

Using paradata and metadata to assess effects of addition of sensitive items to an ongoing longitudinal survey

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This presentation is intended to promote ideas. The views expressed are part of ongoing research and do not necessarily reflect the position of the U.S. Department of Education or RTI International.

Introduction

Sexual Orientation and Gender Identity (SOGI) questions in National Center for Education Statistics (NCES) surveys

- Around 2012, NCES identified a need to introduce measures of sexual orientation and gender identity (SOGI) wherever possible to national education studies
 - A lack of data on educational and labor force outcomes for LGBTQ+ populations
- The High School Longitudinal Study of 2009 (HSLs:09) was identified as a good vehicle for collecting these data

Opportunities

- Second follow-up data collection scheduled for 2016, leaving enough time to investigate and test LGBTQ measures
- HSLs:09 population would be 20-21 years old in 2016; young adults not subject to restrictions under PPRA on in-school parental consent procedures for surveys
- Panel engagement benefits; sample members could update gender and feel “seen” and represented

Challenges

- Questions are potentially sensitive; could lead to nonresponse, missing data
- Needed to refine existing measures and determine their applicability to this population (e.g., young adults with at least 9th-grade level education); previous testing done with adolescents (e.g., YRBSS) or older adults (e.g., NHIS)
- Needed to ensure enough sample available to report out small subgroup experiences

High School Longitudinal Study of 2009 (HSLS:09)

- Nationally representative study of 9th-graders in 2009, followed throughout high school and into postsecondary education and early careers; STEM focus
- 23,000+ students in U.S. public and private high schools
- Base year: Fall 2009 (9th grade)
- First follow-up: Spring 2012 (most were 11th-graders)
- 2013 Update: summer-fall 2013 (most had just graduated from high school)
- High school transcripts collected in 2013
- Second follow-up: 2016 (most were 3 years post-high school)
- 2016 modes: Web survey, CATI, and CAPI for nonrespondents and high priority cases
 - Responsive design with monetary incentives; cases such as previous-round nonrespondents and dropouts were prioritized

SOGI questions in NCES surveys

- Initial focus group and expert recommendations suggested that, among several constructs (sexual attraction, sexual behavior, sexual identity, which are components of sexual orientation; gender expression and gender identity), sexual orientation and gender identity would be most feasible to add to an ongoing study
 - Gender identity measure selected was “two-step”; sex at birth asked first, then current gender (with more than two options)
- Reviewed extant measures (e.g., YRBS, NHIS, NSFG)
- Needed to balance ability for sample members to report identities with minimization of measurement error and burden
- Though understanding bullying is a priority, retrospective questions about bullying in high school were not included in the follow-up given concerns about 3+ years recall
 - NCES’s School Crime Supplement to the NCVS was chosen as a better place to ask about current or recent bullying, given the household collection
- Given concerns about declining response rates (response in the previous wave was 74 percent, the lowest of any NCES high school cohort at this wave), the SO and GI questions were added at the end of the survey with the demographics questions

SOGI questions in HSLS:09 second follow-up

Gender Identity

- What sex were you assigned at birth (what the doctor put on your birth certificate)?
 - 1=Male, 2=Female
- What is your gender? Your gender is how you feel inside and can be the same or different than your biological or birth sex. 1=Yes, 0=No
 - Male
 - Female
 - Transgender, male-to-female
 - Transgender, female-to-male
 - Genderqueer or gender nonconforming, or some other gender
 - You are not sure

