Improving Survey Response Rates of School Counselors: Comparing the Use of Incentives

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Abstract

This article examines the effectiveness of incentives in improving survey response rates of school counselors and compares the findings with those of previously researched populations. A $1 cash incentive increased response rates for a one-wave mailing of a questionnaire, while a raffle opportunity did not. The number and length of optional comments did not differ by incentive condition. These results are viewed in the context of theoretical perspectives for understanding mailed questionnaire response decisions.

Improving Survey Response Rates of School Counselors: Comparing the Use of Incentives

Mailed surveys are often used by researchers in the counseling field to gather data. Although there is a substantial body of research dating from 1931on the use of incentives to increase response rates for such surveys, research on the use of incentives “will always be needed” (Warriner, Goyder, Gjertsen, Hohner, & McSpurren, 1996) due to changes in the sociological context in which such research is conducted. For example, a recent general trend toward declining survey participation has been detected in Western societies (Bickhart & Schmittlein, 1999; Groves, Cialdini, & Couper, 1992), and strategies that formerly were effective may be less so in this less receptive environment.

Much of the research on the use of incentives has been published in marketing, business, and public opinion journals (Erwin & Wheelwright, 2002). A recent meta-analysis located 292 studies, and found the greatest number (42%) in marketing, business or statistical journals; 32% were found in medical or health related publications, and only 23% in psychology, education, and sociology journals (Edwards et al., 2002).

It appears that the counseling field has not used the findings of empirical studies when conducting mailed survey research. Although the effectiveness of material incentives for increasing response is “beyond dispute” (Warriner, et. al., 1996, p. 543), Erwin and Wheelright (2002) reviewed 219 reports of survey research in counseling journals (*Journal of Mental Health Counseling* and *Journal of Counseling and Development*) and found none used a monetary incentive, and only two used non-

monetary incentives. Weathers, Furlong, and Solórzano (1993) examined 40 articles reporting survey research in the *Journal of Counseling Psychology* and found a monetary incentive was used in only one study. Thus, despite a consensus that monetary incentives are the most effective method for increasing response rates to mailed surveys, this strategy has very rarely been used in the counseling field. As the author is interested in this population, this finding is noteworthy.

The purpose of this article is to determine whether the findings with a sample of school counselors are similar to those of previous research on the use of incentives in other populations, and to examine the findings in light of a theoretical framework. Towards that end, first the literature on the use of incentives to increase response rates in mailed surveys is briefly reviewed. Second, various theoretical perspectives that have been used to explain the behavior of recipients of mailed surveys is described. Third, a study comparing the effect of two different types of incentives on the response rates of a sample of school counselors in one state will be described. Finally, the implications of the findings will be discussed.

Review of the Literature on Incentives

Getting the highest response rate possible for mailed surveys is essential because non-response introduces bias, reduces sample size, and affects the external validity of a study as well as the statistical power of analyses (Brennan, Hoek, & Astridge, 1991; Church, 1993; Edwards et al., 2002; Erwin & Wheelright, 2002; Hopkins & Gullikson, 1989; Koloski, Talley, Boyce, & Morris-Yates, 2001; Ransdell, 1996; Roth & deBeVier, 1998; Smeeth & Fletcher, 2002; Wilde, 1988). Researchers who use surveys must make numerous decisions regarding the optimal combination of strategies to

enhance the response rate while containing costs. Ideally, the researcher determines the likely increase in response rate for a given strategy, and then weighs that against the cost (both monetary and time) of implementing the strategy in order to determine the best strategy or combination of strategies to use.

