UNDERSTANDING THE DECISION TO PARTICIPATE IN A SURVEY

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Abstract The lack of full participation in sample surveys threatens the inferential value of the survey method. We review a set of conceptual developments and experimental findings that appear to be informative about causes of survey participation; offer an integration of that work with findings from the more traditional statistical and survey methodological literature on nonresponse; and, given the theoretical structure, deduce potentially promising paths of research toward the understanding of survey participation.

Introduction

Among the alternative means of gathering information about society, survey research methods offer unique inferential power to known populations, within measurable levels of sampling error. This power, however, is the cumulative result of many individual decisions of sample persons to participate in the survey. When full participation fails to obtain, the inferential value of the method is threatened. Tools for dealing with nonresponse effects have been available for some time for descriptive statistics (e.g., Deming 1953; Hansen, Hurwitz, and

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Madow 1953), but only relatively recently for analytic statistics (e.g., Heckman 1979).

The statistical literature on nonresponse largely attempts to reduce nonresponse error through postsurvey adjustments. This includes weighting cases by estimated probabilities of cooperation and by known population quantities, imputation, and selection bias models (see Kalton 1983). All of these techniques eliminate the bias of nonresponse, under certain assumptions. The fact that such assumptions must be met implies that these methods are based on simplified models of the processes producing cooperation with the survey. These models reduce to statements about characteristics of respondents and nonrespondents. We assert that these are themselves *theories* of survey participation but are typically the result of "making do" with what variables have been measured in the survey, not measures of the causes of participation in the survey at hand. The thesis of this article is that the specification of such theories should inform the adjustment process.

There is also a large literature on methods to increase cooperation in surveys, involving advanced letters (e.g., Dillman, Gallegos, and Frey 1976), payment to respondents (e.g., Chromy and Horvitz 1978), interviewer scripts that are persuasive (e.g., Couper and Groves 1991), and strategies of timing calls on sample households (e.g., Weeks et al. 1980). The literature has rarely been guided by a set of theoretical principles that suggest the effectiveness of a particular technique, nor have such principles been deduced from the cumulative results of the studies.

Direct efforts at persuasion are a common tool to increase response rates. In some surveys, interviewers may make two or three additional contacts on a sample household, after an initial refusal, in an effort to persuade them to respond. These efforts to achieve high response rate goals threaten violation of basic informed consent principles. For this reason, in addition to identifying interviewer behavior that is effective in gaining cooperation, it is especially important to identify influences on response that may seem particularly manipulative or gain consent through reduced information about the nature of the task because they may lead to decline of the public trust in surveys (e.g., Butz 1985).

The perspective we describe began with a review of the survey methodological literature, then led to a search for other theories of attitudes and behaviors that might inform an understanding of survey participation. Finally, we conducted a series of focus groups with survey interviewers to critique our notions and further shape the theory.

The purpose of this article is to (1) outline a model that specifies the various factors affecting survey participation, (2) alert survey researchers to a set of concepts and experimental findings that appear to be informative about causes of survey participation, and (3) deduce potentially promising paths of research toward the understanding of survey participation. The article focuses specifically on the refusal component of nonresponse.

Factors Influencing Survey Participation

We believe that full understanding of decisions to participate in a survey requires a theory that integrates the observed influences of sociodemographic and survey design factors, on the one hand, with the less observable impact of the psychological components of the relatively brief interactions between interviewer and respondent, on the other. The former set of influences are the focus of most of the survey methodological literature on survey participation. These are briefly reviewed here.

SOCIETAL-LEVEL FACTORS

There is a set of global characteristics in any society that have an impact on survey participation. These factors serve to determine the context within which the request for participation takes place and constrain both respondent and interviewer. For example, the degree of social responsibility felt by a sample person may be affected by such factors as the legitimacy of societal institutions, the degree of social cohesion, and so on (see Goyder 1987). Such factors not only influence the expectations that both interviewer and respondent bring to the interaction but also determine the particular persuasion strategies (on the part of the interviewer) and decision-making strategies (on the part of the respondent) that are used. More specific to the survey-taking climate are such factors as the number of surveys conducted in a society (the "oversurveying" effect) and the perceived legitimacy of surveys (see Schleifer 1986).