Sexual Orientation

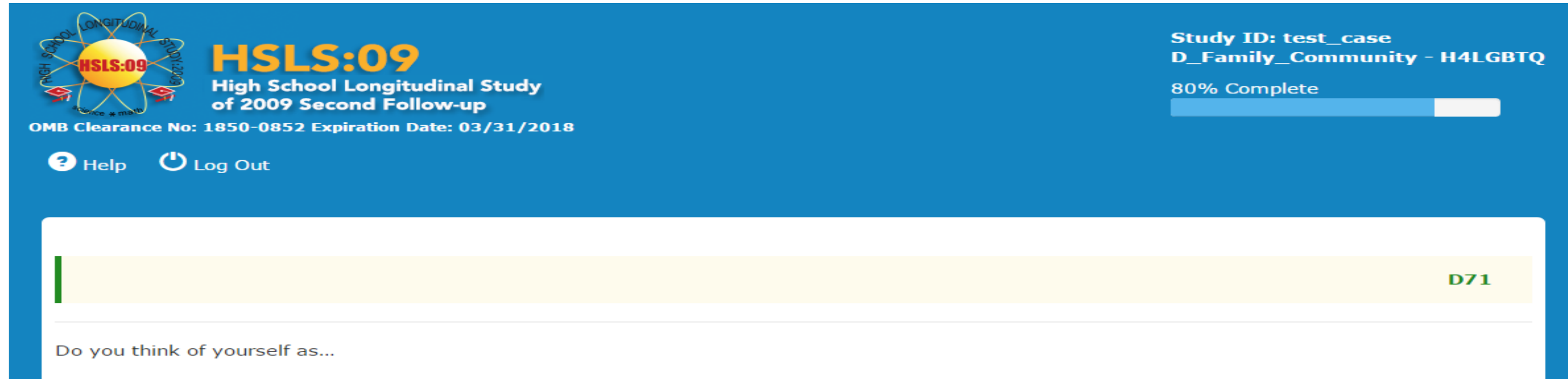
- Do you think of yourself as...
 - 1=Lesbian or gay, that is, homosexual
 - 2=Straight, that is, heterosexual
 - 3=Bisexual
 - 4=Asexual
 - 5=Something else (please specify)
 - 6=Don't know

Initial testing of SOGI questions HSLS:09 second follow-up

- Field-tested items
 - April – July 2015, N=800
 - N missing (possibly skips/refusals) = <5
 - N breakoffs on these questions = 0
 - Several individuals indicated a transgender gender identity
 - Apparent issues with these items: **None**
- Cognitive testing with sexual orientation, gender identity items
 - June – July 2015, N= 40 (12 LGBTQ)
 - Participants liked having more options
 - Participants googled unfamiliar terms, but help text definitions were helpful
 - Simpler question stems worked better
 - Option for “something else” or “different identity” was appreciated
 - Two-step measure was confirmed to be least confusing
 - Apparent issues with items: **None**

Evaluation methods

HSLs:09 second follow-up survey overall response rate



Second follow-up (2016) had a **75%** response rate overall

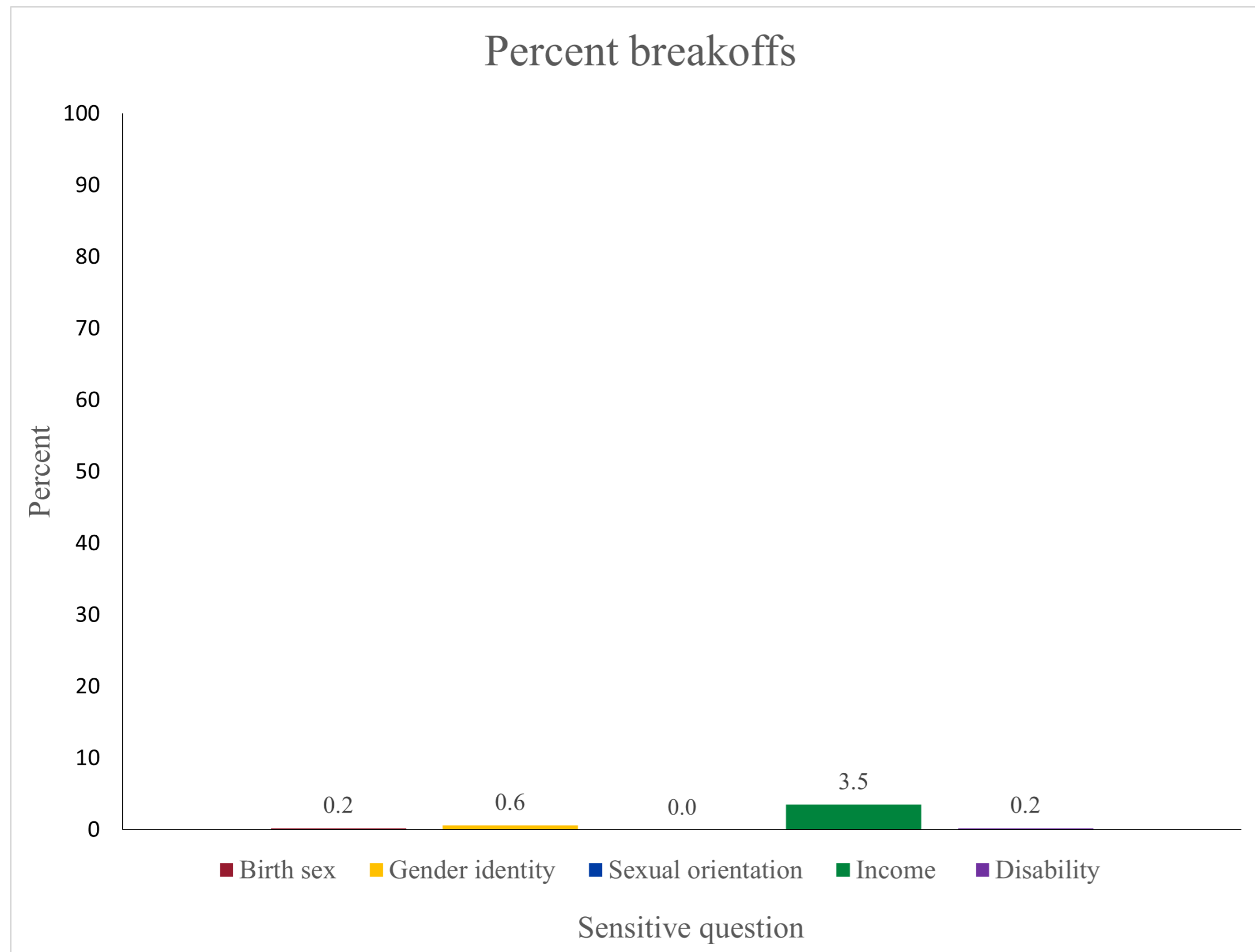
- No complaints about these questions
- No evidence of lower unit response rate due to their inclusion