There is no lack of research on increasing response rates for mailed surveys. The use of monetary incentives has consistently revealed an increase in response rates over no incentive, and the increase is greater when the incentive is received with the questionnaire, rather than contingent on the return of the questionnaire (Biner & Barton, 1990; Church, 1993; Edwards et al., 2002, Heerwegh, 2006; Hopkins & Gullickson, 1989; Yu & Cooper, 1983). James and Bolstein (1990) concluded that, despite previous findings that the amount of the monetary incentive was not related to response rates, a one-dollar incentive resulted in a significant increase in response rate over a quarter-dollar incentive. The use of a two-dollar incentive did increase response rates over the one-dollar incentive, although not significantly, and did not justify the increased cost per return. A similar conclusion was reached by Yu and Cooper. They concluded that a one-dollar incentive would be the best choice for a one-wave mailing, as did Hopkins and Gullickson, who also found that the effect of this incentive was almost as great among professional respondents as in the general population. The monetary incentive had a greater effect on response rates than a follow-up mailing. A meta-analysis found an increase in response rates of 12.2% for a monetary incentive of $1.00 or more (Yammarino, Skinner, & Childers, 1991).Thus, there is a general consensus that the one dollar incentive, provided with the initial mailing, is an effective and cost-effective strategy to increase response rates (King, Pealer, & Bernard, 2001). James and

Bolstein (1990) observed that in addition to increased response rates, monetary incentives resulted in questionnaires with more and longer comments than those without an incentive.

Compared to studies on the use of monetary incentives, far fewer studies investigated the effects on response rates of a “raffle” or opportunity to enter a drawing for a prize. In general, the use of lotteries has not been found to increase response rates (Heerwegh, 2006). However, Wilde (1988) reported the largest return rate of her survey from those respondents who received a 50-cent incentive along with a self-addressed stamped envelope (SASE) for return (64%), with the group receiving an entry to a drawing for $50 receiving the next highest return (54%). Return rate for the group receiving only a self-addressed stamped envelope as an incentive was 44%. The population of interest in that study included instructors at state-supported educational institutions in a southwestern state and employees at one scientific national laboratory in that state. Brennan, Hoek, and Astridge (1991) found that consumers in New Zealand did not increase response rates to a mailed survey when a prize draw (for $200 cash or a $200 gift voucher) was included with the mailing. Similar findings of no effect from a drawing were reported by several investigators in the medical/pubic health field who surveyed samples from the general population (Mortagy, Howell & Waters, 1985; Roberts, Roberts, Sibbald, & Torgerson, 2000). Another study found a small increase in return rate in a raffle group compared to a no-incentive control, but concluded that the increase was not cost-effective (Brown, Lawrie, Kennedy, Webb, Torgerson, & Grant, 1997). The only study in which the return rate was sufficiently increased by the raffle incentive was the Wilde study, which sampled educated professionals.

Despite the fairly consistent findings about the use of incentives, there have been few attempts to view the results within a theoretical framework. Useful theoretical perspectives are described next in order to provide a context for the study described in this article.

Brennan, Hoek, and Astridge (1991) and Wilk (1993) turned to *cognitive dissonance theory* to explain their findings on the use of incentives in mailed surveys. This perspective proposes that incentives are effective because they induce a state of cognitive dissonance in the recipient. Not responding would be dissonant with the recipient's self-perception as a helpful, cooperative person. Biner and Barton (1990) suggested that cognitive dissonance theory did not sufficiently explain observed results, and recommended *equity theory*, which describes a feeling of guilt that results when individuals believe they have been overcompensated (via a monetary incentive) for their behavior. This guilt can be reduced by restoring equity, that is, by completing the survey. A broader theory that might explain response behavior in general was suggested by Childers and Skinner (1996), who proposed that *exchange theory* offers a useful lens through which to view what has been learned about response behavior for mail surveys. Dillman (1991) noted that his Total Design Method of survey use is based on exchange theory.

Exchange Theory is a kind of social economics that postulates that individuals will take a given course of action if perceived benefits outweigh costs. According to exchange theory, the potential participant must believe that benefits accruing from completing and returning the questionnaire are greater than the costs of doing so. Three elements facilitate the belief that the equation is favorable for the participant, according

to Childers and Skinner (1996): cooperation, trust, and commitment. The following paragraphs summarize these elements.

Cooperation results when there is a mutual or joint effort towards a goal. If the respondent shares the researcher's ultimate goal (i.e., increasing knowledge about some common concern), then the element of cooperation has been introduced. This is typically accomplished in the cover letter that explains the purpose of the research and the potential uses to which results might be put. In that letter, a statement regarding the value of the respondent's input in achieving the goal is an inducement to cooperate.

