Approaches to Data Collection for NSF Non-Profit R & D Study

For

Workshop on Measuring R & D Expenditures in the U.S. Nonprofit Sector

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How Nonprofits to be surveyed may vary

- Some quite large with many employees; some quite small with no or few employees.
- Meaning of "research and development" clear and relevant to some, but unclear and not relevant to others.
- Most organizations can respond by web; some may be reluctant to use this mode.
- Convincing some to respond may take significant effort.
- One person may be able to complete and send the response; in others multiple people may need to be involved.

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How to increase chances of obtaining a survey response

1 Make an initial contact with organizations, especially larger ones for finding out the name and contact information for the person to whom request should be sent.

- Purpose is to make sure multiple contacts get to the right person.

2 Obtain contact information for telephone, email and postal delivery.

- Purpose is for use in building more effective implementation system, explained below

How to increase chances of obtaining a survey response (2)

3 Use multiple contacts by different modes in predetermined sequence to encourage contacts.

4 May want to get statement(s) of support from non-profit sector for possible use in communications.

5 Use initial postal contact with request to respond by web followed by email to "make responding easier for you."

- This is known as email augmentation, for example:

An example of changing a design to make data collection more effective

- We were doing a study for the National Science Foundation on the extent to which students were writing interdisciplinary dissertations in 2013.
- We could have done it by using only email contact, only mail contact or both. We expected:
  - Email only contact to get a web response would have put us in the 20-25% response range.
  - Mail only contact to get a <u>web</u> response would have put us in the 35% response rang**e**.
  - Mail only contact to get a <u>paper</u> response would have put us in the 35-45% range.
- Instead we designed a system to "push responses to the web" but also followed up with mail, while trying to build synergy across postal/email contacts.
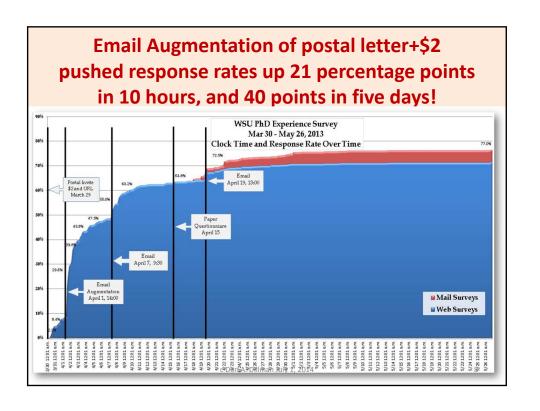
Contact procedures for a 2013 Survey of Graduate Students Working on Dissertations

- Day 1- Postal request to respond over the Internet with $2 token incentive
- Day 4- <u>Email Augmentation</u> 3 days later
- Day 8- Another Email follow-up
- Day 16- Postal Follow-up with mail questionnaire (used this in anticipation of coverage problems from email alone)
- Day 21- Final Email-augmentation

(Millar, Morgan. July 2013. Determining Whether Research is Interdisciplinary: An Analysis of New Indicators. Technical Report #13-049. The Washington State University Social and Economic Sciences Research Center: Pullman)

The 12 page paper questionnaire

Email Augmentation of postal letter+$2
pushed response rates up 21 percentage points
in 10 hours, and 40 points in five days!

Elaboration

- We achieved <u>synergy</u> from placing postal/email contacts in support of each other. (Postal contact had incentive; email had message, "Here's a electronic link to make responding easier")
- It's likely that some people don't open emails; some don't open mail. "Pairing" them increased the likelihood of the other being read and acted upon.
- Use of both also improves coverage (wrong email or postal addresses).
- The connection between the two gave us <u>speed</u> as well as higher response rate, 77%.
- Response rate increased an additional 12 percentage points after postal questionnaire sent; ½ responded by paper and ½ by web, but we don't know whether it achieved lower non-response error .

How to increase chances of obtaining a survey response (3)

6   Do <u>not </u>offer a choice of response mode unless you make it easy to respond by <u>both</u> modes. Doing so lowers response rates.

It is okay to push respondents to one mode initially; save alternative mode (postal) until late in the process as a means of "improving" response.

How to increase chances of obtaining a survey response (4)

7   Do <u>not</u> rely only on email contact. Mail needs to be used to legitimize the study (some nonprofits will not know who NSF is; email only surveys get much lower response than when other <u>contact modes</u> are use to amplify effectiveness of email contacts).

8   Use of postal mode response option is effective when no web response has been achieved, but not vice versa.

Non response follow-up

- Nonresponse is most likely to occur if organization does not undertake R & D or understand what it is.

- A follow-up phone call might be made that includes the "screener" items to see if the organization is eligible.

- If eligible, then additional contacts by email (and/or mail) can be made.

What the complete implementation process might look like

- An initial contact by <u>telephone</u> to obtain contact information.
- An initial <u>postal letter</u> that explains and legitimates request for R & D information.
- A quick <u>email follow-up</u> to make it easier for person to respond.
- Another <u>postal letter</u> requesting a response.
- Another <u>email augmentation</u>
- <u>Telephone</u> calls for nonresponse follow-up.
- Additional Email and/or postal contacts.

The Survey Science that undergirds this kind of implementation protocol

- Different modes of contact are used to increase likelihood of organizations becoming aware of the survey request, and defining it as important.
- Offering multiple response modes will improve response by providing another way of attracting attention to the survey.
- Getting people to respond by a particular mode requires making it easier (an electronic link), but getting people to use that link requires first defining the request as important.

{For elaboration, see Dillman, Smyth, and Christian, 2014 (August) Internet, Phone, Mail and Mixed-Mode Surveys; The Tailored Design Method, 4th edition. John Wiley Co., Hoboken, NJ}

Final Comment

- We are in an era of <u>tailored design</u>- different connection between <u>contact modes</u> and <u>response mode</u> for different populations and data collection situations.
- The science of data collection is moving forward rapidly, and in general it's not sufficient to simply pick-up procedures from other studies and use them in the same way as done in the past.
- We need to think forward instead of just doing what we did in the past.

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Thank you!

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