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Increasing Response Rates in Mail Surveys Without Increasing Error

A Research Note

Stephen J. Ziegler

Indiana University–Purdue University Fort Wayne

Self-administered mail surveys remain one of the most common methods of collecting data in social science research. Not only are mail surveys cost-effective, they also enable researchers to gather both quantitative and qualitative data from elite policy makers as well as everyday citizens. However, no matter how well the research is designed or how interesting the questions are, it is all of little use if the population fails to respond. Accordingly, in an effort to increase response while decreasing the error associated with nonresponse, the following article argues for the careful integration of multiple contacts and endorsements when surveying elite policy makers. Such an approach is consistent with the Tailored Design Method and was used in a recent survey of chief prosecutors in four states. Response rates reached as high as 90% in one of the states, with an overall response rate of 76% across the four states.

Keywords: *mail survey; response rate; endorsement; Tailored Design Method; Total Design Method; prosecutors*

Self-administered mail surveys are one of the more popular tools in the study of social behavior (Brehm, 1993; Frankfort-Nachmias & Nachmias, 1996). Virtually every federal agency relies heavily on survey data, and the disciplines of political science and sociology use survey research as a “primary source of evidence” (Brehm,

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1993, p. 15). Not only are they cost-effective but they have the potential to reduce some of the error associated with personal interviewing (Frankfort-Nachmias & Nachmias, 1996, p. 225). But despite their popularity, self-administered mail surveys can still suffer from a variety of errors, especially those associated with low response rates, a type of error that has the potential to affect the generalizability of the results (Brehm, 1993; Dillman, 2000; Dobbin et al., 2001; Faria, Dickinson, & Filipic, 1990; Fox, Crask, & Kim, 1988). Low response rates have posed problems when dealing with the general population, and data collection becomes even more challenging when the population is made up of busy professionals or elite policy makers who are reluctant to participate (Dillman, 2000; Dobbin et al., 2001; Gore-Felton, Koopman, Bridges, Thoresen, & Spiegel, 2002; O'Rourke, 1999; Puleo et al., 2002). Consequently, no matter how interesting our questions or how valuable our research, all of our efforts are of little use if our population fails to respond.

But low response rates need not be an insurmountable problem. In an effort to increase response rates while simultaneously decreasing the error associated with mail surveys, the following article argues for the careful use and integration of multiple contacts and endorsements when surveying elite policy makers. Such an approach is consistent with the Tailored Design Method (TDM), the method employed in a recent survey of state prosecutors where response rates reached as high as 90% in one of the states, with an overall response rate of 76% across all four states (Ziegler, 2003; Ziegler & Lovrich, 2003).

The first part of the article will provide a brief history of the TDM and the value of both multiple contacts and endorsements. The second part will describe the four-state study of prosecutors and how multiple contacts and endorsements were integrated to achieve positive results. The third part will offer a brief discussion and conclusion about potential and limitations when multiple contacts and endorsements are integrated.

The TDM, Multiple Contacts, and Endorsements

The TDM

Although a great deal of research continues to experiment with new ways to increase response rates, the leading paradigm in self-administered mail surveys is the TDM, a systematic approach to survey research that recognizes that the design and implementation of surveys must be tailored to the population being examined (Dillman, 2000). In 1978, Don Dillman (1978) published the Total Design Method, a one-size-fits-all approach that relied heavily on social exchange theory as a framework for the design and implementation of self-administered mail surveys (p. 5). Social exchange consists of three key elements—rewards, costs, and trust—and essentially argues that people can be motivated to do something if they can expect a reward in return for their efforts, particularly if the rewards exceed the costs (Dillman,

2000, p.14). Twelve years later, Don Dillman published *Mail and Internet Surveys: The Tailored Design Method* (Dillman, 2000). His newest work built on earlier research and altered the landscape by adopting the new TDM, the recognition that the design and implementation of surveys must be tailored to the population being examined; the one-size-fits-all approach to mail surveys no longer stands alone (p. 12).

