"Text Me Maybe? Evaluating Text Messaging as a Contact Strategy for the Census Household Panel"

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DC-AAPOR Conference | September 16th, 2025

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Statement of Problem

- Data collection efforts continue to face concerns about declining response rates and rising costs associated with respondent recruitment and follow-up *(Bureau of Labor Statistics, 2025; NASEM, 2017)*
- Given how Americans' Internet usage has drastically increased over the past two decades, data collection efforts are increasingly adopting Internet modes *(PEW, 2024)*
- The proliferation of surveys may exacerbate declines in survey response rates via "survey fatigue" *(J. Eggleston, 2024)*

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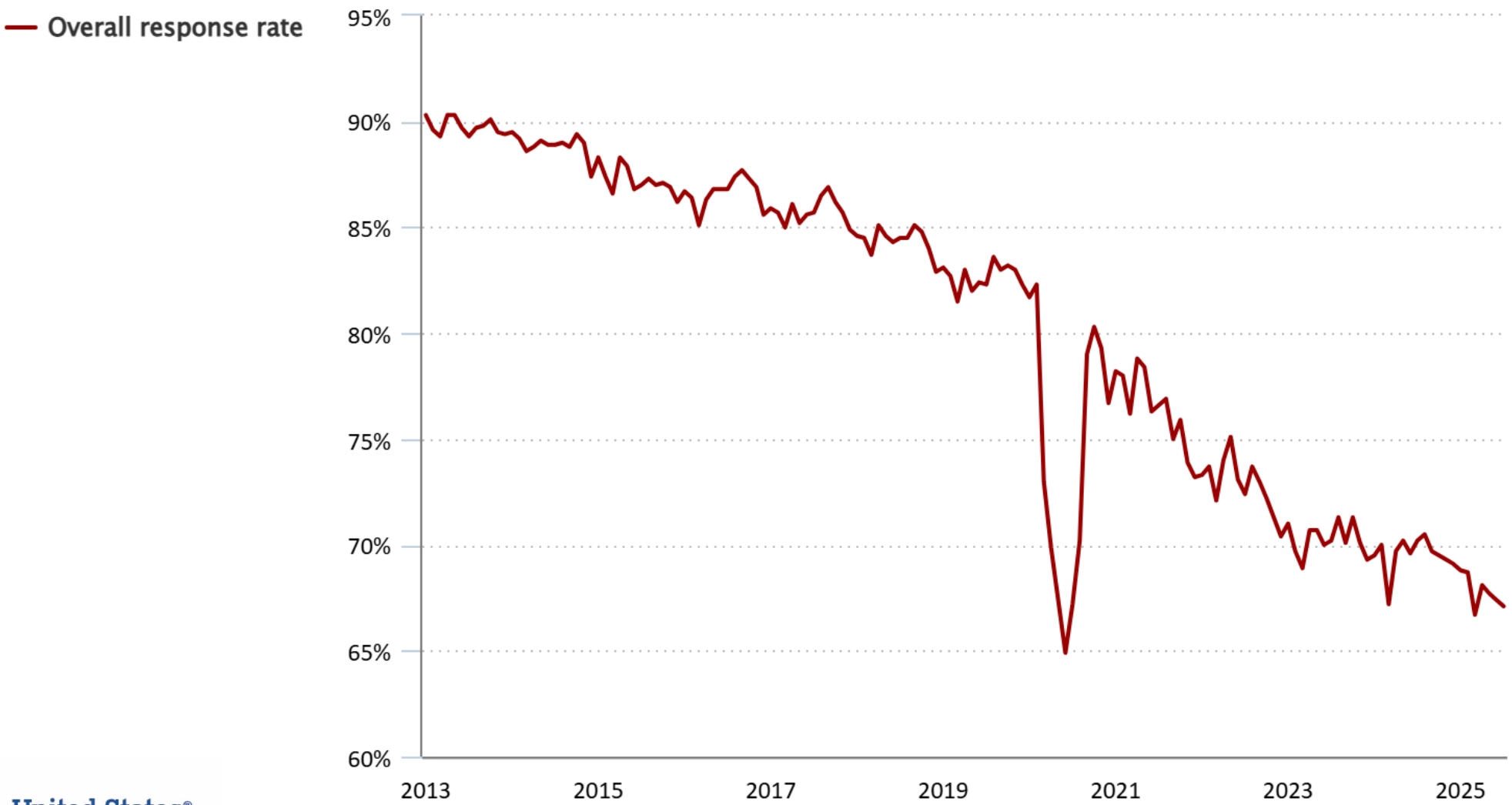
CPS response rates, overall response rate and response rates by month in sample (MIS)



Source: U.S. Bureau of Labor Statistics.