SOGI questions in NCES surveys: Evaluation methods

- Use of paradata and metadata from data collection to examine
 - Breakoffs: Do respondents leave the survey?
 - Item-level nonresponse: Do they skip the questions?
 - Timing data: Do the questions give them pause?
- Data for SOGI items compared to that of
 - Repeated sensitive item: Income
 - New sensitive item: Disability status

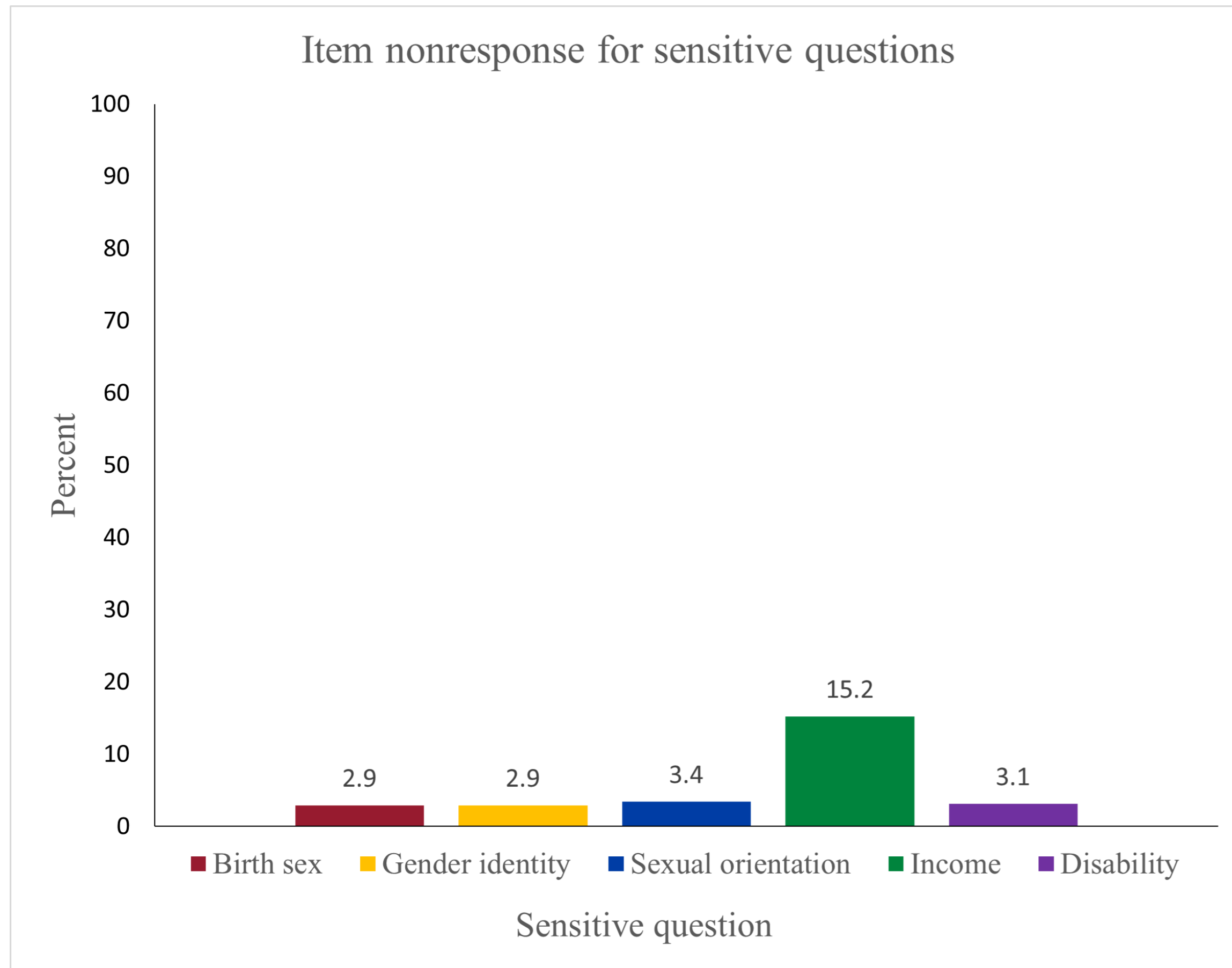
Results

Breakoffs: Do respondents leave the survey?



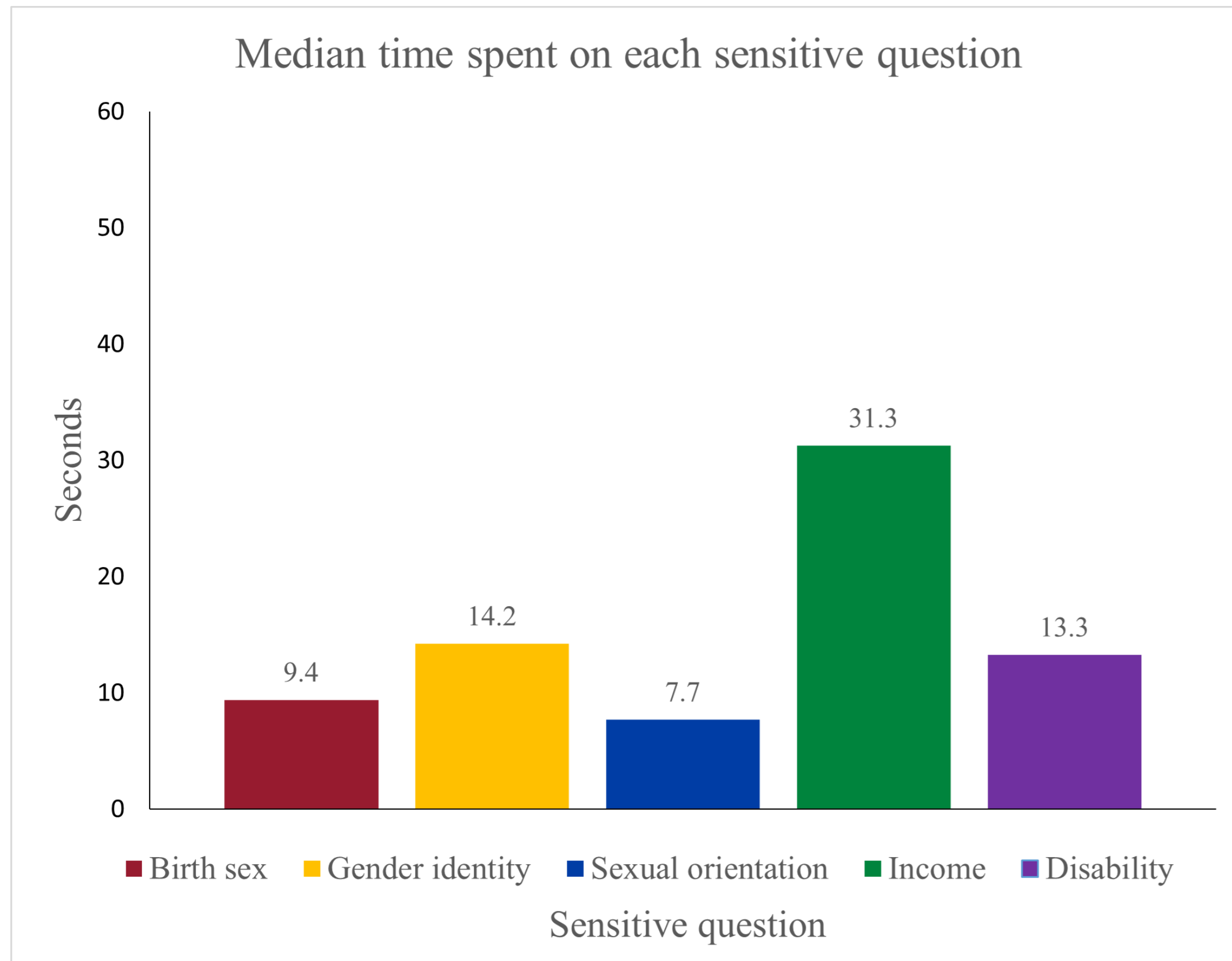
- Measure: Percent breakoffs on question
- Birth sex: 0.21 percent
- Gender identity: 0.62 percent
- Sexual orientation: 0
- For comparison:
 - Income: 3.51 percent
 - Disability status: 0.41 percent
- Answer: No evidence that these items lead to survey breakoffs

