What Does it Mean to be Burdened?: Exploring Subjective Perceptions of Burden

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Objective Measures of Respondent Burden

- Time to complete survey:
  - Survey length
  - Number of questions
  - Frequency of survey
  - Time reading instructions
  - Time gathering and entering data
  - Time reviewing data

- Related to response rates (e.g., Bradburn, 1978; Rolstad et al., 2011; Crawford et al., 2001)

Subjective Measures of Respondent Burden

- Appraisal of how burdensome the survey experience was, for example:
  - ▶ Effort
  - ▶ Motivation
  - ▶ Interest
  - ▶ Sensitivity

- "How burdensome did you find this survey?"

- Related to data quality, attrition rates, survey fatigue (Rolstad et al., 2011; Fricker et al., 2014; Bradburn, 1978)

Previous Research

■ Most prior research focused on objective burden, little is known about:

   ▶ How to measure subjective perceptions of survey burden

   ▶ Relationship between objective and subjective burden

   ▶ Effects of other survey features on burden:

      – Answering for self vs. proxy

      – Anticipated survey burden (e.g., advance materials)

Research Objectives

1. Explore relationship between objective and subjective burden measures & anticipation of burden on response

2. Explore burden of answering questions for self & proxy

3. Explore relationship between burden and response quality (e.g., item nonresponse)

4. Debriefing to understand how survey participants think of the term 'burden'

Surveys

- **American Community Survey (ACS):**
  - One time survey; ~40 min to complete
  - In-person or self-administered

- **Current Population Survey (CPS):**
  - Eight-waves; ~10-20 min to complete each wave
  - In-person or telephone

- **Survey content (self and proxy response):**
  - Household roster & demographics
  - Social (marital status, disability, school enrollment, veteran status)
  - Economic (employment status, income/earnings)
  - Housing (ACS; tenure, year structure built, house heating fuel)

Study Design

- All **online** data collection; exploratory research; $2.00 for participating

- Random assignment to Low vs. High burden advance letter (to manipulate anticipated burden)

- Answer ACS/CPS questions for self & up to **<u>one</u>** other HH member as a proxy (randomly assigned)

- Burden measures
  - ▶ Open-ended reactions
  - ▶ Subjective burden ratings
  - ▶ Select words from word bank that describe the survey (mix of positive, negative, & neutral words)
  - ▶ Burden antonym task

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Dear Resident,

Your address has been randomly selected to participate in a survey for the federal government. This survey gives our country an up-to-date picture of how we live – including jobs, housing, and demographics.

Americans rely on information from this survey for the following:

- Improving roads and buildings
- Veteran's programs
- Education, employment, and housing resources
- Helping the Federal Reserve to set the interest rates in our country

Because your household has been asked to participate in this survey on behalf of your community, it is vital that you complete this survey to help meet critical needs in your area.

The success of this survey depends on your participation. We cannot substitute another address for yours. Your address is part of a scientifically selected sample of addresses chosen throughout the country. Your answers represent hundreds of other U.S. households.

- **LOW BURDEN:** An official federal government representative will contact you soon to ask your household to complete this one time survey on the <u>phone</u>, which will take <u>10 minutes</u>. If we cannot reach you, we will send you <u>one more mail reminder</u> to participate.

- **HIGH BURDEN:** An official federal government representative will visit your <u>home address</u> to ask you to complete the survey. You will need to complete the survey each month for eight months. Each survey will take about <u>40 minutes</u> to complete. If we cannot reach you for this month, you will be sent <u>five additional mail reminders</u> over the next month reminding you to participate.

