

RESEARCH NOTE

Sponsor Prominence and Responses Patterns to an Online Survey

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In recent years, research on the effects of survey sponsorship on response patterns has almost disappeared. This disappearance may be explained by a lack of new knowledge arising from such research. After a long hiatus, a newspaper published on this subject (Groves & Peytcheva, 2008) affirms a well-established finding that government sponsorship of a survey yields a higher response rate than other types of survey sponsorship. Online surveys raise new questions about the role of sponsorship, particularly in relation to communicating the authenticity of the survey and the importance of participation.

This research note summarizes the results of an experiment in which an email invitation was sent to university faculty, staff, and students asking them to participate in an online survey about campus transportation issues. Subjects were randomly assigned to receive an email invitation from either the university survey center or the university transportation department, the actual sponsor of the survey. Rather than manipulate the actual sponsor, our experiment manipulates the prominence of the sponsor (e.g., Transportation Department) in the recruitment process as well as the topic (e.g., transportation issues) as a result of the sponsor prominence. We examine the effects of sponsor prominence on response patterns, namely the response rate and break-off rate. In addition, we examine whether the effect of this manipulation differs for different types of sample strata (faculty/staff vs. students; commuters vs. non-commuters).

Existing Research on Sponsorship, Organizational Ties, and Topic Saliency

Studies on survey sponsorship have found that government and university sponsorship yield higher response rates to surveys than sponsorship by commercial organizations (Doob & Freedman, 1973; Edwards et al., 2002; Fox, Crask, & Kim, 1988; Groves & Peytcheva, 2008; Jones & Lang, 1980; Jones & Linda, 1978; Kanuk & Berenson, 1975; Peterson, 1975). There are several explanations for this finding (see Boulianne, 2008). For example, sample members may be motivated to respond because they connect the survey to government policy decisions that may affect them (Heberlein & Baumgartner, 1978). In addition, government and university sponsors may also be perceived as having higher prestige or moral authority than private sector firms (Etter, Perneger, & Rougemont, 1996; Jones, 1979; Kanuk & Berenson, 1975).

Sponsorship effects are not universal. Having some relationship to the sponsoring organization, for example, such as being a member or receiving services from the organization, may alter the effect of sponsorship on response rate. For example, in a healthcare survey sent to medical patients, Etter et al. (1996) found no differences in the response rate to a mail survey when the sponsor was identified as either a university or a private medical practice. The researchers explain that respondents who receive services from an organization may feel more inclined to respond to the survey, which reduces the difference in response rates for university versus private sector-sponsored surveys. Other research affirms that participants' involvement with the sponsor reduces nonresponse bias (Groves & Peytcheva, 2008) and produces a higher response rates, compared to sample strata who do not have a connection to the sponsor (Porter & Whitcomb, 2007). More generally, these studies imply the importance of sample members' characteristics in evaluating the effects of sponsorship on response patterns.

However, this seemingly contradictory finding might also be explained by topic saliency. The costs of responding to a survey may be rationalized if the sample member believes the topic to be important, interesting, or an opportunity to advance one's own needs (Boulianne & Basson, 2008). For example, surveys about healthcare tend to generate higher response rates in general (Groves, Presser, & Dipko, 2004). For individuals interested in healthcare issues, such as medical patients in the Etter et al. (1996) study or seniors (e.g., Groves et al., 2004), the response rate may be even higher than for the general population. The higher response rate is explained by topic saliency. Topic saliency may diminish the potential impact of survey sponsor, especially among individuals who are particularly engaged with the topic of the study.

Previous studies on sponsorship focused on mail and telephone surveys. Our study examines how the effect of sponsor prominence may differ for online surveys. Like unsolicited phone calls and junk mail, email users are bombarded with unsolicited email messages. Moreover, many unsolicited email messages contain insidious material such as viruses. As such, we would expect survey sponsorship to be an important variable in communicating authenticity and the policy importance of the study. Survey sponsor may be one of the deciding factors in determining whether an

email invitation is opened or deleted (Porter & Whitcomb, 2007). In addition, unlike other self-administered questionnaire studies, we examine patterns of break-offs to explore the continuing role of sponsorship in the process of completing a survey.