ATTRIBUTES OF THE SURVEY DESIGN

Design choices may have an impact on survey participation in a variety of ways. For example, the mode of initial contact affects the number of channels of communication between interviewer and householder (Groves 1978), as well as the selection of persuasion strategies to employ and the effectiveness of alternative strategies. The respondent rule (i.e., who is eligible to answer the survey questions) can permit multiple householders to be alternative respondents or restrict the choice to just one. The length of the interview being requested is a basic indicator of the burden of participation. The length of the interviewing period affects how forceful the interviewer must become in seeking time to conduct the interview. Finally, the topic of the survey helps determine the respondent's level of interest and knowledge in the interview (Steeh 1981).

CHARACTERISTICS OF THE SAMPLE PERSON

The factors that are most widely discussed in the survey literature are the sociodemographic characteristics of the householder. These include age (Brown and Bishop 1982; Herzog and Rodgers 1988), gender (DeMaio 1980; Smith 1979), income (Brehm 1990; Goyder 1987; Smith 1983), and health status (Pennell 1991). Response rates have been shown to vary with each of these, as well as other, characteristics (see Groves 1989).

Other factors associated with these have also been studied for their relationship to response rates. These factors include the environment, such as the level of urbanization and crime rates (Brehm 1990; House and Wolf 1978; Smith 1983); household structure and characteristics, such as the number and ages of the household members and the quality and upkeep of housing (Kemsley 1976; Lievesley 1988); and the past experience of the respondent (Goyder 1987). We do not believe these factors are causal to the participation decision. Instead, they tend to produce a set of psychological predispositions that affect the decision. They also affect the initial approach of the interviewer to the sample unit.

ATTRIBUTES OF THE INTERVIEWER

Observable sociodemographic characteristics of the interviewer (race, age, gender, etc.) are believed to affect the "script" evoked in the householder's mind at the first contact with the interviewer. At that moment, the householder is making judgments about the purposes of the visit. This occurs by considering the candidate possibilities (e.g., a sales call, an assault, a call for charitable contributions) and matching the pattern of visual and audio cues with those alternatives. All attributes of the interviewer that help the householder discriminate the different scripts will be used to make the decision about the intent of the call.

An interviewer's prior experience will affect the skill and confidence with which the sample person is approached with the survey request. We believe that experienced interviewers tend to achieve higher levels of cooperation because they carry with them a larger number of combinations of behaviors proven to be effective for one or more types of householders. We also deduce that the initial months and years of interviewing provide the largest gains to interviewers in providing them with new persuasion tools (see Couper and Groves 1991).

Turning to interviewer expectations, research shows that interviewers who believe survey questions are sensitive tend to achieve higher missing data rates on them (Singer and Kohnke-Aguirre 1979). Interviewers report that their emotional state at the time of contact is crucial to their success. We believe these expectations are a function of interviewer sociodemographic attributes (and their match to those of the householder), their personal reactions to the survey topic, and their experience as an interviewer.

Finally, the affective or psychological state of the interviewer prior to the contact may have an impact on his or her behavior during the interaction with the householder. As with the potential respondent, an interviewer's mood, prior success that day or in that neighborhood, tiredness, motivation, etc., may all influence the interviewer's psychological predisposition.

RESPONDENT-INTERVIEWER INTERACTION

It is here that the factors discussed above come to bear on the decision to participate, but there is little attention to this in the survey literature (see Oksenberg, Coleman, and Cannell 1986). The strategies the interviewer employs to persuade the sample person are determined not only by the interviewer's own ability, expectations, and so on but also by features of the survey design and by characteristics of the immediate environment and broader society. Similarly, the responses that the sample person makes to the request are affected by a variety of factors, both internal and external to the respondent, and both intrinsic and extrinsic to the survey request.

We contend that an understanding of the interaction between respondent and interviewer, and of the behaviors, attitudes and expectations each brings to the interaction, are critical elements in the development of a theory of survey participation. Our search for a theoretical base for understanding survey participation has led us to the literatures on the social psychology of compliance, helping tendencies, and opinion change. We also conducted a series of focus groups with interviewers to test the relevance of these concepts to survey participation. Not only did we find face validity for the concepts, but we also obtained additional insights from the interviewers that filled gaps in our understanding of the process of survey participation.