Trust must be established in the relationship between researcher and respondent. Information about the researcher is often included in an invitation to participate in order to facilitate the development of trust. Anxiety about confidentiality of results or the use of the data can be reduced by clear information in informed consent documents. The researcher must carefully consider whether surveys will be anonymous, and if not, to be very clear about the reason identification is needed and how it will be handled.

Researchers employ a variety of strategies to convince the potential respondent that the exchange is equitable. For many, the opportunity to have one's opinion counted and heard is highly valued, and this value increases the perception of a favorable exchange. Direct and indirect rewards also serve to increase the value of benefits side of the equation. Costs to respondents are money, opportunity, energy, and psychological costs. The financial cost to respondents can be eliminated by providing return envelopes and postage. Energy expenditures can be reduced by making the survey relatively short and easy to use (for example, bubble-in responses vs. written

responses). Childers and Skinner (1996) concluded that including a monetary incentive with the request for participation increases trust and the sense that the exchange is equitable. Exchange theory suggests that monetary incentives and raffles might be perceived as sufficiently beneficial to outweigh the cost in time of completing the survey.

Groves, Cialdini, and Couper (1992) propose the norm for helpfulness as a factor in deciding to complete a survey. This factor may have particular weight in the current study, in which participants are school counselors, members of a helping profession. If the request includes an appeal to this factor (a statement such as “your help is needed”) response rates are likely to rise. Interestingly, some IRBs consider such a statement to be undue pressure or coercion, and will not allow such appeals.

The Present Study

The purpose of the present study was to evaluate the effects of two types of incentives provided with the mailing of a survey about professional organization membership to all school counselors in one southwestern state. James and Bolstein (1990) found that in addition to increased response rates, a monetary incentive improved quality of response (measured by number and length of comments), so such a hypothesis was also proposed for this research.

Based on the review of the literature, the following research hypotheses were tested in this study:

1. Respondents who received the one-dollar bill incentive will have a significantly higher return rate than those who received an invitation to a raffle or no incentive.
2. The opportunity to enter a raffle for a gift certificate will have a significantly higher return rate than no incentive.

3. The number and length of optional comments will be significantly greater in the dollar condition than in either the raffle or the no incentive condition.

Method

Participants

A survey was mailed to 1,342 school counselors in a southwestern state. Of the 450 who returned the survey, 74% (*n* = 332) were female and 26% (*n* = 115) were male. Three participants did not indicate gender. Caucasians comprised 81% (*n* = 363) of the sample, Hispanic/Latinos represented 10% (*n*=45); 2% (*n* = 8) were African American, 1% (*n* = 6) were Asian American, 4% (*n* = 16) American Indian, and 1% either marked the category “biracial” or “other,” or marked more than one category. Data were missing for seven respondents. Age of participants was distributed as follows: 21-30, 5% (*n* = 22); 31-40, 17% (*n* = 73), 41-50, 28% (*n* = 128); 51-60, 44% (*n* = 198); and 60+, 6% (*n* = 23). Age was missing for seven participants.

Respondents varied in their years of experience as a school counselor, with 28% (*n* = 126) having 0 – 5 years, 25% (*n* = 114) having 6 – 10 years, 19% (*n* = 84) having 11 – 15 years, 11% (*n* = 49) with 16-20 years, 7 % (*n* = 32) with 21 – 25 years; and 10% (*n* = 423 having 26 or more years in this career. Academic background of the respondents included undergraduate majors in education (54%, *n* = 243), and psychology (12%, *n* = 54). Those with other majors comprised 29% of the sample. The vast majority of school counselors in this sample had master’s degrees (91%, *n* = 406). An education specialist degree was held by 5% (*n* = 21) and a doctorate by 2% (*n* = 8). Four school counselors’ highest degree was a bachelor’s degree. Data were missing, or more than one category marked, for 11 respondents (3%).