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Text Messaging as a Contact Strategy *(1/3)*

- Federal surveys have only recently begun to use text message invites and reminders (e.g., Household Pulse Survey in 2020)
  - Many of these surveys have targeted specialized populations instead of the general population (e.g., National Survey of College Graduates)
- As web surveys are adopted and optimized for mobile devices, understanding the impacts of text messages becomes more important
  - ~15% of Americans depend on smartphones for their only source of Internet access *(PEW, 2024)*
  - Certain groups are more likely to depend on smart phones for Internet access (e.g., non-white; lower-income, lower educational attainment)

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Text Messaging as a Contact Strategy *(2/3)*

- Available literature presents mixed findings on the efficacy of text messaging as a contact strategy for promoting survey response:
  - Prior studies find that text message invitations/reminders do not substantially impact overall response rates or differ from email invites *(Bruijne & Wijnant, 2014; Christian, 2024)*
  - However, prior research has also shown that text message invitations improve initial response rates and encourage quicker survey response *(Christian, 2024)*

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Text Messaging as a Contact Strategy *(3/3)*

- Prior research has shown consent rates for receiving text messages to be ~50%, but there are mixed findings on patterns in consent behaviors:
  - Most studies find evidence of demographic differences in consent behavior *(McGeeney & Yan, 2016; Spiegelman & Zotti, 2021)*
    - Differences by age, race/ethnicity, income, and urbanicity have been documented in these studies
  - However, at least one study found no significant differences by select demographics (*i.e.* age, sex, education) in providing phone numbers for consenting to text messages *(Bruijne & Wijnant, 2014)*

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Research Aims

- This is an exploratory study that examines the following research questions:
  1) How do text message reminders contribute to response rates?
  2) Are there demographic differences in who clicks on the survey through text message invites versus email invites?
  3) What are the consent rates for receiving text messages?
  4) Are there demographic differences in who consents to receive text messages?

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Data & Sample *(1/3)*

- Nationally-representative data from the Census Household Panel (CHP)
- The CHP is a probability-based nationwide survey panel that regularly fields surveys to panel members as monthly "topical" surveys
- Panelists are invited to the topical surveys via email and text messages
- Analyses of survey responses and paradata from the May 2024 topical survey (*i.e.* "Topical 7") with a national sample
    - A replenishment sample was included for this wave of data collection

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Data & Sample *(2/3)*

Day of Data Collection Period	Type of Invitation/Reminder	Time of Message
1	Email	6:00 am (EST)
1	Text Message	12:00 pm (EST)
3	Email	6:00 am (EST)
8	Text Message	5:00 pm (EST)
10	Email	6:00 am (EST)
10	Text Message	12:00 pm (EST)
15	Email	6:00 am (EST)
15	Text Message	12:00 pm (EST)

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Data & Sample *(3/3)*

- Outcome Variables:
  - Clicking on Text Messages
    - Binary measure of whether someone clicked on/accessed the survey through a text message invitation instead of an email invitation (0 = No; 1 = Yes)
  - Consent
    - Binary measure of whether someone consented to receive text message invitations/reminders when enrolled in the panel (0 = No; 1 = Yes)
- Control Variables:
  - Age Group; Sex; Race/Ethnicity; Marital Status; Education Level; Household Income; Region; Language; Respondent Type

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Analytic Approach

- Descriptive statistics to establish response rates and consent rates
- Binary logistic regressions to model differences in likelihood of:
    1) Clicking on text message invitations over email invitations
    2) Consenting to receive text messages
- Calculate and interpret odds ratios as % increases and % decreases
- Pairwise deletion to preserve sample size across models
    - Analytic sample size is ~9,600

