with whom they have an emotional bond. Most demisexuals feel sexual attraction rarely compared to the general population, and some have little to no interest in sexual activity. Demisexuals are considered to be on the asexual spectrum, meaning they are closely aligned with asexuality." (Retrieved from https://lgbtqia.ucdavis.edu/educated/glossary.)

[8] "One definition of queer is abnormal or strange. Historically, queer has been used as an epithet/slur against people whose gender, gender expression and/or sexuality do not conform to dominant expectations. Some people have reclaimed the word queer and self-identify as such. For some, this reclamation is a celebration of not fitting into norms/being 'abnormal.'" (Retrieved from https://lgbtqia.ucdavis.edu/educated/glossary.)

of respondents selected "queer," (5 percent of the subset of respondents who selected an identity other than "straight/heterosexual") and 4 percent selected "questioning" (13 percent of the subset of respondents who selected an identity other than "straight/heterosexual"). Although 3 percent of respondents selected "write-in" (9 percent of the subset of respondents who selected an identity other than "straight/heterosexual), only a fraction of these responses included identities not already listed as response options. In particular, 14 of 69 respondents wrote in "pansexual" or described an identity consistent with pansexuality, such as "everything"; this group represents less than 1 percent of the responses (2 percent of the subset of respondents who selected an identity other than "straight/heterosexual").

Cognitive interviews with adults also have yielded suggestions of additional categories. Bulgar-Medina (2017) conducted cognitive interviews with a convenience sample of 27 adults who did not self-identify as straight. Given the response options "lesbian," "gay," "bisexual," "queer," and "no label," four participants selected "queer" as the term that best described them, and two participants selected "no label." The remainder identified themselves as "lesbian," "gay," or "bisexual." Additionally, when asked whether other categories might be missing, one-third requested the addition of "pansexual."

Meyer et al. (2019) conducted an experiment with approximately 9,700 adults age 18 or older in the United States about their sexual orientation, randomly assigning respondents to one of two question wordings. Half of the sample received the follow-up question, "What do you mean by something else?" if they responded "something else" to the sexual orientation question. The other half of the sample did not receive a follow-up question. Response options for the follow-up question included "queer," "pansexual," "asexual," "demisexual," "same-gender loving,"[9] and "none of the above." Fewer than 1 percent (i.e., 0.6 percent) of respondents identified as one of these sexual orientations. The sexual orientation question used in this experiment uses the same wording as the NHIS. Meyer at al. determined that most respondents (53 percent) who initially identified as "something else" subsequently identified as "none of the above." This research concluded that persons who identify as "something else" might include sexual minorities but might also include heterosexual people who do not find an appropriate label among the provided choices, as well as people who do not have or do not want to respond with a particular sexual identity.

Some sexual minority groups, especially teens, do not like using labels for their sexual orientation.

Another insight found in recent research on sexual orientation terminology is the rejection of labels, which can often go hand-in-hand with identifying as "something else" when persons are asked about sexual orientation. Eliason and Streed (2017) found that one in five persons who reported their sexual identity as "something else" subsequently responded that they "haven't

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[9] "Same Gender Loving is a term used by some African American people who love, date, have attraction to people of the same gender." (Retrieved from https://lgbtqia.ucdavis.edu/educated/glossary.)

figured out their sexuality," "don't use labels," or "are not straight but use another label." Other research similarly reported that persons identifying as "something else" responded that they were "not straight, but identify with another label such as queer, trisexual, omnisexual, or pansexual" (Eliason et al., 2016). Additionally, teens were also likely to report that they did not like labels related to their sexual orientation when identifying as "something else" (Russell, Clarke & Clary, 2009).

Sexual orientation is a spectrum or continuum that can change over time, but the terminology typically used does not treat it as such.

Sexual orientation terminology fails to treat sexual orientation as a spectrum or continuum that can change over time. Kinsey, Pomeroy, and Martin (1948), who developed the Kinsey Heterosexual-Homosexual Scale (KHHS), conducted seminal research on sexual orientation. The KHHS places sexual identity on a seven-point scale ranging from exclusively heterosexual to exclusively homosexual (Kinsey et al., 1948). The KHHS was revolutionary at the time of its development, but it was criticized because it was a static measure and did not account for potential variations in sexual orientation over time (Klein, Sepekoff, & Wolf, 1985). Klein et al. recognized the importance of viewing sexual orientation as a fluid process that can change over time and developed a new measure, the Klein Sexual Orientation Grid (KSOG) (Klein et al., 1985). The KSOG measures sexual orientation using a seven-point scale for three different life points: past, present (preceding year), and an individual's ideal choice. Klein et al. concluded that sexual orientation in adults changed over time; specifically, adults in their study identified as more homosexually oriented over time (Klein et al., 1985).

Furthermore, research also suggests that sexual orientation is fluid and tends to change during one's life course. Women who identified as LGB earlier in their life, or experienced same-sex attractions and/or behaviors, reported not identifying as LGB later in life (Diamond, 2003). Instead, the women were more ambivalent about sexual orientation labels later in life, expressing that the labels were limiting or that they saw their sexual orientation as fluid (Diamond, 2003).

In addition to cisgender adults, teens and transgender adults have similarly viewed their sexual orientation as fluid. Teens were likely to respond that their sexual orientation was fluid or that they were experimenting, saying they were "hetero-flexible," "bisexually gay," or "bi-curious" (Russell, Clarke & Clary, 2009). Transgender adults also reported fluidity throughout the life course and saw these shifts in sexuality as a product of "multidimensional measurement of sexual orientation" (Galupo, Henise, & Mercer, 2016).

Sexual identities do not map perfectly to "gay," "lesbian," "straight," and "bisexual," which is evidenced by the fact that teens were known to select multiple sexual orientation categories (i.e., a more complex or encompassing identity) when given the option (Russell, Clarke & Clary, 2009). Individuals might identify with other descriptors (e.g., "queer" or "asexual") or reject labeling themselves entirely. For respondents who choose one of these terms, a single category might not capture their identities adequately. Self-described sexual identities might vary by

population of interest. For example, young respondents use other terminology to describe themselves or decline to select a label. Static categories might be limiting for both older adults, by omitting lifetime changes in identity, as well as for young adults, who view their identity as fluid or changing.

b. Gender Identity

Research shows that current survey measures and terminology for gender identity do not work well for all transgender individuals, resulting in variations in reporting gender identity. Current survey measures include the two-step question approach to asking gender identity: first asking respondents their sex at birth and following up by asking their current gender identity. Current terminology often includes terms such as male, female, and transgender. Question format and terminology are evolving, but they are not understood in the same way across the entire transgender community. Moreover, self-identification can change over time and is affected by such factors as culture and language. This section of the paper focuses on insights from the literature reviewed around these themes.

Some gender minority groups do not see transgender as an identity distinct from male or female; others prefer genderqueer to female or male.