Procedure

A questionnaire regarding school counselors' participation in and beliefs about their professional organizations was mailed via bulk mail to all school counselors in a southwestern state. The survey and the findings are described in Bauman (2004). The 1,449 names on the mailing list provided by the state's Department of Education were randomly divided into three groups by importing the address list into an SPSS file and using the randomizing procedure under Select Cases. All participants received the survey, a cover letter, and a self-addressed pre-paid return envelope. All surveys were printed on white paper, front and back of one sheet, with an unobtrusive code (001, 002, 003 printed in small type on the lower corner of the back page) to identify the type of incentive. Responses were anonymous with no personal identifying information requested. The cover letters were identical with the exception of a sentence or phrase added to those who were in the incentive groups.

The cover letter mailed to the control group (no incentive) said only, "Please complete the questionnaire and return it to me in the self-addressed postpaid envelope included in this mailing." The cover letter for the drawing incentive included this additional statement: "In appreciation of your time, upon completing and mailing the questionnaire, you may email your name and address to the researcher (author@institution.edu) with the subject line "Drawing" to have your name entered in a drawing for one of two $50.00 gift certificates to Amazon.com." The letter sent to the cash incentive group said, "In appreciation for your participation, a one dollar bill has been enclosed with this mailing."

The mailing list of all school counselors' names and school addresses was obtained from the state's Department of Education. To ensure a dataset of sufficient size for analysis, the researcher elected to include the entire population in the mailing. The list had been updated in the spring of the previous school year; it is likely that some of the names and locations were no longer current. Thus, the envelopes were addressed to the individual name on the mailing list, with an additional address line, "Or Current School Counselor," so that if the person named was no longer in the position the replacement counselor would receive the survey. The mailing included 1,449 surveys sent to 1,342 individuals; 107 counselors appeared on the list more than once if they worked in more than one school. Each envelope included the cover letter, the survey, and a pre-paid return envelope addressed to the researcher. Responses were anonymous, and respondents were assured of confidentiality. Data were entered into an SPSS data file by a research assistant.

The mailing was sent in October, given that school counselors are typically extremely busy when the school year starts in August and become very busy again around the winter holidays. It was hoped that the timing would increase the likelihood that surveys would be returned.

Results

The overall response rate for the survey was 33% (n = 450). The actual response rate was likely higher, as the mailing list contained names and addresses that were no longer current. Because bulk mail was used, the number of undeliverable mailings could not be calculated. However, a colleague using the same list with a first class mailing had approximately 10% of the mailing returned as undeliverable (Chris Wood, personal

communication, April 22, 2004). If we assume a similar rate for the current mailing, the response rate is 37%.

To check for differences in demographic variables among the three incentive types, chi-square tests were calculated for gender, race, age, years of experience, undergraduate degree, work setting, and number of counselors at the site. No differences were found.

A one-way chi-square analysis of response rate by incentive type yielded statistically significant differences ($\chi^2 = 15.262$, df = 2, $p < .0005$), with an effect size (Cramer's V = .131), a small effect. The highest response rate (42%, $n = 188$) was found for the one-dollar bill, while the lowest rate (27%, $n = 120$) was for the raffle. The difference in response rate between no incentive (31%, $n = 141$) and the raffle was not significant. Follow-up chi-square analyses were conducted to examine differences in pairs of incentive conditions. The difference between no incentive and the dollar was significant ($\chi^2 = 6.193$, df = 1, $p < .013$), with an effect size of $\Phi = .137$, a small effect. That means that approximately 14% of the variance in response rate was explained by the incentive type. The difference between the raffle and the dollar was also significant ($\chi^2 = 14.235$, df = 1, $p < .0001$). A medium effect size ($\Phi = .215$) was detected for this difference, indicating that about 22% of the variance in response rate was explained by the type of incentive. Thus, hypotheses one was supported and hypothesis two was not.

It is notable that only 23 of the 120 respondents from the raffle incentive condition who completed the survey chose to enter their names in the drawing did so. From the group receiving the dollar bill, nine dollars were returned to the researcher. Two included notes saying that they would not complete the survey and so were

returning the dollar, one had a note saying that he or she did not need an incentive to participate, and one included a note saying the use of the dollar was unethical. The others came in the response envelope with no comment.