Our study replicates a manipulation presented in Porter and Whitcomb (2003) that altered the email sender between the Office of Institutional Research and the Office of Admission. Our study extends their analysis by considering the effect of the manipulation on different sample member characteristics. Porter and Whitcomb's survey targeted high school students who considered but did not apply to a university. They found no effect of the email-sender manipulation on response rates or break-offs. They explain that the email-senders may be indistinguishable to a population outside the university. Our study offers further insight into this topic because we expect our email senders (UW Transportation Department, UW Survey Center) are more distinguishable to university community members. The email senders and the sample elements share membership in the university community. Unlike Porter and Whitcomb, our study examines the possibility of differential effects of sponsorship (sponsor-prominence) for different types of sample members. This analysis may help explain the discrepant findings in research, that is, Etter et al. versus other studies.

We can make logical assumptions about which sample strata may perceive the survey topic to be of greater or lower salience and which sample strata have stronger or weaker ties to the organization. Transportation issues are expected to be most salient for long-term members of the campus community and for those who must commute to campus from outside the city limits. Based on this assumption, we expect that transportation issues will be most salient for university faculty/staff and commuters, compared to students and non-commuters. In addition, because faculty and staff have long-term ties to the university compared to students, we expect that they will feel more connected to the Transportation Department, which has a longer institutional history than the survey center. Faculty and staff might regularly visit the Transportation Department (virtual or in person) to renew their parking passes, pay parking tickets, or find information on commuter solutions, such as car- and van-pools etc. Access to parking is a critical issue for the Department, given the campus's location near the downtown core and next to an urban lake, which reduces parking options for commuters.

Sample members are significantly less likely to have interaction with the UW Survey Center unless they were asked to participate in a study. The UW Survey Center regularly conducts faculty, staff, and student surveys, but given the size of the university and the number of surveys conducted, it is unlikely that they would have repeated interactions with the Survey Center. The UW Survey Center also tries to minimize burden on potential respondents by de-duplicating survey samples so that university members will not receive multiple survey requests in any given year. Based on assumptions about topic saliency and organizational ties, we expect the effects of the sponsor-prominent condition to be greater for faculty compared to students, and greater for commuters compared to non-commuters. In addition to examining the main effects of sponsor prominence, we assess the differential effects of sponsor prominence on response patterns for these different groups. This is a unique contribution to research on the effects of sponsorship on response patterns.

Data and Method

The data used in this study come from the University of Wisconsin–Madison Transportation Survey. This survey was administered in December of 2004 by the University of Wisconsin Survey Center (UWSC) on behalf of the UW–Madison Department of Transportation. The study was conducted to assess the commuting practices of university students, faculty, and staff. Sample records were obtained from the Office of the Registrar. A total of 2,125 sample members were randomly selected to participate in this experiment. The sample included an oversample of commuters. Commuting status, which was defined by having a home address outside of the university community of Madison, Wisconsin, is known for a representative subset of faculty and staff in our sample ($N=893$ of a total of 1,125 faculty and staff). We do not know the commuting status for the student population. The Transportation Department decided to oversample commuters to examine how transportation issues (such as the availability of public transportation) may differ depending on the region from which the individual commutes. In total, 1,014 respondents completed the survey and 25 cases were ineligible or undeliverable. The unweighted response rate was 48.3% (AAPOR Response Rate 1). The response rate was 36% for students ($N=359$; $N=4$ ineligible or undeliverable) and 60.2% for faculty and staff ($N=655$; $N=21$ ineligible or undeliverable). In terms of other sample strata, the response rate was 59.8% for commuters ($N=277$; $N=2$ ineligible or undeliverable) and 60% for non-commuters ($N=256$; $N=1$ ineligible or undeliverable). On average, respondents took 12.7 min to complete the survey.

Respondents were contacted by email to complete the questionnaire via the Internet (see Appendix). The header of the email was randomly varied to manipulate the organization that sent the email (i.e., “The University of Wisconsin Survey Center” or “The UW–Madison Department of Transportation”). Sample members were assigned a random number that indicated to which experimental condition they were assigned. In both experimental conditions, as per ethical guidelines for survey research, we disclose the name of the survey sponsor in the main body of the email invitation. However, the prominence of the sponsor is more prevalent in the sponsor-sender condition than in the alternate condition. We expect that the prominence of the sponsor will increase response rates and decrease break-offs because the sponsor facilitates the connection of the survey to policy decisions, reinforces the survey topic (e.g., transportation issues), and participants have some level of connection to the organization. Other experiments related to the survey invitation were conducted in this study, but are excluded from this analysis (see Klofstad, Boulianne, & Basson, 2008). The broader experiment included a manipulation of email invitation length on response patterns. By considering a single treatment condition (the “long” email condition), we isolate the effects of sponsorship on response patterns. This treatment condition is also more typical of recruitment letters used in email invitations (see Appendix).

