



Results of a Mixed-Method Study to Evaluate 2-Step Gender Identity Measures

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The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the National Center for Health Statistics, Centers for Disease Control and Prevention.

Outline

- Background
- Research and Development Survey (RANDS) 5 Experimental Study
- National Survey of Family Growth (NSFG) Cognitive Interviewing Study
- Summary and Related Work

Background

- We've been testing 2-step gender questions to see how they perform
 - Sex assigned at birth (SAAB) and gender identity (GI)
- Quantitative work
 - **RANDS 5 comparing 2 versions of the GI question and question order**
- Qualitative work
 - **NSFG cognitive interviews**
 - Government Employee Management System cognitive interviews
 - General Population Health Survey cognitive interviews

RANDS 5 Experimental Study

RANDS 5 Background

- RANDS¹ program: ongoing series of surveys by the Division of Research and Methodology at NCHS using quantitative and mixed methods to assess measurement error, validity, and bias
- RANDS 5 administered by NORC at the University of Chicago, AmeriSpeak survey panel; January & March 2022
- 2 x 2 experiment testing question order (sex assigned at birth first vs. gender identity first) and two question versions (Pew vs. Williams Institute)

1. <https://www.cdc.gov/nchs/rands/index.htm>

The Questions

What sex were you assigned at birth, on your original birth certificate?

1. Male
2. Female
3. I don't know

How do you describe yourself? Select all that apply.

1. Male
2. Female
3. Transgender
4. Something else: _____ [text box]

Do you describe yourself as a man, a woman, or in some other way? Select all that apply.

1. Man
2. Woman
3. In some other way: _____ [text box]

Just to confirm, you were assigned {FILL} at birth and describe yourself as {FILL}. Is that correct?

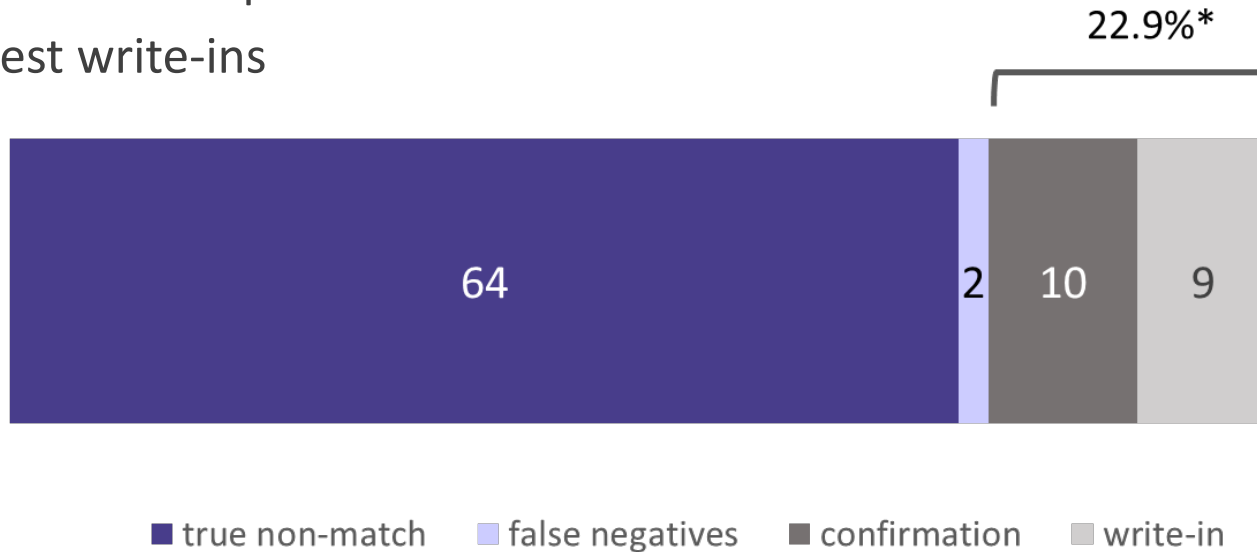
1. Yes
2. No

Findings

- Of 6,896 completes:
 - 66 non-matches; 6,806 matches; 24 missing
- We don't see statistically significant differences when comparing weighted results by gender identity question (Pew vs. Williams Institute) and order of question (sex assigned at birth first vs. gender identity first)
- Confirmation question: 45 people skipped; 31 said 'no'
 - Only 14 who said 'no' changed their answers
- When asked, 'Why did you answer "Don't know" for what sex you were assigned at birth, on your original birth certificate?' 10/23 respondents said it was because they did not want to answer the question

