Adaptive Designs – Tailoring of Contact Materials to Increase Survey Participation

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Rebecca J. Powell, Antje Kirchner, Emilia Peytcheva
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Leverage Saliency Theory (Groves et al. 2000)

- **Topic saliency**
  
  - Tailoring of communication materials to make a survey more attractive and increase saliency (Groves and McGonagle 2001; Groves et al. 2000; Groves et al. 1992; Cialdini 1984; Blau 1964)
  
  - Improved response rates with targeted/more salient letters (especially among nonrespondents) (Lynn 2016; Tourangeau et al. 2010)

- **Sponsorship**
  
  - Individuals “are more likely to comply with a request if it comes from an authority” (Groves et al. 1992) due to increased sense of
    - legitimacy
    - trust
    - potentially positive attitude towards sponsor
  
  - Positive effects on response rates for legitimate organizations (Edwards et al. 2014; Avdeyeva and Matland 2013; Groves et al. 2012)
▪ Baccalaureate and Beyond 2008/18 (B&B:08/18)
  – Longitudinal survey of individuals who completed their Bachelor’s degree during the 2007-08 academic year
  – Last National Postsecondary Student Aid Study (NPSAS:08) follow-up
    ▪ Students are interviewed during their degree year (NPSAS:08), one (B&B:08/09), four (B&B:08/12) and ten years later (B&B:08/18)
  – Mixed-mode data collection (web and telephone)

▪ Field Test
  – N=1,557
  – Response Rate=75%
  – Data collection: July 17-November 7
Research Questions

▪ How does **tailoring** of letters and emails affect
  – response rates?
  – potential for nonresponse bias?
    ▪ Are there differences for previous round nonrespondents?

▪ How does **sponsorship** in reminder emails affect
  – response rates?
  – potential for nonresponse bias?

▪ How do **tailoring** and **sponsorship** interact?
Experimental Manipulations

▪ Tailoring experiment on all letters and emails
  – Generic version – earning a Bachelor’s degree impacted…
  – Tailored version – earning a Bachelor’s degree in field impacted…

▪ Sponsorship experiment on all reminder e-mails
  – From RTI (@rti.org)
  – From NCES (@ed.gov)
Methods

- Response Rates: t-tests on final numbers

- Nonresponse Bias: absolute relative bias
  - Region
  - Age
  - School type
  - Enrollment
Similar overall response rates (p=.914):
- Generic: 72.0 %
- Tailored: 71.7 %
Tailoring and Response Rates by Previous Response Status

Response Rate (in %)

- B&B:08/12 Respondents:
  - Generic: 77.9%
  - Tailored: 78.9%

- B&B:08/12 Nonrespondents:
  - Generic: 36.0%
  - Tailored: 42.4%
Tailoring and Nonresponse Bias

Relative Nonresponse Bias

- **Maximum absolute relative bias**:
  - Generic: 44.5
  - Tailored: 39.4

- **Average absolute relative bias**:
  - Generic: 8.4
  - Tailored: 9.5

- **Median absolute relative bias**:
  - Generic: 5.5
  - Tailored: 5.5
Similar overall response rates ($p=0.982$).
- RTI: 54.8 %
- NCES: 54.8 %
Sponsorship and Nonresponse Bias

Relative Nonresponse Bias

Maximum absolute relative bias: 54.5
Average absolute relative bias: 11 RTI, 10 NCES
Median absolute relative bias: 8.9 RTI, 7.4 NCES
Interaction Response Rates

**Response Rate (in %)**

- **Generic**
  - RTI: 67.5%
  - NCES: 64.7%

- **Tailored**
  - RTI: 62.8%
  - NCES: 71.3%
Interaction Nonresponse Bias

Relative Nonresponse Bias

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Tailoring seems to help with nonresponse
   - Response rates among previous round nonrespondents
   - Absolute relative bias

NCES sponsorship seems to increase response rates when combined with tailoring

Analyses underpowered, but results in the expected direction
Thank you!

Rebecca J. Powell, PhD
rpowell@rti.org