The first insights for gender identity are related to variations in question format, response options, and reporting. Ellis et al. (2017) and Holzberg et al. (2017) conducted research to assess the feasibility of asking about sexual orientation and gender identity in the Current Population Survey (CPS). Cognitive interviews with lesbian, gay, bisexual and transgender (LGBT) and non-LGBT respondents, along with focus groups with members of the transgender population, were conducted. The question used in the Ellis et al. (2017) and Holzberg et al. (2017) cognitive testing work was a two-step gender identity question with response options "male," "female," and "transgender" for current gender identity.

Cognitive interview findings showed that some respondents had difficulty selecting from the available response options because they "either did not see themselves in the list of response categories offered (e.g., because they were gender-fluid), and/or they wanted to choose more than one category." Some respondents did not like the limitation of choosing only one category because "transgender" is excluded from "male" and "female." Others noted that male and female were biological concepts of sex and not exclusive from gender identities (Ellis et al., 2017).

In general, respondents commented on the lack of response options and the inability to mark all that apply. Respondents suggested adding "gender non-binary," "trans-man," "trans-woman," and "something else." They also said that transgender respondents might identify as both male and transgender or female and transgender; these response options are not mutually exclusive (Ellis et al., 2017).

Furthermore, findings from the focus groups with members of the transgender population found that many would use "'transgender' as an umbrella term to describe members of a diverse community" even if it was not personally their first choice for self-identification (Holzberg et al., 2017). The focus group respondents self-identified in many ways, including "man, woman, transgender, queer, gender-fluid, non-binary, and genderqueer. Some indicated that their self-identification had changed over time or that it might change in the future, a process one respondent described as 'fine tuning their own self-description'" (Holzberg et al., 2017).

Also important is the finding that "some respondents explicitly said that they thought it would be difficult for researchers to create questions with adequate response options, given the diversity of terms used and debate within the transgender community itself about terminology." Several question formats were tested in the focus groups; although respondents saw shortcomings in all versions, the question with the largest number of current gender identity response options was seen as the most promising (Holzberg et al., 2017).[10] A few respondents were uncomfortable selecting a "transgender" response option because they do not use that word to describe themselves. Other respondents were unsure, unwilling, or uncomfortable identifying as transgender instead of male or female. The inability to mark all that apply was also generally noted by respondents (Holzberg et al., 2017).

The Report of the National Transgender Discrimination Survey (NTDS) (2008–2009) intentionally provided survey results separately for transgender and gender non-conforming respondents by asking respondents to identify with a variety of response options. According to Grant et al. (2011), this was done to better understand the breadth of this community's experiences. The NTDS was the first study to comprehensively measure experiences and life outcomes of transgender people in the United States.

The survey started by stating the following:

> *Transgender/gender non-conforming describes people whose gender identity or expression is different, at least part of the time, from the sex assigned to them at birth.*
>
> *1. Do you consider yourself to be transgender/gender non-conforming in any way?*
> *Yes*
> *No, if no, do NOT continue.*
>
> *2. What sex were you assigned at birth, on your original birth certificate?*
> *Male*
> *Female*

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[10] Question 2D. How do you describe yourself? (Check one). Options include: "male," "female," "trans male/trans man," "trans female/trans woman," "genderqueer/gender non-conforming/non-binary," "different identity (please state): _____."

3. What is your primary gender identity today?[11]
Male/Man
Female/Woman
Part time as one gender, part time as another
A gender not listed here, please specify _____.

4. For each term listed, please select to what degree it applies to you, not at all, somewhat, or strongly.
Transgender
Transsexual
FTM (female to male)
MTF (male to female)
Intersex
Gender non-conforming or gender variant
Genderqueer
Androgynous
Feminine male
Masculine female or butch
A.G. or Aggressive
Third gender
Cross dresser
Drag performer (King/Queen)
Two-spirit
Other, please specify _____

The authors constructed this list of commonly understood choices at the time of publication; more than 500 respondents, however, wrote in a range of additional gender identities (Grant et al., 2011). Using these four qualifying questions to categorize respondents, the authors conveyed that it was labor intensive to categorize the 6,450 survey responses into the two tabulation categories for presentation; they noted, however, that "asking more simplified identity questions would create more simplified categories" (Grant et al., 2011).[12]

The 2015 U.S. Transgender Survey (USTS) is the follow up to the 2008–2009 NTDS and is an opt-in internet survey of 50,000 people. Survey results show that 88 percent of respondents thought of themselves as transgender, and 86 percent expressed that they were "very comfortable," "somewhat comfortable," or "neutral" when asked how comfortable they were being described as "transgender." Eighty-two percent of non-binary respondents were comfortable being described as "transgender." The authors thus concluded that the term

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[11] As with many two-step gender identity questions, persons are considered transgender if they provide a sex/gender for question 2 and a different sex/gender for question 3.
[12] See Boxes of Our Own Creation: A Trans Data Collection Wo/Manifesto, J. Harrison-Quintana, J. Grant and I. Rivera. 2015 *Transgender Studies Quarterly* V2. N1 for a nice description of how the qualifying questions were designed so "…people would see themselves and their genders in the earliest moments of entering the study process." p. 169.

"transgender" is broadly used and accepted and represents the diverse identities of those who participated in the survey (James et al., 2016).

Unlike in the 2008–2009 survey, the 27,715 respondents were asked to choose only one term that best described their current gender identity out of six possible terms: woman, man, trans woman (MTF), trans man (FTM), non-binary/genderqueer, and crossdresser. These responses were then grouped into four gender identity categories: transgender woman, transgender man, non-binary people and crossdressers. Sixty-two percent of respondents were included in the transgender man and woman categories. Crossdresser best described the gender identity of 3 percent of respondents. Thirty-five percent of respondents indicated they identified as "non-binary" or "genderqueer" (James et al., 2016).[13]

Several recent smaller data collections have resulted in additional useful information about gender identity question terminology and response options. Bauer et al. (2017) conducted a mixed-methods evaluation of a two-step question developed in the United States and a multidimensional measure developed in Canada. Data from 588 Canadian respondents were collected through an online questionnaire, and 79 respondents were selected for an individual interview conducted via telephone or Skype. Results showed strong agreement between the two measures on the assessment of gender identity. Twenty participants reported a non-binary gender identity on the multidimensional measure, and 29 did on the two-step measure. Write-ins that indicated non-binary identities included "agender," "gender queer," "female questioning," and "non-binary." In many of the personal interviews, the issue of whether genderqueer persons are included within a broad definition of "trans"[14] came up. Genderqueer respondents conveyed a variety of views on whether they were trans, recognizing that terminology inclusivity or exclusivity is a point of community disagreement.

Some Indigenous participants identified as Two-Spirit, commonly known as an umbrella term used to communicate a broad range of traditional Indigenous gender-diverse identities and social roles. One respondent offered, "I think that whereas some people, they misunderstand that Two-Spiritedness can be—is considered to be something under the transgender spectrum, when really it's something that's more of a spectrum in itself that is inclusive of sexuality and gender identity...but very exclusive to First Nations and Indigenous people" (Bauer et al., 2017).