Psychological Concepts Relevant to Survey Participation

Research in social psychology that appears most relevant to the issue of survey participation can be divided into three areas: compliance with requests, helping tendencies, and opinion change. Each can be addressed in terms of the relation of its extant literature to the domain of survey participation. The work on compliance warrants our most concentrated focus, owing to its more direct connection to the decision to accede to a survey request.

COMPLIANCE WITH REQUESTS

People frequently decide whether to perform a requested activity on the basis of the attractiveness or unattractiveness of the inherent features of the activity itself (e.g., the interest value and personal relevance of the activity as well as the cost in time, energy, and resources required to perform it). Cialdini (1988) has argued, however, that in addition to these inherent features of the activity, other social or psychological factors play a powerful role in determining whether individuals will agree to perform the activity. Cialdini specified six such compliance principles that people regularly use to decide when to yield to a request. These principles serve as heuristic rules for compliance within the society. It is our belief that the survey request situation most often favors a heuristic approach because the potential respondent typically does not have a large personal interest in survey participation and, consequently, is not inclined to devote large amounts of time or cognitive energy to the decision of whether to participate. The six principles are:

Reciprocation. Every human society abides by a norm for reciprocity that directs individuals to provide to others the general form of behavior that they have received from those others (Gouldner 1960). People feel obligated to respond to positive behavior received (e.g., gifts, favors, services, concessions) with positive behavior in return (Cialdini et al. 1975; Regan 1971). One qualification of this relationship occurs when the earlier behavior received is not viewed as a gift or favor but as a bribe or an undue pressure to comply; under those circumstances, compliance is inhibited (Brehm and Cole 1966; Weiner and Brehm 1966). The reciprocity heuristic for compliance can be worded as follows then: one should be more willing to comply with a request to the extent that the compliance constitutes the repayment of a perceived gift, favor, or concession.

This principle probably underlies the large literature (e.g., Armstrong 1975; Yu and Cooper 1983) finding consistent positive effects of incentives (e.g., cash payments, gifts) on survey cooperation. The literature also shows some nonlinearities with increasing amounts of incentives and inconsistencies over different contexts (i.e., populations and tasks). The implications of the logic above could be expectations that: (1) surveys that provide the incentive before the survey request will show higher participation rates than if the gift were given contingent on completion of the questionnaire; (2) interviewers who give respondents informational letters, brochures, and so on prior to asking for participation will get better compliance than those who do not, and that this will especially be the case when the preliminary information has value for the respondent; (3) interviewers who state that the survey provides information specifically intended to benefit the respondent will get greater participation than those who describe the (same) benefits as by-products of the survey purpose (this might underlie the higher response rates in surveys that lead to actions affecting the population studied); (4) interviewers who are refused in a request to complete a large questionnaire and who then retreat to a request to answer a smaller number of questions—thereby, offering a concession to the respondent—will get more compliance than if they had asked for completion of the smaller questionnaire alone (see Mowen and Cialdini 1980). This last deduction is relevant to double-sampling designs for nonresponse adjustment, which administer short questionnaires to a sample of nonrespondents.

Additional implications flow from the reciprocity rule if it is set in the context of traditional (Blau 1964; Homans 1961) and contemporary (Dillman 1978; Goyder 1987) visions of the process of social exchange. That is, the sponsors of most modern surveys are typically representatives of major societal institutions (i.e., government, business, education). Consequently, those individuals least likely to want to participate in surveys, according to an exchange analysis, will be those who see themselves as least obligated to provide resources (e.g., information) to the sponsor in return for resources received. Such an analysis may help explain the low rates of survey participation among lower SES persons (Goyder 1987). One obvious value of this sort of exchange analysis as applied to survey methods is that it acknowledges that nonrespondents can have well-founded rationales for not cooperating with a survey request. In contrast to the view that nonrespondent actions are in some sense based on ignorance, the exchange approach attempts to identify costs and benefits of responding from their perspective.