Misclassification

- 10 confirmation question
- 9 protest write-ins

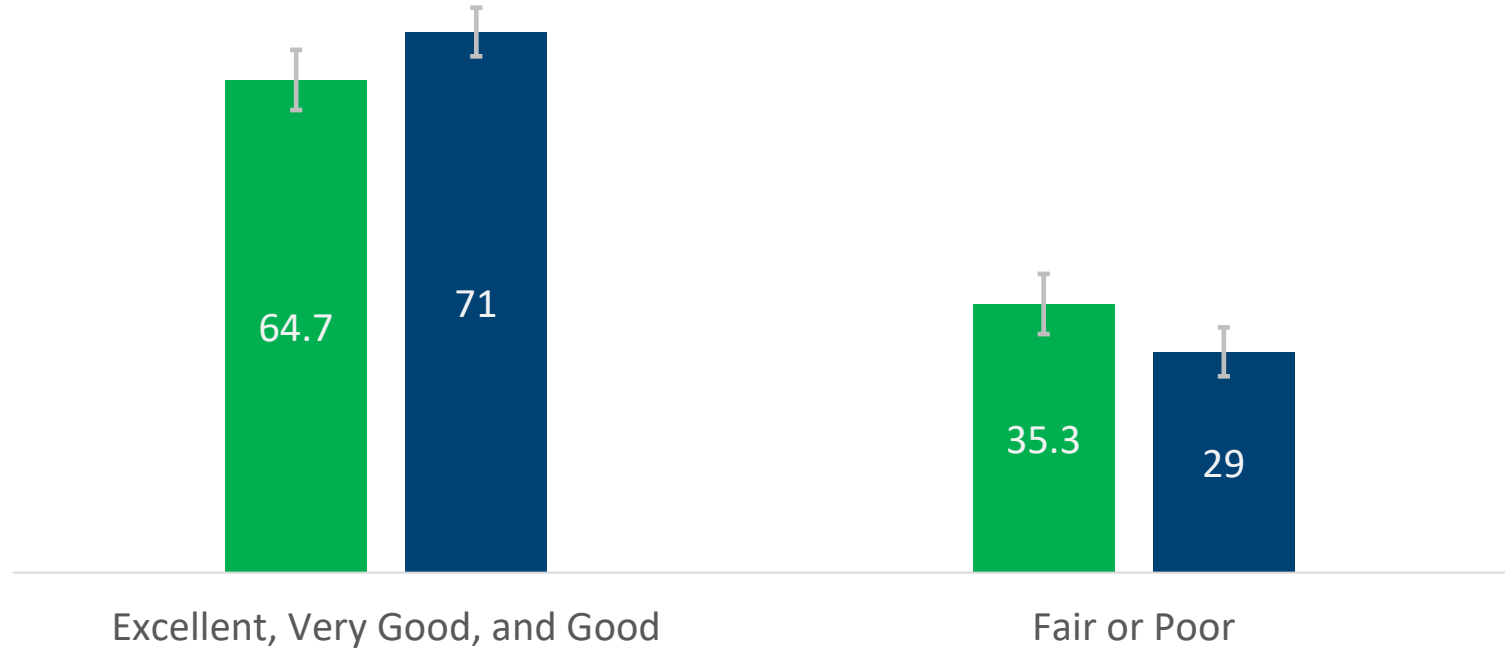


Note: 2 Rs said 'no' to the confirmation question and changed their answer; 1 was a protest write-in and the other changed from a female match to a male match so those 2 are not included in the confirmation question misclassification here, though they were in the table on the previous slide.

*Denominator is number of people in non-match category if data were misclassified, n = 83.