Multiple Contacts and Endorsements

Although there are various ways to increase response rates (Dillman, 2000; Fox et al., 1988; O'Rourke, 1999), multiple contacts have been found to be "more effective than any other technique for increasing response to surveys by mail" (Dillman, 2000, p. 149). Multiple contacts come in various forms such as prenotice letters, telephone calls, introductory letters enclosed with the questionnaires, and thank-you cards or follow-up reminders. Multiple contacts could also include certain special procedures that a surveyor may employ when sending out the survey (e.g., certified mail or overnight delivery). Each one of these contacts relies on a different stimulus yet is consistent with the principles of social exchange (pp. 149-154; see also Dobbin et al., 2001, pp. 294-295).

In addition to multiple contacts, recent research indicates that endorsements from external parties who are considered by the respondents to be credible could have a positive influence on response rates (Rochford & Venable, 1995, p. 86). In fact, researchers have found that endorsements from local, well-known individuals generally increased response rates over the response rates seen from surveys sent without letters of endorsement (pp. 86, 92-93; see also Dillman, 2000, p. 20, who cites literature that indicates that surveys sponsored by legitimate authorities have also benefited from increased response). But what if these two methods, multiple contacts and endorsements, are combined with each other? Each method by itself has the potential to increase response rates, but could their combination have a positive, synergistic effect? This article explores that possibility by describing the process by which these two factors were integrated with positive results.

The Survey: Pain Relief, Prescription Drugs, and Prosecution

Background

The undertreatment of pain has reached epidemic proportions in the United States, and one of the reasons for its undertreatment stems from physicians' fears that the dispensing of heightened levels of opioids for palliative purposes increases the risk of investigation by various drug regulators such as local prosecutors or other state or federal officials (Hill, 1993; Nowak, 1992; Weinstein et al., 2000; Ziegler & Lovrich, 2003). But how accurate is this commonly held fear of investigation or prosecution? In an effort to explore this question, a self-administered mail survey was sent to all chief

prosecutors in Washington, Oregon, Maryland, and Connecticut (Ziegler & Lovrich, 2003).

The Population's Unique Characteristics and the Need to Tailor

From the very beginning of the project, we were aware that most of our potential respondents were political elites who, as elected policy makers, could suffer negative consequences should their confidential answers be revealed. Consequently, every effort was made to protect the confidentiality of the participants while maintaining scientific standards. Tailoring a study to the population is not something that begins and ends with the design of the questionnaire; rather, the need to tailor should be considered from the very beginning of the project all the way through its completion (Dillman, 2000). In fact, the very process of seeking endorsements illustrates this point.

The Process of Securing Endorsements

Earlier research has indicated that endorsements can have a positive influence on mail survey response rates (Rochford & Venable, 1995). But two questions immediately come to mind: Where do I start, and from whom do I seek endorsements? Endorsements should only be secured from those organizations that are most relevant to the population under study. Moreover, if more than one endorsement is sought, the investigator should start with the one most likely to prove successful. In fact, once an investigator obtains an endorsement from one relevant organization, the likelihood of additional endorsements is increased because the investigator can often get referrals for other relevant organizations from the first organization and, with permission, use their name in acquiring additional endorsements. This approach is analogous to snowball sampling (Johnson & Joslyn, 1986, p. 148), but here it would be regarded as snowball endorsing. When dealing with prosecutors, one obvious organization to begin a search would be their own associations.

Prosecutor Associations

Although the majority of chief prosecutors in the United States are elected (Jacoby, 1980), most states will have their own prosecutors association where meetings are held on a periodic basis. These meetings permit informational exchanges among members and at times permit the earning of continuing legal education credits, a necessity for all licensed attorneys in many states. Consequently, if the researcher must initiate a cold call to the association, it is recommended that the association's liaison or training coordinator be contacted first. After all, persons who serve in a liaison capacity already have a mindset toward facilitation and communication, and those working in the training division would likely be more receptive to other researchers because education is a primary part of their job function (particularly when the matter

involves continuing legal education). Moreover, it is recommended that prior to making such a cold call, the researcher should consider e-mailing the liaison to ensure that he or she is contacting the correct person. This will not only help establish legitimacy but will also enable the researcher to acquire some background before making the first call.