Subjective Burden Measures (Self)

Measure	5 point scale
How burdensome was it to complete these survey questions?	Not at all, a little, moderately, very, extremely
How burdensome would it be to complete this survey **one more time?**	Not at all, a little, moderately, very, extremely
How burdensome would it be to complete this survey every month for **eight months in a row?**	Not at all, a little, moderately, very, extremely
How **easy or difficult** was it to answer these survey questions?	Very easy, a little easy, neither easy nor difficult, very difficult, extremely difficult
How **sensitive** were these survey questions?	Not at all, a little, moderately, very, extremely

Subjective Burden Measures (Proxy)

Measure	5 point scale
How burdensome was it to complete these survey questions about **<insert initials>?**	Not at all, a little, moderately, very, extremely
How sensitive was it to complete the survey questions about **<insert initials>?**	Not at all, a little, moderately, very, extremely
How easy or difficult was it to answer the survey questions about **<insert initials>?**	Very easy, a little easy, neither easy nor difficult, very difficult, extremely difficult

Mturk Participants (N = 171)

Age	M = 32.25 (SD = 9.91), range 20-71
Education	• 13.5% HS or less • 32.2% Some College/Associate's • 40% Bachelor's • 12.4% Graduate degree
Gender	• 51.5% male • 46.7% female
Ethnicity	• 24.3% Hispanic, Latino, Spanish
Race	• 76.0% White • 14.0% African American • 5.3% American Indian/Alaska Native • 5.3% Asian • 1.2% Native Hawaiian/Pacific Islander

Household Size

Number of people	Percent
1 person (just yourself)	11.7
2 people	49.7
3 people	22.2
4 people	11.1
5 people	2.3
6+ people	0.6

Relationship to Other Sampled HH member

	#	%
opposite sex spouse (husband/wife)	46	32.6%
opposite sex unmarried partner	10	7.1%
same sex spouse (husband/wife)	5	3.6%
same sex unmarried partner	2	1.4%
child	18	12.8%
grandchild	6	4.3%
parent	18	12.8%
brother/sister	20	14.2%
other relative (aunt, uncle, cousin, in law)	10	7.1%
housemate/roommate	5	3.6%
other nonrelative	1	0.7%

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Results

Research objective 1:

Explore relationship between objective and subjective burden measures & anticipation of burden on response

Low v. High Burden Condition Results

- No differences by letter condition on all burden ratings (self & proxy, all ps >.15), so collapsed all results

- No differences on time spent reading advance letter
  - Low burden = 32.8 seconds
  - High burden = 32.5 seconds

Relationship between Objective and Subjective Burden Ratings

- **Objective Burden:**
  - ▶ Average time on survey = 11.7 min.
    - – Only self = 6.8 min
    - – Self + Proxy = 13.1 min