The authors recommended including Two-Spirit as a multidimensional sex/gender measure that should be further studied:

> Q1. What sex were you assigned at birth, meaning on your original birth certificate?
> Male
> Female

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[13] See the full report downloaded on 2/26/19 https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf.

[14] "Trans" is a shortening of "transgender" and is an umbrella term often used instead of, or in combination with, "man" or "woman" (e.g., "transman," "transwoman," "trans man," "trans woman.").

Q2. Which best describes your current gender identity?
Male
Female
Indigenous or other cultural gender minority identity (e.g., two-spirit)
Something else (e.g., gender fluid, non-binary)

The third question may be asked only of those who indicated a current gender identity different than their birth-assigned sex. If so, it can be forward filled to code cisgender participants as living in their identified (and birth-assigned) sex/gender.

Q3. What gender do you currently live as in your day-to-day life?
Male
Female
Sometimes male, sometimes female
Something other than male or female

The authors did not find in question 2 that it was necessary to provide response options that allow respondents to identify as man versus trans man: "While some trans interview participants were clear they were men or women who do not personally identify as trans, none stated that they identify as, for example, a trans man but not a man." The authors also added an Indigenous or cultural gender identity response option to recognize the traditional gender identities that exist in many Indigenous cultures within Canada and the world. The authors included "Two-Spirit" because it is understood as an umbrella term (Bauer et al., 2017).

Finally, one response option for other identities (e.g., non-binary, genderqueer, agender, or gender fluid) was included for participants who were unable to differentiate between the options of "both male and female" and "neither male nor female." No individual indicated that the wording was particularly important to them. The authors also avoided including the broad term "gender non-conforming" to reduce the likelihood of misclassifying queer cisgender respondents as trans.

SGM respondents self-identify using a variety, and in some cases multiple, terms that might change over time.

Another key insight is related to self-identification of gender identity. When asked about their current gender identity, transgender respondents made comments that they were still unsure or "working [things] out in their head." Others referred to a self-identification journey, reflecting the fact that gender identity varies over time.

Returning to the research by Holzberg et al. (2017), when asked about their process of self-identification, respondents used a variety of terms to identify themselves: transgender, male and/or man; transmasculine; masculine; woman; trans woman; woman and trans woman;

agender fem; fem androgynous; aporagender;[15] queer; gender-fluid; genderqueer; gender-fluid/genderqueer; non-binary; gender fluid, genderqueer, nonbinary trans woman; non-binary genderqueer trans guy; and bi-bi kid (bisexual, bigendered). Later in the focus groups, respondents were asked what response options should be included in two-step gender identity questions. Respondents mentioned intersex, agender, genderqueer, nongendered, bigender, gender-fluid, non-binary, other, neither (instead of transgender), prefer not to answer, and none of the above. Some respondents also thought an open-ended question should be used instead, although they acknowledged that cisgender people could write in false answers and that open-ended responses would be harder for researchers to analyze. The ways respondents self-identified were more numerous and diverse than the response options the respondents were offered.

In another study, Kuper et al. (2014) worked to understand the range of identity possibilities within the larger sample of transgender individuals. Noting that most samples are drawn from clinical samples of transgender individuals, the authors fielded a web-based survey of 292 adults who self-identified as within the transgender spectrum or gender variant in some way. Participants described their current and past gender identities as female, male, genderqueer, transgender, transsexual, crossdresser, two spirit, bigender, intergender, drag king, androgynous, drag queen, and not listed.[16]

In the same study, genderqueer was the most often reported current gender identity after female and male. Forty-five percent identified as neither male nor female. Almost 13 percent wrote in a gender identity that was not listed. Seventy-two percent of participants identified with more than one current gender identity, and 41 percent identified with more than two. Participants identified an average of 1.4 past identities that were unique from their current identity or identities, evidence that identity shifts over time.

Sex labels such as male and female are preferred over gender labels such as man and woman.

Another key insight in gender identity terminology is focused on sex versus gender labels. Research by Martinez et al. (2017) explored the use of male/female versus man/woman to describe one's gender identity. Cognitive pretesting of the NCVS Supplemental Victimization Survey tested a two-part current gender identity question to determine the respondents' preference for sex labels (male/female) versus gender labels (man/woman). This pretesting was targeted toward the general population in the context of a crime survey. Respondents were asked the following question: "Do you currently describe yourself as a man, woman, or transgender person?" A scripted probe was then included, asking gender identity the original way: "Do you currently describe yourself as male, female, or transgender?" Findings showed that most respondents preferred to use sex labels over gender labels. However, no respondent

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[15] Aporagender is defined as a "nonbinary gender identity and umbrella term for 'a gender separate from male, female, and anything in between (unlike Androgyne) while still having a very strong and specific gendered feeling' (that is, not an absence of gender or agender)" (https://gender.wikia.org/wiki/Aporagender).
[16] Other gender identities that received four or fewer mentions were not listed.

identified as transgender or mentioned transitioning in the sample. Furthermore, among respondents there was disagreement on what would work for all ages, such as younger respondents not considering themselves to be men and women. This idea was also supported by the responses that teen respondents gave.

Similar to the NCVS research, as part of cognitive testing, researchers in the United Kingdom asked respondents how the terms "man" and "woman" were understood in the question that included response options "trans man," "trans woman," "transsexual person," "gender variant person," "cross dressing person," "transvestite person," "intersex person," "in another way _____," and "I prefer not to say." Findings showed that "man" and "woman" were problematic terms. Respondents conveyed that these were sexualized roles or that they felt uncomfortable selecting these if they were in the process of changing from their birth sex to the gender with which they identify, because they did not feel they could yet justify choosing "man" or "woman" as it felt like they would be "lying" (Balarajan, 2011).

Gender identity terminology seems to vary by age, sex assigned at birth, and educational attainment.

After reviewing recent research on gender identity, demographic characteristics are another key insight that emerged. The results from the 2015 U.S. Transgender Survey (USTS), a non-probability opt-in internet survey of 50,000 respondents, included a snapshot of respondents by gender identity category, including trans man, trans woman, non-binary and crossdressers (James et al., 2016). The age profile showed that nearly half (47 percent) of transgender men and women were ages 25–44 years, compared to 35 percent of non-binary respondents and 29 percent of crossdressers. Non-binary respondents were more likely to be younger (61 percent) compared to transgender men (43 percent), transgender women (24 percent) and crossdressers (8 percent). Twenty percent of crossdressers were 65 years or older, compared to 5 percent of transgender women, 1 percent of non-binary respondents, and less than 1 percent of transgender men.

Finally, findings on educational attainment generally showed that survey respondents had higher education attainment than the total U.S. population, although this is common among internet-based surveys. Looking at the two populations by age, survey respondents showed higher percentages with some college or a bachelor's degree or higher, compared to the total population (65 percent compared to 46 percent and 17 percent compared to 10 percent).