Almost 30% of respondents included an optional comment in the space provided. Comments were included by 26% of no incentive respondents, 30% of the raffle respondents, and 33% of cash respondents. A 2 (comment, no comment) x3 (incentive type) chi-square analysis found that the number of comments made did not differ significantly by incentive type. Length (number of words) per comment was compared using a univariate ANOVA with number of words as the dependent variable and incentive condition as the independent variable. The differences were not statistically significant. Thus, no differences were found in comment number or length by incentive type and hypothesis three was not supported.

The results of this study with a sample of school counselors were generally consistent with those of previous studies with other populations. The $1 incentive included with the initial mailing yielded the highest response rate, while the raffle had the lowest rate. In fact, the raffle had a lower response rate than no incentive, although the difference was not significant. Unlike the findings of James and Bolstein (1990), the incentives did not have an effect on the number or length of optional comments made by participants.

Follow-up Inquiry

In order to add more depth to the results, follow-up telephone contact was attempted with 73 randomly-selected respondents, and 16 were available to interview. Of those 16, seven were from the no incentive group, five from the raffle group, and four

from the dollar group. Transcriptions of the responses were coded for factors influencing response decision. Following the guidelines of Strauss and Corbin (1998), open coding was the initial step in data analysis. Eighteen codes were used, with some comments receiving more than one code. The codes were then searched to discover themes, groups of related codes with commonalities. Notes were made on recurring themes, with representative quotations identified. The themes were then grouped into conceptual categories. Once the categories had been identified, the relationships among them were induced from the data and a model of these relationships created (Miles & Huberman, 1994). This is presented graphically in Figure 1.

The theme most often mentioned was relevance or interest in the topic (or importance of the topic) of the questionnaire, which was mentioned ten times. Length of the survey was mentioned six times, as was time available when a survey is received. Many respondents talked about how busy their job was and how overwhelmed they felt in general. Four respondents mentioned the reputation of the researcher, and three mentioned the number of other surveys received recently as influences on their decision. Several themes had two mentions: timing of mailing (early in school year suggested by both), address used (work or home, with one preferring work and the other home), reminders, return envelope with postage, incentives, and advance notice that a survey will be received. Themes mentioned only once were: including a place to comment, acknowledgement of time spent to complete the survey, being too tired, having a personal connection to the researcher (e.g. attended that university), availability of an online option to complete, and ease of completion (bubble-in versus writing responses).