- **Subjective Burden:**
  - ▶ Average rating = 1.8 (A little/somewhat burdensome)
    - – Only self = 1.5
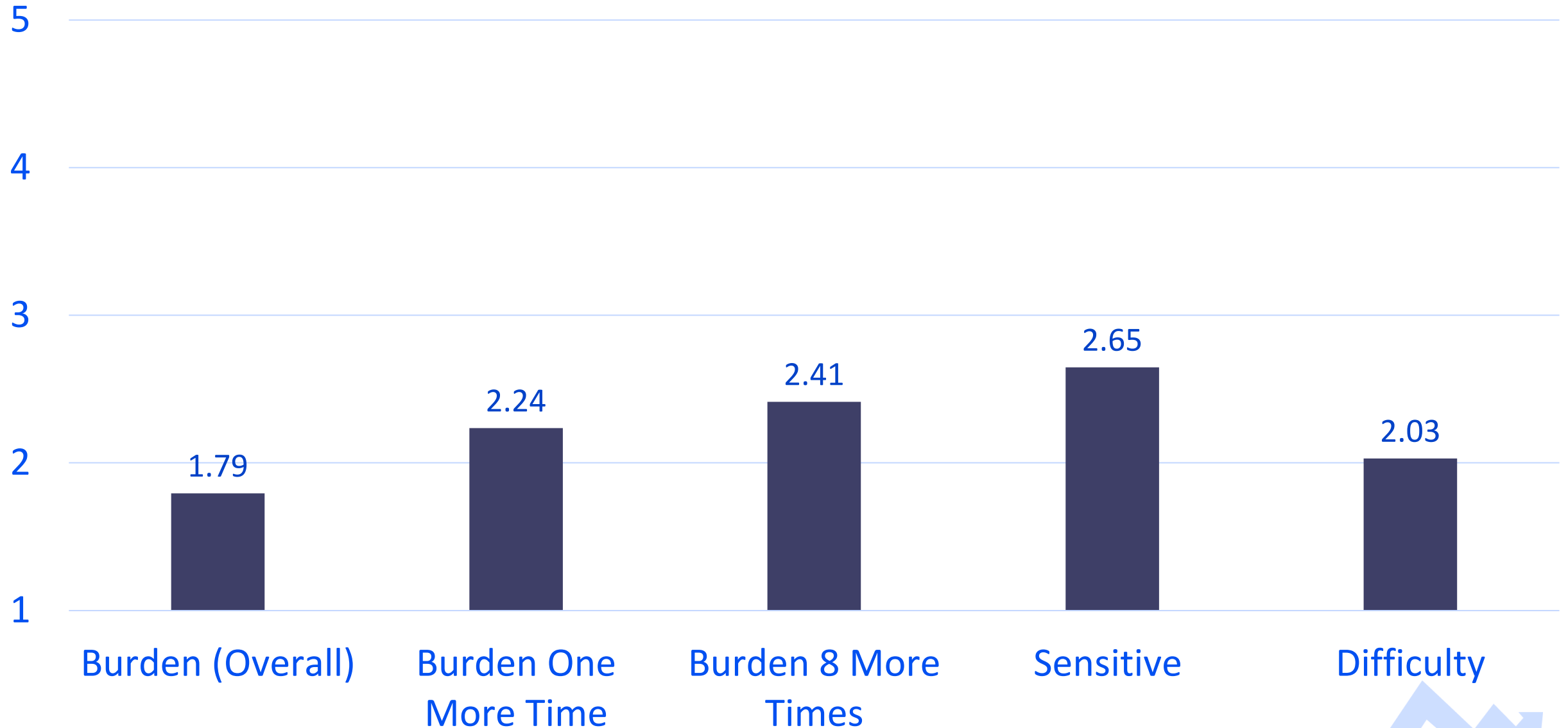   - – Self + Proxy = 1.8