Item-level nonresponse: Do they skip the questions?



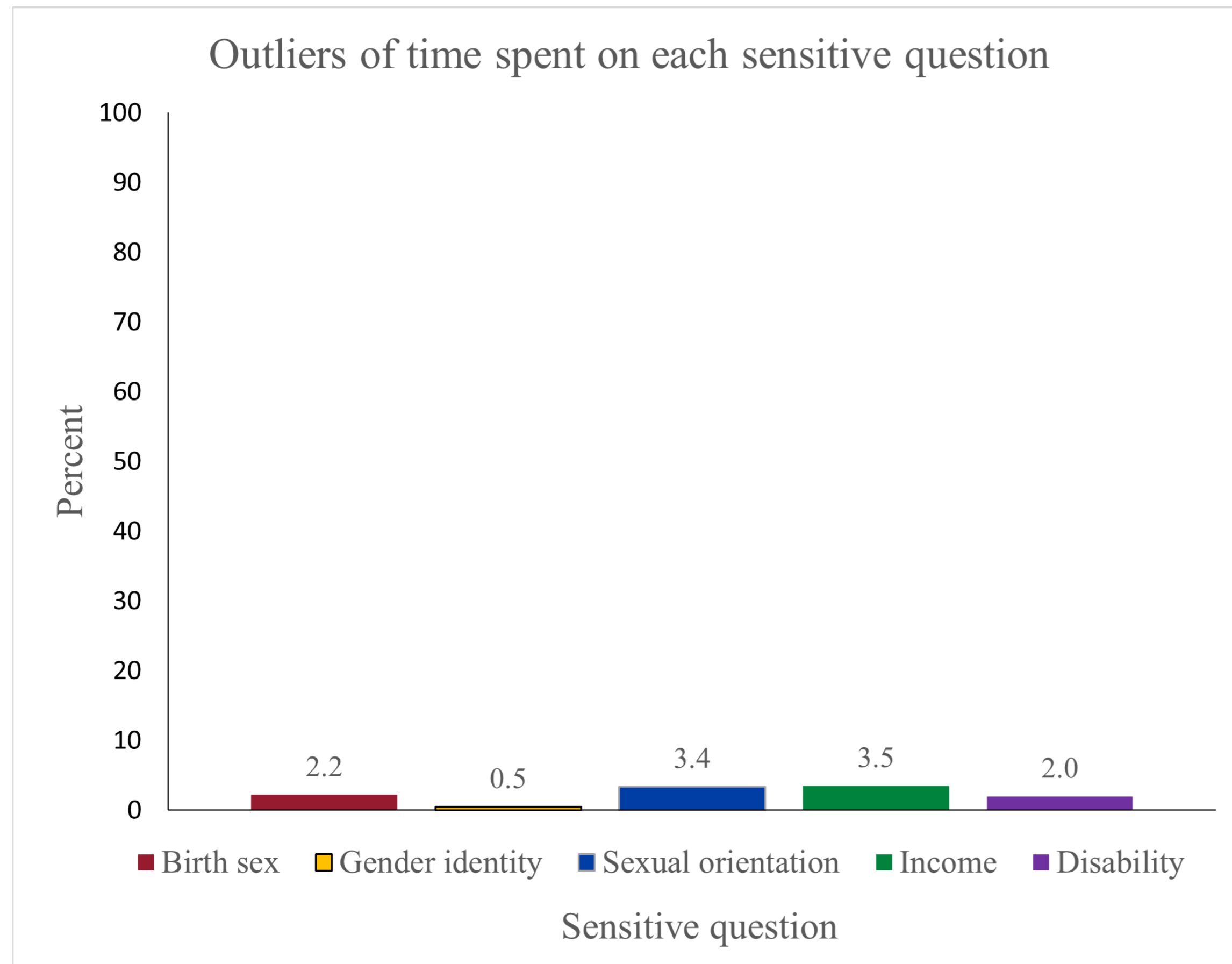
- Measure: Percent “missing” on question
- Birth sex: 2.9 percent
- Gender identity: 2.9 percent
- Sexual orientation: 3.4 percent
- For comparison:
 - Income: 15.2 percent
 - Disability status: 3.1 percent
- Answer: No evidence that item nonresponse is higher for these items than for other sensitive items