Survey results also point to variations. Bauer et al. (2017) concluded that demographic characteristics used in regression models could be associated with current gender identity. Compared to those ages 18–21, individuals in the oldest age group (ages 35+) were more likely to identify as a crossdresser. Those in the second oldest group (ages 26–35) were more likely to identify as bigender. Those in the oldest group were less likely to identify as genderqueer. Moreover, people assigned female at birth were more likely than those assigned male at birth to retain their birth sex as their current gender identity. Controlling for age, birth sex females were also more likely to identify as genderqueer and less likely to identify as transsexual. The

authors concluded that these results highlight the diversity of experience within the transgender umbrella and, therefore, the need for sensitivity and thoughtfulness related to language.

Survey questions might benefit from consideration of the variation in how transgender people identify over time and by demographic group.

The literature outlined above highlights the fact that transgender individuals are extremely varied in the ways they identify their current gender identity. Some do not want to identify with a term that tries to stabilize gender identity, and others do not identify as transgender because they do not see themselves as a man or woman. Using a two-step question approach, asking first about sex assigned at birth and then about current gender identity, might help to avoid an undercount of transgender persons because they do not identify as transgender. Instead, researchers can classify respondents based on their sex at birth and current gender identity. Others might not identify with the umbrella term "transgender" but instead with such options as "gender non-conforming," "gender queer," "non-binary," "fluid," etc. Another common theme is that transgender respondents might still be unsure or "working [things] out in their head" (Holzberg et al., 2017). Others referred to a self-identification journey, reflecting the fact that gender identity varies over time. Findings from the USTS and smaller surveys indicate that respondents' identities vary in terms of age and other characteristics, suggesting that—in addition to question wording, format, terminology, and response options—other factors should be taken into consideration as new research methods are developed.

c. Open-Ended Questions

"Other" is preferred to "something else," but is analytically useful only if a write-in option is available.

Some surveys have included open-ended options for their sexual orientation or gender identity items, where respondents write in their response after indicating they identify as "something else" or "other." This provides an option for those who might not identify with the listed categories, who prefer not to be categorized, or who do not understand any of the terms (Joloza et al., 2010). They might partly represent a subset of the community that views sexuality and gender as fluid and dynamic concepts, not to be defined by a single label, or they might prefer not to identify with any of the options presented to them (Meyer et al., 2019).

In a tobacco use survey, cognitive testing of a combined sexual orientation/gender identity question that did not include an open-ended option proved problematic for a few respondents, because their preferred term was not one of the options. A second round of cognitive testing allowed an open-ended response ("You can name a different category if that fits you better"),

which allowed all respondents to classify themselves in the category with which they identified (Scout & Senseman, 2011).

The wording of the open-ended response is important. In a cognitive research study with older adults, the use of the phrasing "something else" was received with confusion and in some cases as judgment. Additionally, the question was not truly open-ended, because there was no opportunity to write in what "something else" meant. The study recommended using "other-please specify" instead of "something else" (Redford & van Wagenen, 2012). Bates et al. (2019) also found the use of "something else" to be a challenge when analyzing data. Their research found that of the 1.5 percent of respondents who marked "something else," only 16 percent of the write-in responses were sexual minority labels like "queer" or "pansexual." Most write-in responses were terms like "Christian male," "normal," and "not your business" (Bates, Trejo, & Vines, 2019).

Interpretation of sexual identity responses of "other" or "something else" can be challenging if separate gender identity question is in the survey. The Redford & van Wagenen study (2012) did not include a gender identity question, which might explain why some respondents thought "something else" was an opportunity to identify as "transgender." Similarly, in a United Kingdom health survey, researchers were unable to discern whether respondents chose "other" as a gender identity or as a "political rejection of sexual orientation categories" (Semlyen, 2017).

Despite these challenges, an open-ended response option should not be summarily discarded. Further study of the various write-in responses to "something else" is warranted to better understand the diversity of the terminology SGM people use to identify themselves in the future, as terminology (i.e., the actual words that are used) changes and evolves. Research also is needed to address whether such an approach results in improved reporting relative to any increased costs (i.e., time to analyze responses) and when it might be most effective.

d. Don't Know or Refused to Answer Questions

Item nonresponse is relatively low for SOGI questions but should be assessed carefully, because even low rates of nonresponse could be problematic when attempting to measure a small population.

A number of factors can influence item nonresponse (i.e., answering "don't know" or refusing to answer) on surveys, including mode of administration (Robertson et al., 2017), item sensitivity and anonymity of the survey (de Leeuw et al., 2015; Joinson et al., 2008), or whether the survey is voluntary and respondents are aware that they can skip items (Betts, 2016). Including such options as "don't know" or "prefer not to answer" or having interviewers instruct respondents that they can choose not to answer a question can increase item nonresponse. It is important to assess levels of item nonresponse, because it can seriously bias prevalence estimates and affect data quality, particularly for small and hard-to-measure populations, such as sexual and gender minorities.

In terms of SOGI questions, several factors might potentially contribute to item nonresponse, such as social desirability or confidentiality concerns (Tourangeau & Yan, 2007), development of (or fluidity in) self-identity leading to uncertainty in how to answer (Saewyc et al., 2004; SMART Report, 2009), or difficulty understanding the question (Shoemaker at al., 2002). However, item nonresponse tends to be relatively low for SOGI questions compared to other items, particularly other sensitive questions about income, disability, or health (Holzberg et al., 2019; Dahlhamer et al., 2014; Pierannunzi et al., 2017; Ortman et al., 2017). For example, Robertson et al. (2017) examined responses to questions about sexual identity across a number of national surveys and found that the percentage of "don't know/not sure" responses ranged from 0.3 percent to 1.3 percent, and refusals ranged from 0.2 percent to 4.4 percent, consistent with other findings (IWG, 2016a). Because item nonresponse to SOGI items generally has been low, this has been interpreted to mean that respondents easily understood SOGI questions and that the terminology included in the questions was clear to them. However, some research has suggested that item nonresponse might vary by question terminology or by respondent subgroup. Furthermore, a nonresponse rate of 4 percent could be problematic when attempting to measure a small population.

Improvements in the clarity of SOGI questions have been associated with reduced item nonresponse.

The terminology used in the response options of SOGI items might play a role in item nonresponse. The NHIS has used a sexual identity question that included the response categories of "lesbian/gay," "straight, that is not gay or lesbian" "bisexual," "something else," or "don't know." However, other surveys do not include a "don't know" option or combine "don't know" and "refuse to answer" options together, which can lead to different levels of item nonresponse.

Similarly, the National Survey of Family Growth (NSFG) began asking respondents about their sexual orientation in 2002. The NSFG is a nationally representative survey collecting information on family life, marriage and divorce, pregnancy, and other topics related to family and reproductive health. Recently, the items about sexual orientation were revised to include categories that were more descriptive and easily understood by respondents (closer to the terminology used in the NHIS). These changes reduced the level of item nonresponse over time (Ridolfo et al., 2012). Furthermore, when the terminologies used in the question categories are conflated with one another (e.g., sexual identity, attraction, and behavioral concepts), item nonresponse might increase (Saewyc et al., 2004). This effect might result from confusion with the response category terms, because those with clear, concise categories had less item nonresponse overall.