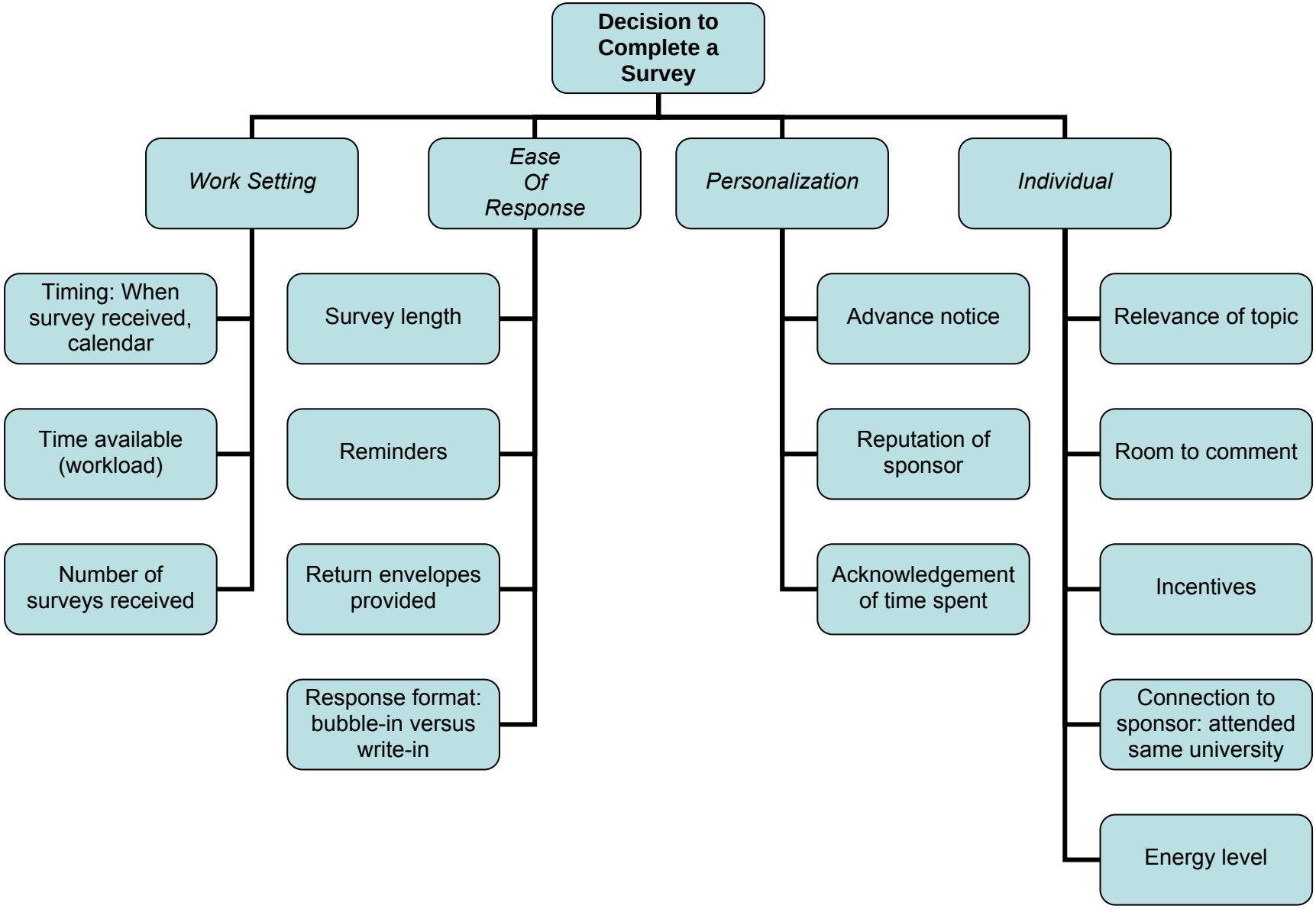

Figure 1. Bases for decisions to complete surveys.

Examination of these themes suggests several more general categories of factors. Several of the themes relate to the work setting (timing, time available, feeling tired, getting too many surveys). Others relate to ease of response (length, reminders, phone vs. mail, website availability, provision of return envelopes, easy completion – bubble-in vs. write in, and location (some find it easier to do at work, others at home). The category of personalization efforts seemed to encompass several of the themes: advance notice, connection to researcher, and acknowledgement of time spent. The remaining themes seem to fit loosely into a category that might be called individual factors. Whether the survey is relevant is an individual matter, and room to comment is important to some individuals who wish to be certain their views are expressed. The reputation of the researcher and the use of an incentive are the remaining two items grouped in this category.

Implications

As exchange theory was the framework from which the research hypotheses were generated, it is useful to examine the obtained results in light of the theory. The essential principle of exchange theory is that individuals will act if the perceived benefits of the action are greater than perceived costs. The corollary is that when one seeks to influence another's decision to act, one can attempt to increase the perceived benefits or decrease the costs. In summarizing the results of her research, Wilde (1988) concluded "They [respondents] seem to look for maximal effort on the part of the researcher and minimal effort on the part of themselves."

The researcher's choices regarding strategies to increase response rate are readily understandable in this context. The researcher seeks to obtain the maximum

benefit (highest return rate) for the lowest costs (money, time, and energy). The same is true for the respondent. Benefits to the respondent are often described in a cover letter as a chance to contribute to advancement of knowledge, an opportunity to contribute to understanding an important issue, or a chance to voice one's opinions. In this case, the letter indicated that the researcher was interested in learning about school counselors' membership in and beliefs about professional organizations. Such benefits are intangible and somewhat altruistic, and require deferred gratification (for knowledge to advance, their opinions to be read at a later time, publication of results to follow even later). It is likely that there is also a benefit in increased self-esteem that results from "doing a good deed" (akin to "helpfulness) that is a benefit to participants. Incentives also increase the benefits, but given the value of professional time, it is unlikely that the incentive represents compensation. Rather, it has symbolic meaning, signifying the appreciation of the researcher for the participant's efforts. Based on the results of this study and previous research, it appears that this symbolic gesture is perceived to be a benefit by many potential participants.