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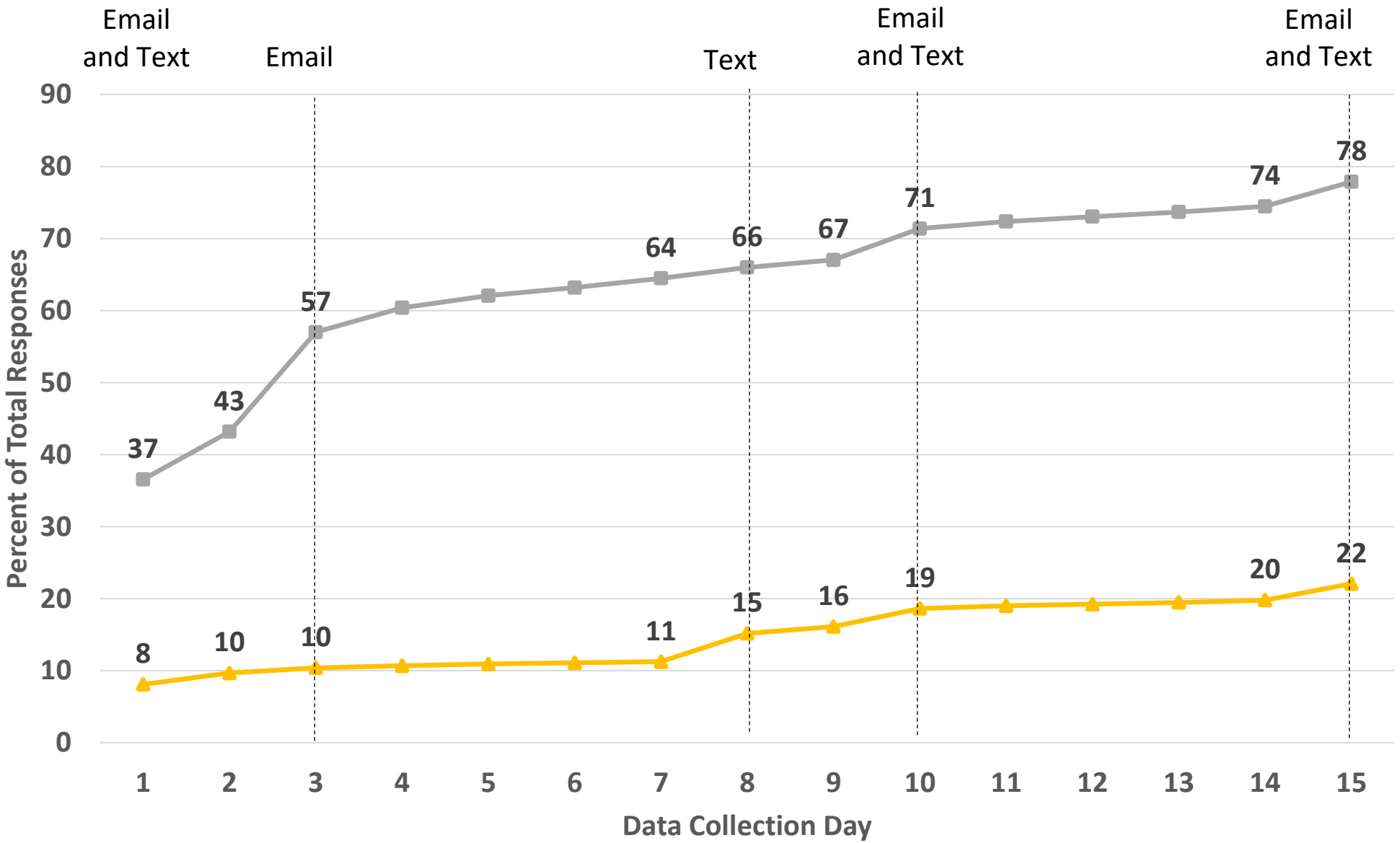
Findings: How do text message reminders contribute to response rates?