- **Time on survey and all burden ratings (for both self & proxy) <u>were not</u> significantly correlated**
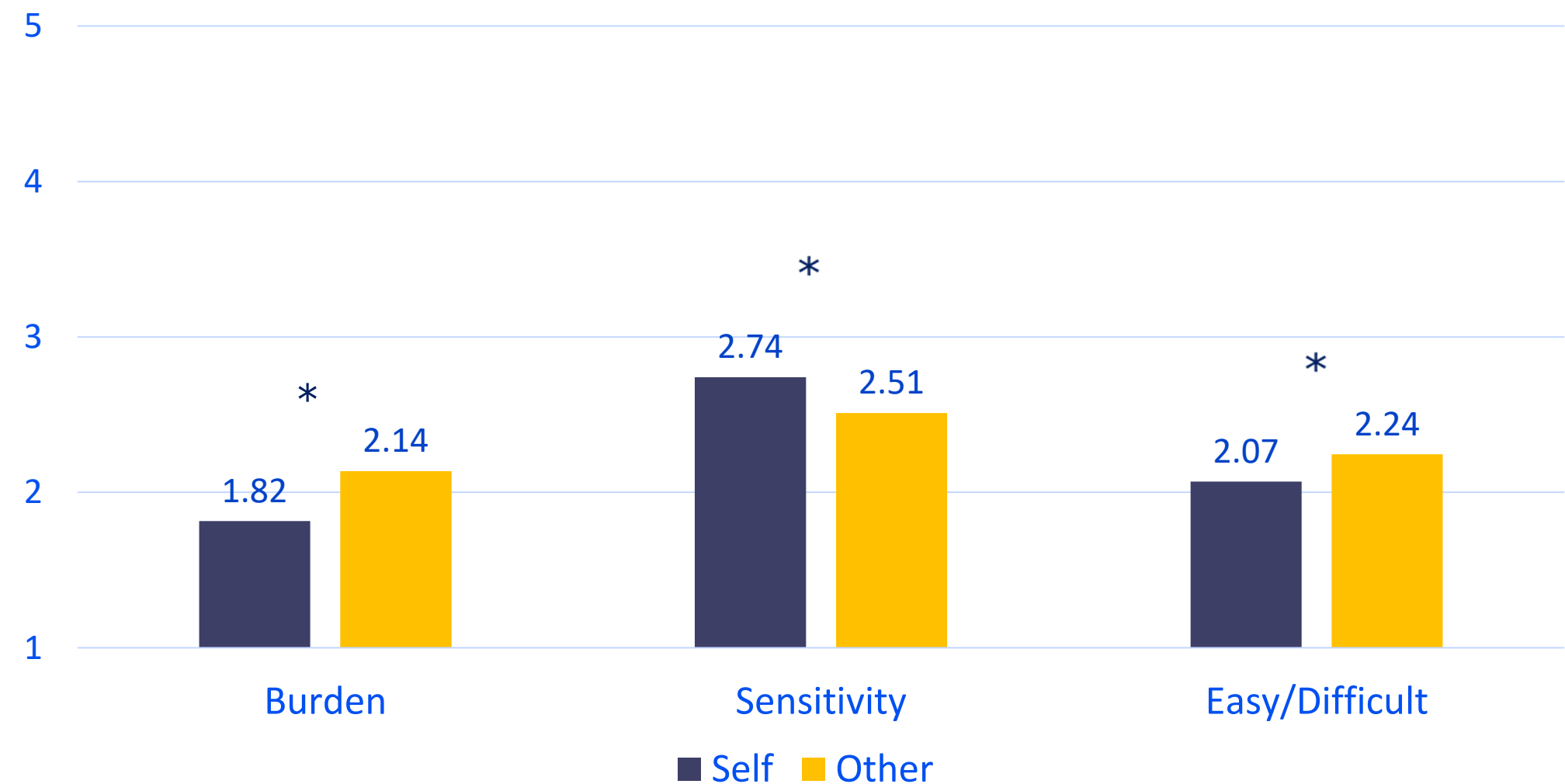 - ▶ all ps > .24.

Research objective 2:

Explore burden of answering questions for self & proxy

Mean Subjective Burden (Self)

Mean Subjective Burden (Self v. Other Proxy)

Bar chart showing mean subjective burden comparing Self (dark blue) and Other (yellow) across three categories:

- Burden: Self 1.82, Other 2.14 *
- Sensitivity: Self 2.74, Other 2.51 *
- Easy/Difficult: Self 2.07, Other 2.24 *