In addition, the current terminology included in such surveys as the NHIS might not encompass all possible response categories. This effect might inflate the level of item nonresponse (Eliason et al., 2017). If other categories—such as "queer," "pansexual," "asexual," or "fluid"—were included, the item nonresponse might be reduced. Eliason (2014) provides an overview of the

terminology used in sexual and gender identity surveys. She argues that although particular labels are associated with a community, the labels do not always map onto a particular identity, and no interview or survey could list all of the possible terms. Furthermore, some respondents might not identify with any label or choice. Gender identity usually is asked about in a binary way on surveys; researchers might consider asking about gender identity as a spectrum to reduce item nonresponse (Tate, Ledbetter, and Youseff, 2013).

Another reason for item nonresponse to SOGI questions might be that some people do not want to select a particular label due to the connotations that come with that label. For instance, associating oneself with a particular label might create fear of negative repercussions (e.g., rejection by family or peers, loss of job) (Temkin et al., 2017). Furthermore, researchers sometimes fear that respondents will be offended by these questions and refuse to answer. Although some respondents are reluctant to answer SOGI questions, most researchers have found that SOGI questions were not any more sensitive than other types of demographic questions (e.g., income). Although little empirical evidence exists for either of these explanations, Jans et al. (2010) found that item nonresponse to the California Health Interview Survey (CHIS) decreased over time between 2003 and 2011, a time period during which public support for sexual minorities and legislative protections, such as same-sex marriage, also increased in the United States. These findings suggest that in some regions of the United States, social stigma might not be as much of a concern moving forward.

Different population subgroups might have more difficulty understanding and responding to SOGI questions.

Past research has shown that using clear, well-understood categories in SOGI questions can reduce item nonresponse rates substantially (6.2 percent to 1.6 percent; Kim & Fredriksen-Goldsen, 2013). However, this effect might not hold for all subgroups; for instance, Hispanic respondents have an item nonresponse rate to a question on sexual orientation of 9 percent. Many surveys have not analyzed response by race and ethnicity, but it is thought that different groups might have more difficulty identifying with the categories provided on the surveys. Findings from research assessing the Behavior Risk Factor Surveillance System (BRFSS) responses over time showed that minorities (e.g., African Americans, Asian Americans, and Hispanic respondents) were more likely to respond "not sure or don't know," and Asian Americans and Hispanics were also more likely to refuse to answer. It is unclear why this occurred. The finding might reflect a language issue, unfamiliarity with the terms, or other cultural differences in these types of terms and definitions of sexuality. Similarly, using data from the CHIS, Jans et al. (2010) found higher sexual orientation item nonresponse for Asian respondents, regardless of their English proficiency, although nonresponse decreased when respondents were interviewed in a non-English language. Higher item nonresponse also was found for Spanish-language interviews. More broadly, race, ethnicity, English proficiency, percentage of life lived in the United States, poverty, education, and gender all were significantly associated with sexual orientation nonresponse.

Fredriksen et al. (2015) aggregated data from 2003 to 2010 from the BRFSS in Washington State, which included measures of sexual orientation. They found that adults ages 65 and older had item nonresponse rates about sexual orientation similar to those of younger adults, where item nonresponse was 1.6 percent and "don't know/not sure" responses were 1.2 percent for adults ages 65 and older. This research challenged previous assumptions that older adults would have higher rates of item nonresponse due to not understanding or feeling uncomfortable with the questions. The rate of item nonresponse lessened over time as the terminology included on the survey improved to be clearer; this pattern was maintained even after adjusting for other demographic variables, such as gender, income, education, and race/ethnicity. In terms of younger respondents, some researchers have found that such groups as adolescents might have more fluidity in their sexual identity. In particular, females might change their responses to SOGI questions over time at higher rates; these changes can move from one response category to another or go from being "unsure" to identifying with a different category (Ott et al., 2011). Among students, an evaluation of eight school surveys found that boys, younger students, those who had been held back a grade, those with a learning disability, and students with limited English proficiency had higher item nonresponse on questions related to sexual orientation (Saewyc et al., 2004). On the other hand, Temkin et al. (2017) found no variation by race or ethnicity for students.

Ruben et al. (2017) showed that veterans had similarly low rates of responding "don't know" or refusing to answer SOGI questions as non-veterans. Despite veterans' sometimes being required to conceal their identity because of various policies about military participation—and medical professionals' feeling hesitant to ask such questions of veterans—they were just as willing to answer these items as non-veterans.

Nonresponse on sexual identity items has also been shown to vary by education level. Respondents with less education (i.e., less than a high school diploma or no college education) had higher item nonresponse to sexual identity questions than those with at least some college education (Dahlhamer et al., 2014; Gruskin et al., 2001). This effect might result in part from satisficing behaviors (i.e., in which respondents exert minimal cognitive effort when answering questions), as education has been linked to question shortcutting. Some evidence also exists that straightlining, (i.e., another question shortcutting behavior in which respondents select the same answers throughout a survey), might play a role in SOGI nonresponse (Saewyc et al., 2004). Student respondents who said they "don't know" to other questions in the survey were more likely to say they "don't know" to SOGI questions; the same pattern held for respondents who skipped questions entirely throughout the survey.

e. Cultural/Language Implications for Question Format and Comprehension

Spanish speakers and persons from Latin American countries have more difficulty with the distinction between sexual identity and gender identity.

There is a recognition in the literature that the format of SOGI questions and response options, as well as comprehension of the constructs by non-English speaking respondents, is important to review and confirm.

As part of a study on sexual identity and behavior among men who have sex with men, survey participants were asked first about their male sex partners and then about their female sex partners (Pathela et al., 2006). This ordering of questions, (i.e., about same sex and then opposite sex partners), differs from the methodology in other large surveys, such as the National Health and Nutrition Examination Survey (NHANES). By including "vaginal intercourse" in the definition of sex, asking about same-sex partners (in this case male) might have contributed to survey participants' not understanding the question and resulted in a misclassification of heterosexual men as homosexual. The authors recommended additional research on the most accurate and reliable approach to ascertaining the sex of partners.

Reisner et al. (2014) conducted an online opt-in anonymous survey of more than 36,000 individuals who were members of a sexual networking website targeting men who have sex with men in Latin America/the Caribbean, Portugal, and Spain. The purpose of the survey was to test a two-step method to measure gender identity (i.e., sex assigned at birth and current gender identity). Survey participants selected from one of six response categories for their current gender identity: "male," "female," "male-to-female," "female-to-male," "other (specify)," and "prefer not to answer." The majority of write-in responses for "other (specify)" indicated that survey participants interpreted gender identity to mean sexual orientation identity, because their write-in responses were most commonly "gay" (59.5 percent) or "bisexual" (28.2 percent). Often respondents who do not understand the concept of gender identity will interpret it as sexual orientation (Michaels et al., 2017). This lack of clarity on the gender identity item could result from the construct of gender being closely linked to that of sexual orientation in the Latin American context. The authors recommended that future studies include a prompt to define gender identity as separate from sexual orientation. They also recommended additional study to validate the survey items used to measure transgender identity. Furthermore, cognitive testing should occur in different languages and geographic contexts.