In the present study, the researchers were fortunate from the start because one of the principal investigators had previous dealings with the Washington liaison and training coordinator. The investigator subsequently telephoned the liaison and arranged a meeting with the investigators, the liaison, and one of the potential respondents (an elected prosecutor). Although a meeting with a potential respondent could have many positive results, the process of securing endorsements and the presence of a potential respondent can be tricky. On one hand, investigators want an endorsement from the organization but do not want to prematurely expose a potential respondent to the stimulus. On the other hand, few organizations would endorse something sight unseen. We resolved this dilemma by providing a confidential draft of the questionnaire to the liaison, who himself was an attorney and understood the necessity of not revealing the contents of the survey to a potential respondent. Taking this approach not only insulated a potential respondent from the stimulus while simultaneously permitting review by the association but also enabled the liaison to provide us feedback on the questionnaire (a form of pretesting; see Dillman, 2000, p. 140). Moreover, by meeting with a liaison and a potential respondent, it enabled them to vouch for our credibility and our sensitivity to the needs of the membership (particularly as it relates to confidentiality and/or political concerns).

If the instrument cannot be shown to a potential respondent, what can be spoken about? I recommend that the investigator first express the reasons why the draft of the questionnaire cannot be shown to a potential respondent and limit the conversation to the information that would appear in the cover letter that would be mailed out with the questionnaires. Throughout the meeting, we emphasized our willingness to present our findings in the aggregate at one of their future legal education meetings, a gesture that was eagerly accepted and that helped fulfill the mutual goals of both the researchers and the endorsing organization (consistent with social exchange theory's focus on increased rewards for participation). It is important to note, however, that although we were pursuing a partnership of sorts by seeking their consent, support, and participation, we were not seeking their permission to conduct the study in the first place. Although it would be best to receive an endorsement from their association, there may be reasons that prohibit them from doing so. Weeks after our meeting, we learned that the association's board of directors had indeed endorsed our study, but the liaison asked if we could substitute the word *endorse* with *encourage* in our cover letter to the respondents. We recognized that politically it was more than mere semantics, and thus we were more than happy to comply (which in turn contributed to the promotion of trust without compromising our research). After our first endorsement, we were able to gain referrals and contacts in other states and thus reduce the number of cold calls that had to be made.

Support From Support Agencies—Maryland

During the process of refining the questionnaire, a colleague in pain research recommended an official at the Maryland Attorney General's Office who maintained an avid interest on the topic of pain relief and end-of-life care. Although the state of Maryland was currently not part of the study, contacting the attorney general's office was advantageous because we knew no one else in the state, because people at the office could provide information about Maryland prosecutors, and because there was a reduced risk of tainting potential respondents as the attorney general's office is a separate entity from the state prosecutors (state attorney's general will often be a good start if no other contacts exist in the state because they have no oversight or authority over state prosecutors, and they often operate in a support capacity).

Although we ultimately decided to add Maryland to the study and received an endorsement from the attorney general, we were unable to secure an endorsement from the Maryland prosecutors' association (it was not that they opposed our study, but endorsing research studies was something they preferred not to do). Nevertheless, the support from the attorney general helped to establish credibility and encouragement, particularly when the attorney general's office sent out a letter encouraging the chief prosecutors to complete our questionnaires.