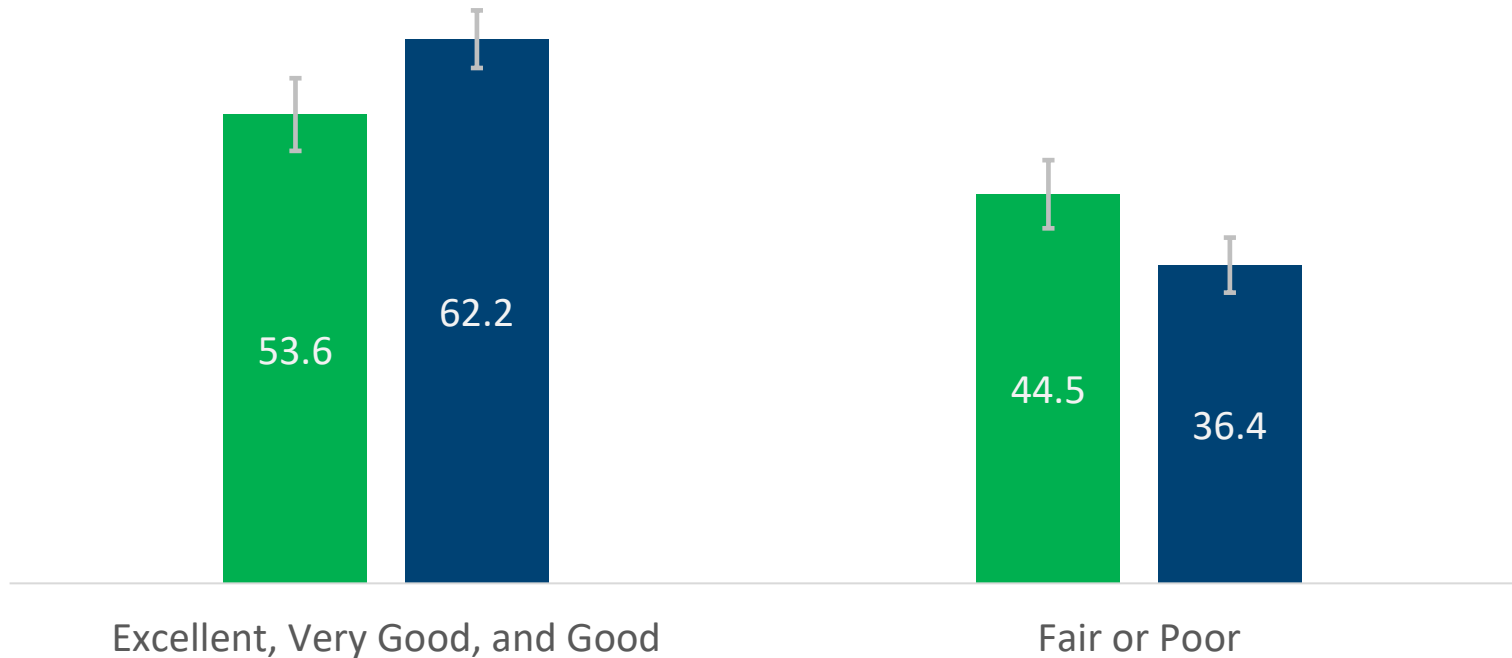
Self-Rated Health: Comparing **Correct** and **Not Corrected**
Weighted Percent Estimates for Non-Match Respondents;
RANDS 5, 2022

■ Correct ■ Not Corrected



Self-Rated **Mental** Health: Comparing **Correct** and **Not Corrected** Weighted Percent Estimates for Non-Match Respondents; RANDS 5, 2022

■ Correct ■ Not Corrected



NSFG Cognitive Interviewing Study

NSFG Cognitive Interviewing Study

- What sex were you assigned at birth, on your original birth certificate?
 - Male
 - Female
- How do you describe yourself? You can select all that apply.
 - Male
 - Female
 - Transgender
 - Something Else
- n = 31; 24 gender non-minority, 7 gender minority

NSFG Cognitive Interviewing Study

The primary focus of the study was two-fold:

1. Do respondents see a difference between the 2 questions?
2. What are the ways respondents defined or conceptualized those constructs when formulating answers?

End Goal: Investigate construct validity & provide insight into potential response error

Seeing Difference Between Sex and Gender

1. Difference between sex assigned at birth and gender identity
 - No Difference
 - Vague Understanding of Difference
 - Clear Understanding of Difference
2. Constructs captured
 - Sex Assigned at Birth = Biology, Gender = Biology
 - Sex Assigned at Birth = Biology, Gender = Social
 - Sex Assigned at Birth = Social, Gender = Social
- Potential response error
 - Seeing the questions as repetitive
 - Confusion over terms

Summary & Related Work

- 2-step questions are not performing well
 - Differences in how Rs interpret SAAB and GI questions
 - Without a confirmation question or write-in gender option, 22.9% of people classified as gender diverse would be false positives (cisgender people misclassifying themselves)
 - This leads to differences in estimates
 - Many people are skipping SAAB and/or the confirmation question
- Our group is working on a single gender identity question
 - See Kristen Miller's presentation on Thursday at 10:30 am
 - Development of an X Gender Marker Definition for the US Passport: Methodology and Implications for Asking about Gender

Our papers

- Miller, K., Willson, S., & Ryan, V. (2021). An Initial Cognitive Evaluation of a 2-Step Gender Identity Measure. National Center for Health Statistics - QDRL. Hyattsville, MD <https://wwwn.cdc.gov/QBank/Report.aspx?1219>
- Willson, S., Miller, K. (2022). Cognitive Interview Evaluation of X Gender Marker Definitions for the U.S. Passport Application Form. National Center for Health Statistics - QDRL. Hyattsville, MD <https://wwwn.cdc.gov/qbank/report.aspx?1225>
- RANDS 5 Experimental Study paper coming soon!

My contact information: VRyan2@cdc.gov

Q-Bank: providing access to survey question evaluation reports, question design and performance

<https://wwwn.cdc.gov/qbank/>

Q-Notes: designed to facilitate the management and analysis of cognitive interviews

<https://www.cdc.gov/nchs/ccqder/products/qnotes.htm>

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

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