Michaels et al. (2017) conducted cognitive interviews on sexual and gender identity questions with non-LGBT and LGBT older English and Spanish speakers. The interviews revealed no issues with respondents' answering the two-step gender identity question (i.e., sex assigned at birth and current gender identity). Most English speakers had no trouble with the sexual identity question, but 58 percent of the non-LGBT Spanish speakers did not identify as heterosexual when presented with the response option: "heterosexual, that is, not gay (or lesbian).'' To address the non-response error with the Spanish version of the sexual identity question, an alternative response option was tested: "not gay (or lesbian), that is, heterosexual." This follow-up testing found that only 10 percent of non-LGBT Spanish speakers did not identify as heterosexual. The authors recommended that this change to the response option be used.

IV. Future Directions

Terminology used to collect SOGI data has continued to evolve since the 2011 Institute of Medicine (IOM) report, a seminal piece of research published by National Academies Press that focused on the health of SGM persons (IOM, 2011). When the IOM report came out, most of the research focused on the "LGBT" population. Nearly a decade later, the term "sexual and gender minority" has become the more common vocabulary, especially among researchers. A major challenge in identifying, counting, and measuring SGM populations is the diverse terminology people use to describe themselves. Moreover, the rate of terminology evolution might be outpacing the diversity of identity categories in survey instruments.

After reviewing the available research and literature, we identified four major findings around SGM terminology. First, not everyone fits neatly into the categories federal surveys tend to use. Continued testing of alternatives in the field could help ameliorate this issue. Although different categories of responses are grouped together for the purposes of analysis, the underlying reason for those responses might be nuanced and could provide additional insight into respondent identities. Second, language, culture, and other demographic characteristics remain important influencers of the type of terminology used—or the understanding of terminology available to be used—for identifying a person's sexual orientation and gender identity. Third, it will remain important to monitor the performance of SOGI questions on federal surveys and other key national surveys. Given the swift pace and evolution of sexual and gender identity terminology, it is unlikely that the current terminology will remain relevant. Last, the perennial conclusion of SGM research is that we need more research and data collection, because there is still a relative dearth of information about these populations, and a large amount of available data are qualitative.

The growing number of labels emerging to describe the constructs of both sexual orientation and gender identity presents a challenge for survey methodologists. On the one hand, survey methodologists strive to be exhaustive when presenting categories, such that all respondents see themselves reflected among the choices. On the other hand, many of the new labels are relevant and familiar to only a micro-minority of the population. Thus, adding them to the more traditional categories runs the risk of confusing most the population in nationally representative surveys. Practical considerations also require methodologists to develop a finite set of response options.

One suggestion based on our review is to continue researching the utility of keeping the "something else" response category, exploring "write-in" options, and understanding response patterns. The ever-expanding diversity of terminology people use to identify their sexual orientations and gender identities suggests that terminology needs further investigation in particular areas (e.g., with younger and older people, specific geographic regions, and translation of potentially disparate terms into languages other than English). One significant benefit of testing "write-in" response options would be tracking terminology prevalence and evolution over time and across different demographic variables (e.g., region, race or ethnicity, country of origin, language, or income level). Continued research efforts are needed to

understand how often the new and evolving terminology is selected for both sexual orientation and gender identity. Although item nonresponse is low for sexual orientation and gender identity questions compared to other demographic questions like household income, more exploration is needed into the reasoning behind both choosing "don't know" and not answering, especially given the size of the SGM population.

Additional qualitative research that explores more nuanced responses through write-in or follow-up could be illuminating. The reasons for answering "don't know" or refusing to answer are not well understood. We noted that the choice of response options affects researchers' ability to disentangle why a respondent does not provide an answer to the question. In some situations, it might be important to provide more nuanced response options. For example, including "I'm not sure yet" and "something else" when asking youth about their sexual identity helps to distinguish those who are still developing their identity from those who identify as some other type of sexual identity (Temkin et al., 2017). Adding a write-in box after selection of "something else" or "don't know" could enhance insights into terminology choice and answer selection. We suggest that research be performed to evaluate "don't know" and refusal rates over time, especially if question wording changes.

Quantitative research to understand the general response patterns of respondents who tend to skip or provide non-substantive responses to surveys also could contribute to reducing the rate of item nonresponse to SOGI questions and could be supported with qualitative follow-up to find out why the questions were skipped or left blank. Over time, it is likely that item nonresponse will continue to decrease as people better understand SOGI questions and become more comfortable responding to these items.

The literature indicates that SOGI terminology varies in ways that will continue to challenge our ability to distill the terms and descriptors into an exhaustive yet refined list of response options to survey questions. Continued research to expand our understanding of the current terminology should happen in concert with efforts to design efficient and effective survey questions. We posit that there could be utility to employing an "unfolding bracket" strategy. This method has proven successful in collecting SOGI data in the NIH All of Us Research Program and other types of demographic information (e.g., race and ethnicity data) in programs like the Census Bureau's American Community Survey (ACS) and the 2020 Decennial Census. Using this approach, sexual orientation could be collected by first asking a screener question to identify a broader group of sexual minorities. A detailed list of categories for those who identify under the umbrella of LGB would then be shown to those individuals only. This method would reveal such terms as "pansexual," "asexual," etc., only to those who identify as a sexual minority. The success of this method would be dependent, in part, on the willingness of sexual and gender minorities to identify with those well-known terms. Any research pursued on the efficacy of an "unfolding bracket" strategy will need to determine whether there is a common term for both sexual orientation and gender identity that all persons of interest will select, given changes in terminology that have been identified in the research. Small-scale cognitive testing could quickly produce evidence on whether larger field tests are warranted.

One limitation is that this technique is best conducted in automated data collections (e.g., CAPI, CATI, or web).

Although this paper focused on work related to terminology for SGM populations, we need to strike a balance in survey research by having questions and response options that both SGM populations and non-SGM populations can understand and select to appropriately identify themselves. This challenge occurs in all survey instruments, but the personal, culturally and linguistically specific, and generationally influenced nature of sexual orientation and gender identity continue to make this effort a work in progress. Researchers are encouraged to consider both their key populations of interest population and research questions when developing survey items on sexual identity and gender identity.

References

Balarajan, M., M. Gray, and M. Mitchell. 2011. Monitoring Equality: Developing a Gender Identity Question. National Center for Social Research. Research Report 75. Equality and Human Rights Commission.

Bates, N., Y. A. Garcia Trejo, and M. Vines. 2019. Are Sexual Minorities Hard-to-Survey? Insights from the 2020 Census Barriers, Attitudes and Motivators Study (CBAMS) Survey. *Journal of Official Statistics* 35(4): 709–730.

Bauer, G. R., J. Braimoh, A. I. Scheim, and C. Dharma. 2017. Transgender-Inclusive Measures of Sex/Gender for Population Surveys: Mixed-Methods Evaluation and Recommendations. *PLoS ONE* 12(5): e0178043.