In total, three contact attempts were made with three days between each attempt. We did not find any differences in the effects of the sponsor-sender condition on the likelihood of participating based on the first, second, or third contact attempt.

Respondents could quit the survey at any time, in which case they did not receive further emails. The same email invitation was used in all three contact attempts.

Results

The results of our experiment are reported in Table 1. The top row of Table 1 shows that the response rate increased when the UW Transportation Department sent the invitation, but not significantly so. Among the different sample strata, faculty/staff appear to have been more likely than students to react to the sponsorship manipulation. However, this difference in treatment effect between faculty/staff and students is not statistically significant. This finding is based on a logistic regression analysis of response rate, which included the treatment, sample strata (faculty and staff vs. students), and a term for the interaction between these two variables.

The bottom-half of Table 1 shows that respondents who received the email invitation from the study sponsor were significantly more likely to fully complete the survey (i.e., less likely to break-off after starting to respond to the questionnaire). Among the sample strata, students appear to have been more responsive to the sponsorship treatment than faculty, and non-commuters more so than commuters. Students and non-commuters were less likely to break-off when they received an invitation from the UW Transportation Department, compared to the UW Survey Center. These differences in treatment effects between strata, however, are not statistically significant. This finding is based on a logistic regression analysis of response rate (not reported here), which included the treatment indicator variable, a sample strata indicator variable (i.e., faculty and staff vs. students), and a term for the interaction between the treatment and sample strata variables. The interaction term in this model was insignificant, indicating that students were not significantly more responsive to the experiment than faculty and staff.

Discussion and Conclusions

We expected that survey sponsorship would be an important variable in soliciting responses to an online survey by communicating the authenticity and policy importance of the study. However, we found that sponsor-prominence did not have a significant effect on response rate, but did have an effect on the break-off rate. Our data do show that sponsor-prominence significantly increased sample members' willingness to fully complete the questionnaire, suggesting that sponsor-prominence could be a useful strategy in reducing break-offs.

Our results both replicate and contradict Porter and Whitcomb's (2003) findings. Like Porter and Whitcomb, our study found no significant effects of sender conditions on response rates. Our analysis extends their analysis by examining response patterns for different sample strata that have different relationships with the email-senders. While faculty/staff were more sensitive to the manipulation in terms of overall response rate, this differential effect was not statistically significant. However, our study suggests that receiving an invitation from the sponsor decreased break-offs. Porter and Whitcomb did not find such an effect in their study of high school students' response patterns.

Table 1
Effect of Sponsor Prominence on Response Patterns (t-test)

	Email Sender		Difference
	Survey Research Center	Transportation Department	
Response rate			
All respondents	47.2% ($N = 1,048$; $SD = 0.5$)	49.3% ($N = 1,052$; $SD = 0.5$)	-2.1% ($t = -1.0$; $p = .3$)
Commuters	58.9% ($N = 236$; $SD = 0.5$)	60.8% ($N = 227$; $SD = 0.5$)	-1.9% ($t = -0.4$; $p = .7$)
Non-commuters	59.0% ($N = 205$; $SD = 0.5$)	60.8% ($N = 222$; $SD = 0.5$)	-1.8% ($t = -0.4$; $p = .7$)
Faculty/staff	58.1% ($N = 551$; $SD = 0.5$)	60.6% ($N = 553$; $SD = 0.5$)	-2.5% ($t = -0.8$; $p = .4$)
Students	35.2% ($N = 497$; $SD = 0.5$)	36.9% ($N = 499$; $SD = 0.5$)	-1.7% ($t = -0.5$; $p = .6$)
Break-off rate			
All respondents	5.1% ($N = 1,050$; $SD = 0.5$)	2.8% ($N = 1,053$; $SD = 0.5$)	2.3% ($t = 2.8$; $p = .004$)
Commuters	4.6% ($N = 238$; $SD = 0.5$)	4.4% ($N = 227$; $SD = 0.5$)	0.2% ($t = 0.1$; $p = .9$)
Non-commuters	6.3% ($N = 205$; $SD = 0.5$)	4.0% ($N = 223$; $SD = 0.5$)	2.3% ($t = 1.1$; $p = .3$)
Faculty/staff	4.9% ($N = 553$; $SD = 0.5$)	3.4% ($N = 554$; $SD = 0.5$)	1.4% ($t = 1.2$; $p = .2$)
Students	5.4% ($N = 497$; $SD = 0.5$)	2.0% ($N = 499$; $SD = 0.5$)	3.4% ($t = 2.9$; $p = .004$)