Consistency. Social psychological theorists have repeatedly noted that most people possess a strong desire to be (and to appear) consistent within their attitudes, beliefs, words, and deeds (Baumeister 1982; Festinger 1957; Heider 1958). Once an individual has taken a freely chosen stand on an issue, he or she will exhibit a tendency to act congruently with the commitment in the future (Kerr and MacCoun 1985; Pliner et al. 1974). Thus, a heuristic that governs such situations can be worded as follows: after committing oneself to a position, one should be more willing to comply with requests for behaviors that are consistent with that position.

We deduce that interviewers who draw connections between participating in a survey and the respondent's committed beliefs, attitudes, and values (e.g., efficiency in government, advancement of knowledge) will be more successful in gaining compliance (Ball-Rokeach, Rokeach, and Grube 1984). This should be especially true if the respondent has verbalized those commitments before the request for participation (Moriarity 1975).

Of course, the tendency for consistency with prior commitments has its limits. For example, although Freedman and Fraser (1966) showed that homeowners who participated in a short survey of household products were significantly more willing to agree to participate in a much larger survey of household products, it is likely that continued requests for still further household survey participation would be rejected (see Goyder [1987] for evidence of an "oversurveying" effect). Thus, the extent to which consistency pressures would direct behavior in the survey setting may well be limited by exchange theory considerations. That is, after participating in one or two surveys, an individual may get the feeling of already having done his or her part as a survey participant (see Groves and Magilavy 1981).

Social validation. People frequently use the beliefs, attitudes, and actions of similar others as standards of comparison for their own beliefs, attitudes, and actions (Festinger 1954). As a consequence, individuals commonly decide on appropriate actions for themselves by searching for information as to how similar others have acted or are acting in a similar situation (Latané and Darley 1970; Schachter and Singer 1962). The social validation heuristic can be worded as follows: one should be more willing to comply with a request to the degree that one believes that similar others would comply with it.

For surveys there may be a complicating feature: if many similar others stand ready to participate, why should the respondent be the one to volunteer his or her time? Some interviewers on ongoing surveys may be engaging this principle by noting high cooperation in the past with the survey. The confidentiality constraints should prevent interviewers from identifying other respondents (perhaps neighbors) as a tool of social validation.

Authority. People are more likely to comply with a request if it comes from a properly constituted authority (Bickman 1974; Bushman 1984; Milgram 1974), someone who is sanctioned by the society to make such requests and to expect compliance. In short, one should be more willing to yield to the requests of someone whom one perceives as a legitimate authority. In the survey context, the immediate requester is typically not the authority figure but is seen as representing some sponsoring organization that can be judged to have varying degrees of authority status. One would expect that (1) interviewers who emphasize the sponsor of their survey will be more successful in generating participation if the sponsor is generally seen as having legitimate authority to collect the information (e.g., government or educational institutions), but that (2) this effect will be reversed if the sponsor is not seen as having such status (e.g., certain commercial organizations).

The perception of legitimate authority may reduce the impact of the right to privacy in the survey participation decision. In making a decision about survey participation, each sample person must balance a personal right to privacy against the benefits of providing the desired information to the requesting source. A testable implication is that information will be construed as less private as the perceived legitimacy of the survey source to have and use it grows.

Scarcity. As opportunities become more scarce, they are perceived as more valuable (Mazis 1975; Worchel, Lee, and Adewole 1975). As long as a behavior is initially perceived as neutral or positive, people are more likely to comply with requests to perform it when the opportunity to do so is limited: one should be more willing to comply with requests to secure opportunities that are scarce. One implication for survey participation is that requests that emphasize the value to a respondent of "making your voice heard" or "having your opinion count" will be more effective when coupled with information suggesting that such an opportunity is rare: "We only contact one person in every 300,000." This principle may also help explain the decline of survey participation in Western society coinciding with the proliferation of surveys. People may no longer consider the chance to have their opinions counted as an especially rare, and therefore valuable, event. Conversely, in an attempt to make the scarcity principle apply, some interviewers are known to say at the end of the interviewing period that "there are only a few days left. I'm not sure I'll be able to interview you if we don't do it now."