Time spent on item screens: Do the questions give them pause?



- Measure: Median amount of time spent on item screens
- Birth sex: 9.4 seconds
- Gender identity: 14.2 seconds
- Sexual orientation: 7.7 seconds
- For comparison:
 - Income: 31.3 seconds
 - Disability status: 13.3 seconds
- Answer: No evidence that these questions take longer to answer

Time spent on item screens: Do the questions give them pause?



- Measure: Outlier rate for time spent on item screens
 - Outliers defined as +/-1.5 interquartile range for each item
- Birth sex: 2.2 percent
- Gender identity: 0.5 percent
- Sexual orientation: 3.4 percent
- For comparison:
 - Income: 3.5 percent
 - Disability status: 2.0 percent
- Answer: No evidence that these questions take longer to answer

Discussion

Summary: SOGI item performance in HSLS:09

- Breakoffs: No evidence that these questions make respondents leave the survey
- Item nonresponse: No evidence that these questions are skipped at a higher rate than other sensitive questions
- Item timing: No evidence, either from median time on screen OR outliers in time spent on screen, that these questions give sample members pause

Discussion: Adding SOGI questions to federal surveys

- **Adding sensitive SOGI items in a later wave of HSLS:09 was successful**
- Including sensitive items can be done without introducing certain data quality concerns, even several waves into an ongoing panel study, if done carefully
- Metadata and paradata are useful tools for investigating data quality
- Recommendations:
 - Consider adding questions at the end of a survey if breakoffs are a concern
 - Add SOGI items in a section with other demographics or background items to make them “stick out” less
 - Compare your results to those of other known sensitive items (e.g., income, disability status, race/ethnicity)

SOGI questions in HSLS:09 – Sources

- Sources consulted for measures:
 - NHIS, NHANES, NSFG
 - Measuring Sexual Identity Using Survey Questionnaires: How Valid Are Our Measures? Ridolfo, H., Miller, K. and Maitland, A. *Sexuality Research and Social Policy*. 2012. 10.1007/s13178-011-0074-x.
 - The GenIUSS Group. (2014). *Best Practices for Asking Questions to Identify Transgender and Other Gender Minority Respondents on Population-Based Surveys*. J.L. Herman (Ed.). Los Angeles, CA: The Williams Institute.
- A BIG THANK-YOU to our experts for their recommendations:
 - GLSEN
 - Williams Institute
 - Trevor Project
 - Human Rights Campaign

Thank you!!!

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<https://nces.ed.gov/surveys/hsls09>