

Using Paradata to Track the Incidence of Respondent Substitution and its Effect on Survey Quality

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Paradata created by survey process:

Difference or Lack of Difference between:

Name / title / role / contact information of the
originally targeted respondent

vs.

Actual respondent of record

Application

- Business or household surveys
- List frame surveys with pre-identified “reporters” or “informants”
- Identity of reporter or informant is significant to data collection

Purpose

- For survey managers & designers
- To monitor and analyze phenomenon of respondent substitution
- To understand link between substitution and data quality

Is Substitution Important?

- In longitudinal establishment surveys – yes
- Substitution can be good:
 - Correction of misdirected survey requests
 - Facilitators for multiple respondents necessary
 - Replacement of absent or delaying reporter
- Or bad:
 - Delegation to unqualified recipients
 - Interception by gatekeepers
 - Lack of commitment to the task

Research

- Response Models for Business Surveys
 - Edwards & Cantor (1991)
 - Tomaskovic-Devey (1994)
 - Willimack et. al (1999-2001)
 - Tuttle (2008)
- Proxy Reporting

Survey Datasets

1. **Army spare parts inventory**
Respondent: managers of sampled parts
2. **Head Start Grantees**
Respondent: program officials
3. **Healthy Marriage Grantees**
Respondent: program officials
4. **Protégé Firms**
Respondent: Corporate officers

Substitution Rates

1. Army spare parts inventory: 3%
2. Head Start Grantees: 34%
3. Healthy Marriage Grantees: 56%
4. Protégé Firms: 31%

Nature of Substitution

- Delegation: typically from higher-level titles to subordinate titles

1. Head Start

Titles with term “director”:

- 88% of originally targeted
- 32% of substitutes

Nature of Substitution

2. Healthy Marriage Grantees

- “Executive Directors”:
28% vs. 3% (original vs. substitute)
- Substitutes more often had subordinate title terms: “assistant,” “deputy,” “associate”

Nature of Substitution

3. Protégé Firms

- Originals: more often “President,” “CEO”
- Substitutes: more often “Vice President,” “Chief Financial Officer”

Nature of Substitution

- Specialization: typically from general executive titles to more specialized titles

“Analyst,” “Project Director of _____,”
“Fatherhood Advocate,” “Chief
Procurement Officer,” “QA Director”

Quality Measures

- Item nonresponse
- Nonsubstantive answers
- Volume of open-ended text provided
- Navigational & other response errors

Answer Text Volume

1. Head Start Grantees

Original > Substitute in 5 of 6 qns.

2. Healthy Marriage Grantees

Original > Substitute in all 5 qns.

3. Protégé Firms

Original > Substitute in 1 of 4 qns

Response Errors

1. Head Start Grantees

Original > Substitute skip errors in 2 of 4 qns.

2. Healthy Marriage Grantees

Original > Substitute in satisficing in 1 of 1 qns.
(estimating 1st of month in date qn.)

3. Protégé Firms

Original > Substitute skip errors in 2 of 4 qns

Item Nonresponse

1. Head Start Grantees

Original > Substitute in 23 of 30 qns.

2. Healthy Marriage Grantees

Original > Substitute in 10 of 34 qns.

3. Protégé Firms

Original > Substitute in 5 of 7 qns

Nonsubstantive Answer

1. Head Start Grantees

Original > Substitute in 3 of 19 qns.

2. Healthy Marriage Grantees

No data

3. Protégé Firms

Original > Substitute in 2 of 6 qns.

Further Issues

- Multiple Respondents
- Population-specific characteristics
- Manipulating substitution rates

Thank you!

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