Liking. An obvious fact of social interaction is that people are favorably inclined toward those individuals they like. A compliance heuristic consequence of this tendency can be worded as follows: one should be more willing to comply with the requests of liked others. In a survey request setting, the liked other can refer either to the interviewer or to the sponsoring organization the interviewer represents. Most research on liking has confined itself to factors that determine when one person will like another person. That research indicates that the following factors enhance liking: similarity of attitude (Byrne 1971), background (Stotland and Patchen 1961), and dress (Suedfeld, Bochner, and Matas 1971); praise (Drachman, deCarufel, and Insko 1978); cooperation (Aronson, Bridgeman, and Geffner 1987); and physical attractiveness (Benson, Karabenic, and Lerner 1976). An interviewer who brings one or more of these features to a survey request situation should generate more willing compliance, especially when the respondent is in a heuristic processing mode.

There is a relatively large literature examining alternative interviewing styles that may effect different amounts of liking on the part of the respondent toward the interviewer. This research (Dijkstra and van der Zouwen 1982; Hyman 1954), often contrasting "personal" versus "professional" styles of interviewing, has focused on measurement error implications of the behavioral styles, ignoring their impacts on unit nonresponse.

HELPING TENDENCIES

Research on helping can be broken down into two major categories of aid: (1) helping in emergency situations absent an explicit request for assistance (see Piliavin et al. 1981); and (2) helping in nonemergency situations in which the recipient is a petitioner for low level aid, who makes an explicit request for it. Clearly, it is the latter that is closer to the survey request situation.

Providing low level help in response to a direct request can be seen as similar to complying with other types of requests. Indeed, when viewed in this way it becomes possible to apply much of what is known about general compliance—as described in the foregoing section—to the helping arena. That is, tendencies to reciprocate, to be consistent with earlier commitments, to follow the lead of similar others, to follow authority suggestions, to seize scarce opportunities, and to favor liked others have all been demonstrated to affect the decision to help (see Dovidio 1984). Still, the concept of help-giving is different from that of compliance and can add unique variance to the decision of how to respond to a request. For example, it is argued that a helping norm (sometimes called "the norm of social responsibility") exists in most cultures and motivates individuals to help others who are in need and who are dependent upon them for aid (Berkowitz and Daniels 1964). A wet and cold interviewer standing on a doorstep in winter may elicit greater compliance. Thus, even a simple request to participate in a survey may be significantly more successful when it includes an appeal to the helping norm. For example, Mowen and Cialdini (1980) obtained a 19-percentage-point increase in survey participation by adding the words "it would really help us out" to the end of their request.

Three emotional states have been found to be reliably connected to helping decisions: anger, happiness, and sadness. Anger has a negative effect on requests to help, probably because refusing to help can be seen to be a form of passive aggression that reduces the anger/tension state (see DeNicholas 1987). Happiness, on the other hand, has with few exceptions an enhancing effect upon helping; one likely mediator of this relationship is that happiness leads to a positive evaluation of the features and possible consequences of the helping act (Clark and Waddell 1983; Isen et al. 1978), making it appear to be a more rewarding activity. Finally, sadness has been shown to relate to helping in a less unitary way than either anger or happiness, sometimes producing a positive impact and sometimes producing a negative impact. In explaining the effects of sadness on helping, Schaller and Cialdini (1990) have argued that, because helping can be experienced as a personally gratifying experience by normally socialized adults (Weiss et al. 1971), it can be used to dispel a helper's sadness; however, they argue further that this will only be so when the costs of the helping act are low enough and the potential benefits are large enough to make the act a hedonically rewarding—and, therefore, a mood elevating—experience (Weyant 1978).

The upshot of this analysis for the issue of survey compliance is that, among potential respondents, we might expect (1) anger generally to reduce compliance, (2) happiness generally to enhance compliance, and (3) sadness to reduce it under conditions of a relatively high response cost to benefit ratio (e.g., a long survey with small perceived impact or value) but to enhance it under conditions of a relatively low response cost to benefit ratio. To apply this knowledge, observable indicators of emotional states are needed (see Ekman and Friesen 1975). Thus, interviewers who react to perceived sadness by emphasizing the enjoyment and societal benefits of the interview may tend to be more successful. If the householder appears angry, the interviewer who retreats and returns later should be more successful.