Betts, P. M. 2016. Asking About Sexual Orientation on the 2021 Census in England and Wales: Research into Public Acceptability, Question Design, and Administration in Online and Paper Modes. Presented at the International Conference on Questionnaire Design, Development, Evaluation, and Testing (QDET2) Conference: November 9-13, 2016, Miami, FL.

Bulgar-Medina, J. 2017. 'SOGI' in Context: Findings from Cognitive Interviews. Paper presented at the American Association for Public Opinion Research Annual Meeting: May 18-21, 2017, New Orleans, LA.

Bureau of Justice Statistics. 2018. National Crime Victimization Survey, NCVS-1 Basic Screen Questionnaire. Retrieved from https://www.bjs.gov/content/pub/pdf/ncvs18_bsq.pdf.

Dahlhamer, J. M., A. M. Galinsky, S. S. Joestl, and B. W. Ward. 2014. Sexual Orientation in the 2013 National Health Interview Survey: A Quality Assessment. *Vital and Health Statistics* 2(169): 1–32.

de Leeuw, E. D., J. J. Hox, and A. Boevé. 2015. Handling Do-Not-Know Answers: Exploring New Approaches in Online and Mixed-Mode Surveys. *Social Science Computer Review* 34 (1): 116–132.

Diamond, L. 2003. Was it a Phase? Young Women's Relinquishment of Lesbian/Bisexual Identities Over a 5-year Period. *Journal of Personality and Social Psychology* 84: 352–364.

Eliason, M. J. 2014. An Exploration of Terminology Related to Sexuality and Gender: Arguments for Standardizing the Language. *Social Work in Public Health* 29: 162–175.

Eliason, M. J., A. Radix, J. A. McElroy, S. Garbers, and S. G. Haynes. 2016. The "Something Else" of Sexual Orientation: Measuring Sexual Identities of Older Lesbian and Bisexual Women Using National Health Interview Survey Questions. *Women's Health Issues* 26(Suppl 1): S71–S80.

Eliason, M. J. and C. G. Streed, Jr. 2017. Choosing "Something Else" as a Sexual Identity: Evaluating Response Options on the National Health Interview Survey. *LGBT Health* 4(5): 376–379.

Ellis, R., M. Virgile, J. Holzberg, D. V. Nelson, J. Edgar, P. Phipps, and R. Kaplan. 2017. Assessing the Feasibility of Asking About Sexual Orientation and Gender Identity in the Current Population Survey: Results from Cognitive Interviews. Statistical Survey Paper. Washington, DC: Office of Survey Methods and Research, Bureau of Labor Statistics.

Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys (IWG). 2016a. Current Measures of Sexual Orientation and Gender Identity in Federal Surveys. Retrieved from https://nces.ed.gov/FCSM/pdf/current_measures_20160812.pdf

Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys (IWG). 2016b. Evaluations of Sexual Orientation and Gender Identity Survey Measures: What Have We Learned? Retrieved from https://nces.ed.gov/FCSM/pdf/Evaluations_of_SOGI_Questions_20160923.pdf

Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys (IWG). 2016c. Toward a Research Agenda for Measuring Sexual Orientation and Gender Identity in Federal Surveys: Findings, Recommendations, and Next Steps. Retrieved from https://nces.ed.gov/FCSM/pdf/SOGI_Research_Agenda_Final_Report_20161020.pdf

Fredriksen-Goldsen, K. I. and H. J. Kim. 2015. Count Me in: Response to Sexual Orientation Measures Among Older Adults. *Research on Aging* 37(5): 464–480.

Galupo, M. P., S. B. Henise, and N. L. Mercer. 2016. "The Labels Don't Work Very Well": Transgender Individuals' Conceptualizations of Sexual Orientation and Sexual Identity. *International Journal of Transgenderism* 17(2): 93–104.

Gender Identity in U.S. Surveillance (GenIUSS) Group. 2014. Best Practices for Asking Questions to Identify Transgender and Other Gender Minority Respondents on Population-Based Surveys. Los Angeles: The Williams Institute, UCLA School of Law.

Grant, J., L. A. Mottet, J. Tanis, J. Harrison, J. L. Herman, and M. Keisling. 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.

Gruskin, E., S. Hart, N. Gordon, and L. Ackerson. 2001. Patterns of Cigarette Smoking and Alcohol Use Among Lesbians and Bisexual Women Enrolled in a Large Health Maintenance Organization. *American Journal of Public Health* 91(6): 976–979.

Harrison-Quintana, J., J. Grant, and I. Rivera. 2015. Boxes of Our Own Creation: A Trans Data Collection Wo/Manifestation. *Transgender Studies Quarterly* 2(1): 166–174.

Holzberg, J., R. Ellis, M. Virgile, D. Nelson, J. Edgar, P. Phipps, and R. Kaplan. 2017. Assessing the Feasibility of Asking About Gender Identity in the Current Population Survey: Results from Focus Groups with Members of the Transgender Population. Statistical Survey Paper. Washington, DC: Office of Survey Methods and Research, Bureau of Labor Statistics.

Holzberg, J., R. Ellis, R. Kaplan, M. Virgile, and J. Edgar. 2019. Can They and Will They? Exploring Response of Sexual Orientation and Gender Identity in the Current Population Survey. *Journal of Official Statistics* 35(4): 885–911.

Institute of Medicine (US) Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities. 2011. The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding. Washington, DC*:* National Academies Press. Available from https://www.nap.edu/catalog/13128/the-health-of-lesbian-gay-bisexual-and-transgender-people-building.

James, S. E., J. L. Herman, S. Rankin, M. Keisling, L. Mottet, and M. Anafi. 2016. The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.

Jans, M., J. Viana, D. Grant, S. D. Cochran, A. C. Lee, and N. A. Ponce. 2015. Trends in Sexual Orientation Missing Data Over a Decade of the California Health Interview Survey. *American Journal of Public Health* 105(5): e43–e50.

Joinson, A. N., C. Paine, T. Buchanan, and U. D. Reips. 2008. Measuring Self-Disclosure Online: Blurring and Non-Response to Sensitive Items in Web-Based Surveys. *Computers in Human Behavior* 24(5): 2158–2171.

Joloza T., J. Evans, R. O'Brien, and A. Potter-Collins. 2010. Measuring Sexual Identity: An Evaluation Report. Newport, South Wales, UK: Office for National Statistics.

Kinsey, A.C., W. B. Pomeroy, and C. E. Martin. 1948. *Sexual Behavior in the Human Male.* Philadelphia: W. B. Saunders.

Klein, F., B. Sepekoff, and T. J. Wolf. 1985. Sexual Orientation: A Multi-Variable Dynamic Process. *Journal of Homosexuality* 11: 35–49.

Kuper, L. E., R. Nussbaum, and B. Mustanski. 2012. Exploring the Diversity of Gender and Sexual Orientation Identities in an Online Sample of Transgender Individuals. *Journal of Sex Research* 49(2-3): 244–254.