Legend: ■ Self ■ Other

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Mean Proxy Ratings by HH Relationship
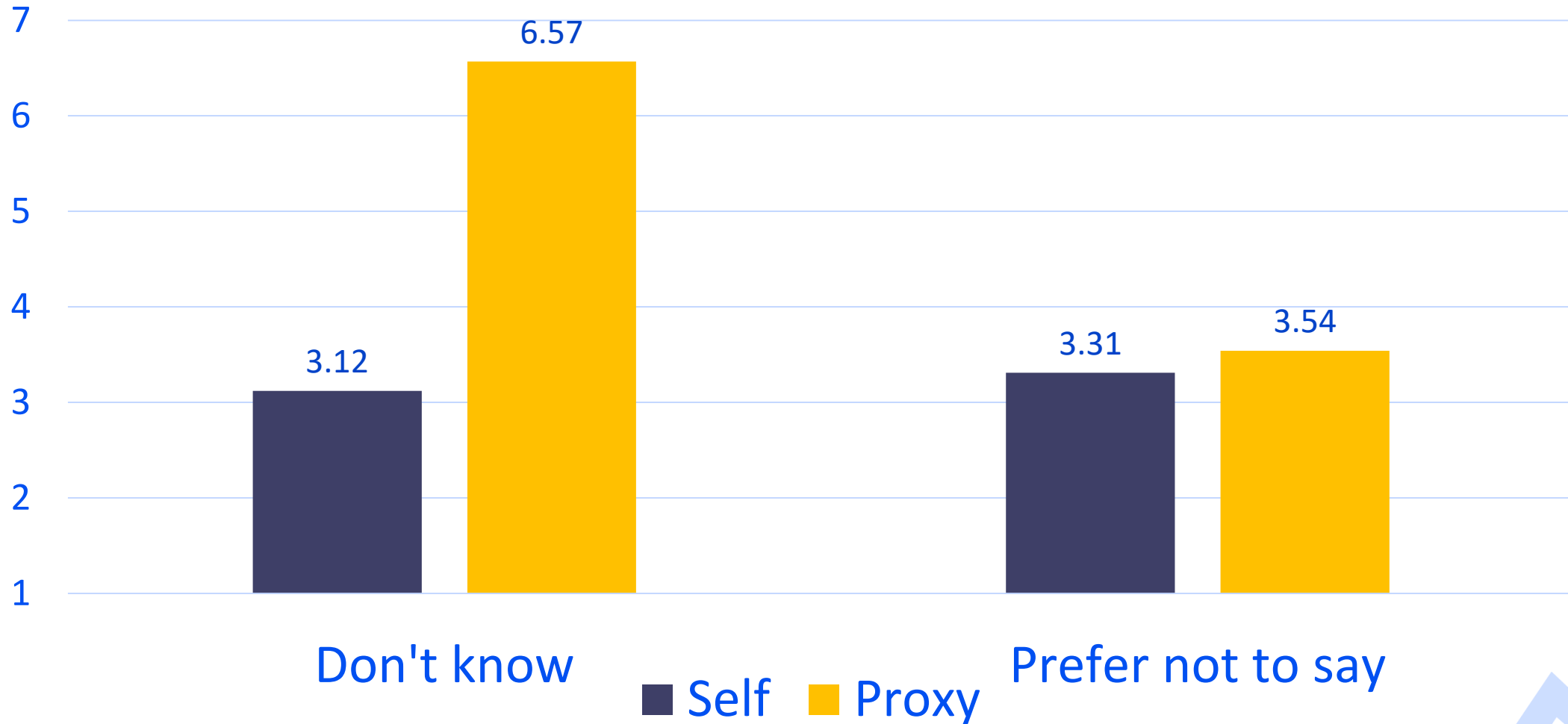
Research objective 3:

Explore relationship between burden and response quality (e.g., item nonresponse)

Mean percent item-nonresponse for ACS/CPS questions

Bar chart showing mean percent item-nonresponse for ACS/CPS questions by Self and Proxy response.

- Don't know: Self = 3.12, Proxy = 6.57
- Prefer not to say: Self = 3.31, Proxy = 3.54

Legend: ■ Self (dark blue) ■ Proxy (yellow)

Subjective Burden and Data Quality

■ A higher percentage of non-substantive proxy responses was positively correlated with:

▶ Overall burden of proxy response ($r = .37$, $p < .001$)

▶ Sensitivity of proxy response ($r = .19$, $p = .03$)

▶ Difficulty of proxy response ($r = .31$, $p < .001$)

Research objective 4:

Debriefing to understand how survey participants think of the term 'burden'

Word Bank Task

From the list below, please select all of the words you would use to describe your experience completing these survey questions about yourself and your household.