OPINION CHANGE

The literature on opinion change offers an encouraging degree of overlap with that on compliance with requests. The same principles that have been shown to influence behavioral compliance with a request (reciprocity, consistency, social validation, authority, scarcity, and liking) have been shown to affect the willingness of a person to change an opinion on some topic. Moreover, research by Petty and Cacioppo (1984, 1986) and Chaiken (1980, 1987) has generated evidence for the usefulness of the systematic versus heuristic processing distinction in understanding opinion change. According to this body of work, any factor that can increase or decrease the motivation and/or ability to process the message fully is expected to be able to increase or decrease persuasion, depending on the strength of the arguments in the message. For example, the amount of external distraction that is present when a message is presented will decrease a recipient's ability to process it fully. Distraction, therefore, will decrease a message's persuasiveness when its arguments are strong but will increase its persuasiveness when its arguments are weak (Petty, Wells, and Brock 1976). Similar results are found when the message is too complex or too quickly presented to be easily comprehended; an inability to comprehend the message easily will decrease its effectiveness when it contains strong arguments but will increase its effectiveness when it contains weak arguments (Cacioppo and Petty 1985; Moore, Hausknecht, and Thamodaran 1986).

The most reliable finding is the demonstration that, when the topic of a persuasive communication is of high personal relevance, subjects will change their opinion on the basis of a systematic review of the communication's intrinsic features (i.e., the extent to which its arguments conform to the rules of logic and evidence); however, when the topic is of small personal import, they will change their opinions on the basis of a heuristic review of its extrinsic features, which include such interpersonal and societal factors as the authoritative manner, attractiveness, and credibility of the source (Petty and Cacioppo 1986).

CONCLUSION

We certainly do not wish to minimize the relevance of a straightforward cost/benefit analysis to the issue of survey participation. Nonetheless, it is our view that the understanding of survey participation can benefit from a consideration of social psychological factors that have been proven to be effective in the research on compliance, helpgiving, and opinion change. Thus, researchers wishing to understand participation in a particular survey would be well advised to consider, in addition to cost/benefit issues, such factors as respondents' current moods; feelings of obligation, deference, and liking toward the survey interviewer and/or sponsor; and perceptions that interview participation is normative or represents a scarce opportunity to be counted or is consistent with existing commitments and values. It would be instructive to examine the degree to which particular survey designs (or particular interviewers) incorporate these factors into their appeals for participation and to correlate the relative presence of these factors with level of survey response.

Similarly, the distinction between systematic and heuristic forms of information processing seems relevant to the decision to participate in a survey. However, in the survey context it does appear that most potential respondents are likely to take a heuristic approach to that decision. That is, the act of participation in a survey is rarely of sufficient personal relevance to cause potential respondents to want systematically to review and incorporate all of the available information into their decision. Consequently, they are likely to base their decisions on one or two highly prominent and normally diagnostic considerations (e.g., the length of the survey or the authoritativeness of the interviewer). It might well be then that interviewer training that operated on the assumption of respondents' heuristic processing of survey-related information would be more effective.

Contributions to Theory from Intensive Discussions with Survey Interviewers

The concepts drawn from the social psychology of compliance closely addressed the dynamics of the interviewer-respondent interaction and, thus, filled a hole in the perspectives on survey participation. We sought, however, some reactions to these notions from professionals involved in survey participation—survey interviewers.

Between 1988 and 1991 we conducted a series of focus groups with personal visit interviewers from the Survey Research Center and the U.S. Census Bureau. Discussions focused on general methods of approaching sample housing units, indicators used by interviewers to identify reluctant respondents, and techniques the interviewers employ to obtain participation from different types of sample persons. In a sense we used them to enrich and critique our theoretical perspective.

In addition, the groups contributed to our thinking two important components of our theory: (1) tailoring—the use of different dress, physical behaviors, words, and strategies of persuasion for different sample persons, and (2) maintaining interaction—the use of interviewer behavior that tries to reduce the likelihood of the respondent terminating the discussion prematurely (as opposed to seeking to maximize the likelihood of an immediate acceptance).