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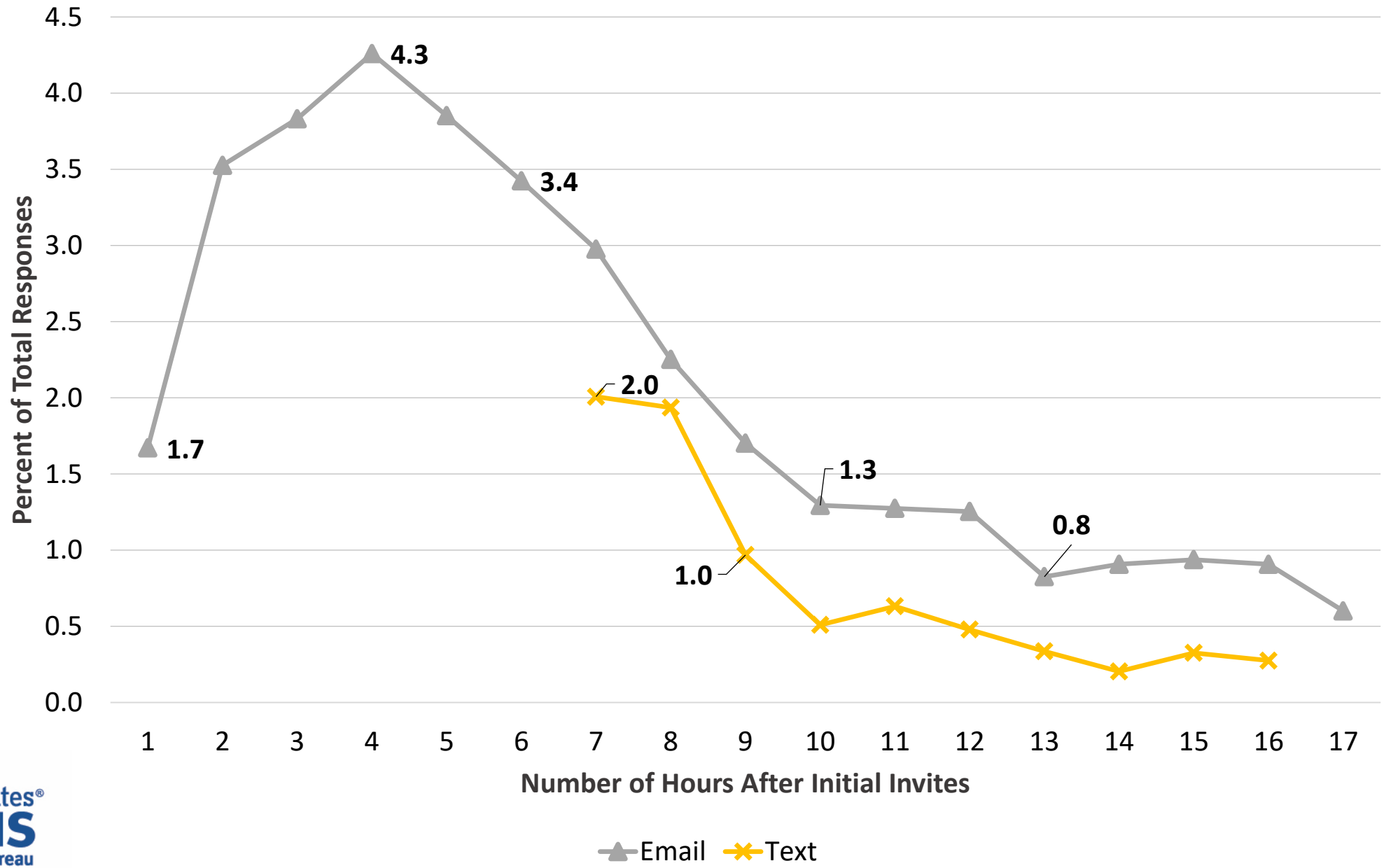
Source: Census Household Panel Internal Use Files, 2024



Source: Census Household Panel Internal Use Files, 2024

Findings: Are there demographic differences in who clicks on the survey through text message invites versus email invites?