How then would exchange theory explain the results regarding the drawing for the $50 gift certificate? First, promised incentives are not as beneficial as are incentives in hand. Second, participants may consider their chances of winning the drawing to be very small, and thus perceive the incentive to be of no value at all. The cover letter indicated that they had been selected to participate because they were school counselors in the state. Some may have calculated that there are many school counselors and thus the odds were too small to provide a significant chance to win. Finally, in order to enter the drawing, the participant had to expend additional effort

(email name to researcher and then, if selected, shop on the Internet for the reward), which might be perceived as an additional cost. Those facts would explain the finding that response rates were not increased by this incentive. However, how would this theory account for the fact that the drawing produced a lower return rate than would be expected by chance? Given that the difference was non-significant, the lower rate may be an artifact of this study. If it were not, one might conclude that the chance to enter a raffle either decreased the perceived benefits or increased the cost more than no incentive. The increased cost could be psychological: the potential participant may feel resentment at the researcher's effort to solicit participation with an incentive of no value (little perceived chance). That is, the recipient may think, "You thought you could trick me into participating by offering a worthless incentive." Thus, the cost (unpleasant emotions) increases sufficiently to outweigh the benefits, which are intangible and also deferred. However, an alternative explanation that should be considered is that the researcher's choice of method for entering the drawing confounded the process. The choice was based on a need to preserve anonymity, and having the respondent mail an entry could have been perceived as a way to connect the entry with the respondent's identity in some way (although that would not be possible). Further, if the respondent had to provide the envelope to mail a separate entry, this might have increased the cost to the participant to a degree that would unbalance the equation in favor of non-response.

It appears that including a monetary incentive increases response rate. It also appears at first glance to increase the researcher's cost. However, the researcher must calculate how many surveys to mail in order to obtain a given number of respondents

necessary for statistical power. It may be that using the monetary incentive will allow the researcher to mail fewer surveys because more will be returned, thus reducing the cost of mailing and compensating for the expense of the incentive.

Limitations

Several features of the mailing list may have compromised the validity of the study. The list that had been prepared the previous spring contained an unknown number of invalid names and addresses. A reasonable estimate of errors in the list would be approximately 10%. Further, the list was organized by school, so that some individuals who worked at more than one school may have received more than one questionnaire. Finally, in large schools where several counselors work, different counselors may have received different incentives when names were randomly assigned to the three groups. Although this is an unlikely topic of conversation among colleagues, it could have occurred and biased results. The population sampled was all school counselors in one state. Further research is needed to determine whether these results will generalize to school counselors in other states or to counselors with other specialties and settings.

Conclusion

A monetary incentive enclosed with a mailing of a questionnaire resulted in the best response rate in a sample of school counselors, but the opportunity to participate in a raffle did not. The results were consistent with the principles of exchange theory.

In the age of accountability, school counselors must demonstrate that their services have a measurable impact on students. Surveys (of parents, graduates, etc.) can be one way to gather data to demonstrate how school counselors contribute to the

academic success of students. In addition, counselor educators need to survey graduates, and conduct other survey research in an effort to improve the training programs for school counselors. Using monetary incentives can assist both school counselors and counselor educators in increasing the response rates to their surveys. Further, they should not waste precious resources on using raffles as an incentive to participate, as the findings in this study are consistent with previous study that found no benefit in doing so.

Survey research in the school counseling field to date has generally neglected to use monetary incentives, which are consistently effective. The author continues to receive requests for survey participation that offer a chance to win a prize (the raffle incentive), even though previous research, and now the current study, suggests that this is an ineffective strategy. The researcher hopes that these results will encourage more researchers in the fields of school counseling and psychology to implement monetary incentives to increase the response rates for mailed surveys. In particular, school counselors must collect and use data in order to demonstrate their effectiveness, and surveys can be very useful in that regard. Using incentives to increase response rates can enhance their results.

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