TAILORING

Experienced interviewers often reported that they adapt their approach to the sample unit. Interviewers engage in a continuous search for cues about the attributes of the sample household or the person who answers the door, focusing on those attributes that may be related to one of the basic psychological principles reviewed above. For example, in poor areas, some interviewers choose to drive the family's older car and to dress in a manner more consistent with the neighborhood. In rich neighborhoods, interviewers may dress up. In both cases, the same compliance principle—similarity leads to liking—is engaged but in different ways.

In some sense, expert interviewers have access to a large repertoire of cues, phrases, or descriptors corresponding to the survey request. Which statement they use to begin the conversation is the result of observations about the housing unit, the neighborhood, and immediate reactions upon first contact with the person who answers the door. The reaction of the householder to the first statement dictates the choice of subsequent strategies to use. With this perspective, all features of the communication are relevant—not only the words used by the interviewer but also the inflection, volume, and pacing (see Oksenberg, Coleman, and Cannell 1986), as well as physical movements of the interviewer.

Some empirical support for tailoring can be found in the work of Morton-Williams (1991). She found that interviewers who were asked to use a prepared script got higher refusal rates than those allowed to develop their own approach. She concluded that "imposing a script inhibited the natural skill of the interviewer in responding to the unfolding situation." The use of tailoring is widely acknowledged in other fields, particularly sales and marketing (e.g., Spiro and Weitz 1990).

MAINTAINING INTERACTION

The introductory contact of the interviewer and householder is a small conversation. There are two radically different optimization targets in developing an introductory strategy—maximizing the number of acceptances per time unit (assuming an ongoing supply of contacts) and maximizing the probability of each sample unit accepting.

The first goal is common to some quota sample interviewing (and to sales approaches). There, the supply of sample cases is far beyond that needed for the desired number of interviews. The interviewer behavior should be focused on gaining speedy resolution of each case. An acceptance of the survey request is preferred to a denial, but a lengthy, multicontact preliminary to an acceptance can be as damaging to productivity as a denial. The system attempts to maximize the number of interviews per time unit.

The second goal, maximizing the probability of obtaining an interview from each sample unit, is the implicit aim of probability sample interviewing. The amount of time required to obtain cooperation on each case is of secondary concern. Given this, interviewers are free to apply the "tailoring" over several turns in the contact conversation. How to tailor the appeal to the householder is increasingly revealed as the conversation continues. Hence, the odds of success are increased with the continuation of the conversation. Thus, the interviewer does not maximize the likelihood of obtaining a "yes" answer in any given contact but minimizes the likelihood of a "no" answer over repeated turn-taking in the contact.

We believe the techniques of tailoring and maintaining interaction are used in combination. Maintaining interaction is the means to achieve maximum benefits from tailoring, for the longer the conversation is in progress, the more cues the interviewer will be able to obtain from the householder. However, maintaining interaction is also a compliance-promoting technique in itself, invoking the commitment principle as well as more general norms of social interaction. That is, as the length of the interaction grows, it becomes more difficult for one actor summarily to dismiss the other.

There is some support from commonly used interviewer training procedures that the "maintaining interaction" model is correct. First, interviewers are typically warned against unintentionally leading the householder into a quick refusal. If the person appears rushed or preoccupied, the interviewer should seek another time to contact the unit. A common complaint concerning inexperienced interviewers is that they create many "soft-refusals" (i.e., cases easily converted by an experienced interviewer) by pressing the householder into a decision prematurely. Unfortunately, only rarely do interviewer recruits receive training in the multiturn repartee inherent in maximizing the odds of a "yes" over all contacts. Instead, they are trained in stock descriptors of the survey leading to the first question of the interview.

We note how similar the goals of a quota sample interviewer are to those of any salesperson, but how different are those of the probability sample interviewer. Given this, it is not surprising that many attempts to use sales techniques in probability sample surveys have not led to large gains in cooperation. The focus of the salesperson is identifying and serving buyers. The "browser" must be ignored when a known buyer approaches. In contrast, the probability sample interviewer must seek cooperation from both the interested and uninterested.