Connecticut: The Only State Where Endorsements Were not Secured

Prosecutors in the state of Connecticut proved to be the most challenging of the prosecutors in the four states in the survey. First, Connecticut prosecutors (state's attorneys) are quite unique in that they are appointed for fixed terms, they are not subject to election, and their association is largely labor oriented. Second, although they have periodic meetings with the chief state attorney's office, the chief state attorney is similar to a state attorney general in other states in that they have no supervisory authority over the prosecutors and serve only in a support capacity. We subsequently contacted the chief state attorney's office and spoke with an assistant whose name we had been given by another endorsing organization. The assistant was most helpful in providing insight concerning the state prosecutors, and although they were reluctant to endorse any type of research study, our contact nevertheless provided the research team with the name of a Connecticut prosecutor who was actively interested in policy research of this type. We subsequently spoke with that prosecutor, and he or she was very supportive of our research topic but admitted that endorsing surveys in his or her state would be problematic. Consequently, Connecticut was the only state where endorsements within the state were not secured.

In the end, we obtained endorsements (or official encouragements) for our study in three out of the four states and from one national organization (two state prosecutor associations, one attorney general's office, and the National District Attorneys Association, which permitted us to indicate that their organization encouraged the participation of state prosecutors in our study). Although some states permitted the use of the

term *endorse* and others preferred the less authoritative term *encourage*, we decided to use the less controversial *encourage* both on the cover of our questionnaire and in the body of our cover letters. Although the difference between *encourage* and *endorse* may seem minor, it was not minor politically, and therefore we were willing to accommodate the concerns of some organizations.

Integrating Endorsements With Multiple Contacts

Over the many weeks we worked at securing endorsements from relevant organizations, the process itself not only educated us about the population and helped refine our instrument, it also promoted trust, an essential component of social exchange theory. In fact, this level of trust eventually enabled us to integrate endorsements with multiple contacts. For instance, after our initial meeting with a liaison from the Washington Prosecuting Attorneys Association and an elected prosecutor (first contact), those two members brought the matter before the board that was comprised of other prosecutors (second contact). After having received endorsements from several of the associations in the states under study, those same supporting organizations were more than willing to send out prenotice letters, which we had drafted for them on their letterhead (third contact), to our potential respondents.

Unlike Rochford and Venable (1995), who inserted letters of endorsement in the survey packages themselves, we were able to coordinate separate mailings from the respective endorsing organizations. Although a preferred approach, this was not without risk. Efforts had to be made at controlling the stimulus being sent to the potential respondents. Accordingly, we drafted the letters that were sent out by these organizations in an effort to exercise control over the stimulus. Not only did this approach enable us to control the outgoing message, it also reduced the workload of these organizations.

Within a few days after their mailings (third contact), we mailed out our own survey packages (fourth contact), which consisted of (a) a personalized cover letter on university stationary with our actual signatures; (b) the questionnaire; and (c) a return envelope that was self-addressed with first class postage affixed. The outgoing survey packages were mailed, using first class stamps and a campus station postmark, in large envelopes (9 inches \times 11 1/2 inches) bearing the university logo. Consequently, by the time our surveys were mailed, we were able to contact our potential respondents up to four times, incorporating the use of endorsements while simultaneously raising the salience of the survey's topic (salience is a factor that can contribute to higher response rates; Dillman, 2000, p. 155; Fox et al., 1988).

Although on the surface the purpose of our study was not to experiment with different survey methods, our efforts at integrating multiple contacts with endorsements seemed to have paid off. After 4 weeks, the response rate for the first wave of mailings was 42.7% (47 of 110). Although it remains a good idea to send a thank-you or reminder postcard to the respondents within a week of the initial mailing (Dillman, 2000, p. 151), we decided instead to mail out a replacement questionnaire with a different cover letter 4 weeks after the initial mailing. We were under time constraints and

wanted to avoid the inherent delay if in fact the original questionnaire had been lost, misplaced, or thrown away. In the second wave of mailings aimed at those who had not responded, we provided a different stimulus by drafting a different letter that not only urged their participation and emphasized the value of their contribution but also remarked about the positive responses we had already received (see Dillman, 2000). Consequently, we were able to provide another contact, to illustrate our commitment to confidentiality, and to provide evidence of additional endorsements by virtue of their colleagues' participation in the study.