Note: The analysis of break-off rate is restricted to respondents who gave a valid response to at least the first question in the questionnaire.
Source: 2004 University of Wisconsin-Madison Transportation Survey.

Our study extends the explanation of sponsorship effects on response patterns. Etter et al. (1996) explain their null effects of sponsorship in terms of the previous relationship between the organization and the sample elements. Our findings are consistent with this explanation of the null effects, but like Etter et al. (1996), topic saliency may also explain our studies' null effects. For sample strata who believe the topic to be important with policy implications and who have organizational ties to the survey sponsor, the prominence of the survey sponsor may only slightly change response patterns.

Furthermore, like Etter et al. (1996), our null effects may be explained by a ceiling effect limiting the effects of sponsor prominence. Etter et al. (1996), achieved response rates of approximately 80% for a mail survey, which is quite high. Our overall response rate was higher than the average response rate for Internet surveys, as estimated in Cook, Heath and Thompson's (2000) meta-analysis (between 35% and 39%) and Shih and Fan's (2008) meta-analysis (34%). In addition, for faculty/staff, the response rate was approximately 60%, which is at least one standard deviation above the average estimated by Cook et al. (2000) and Shih and Fan (2008). Sample stratum, for example, institutionalized populations, is a significant factor in distinguishing response rate differences (Heberlein & Baumgartner, 1978; Porter & Whitcomb, 2007; Shih & Fan, 2008; Yammarino, Skinner, & Childers, 1991). The null effects may be a function of the high response rates.

In conclusion, we offer four suggestions for future research on survey sponsorship. First, future studies should target individuals with diverse levels of interest in the subject covered in the questionnaire in order to test whether topic saliency mitigates sponsorship effects. Second, future studies should also gather direct measures of the entire population's interest in the subject of the survey in order to directly test the interaction effects between survey sponsorship and topic salience on response rate. For example, data on whether the members of our sample had a campus parking pass would have allowed us to directly test the interaction effects between sponsorship and salience on response rate. Unfortunately, we were unable to obtain this type of information. Third, subsequent studies should examine sponsorship effects in web surveys with more typical response rates. Fourth, we suggest that a stronger experimental treatment may be necessary to elicit a significant effect on response rate. In both the Porter and Whitcomb (2003) study and our study, the email invitation senders were both affiliated with the university. As a consequence, respondents may not have distinguished between the two different senders.

Appendix

From: "The UW-Madison Department of Transportation" or "University of Wisconsin Survey Center"

Dear [NAME]:

You have been randomly selected from the UW community to participate in the Transportation Survey. Your response is very important to us.

The UW Transportation Department is interested in learning about your travel habits and attitudes about the campus transportation system, including your views about possible changes to that system.

Your responses will be input into the University of Wisconsin-Madison's 2005 master planning process. Since every UW community member has a unique set of experiences and opinions, it is important that YOUR voice is heard. No one else can take YOUR place!

Although participation is completely voluntary, we hope you will participate. The responses you give are entirely confidential. The UW Survey Center (UWSC) is collecting the data and will ensure that all opinions of community members are reported as aggregated data with all identifying information removed.

If your email software supports hyperlinks click on this link to take the survey:

[WEB ADDRESS]

If your email software does not support hyperlinks please complete the survey using your internet browser by going to this address:

[WEB ADDRESS]

You'll need to enter the following (case-sensitive) username and password:

[USERNAME]

[PASSWORD]

Thank you in advance for your help with this important study. Should you have any questions about the study, feel free to contact the Project Director, [NAME] at [EMAIL]; [PHONE NUMBER].

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Biographical Notes

Shelley Boulianne (PhD, 2007, University of Wisconsin-Madison) is a faculty member at Grant MacEwan University. Her interests relate to civic engagement, media use, and survey research methodology, particularly strategies to improve response rates and issues related to online surveys.

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