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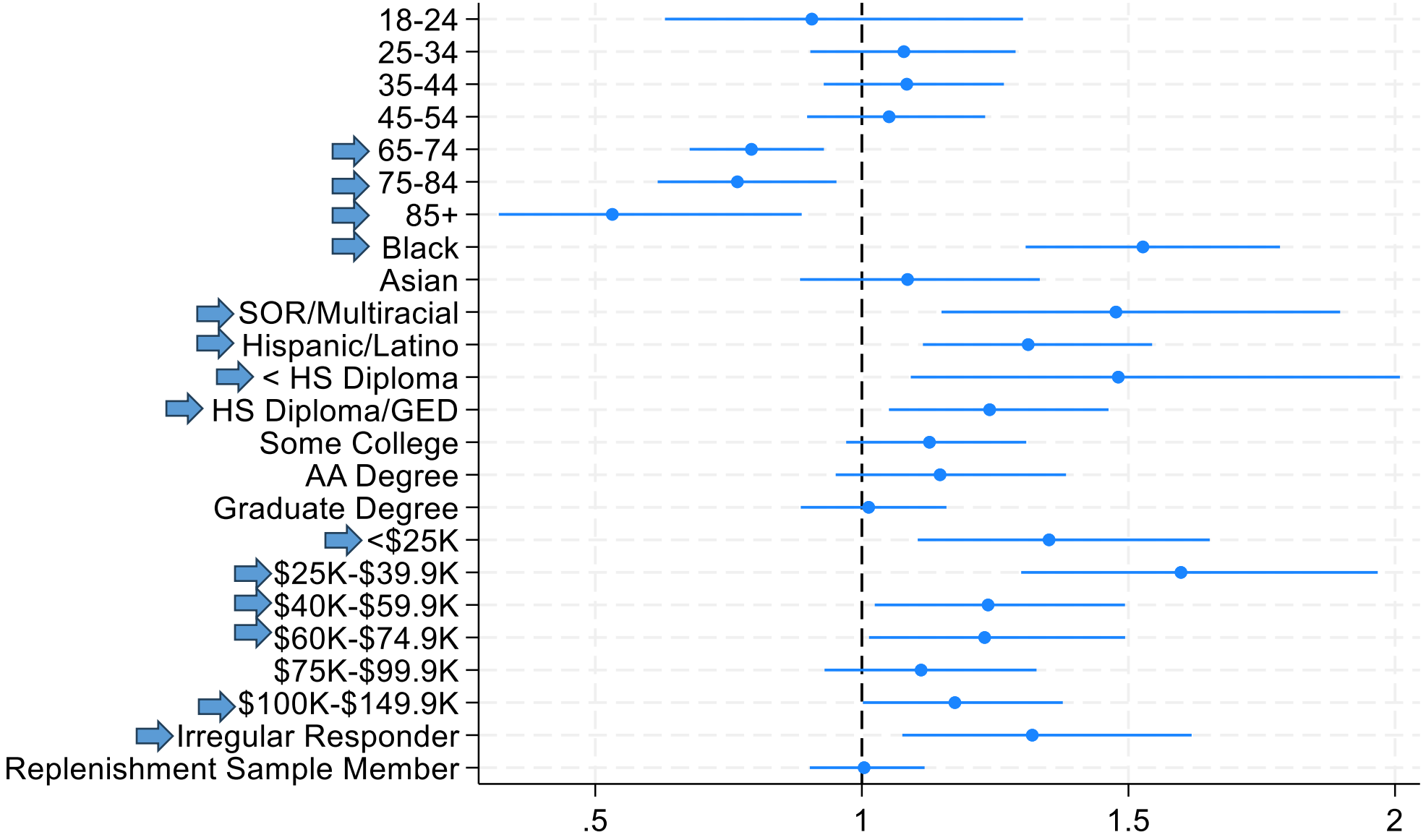
Odds ratios for clicking on a text message invitation link (instead of an email invitation link) (*n* = ~9,600)



Source: Census Household Panel Internal Use Files, 2024

Findings: What are the consent rates for receiving text messages?

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Consent Rates for Receiving Text Messages

Consent to Receive Text Messages	**53.3%**
Consent to Receive Text Messages AND Provided Phone Numbers	**52.6%**

Consent to Receive Text Messages AND Emails	**50.3%**
Consent to Receive ONLY Text Messages	**2.9%**

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Source: Census Household Panel Internal Use Files, 2024

Findings: Are there demographic differences in who consents to receive text messages?