☐ Interesting	☐ Inconvenient	☐ Fine
☐ Easy	☐ Time-consuming	☐ Standard
☐ Important	☐ Difficult	☐ Typical
☐ Useful	☐ Intrusive	☐ Normal
☐ Rewarding	☐ Disruptive	☐ Reasonable
☐ Motivating	☐ Stressful	☐ Tolerable
☐ Valuable	☐ Effortful	☐ Necessary
☐ Good	☐ Boring	☐ Obligatory
☐ Beneficial	☐ Personal	☐ Civic Duty
☐ Helpful	☐ Hassle	☐ Expected
☐ Relevant	☐ Draining	☐ Appropriate
☐ Bothersome	☐ Repetitive	☐ Responsibility
☐ Annoying	☐ Sensitive	

Top 10 Selected Words on Word Bank

Word	N
easy	43
good	39
normal	38
repetitive	34
personal	31
reasonable	30
interesting	28
fine	28
standard	28
typical	27

Burden Antonyms

Earlier we asked you about how burdensome it was to complete this survey. Now, we want you think about what words would describe the **opposite** of being burdened.

In the spaces below, please provide up to five words you think mean the **opposite** of "burden." Please do not use external sources, just list the first word(s) that come to mind.

Word 1

Word 2

Word 3

Word 4

Word 5

Top 10 Burden Antonyms

	# of mentions
Easy	80
Help/helpful	35
Good	26
Fun	18
Relief	18
Benefit	13
Simple	13
Advantage	11
Free	11
Light	11

Open-Ends about Survey Process/Questions

- I think this survey was easy to answer, it doesn't take much effort. It **would be burdensome if it was asked over and over for the upcoming months.**

- I think the government as a whole needs to be more involved in governing and **not snooping** it is not right for the government to ask and or know how much money people earn or how long a commute takes or other related matters.

- It seemed to drag on about **personal questions.**

- I hope this is not going to be a real questionnaire you would send to the public and expect many if any to actually respond to… at least not without first asking them before hand **if they would feel ok with sharing this information**

Open-Ends about Proxy Reporting

- Mainly **trying to accurately report** on the member of my household.

- **It's not my place** to give info about him.

- **I don't keep tabs** on the exact things my husband does on a daily basis.

- The income of my wife and child was difficult since **I don't know the answer**.

- It's hard to comment on what other people are paid or what their exact schedules/expenditures are because **their finances are private.**

- I prefer to answer questions about myself. **It was a little difficult answering for family members** because I'm not sure how much they want me to share especially when it comes to employment questions.

Limitations & Future Directions

- Limitations:

  ▶ Sample was not previous survey respondents

  ▶ Burden letter manipulation failed

- Future directions:

  ▶ Get anticipated burden rating immediately after reading the advance letter to better gauge initial impressions

  ▶ Assess memory for burden at a later time point, which may be predictive of future survey participation

Conclusions

- Objective & subjective burden different constructs

- Proxy reporting may add additional subjective burden:
  - Answering questions when they lack knowledge of the answer
  - Sensitivity for particular household members (e.g., partner, children)

- The term "Burden" may be too strong a word
  - Ratings like 'Easy/Difficult' may resonate more

- Survey organizations & researchers should take into account the multiple dimensions of burden when assessing survey changes to help reduce respondent burden
  - Changing only objective factors may not necessarily reduce respondent burden