Progress Reports: Keeping the Associations Informed

While not revealing specific results, we did keep the associations informed about the positive progress we were making. In fact, as time went on, the associations even offered to contact those who had not yet responded. Although we thanked them for their offer, we respectfully declined out of the need to protect the confidentiality of our population (which in turn likely fostered more trust). Nevertheless, the associations were more than happy to provide a general reminder to all prosecutors at their upcoming meetings (sixth contact). By the end of the second wave, we received an additional 32 completed questionnaires, which brought our response rate up to 71.8% (79 of 110). By the end of the third wave of mailings, we gained 5 more surveys, bringing our final response rate to 76.36% overall (Connecticut: 61.54%, 8 of 13; Maryland: 70.83%, 17 of 24; Oregon 70.59%, 24 of 34; Washington: 89.74%, 33 of 39).

Discussion

Although there is no such thing as a magic bullet when it comes to the design and implementation of self-administered mail surveys (Dillman, 2000, p. 150), and although I did not set out to empirically test the effect of integrating multiple contacts with endorsements, such an approach is consistent with the TDM and warrants further exploration in light of the response rates achieved. In fact, the integration of these two factors may have together increased response rates more than they would have individually (a synergistic effect). There are several reasons for believing this.

First, our target population was comprised of highly educated political elites, and it seemed logical to work through their associations. Accordingly, we recognized in advance the importance of getting their professional associations to endorse or otherwise support our research. Although we were not looking for permission to conduct the study (we would have gone about the survey without the endorsement, and in fact we achieved a 61.54% response rate without an in-state endorsement in Connecticut), we suspected that the very process of securing an endorsement would not only raise the salience of the study but would also result in multiple contacts throughout the entire study. Once the endorsements had been finalized, we found that many of the endorsing organizations were eager to assist us in further contacts with the respondents because we had been able to demonstrate that what we wanted was consistent with what they wanted (learning about the policy issues involved, staying ahead of the

curve, etc.). Inevitably, every respondent to a survey, when deciding whether to complete it or not, will ask, "What's in it for me?" We were able to answer that question to not only the endorsing organizations but also the many respondents who completed our questionnaires.

Potential for Error

Although the endorsing organizations enabled us to engage in multiple contacts with the potential respondents, such an approach is not without risk. For instance, several of the associations expressed a desire to take an active role in increasing our response rates. While we appreciated their eagerness, there is always a potential for error whenever control over the study or the participants is shifted or reduced (Frankfort-Nachmias & Nachmias, 1996). Although we respectfully declined their offer of letting us know who had not responded, the organizations were still able to help by sending out letters to our targeted population (while still enabling us to maintain control over the content and timing of these letters).

In the end, whatever errors may have resulted from the integration of multiple contacts and endorsements were likely offset by the reduction in nonresponse error we achieved. After all, many of the respondents gave answers that were not politically correct, and their individual comments evidenced a great deal of deliberation, rational thought, and emotion. Consequently, the argument could be made that the involvement of endorsing organizations had little influence on their individual answers and only influenced their completion of the questionnaire in a timely fashion.

Conclusion

Survey research remains one of the primary sources of data collection in the social sciences and has the ability to influence the media, our policy makers, and our elected representatives (Brehm, 1993, p. 15). But despite their popularity among researchers, surveys exist in a surveyed-out population that may be less likely to respond. Consequently, efforts must be made to reduce the error associated with nonresponse and the other sources of error associated with survey research (Dillman, 2000; Groves, 1989). In this article, I focused on ways to integrate the use of multiple contacts with endorsements. Consistent with the TDM and social exchange theory, our earlier research was guided by the need to tailor our survey to the population under study and to foster trust, increase rewards, and decrease costs of participation. By integrating multiple contacts with the process of seeking endorsements, we were able to demonstrate to our respondents how our goals were consistent with their own, how we valued their contributions and confidentiality, and how we wanted to reduce the cost of participation without compromising the dictates of the scientific method. Although each survey project must take into consideration such matters as time, finances, and ethical constraints in its design and implementation, it seems that the integration of multiple contacts and endorsements, with careful planning and controls, can have a positive influence on response rates without increasing error.