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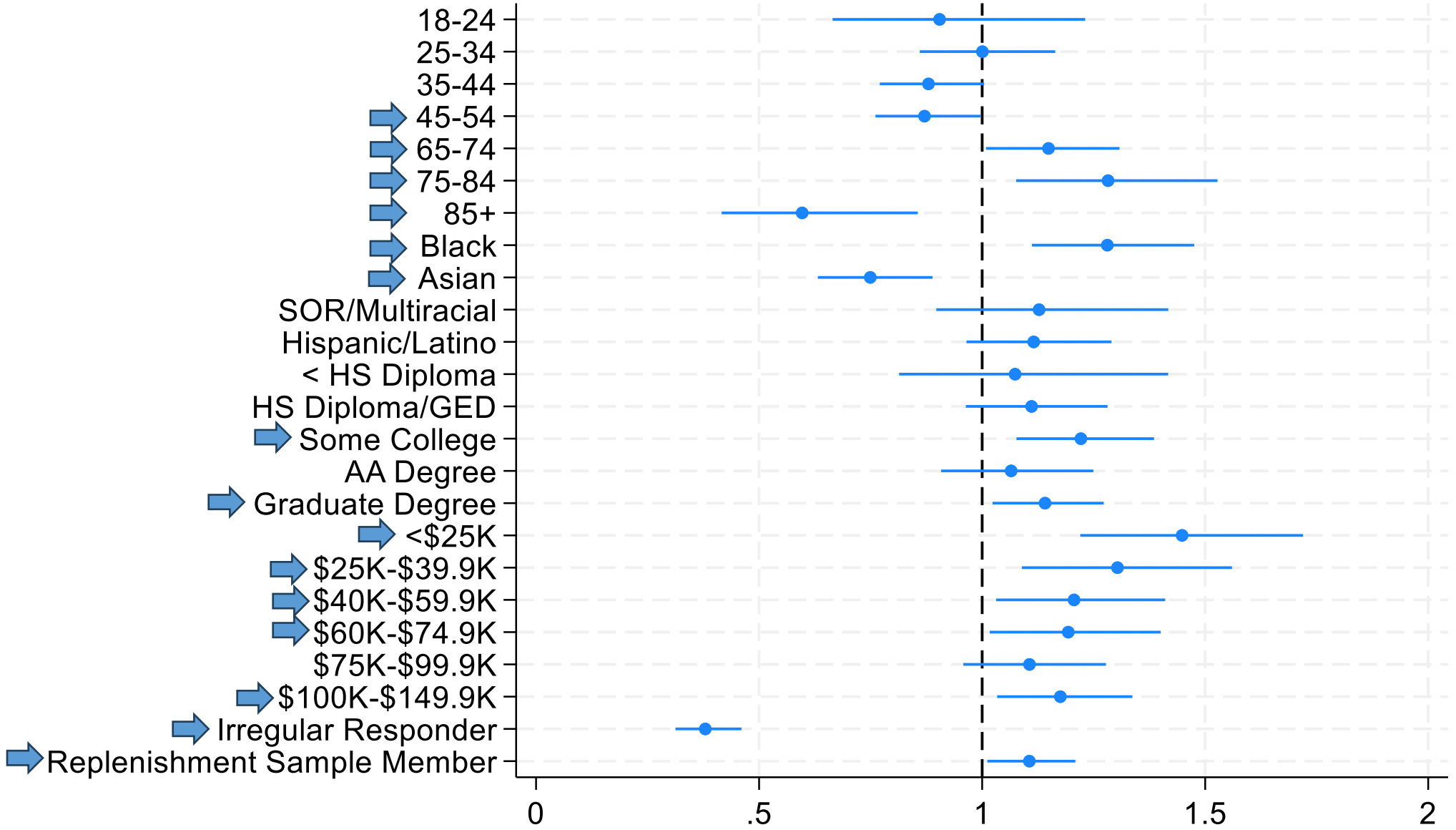
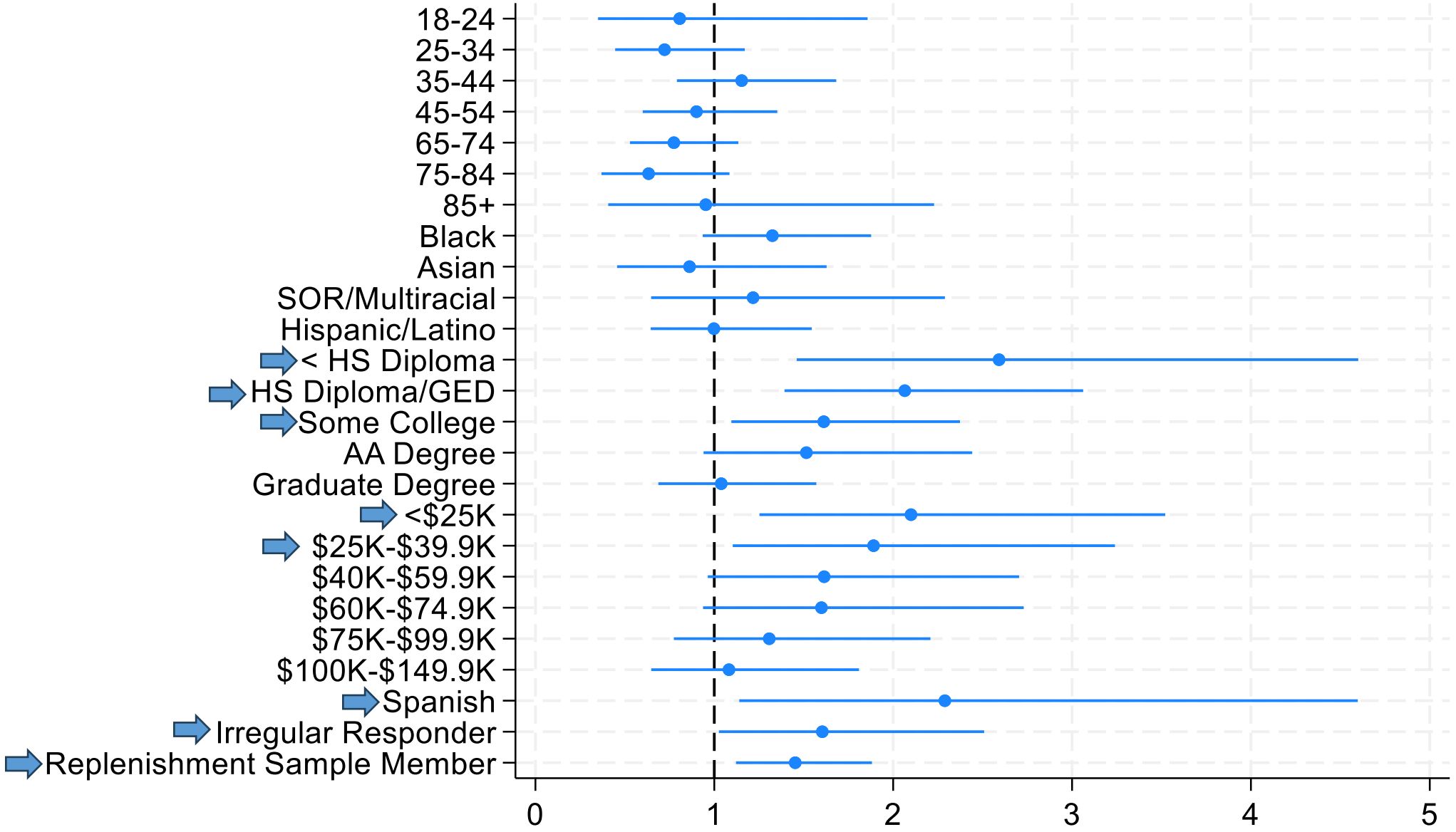
Odds ratios for consenting to receive text message invitations/reminders AND providing phone numbers (*n* = ~9,600)