Lattimore, A. 2018. Developing Statistical Standards for Gender Identity and Sexual Orientation: The New Zealand Experiences. Presented at the 7th Global Forum on Gender Statistics, United Nations Statistics Division: November 14-16, 2018, Tokyo, Japan.

Martinez, M., A. Henderson, J. Luck, and M. C. Davis. 2017. Cognitive Pretesting of the National Crime Victimization Survey Supplemental Victimization Survey. Research Report Series: Survey Methodology #2017-03. Washington, DC: Center for Survey Measurement, Research and Methodology Directorate, U.S. Census Bureau.

Meyer, I. H., S. Marken, Z. Auter, B. D. M. Wilson, and K. Conron. 2019. Asking About Sexual Orientation in a National General Population Survey: Do Expanded Response Options Improve Survey Performance with Sexual Minority Respondents? May 16-19, 2019, Toronto, Canada.

Michaels, S., C. Milesi, M. Stern, M. H. Viox, H. Morrison, P. Guerino, C. N. Dragon, and S. C. Haffer. Improving Measures of Sexual and Gender Identity in English and Spanish to Identify LGBT Older Adults in Surveys. *LGBT Health* 4(6): 1–7.

Monson, M., and K. Minoli. 2016. The Importance of Being Counted: Collecting Sexual Orientation and Gender Identity (SOGI) Data in Federal Surveys. Washington, DC: U.S. Environmental Protection Agency.

National Center for Health Statistics. 2019. 2019 National Health Interview Survey (NHIS) Questionnaire. Retrieved from https://www.cdc.gov/nchs/nhis/data-questionnaires-documentation.htm.

Ortman, J. M., N. Bates, A. Brown, and R. C. Sawyer. 2017. Optimizing Self and Proxy Response to Survey Questions on Sexual Orientation and Gender Identity. Presented at the Annual Meeting of the Population Association of America, April 27-29, 2017, Chicago, Illinois. Retrieved from https://paa.confex.com/paa/2017/mediafile/Extende.dAbstract/Paper13962/Ortman%20Bates%20Brown%20Sawyer%20PAA%202017.pdf.

Ott, M. Q., H. L. Corliss, D. Wypij, M. Rosario, and S. B. Austin. 2011. Stability and Change in Self-Reported Sexual Orientation Identity in Young People: Application of Mobility Metrics. *Archives of Sexual Behavior* 40(3): 519–532.

Pathela, P., A. Hajat, J. Schillinger, S. Blank, R. Sell, and F. Mostashari. 2006. Discordance Between Sexual Behavior and Self-Reported Sexual Identity: A Population-Based Survey of New York City Men. *Annals of Internal Medicine* 145: 416–425.

Pierannunzi, C., M. Town, and W. Garvin. 2017. Investigating and Understanding Responses to Questions on Sex, Sexual Orientation and Sexual Identity. Paper presented at American Association of Public Opinion Research annual conference, May 18-21, 2017, New Orleans, LA.

Redford, J., and A. Van Wagenen. 2012. Measuring Sexual Orientation Identity and Gender Identity in a Self-Administered Survey: Results from Cognitive Research with Older Adults. Paper presented at the Population Association of America Annual Meeting, May 3-5, 2012, San Francisco, CA. Retrieved from http://paa2012.princeton.edu/abstracts/122975.

Reisner, S. L., K. Biello, J. G. Rosenburger, A. B. Austin, S. Haneuse, A. Perez-Brumer, D. S. Novak, and M. J. Mimiaga. 2014. Using a Two-Step Method to Measure Transgender Identity in Latin America/the Caribbean, Portugal, and Spain. *Archives of Sexual Behavior* 43(8): 1503–1514.

Ridolfo, H., K. Miller, and A. Maitland. 2012. Measuring Sexual Identity Using Survey Questionnaires: How Valid Are Our Measures? *Sexuality Research & Social Policy* 9(2): 113–124.

Robertson, R. E., F. W. Tran, L. N. Lewark, and R. Epstein. 2018. Estimates of Non-Heterosexual Prevalence: The Roles of Anonymity and Privacy in Survey Methodology. *Archives of Sexual Behavior* 47(4): 1069–1084.

Ruben, M. A., J. R. Blosnich, M. E. Dichter, L. Luscri, and J. C. Shipherd. 2017. Will Veterans Answer Sexual Orientation and Gender Identity Questions? *Medical Care* 55: S85–S89.

Russell, S. T., T. J. Clarke, and J. Clary. 2009. Are Teens "Post-Gay"? Contemporary Adolescents' Sexual Identity Labels. *Journal of Youth and Adolescence* 38(7): 884–890.

Saewyc, E. M., G. R. Bauer, C. L. Skay, L. H. Bearinger, M. D. Reisnick, and E. Reis. 2004. Measuring Sexual Orientation in Adolescent Health Surveys: Evaluation of Eight School-Based Surveys. *Journal of Adolescent Health* 35(345):e1–e15

Sanderson, M., and S. Immerwahr. 2019. New York City Community Health Survey: SOGI Measurement. PowerPoint presented at SOGI Measurement Interagency Workgroup, Washington, DC, on June 4, 2019.

Scout and S. E. Senseman. 2011. Cognitive Testing of an LGBT Surveillance Question. The Fenway Institute, The Network for LGBT Tobacco Control. Retrieved from https://hivdatf.files.wordpress.com/2011/03/cognitive-testing-on-an-lgbt-surveillance-question.pdf.

Semlyen, J. 2017. Recording Sexual Orientation in the UK: Pooling Data for Statistical Power. *American Journal of Public Health* 107(8): 1215–1217.

Sexual Minority Assessment Research Team (SMART). 2009. Best Practices for Asking Questions About Sexual Orientation on Surveys. Los Angeles: The Williams Institute, UCLA School of Law. Retrieved from https://williamsinstitute.law.ucla.edu/publications/smart-so-survey/.

Shoemaker, P., M. Eichholz, and E. Skewes. 2002. Item Nonresponse: Distinguishing Between Don't Know and Refuse. *International Journal of Public Opinion Research* 14(2): 193–201.

Stegier, D., L. Heaton, J. Behm, C. MacAllum, and J. Stroop. 2017. Improving the Measurement of Sexual Orientation and Gender Identity Among Youth. Paper presented at the American Association for Public Opinion Research annual Meeting, May 18-21, 2017, New Orleans, LA.

Tate, C. C., J. N. Ledbetter, and C. P. Youssef. 2013. A Two-Question Method for Assessing Gender Categories in the Social and Medical Sciences. *Journal of Sex Research* 50(8): 767–776.

Temkin, D., J. Belford, T. McDaniel, B. Stratford, and D. Parris. 2017. Improving Measurement of Sexual Orientation and Gender Identity Among Middle and High School Students. *Child Trends* 22: 1–64.

Tourangeau, R., and T. Yan. 2007. Sensitive Questions in Surveys. *Psychological Bulletin* 133(5): 859.