References

- Brehm, J. (1993). *The phantom respondents: Opinion surveys and political representation*. Ann Arbor: University of Michigan Press.
- Dillman, D. A. (1978). *Mail and telephone survey methods*. New York: Wiley-Interscience.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method* (2nd ed.). New York: John Wiley.
- Dobbin, S. A., Gatowski, S. I., Ginsburg, G. P., Merlino, M. L., Dahir, V., & Richardson, J. T. (2001). Surveying difficult populations: Lessons learned from a national survey of state trial court judges. *Justice System Journal, 22*(3), 287-307.
- Faria, A. J., Dickinson, J. R., & Filipic, T. V. (1990). The effect of telephone versus letter prenotification on mail survey response rate, speed, quality and cost. *Journal of the Market Research Society, 32*, 551-568.
- Fox, R. J., Crask, M. R., & Kim, J. (1988). Mail survey response rate: A meta-analysis of selected techniques for inducing response. *Public Opinion Quarterly, 52*, 467-491.
- Frankfort-Nachmias, C., & Nachmias, D. (1996). *Research methods in the social sciences* (5th ed.). New York: St. Martin's.
- Gore-Felton, C., Koopman, C., Bridges, E., Thoresen, C., & Spiegel, D. (2002). An example of maximizing survey return rates: Methodological issues for health professionals. *Evaluation & the Health Professions, 25*(2), 152-168.
- Groves, R. M. (1989). *Survey errors and survey costs*. New York: John Wiley.
- Hill, C. S. (1993). The negative influence of licensing and disciplinary boards and drug enforcement agencies on pain treatment with opioid analgesics. *Journal of Pharmaceutical Care in Pain & Symptom Control, 1*(1), 43-62.
- Jacoby, J. E. (1980). *The American prosecutor: A search for identity*. Lexington, MA: Lexington Books.
- Johnson, J. B., & Joslyn, R. A. (1986). *Political science research methods*. Washington, DC: Congressional Quarterly.
- Nowak, R. (1992). Cops and doctors: Drug busts hamper pain therapy. *Journal of NIH Research, 4*, 27-28.
- O'Rourke, T. W. (1999). The importance of an adequate survey response rate and ways to improve it. *American Journal of Health Studies, 15*(2), 107-109.
- Puleo, E., Zapka, J., White, M. J., Mouchawar, J., Somkin, C., & Taplin, S. (2002). Caffeine, cajoling, and other strategies to maximize clinician survey response rates. *Evaluation & the Health Professions, 25*(2), 169-184.
- Rochford, L., & Venable, C. F. (1995). Surveying a targeted population segment: The effects of endorsement on mail questionnaire response rate. *Journal of Marketing Theory and Practice, 3*(2), 86-97.
- Weinstein, S. M., Laux, L. F., Thornby, J. I., Lorimor, R. J., Hill, C. S., Thorpe, D. M., et al. (2000). Physicians' attitudes toward pain and the use of opioid analgesics: Results of a survey from the Texas Cancer Pain Initiative. *Southern Medical Journal, 93*, 479-487.
- Ziegler, S. J. (2003). *Prosecutors, palliative medicine, and physician-assisted death: An empirical assessment of the likelihood of prosecution stemming from opioid and non-opioid administrations*. Unpublished doctoral dissertation, Washington State University, Pullman.
- Ziegler, S. J., & Lovrich, N. P. (2003). Pain relief, prescription drugs, and prosecution: A four-state survey of chief prosecutors. *Journal of Law, Medicine & Ethics, 31*(1), 75-100.

Stephen J. Ziegler, PhD, JD, is an assistant professor in the School of Public & Environmental Affairs at Indiana University–Purdue University Fort Wayne. His research interests and publications focus on the regulation of physician-hastened death, drug policy, and the medicolegal barriers to the relief of pain.