Source: Census Household Panel Internal Use Files, 2024

Odds ratios for consenting to receive ONLY text message invitations/reminders AND providing phone numbers (*n* = ~9,600)



Source: Census Household Panel Internal Use Files, 2024

Discussion *(1/3)*

- Consistent with prior literature, we observe rapid initial response when text message invitation are sent *(Christian, 2024)*
  - However, response rates decline sharply as the number of hours since the text message increases
- We also observe text message consent rates for Topical 7 of the CHP that are comparable to the existing literature (*i.e.* ~50%)

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Discussion *(2/3)*

- Consistent with prior literature, we also find evidence of demographic differences in consent behavior *(McGeeney & Yan, 2016; Spiegelman & Zotti, 2021)*
  - Our findings corroborate documented differences by race/ethnicity, age, and income
  - We also find novel differences by educational attainment, marital status, region, past response behaviors (*i.e.* regular vs. irregular responders), and survey language

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Discussion *(3/3)*

- Contrary to the prior literature, we find evidence of demographic differences in providing phone numbers for consenting to text messages
- We also contribute to the available literature by quantitatively examining demographic differences in the likelihood of clicking on/accessing a survey through text invitation
  - We observe demographic differences by age, race/ethnicity, education level, household income, and respondent type

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Limitations & Next Steps

- Limitations
  - This research is exploratory and not experimental, so we cannot speak to causal effects for specific contact strategies
  - Since this is a panel survey, enrolled panelists may differ from respondents in non-panel surveys in ways that are consequential for findings
- Next Steps
  - We plan to investigate how device type impacts observed effects of text messages on response rates

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