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Contact Information

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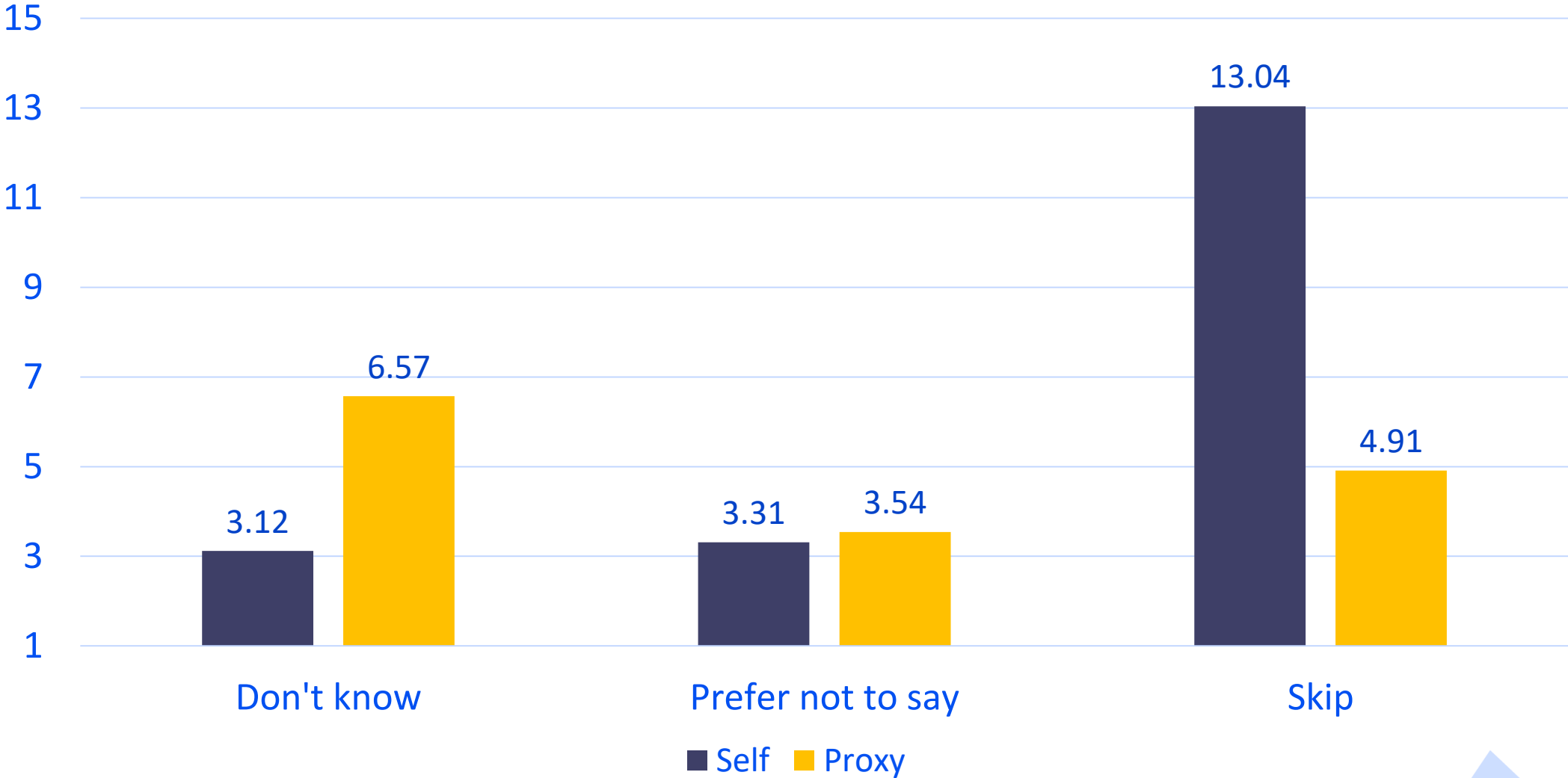Office of Survey Methods Research
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Extra Slides

Mean Percentage of Non-substantive Responses

Bar chart comparing Self and Proxy mean percentages of non-substantive responses across three categories.

Category	Self	Proxy
Don't know	3.12	6.57
Prefer not to say	3.31	3.54
Skip	13.04	4.91

■ Self ■ Proxy

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Top 10 Most Positively Rated Words

	Mean
valuable	4.6
motivating	4.5
helpful	4.4
good	4.4
interesting	4.4
useful	4.4
rewarding	4.4
beneficial	4.2
Important	4.2
reasonable	4.2

Middle 10 Most "Neutral" Words

	Mean rating
appropriate	3.9
normal	3.8
necessary	3.7
expected	3.7
civic duty	3.5
standard	3.4
tolerable	3.3
typical	3.3
personal	3.3
effortful	3.2

Top 10 Most Negative Words

	Mean rating
draining	2.4
bothersome	2.3
stressful	2.3
boring	2.3
intrusive	2.2
difficult	2.2
disruptive	2.2
hassle	2.2
annoying	2.2
inconvenient	2.1