Conclusions

We have outlined a set of concepts and a proposed initial integration of these concepts to explain some influences on survey participation. Although the relationships seem appropriate to a large set of survey situations, it is also apparent upon reflection that they are not universally applicable. For example, in surveys of populations deeply affected by the outcome of the survey (e.g., surveys of members of organizations or special-interest groups about issues of high salience), a theory more akin to rational choice principles may apply. In mailed, self-administered surveys the influences of the interviewer on the actions of the sample persons are not present. Finally, surveys having organizations as their sampling and measurement units, in which members of the organization are asked to report organizational characteristics, are likely to govern their cooperation by formal rules and legal guidance not reflected in the theory above. In contrast, we are comfortable at this stage of development that the concepts capture the major influences on the participation of sample persons in household surveys on topics of relatively low salience to the respondent.

Our conclusions from this work fall into two major areas: (1) implications for the future research agenda in survey participation, and (2) implications for changes in survey procedures.

IMPLICATIONS FOR RESEARCH

Many areas of research are suggested by the model described above. One area may focus on determining the existence of and importance of tailoring as a method of gaining cooperation to surveys. From the model we might deduce that the use of tailoring increases with interviewer experience, especially with diverse subpopulations. We might also deduce that initial tactics of interviewers upon contacting a sample household would concentrate on maintaining contact or rapport-building rather than on seeking compliance. That is, there would be identifiable ordering of tactics used by interviewers within a contact interaction. Given the relative richness of cues in the face-to-face mode, we anticipate more tailoring there than in the telephone mode. Finally, we suspect that much of the manifestation of tailoring lies in the contrast evident *among* respondents, not contrasts within interactions with individual respondents. We believe that all of these aspects of tailoring are testable hypotheses and should shape the research agenda in the near future.

The theory asserts that there are identifiable parts of the interaction between interviewers and sample persons and that these are predictive of the participation decision. Key research issues are whether these are observable at all, whether they are observable by the interviewer involved in the interaction, and whether the interviewer can document them in order to study their role in the participation process. Are tape recordings of the interaction (see Morton-Williams 1991) the only method of measuring the interaction?

The model directly posits statistical interactions among some of the variables. That is, the power of one influence on compliance (e.g., crime levels of the sample area) may depend on levels of another variable (e.g., authority of the collection agency to request the survey information). A whole set of empirical questions have the form, Do personal attributes of the respondent affect cooperation propensity, controlling for the effects of the nature of the survey request and the behavior of the interviewer? Survey methodologists know this as the question of whether a "hard core" of refusers exists in the population.

The model suggests a series of investigations exploring what traits of the interviewer might be compatible with the concept of tailoring. Relatively stable attributes on "need for cognition" and "flexibility" refer to the taste for diagnosing alternative courses of action and changing strategies frequently. One theoretical question is whether these behaviors are trait-based or learned by experience in the field. If the former, it would be prudent to attempt recruiting and screening to identify interviewer candidates.

Finally, one important research item is the exploration of the role of efforts to seek cooperation and levels of measurement error. How do different compliance techniques affect later behavior of the respondent during questioning? Is it desirable to change behaviors when the interview begins? For example, will appeals to authority at the point of gaining cooperation increase response errors on sensitive topics later in the interview?

PRACTICAL IMPLICATIONS

In addition to guiding a research agenda, if the principles above apply, they have broad implications for survey practice. First, interviewers may now be using these techniques in an uncontrolled fashion, sometimes at cross-purposes, sometimes effectively. Unguided use of these techniques may have ethical implications regarding the treatment of survey respondents. For example, tailoring can be used to increase the relevance to the sample person of information given about the interview request. This is beneficial to both the interviewer and the person. It may also be used to heighten the saliency of some minor but attractive feature of the request while distracting respondent attention from strongly unattractive components (e.g., describing in detail purposes of health monitoring of a survey and failing to inform a respondent that the majority of questions are detailed measures of sexual practice). If these techniques are to be formalized into training guidelines, the survey researcher must foster ethical uses and condemn unethical uses of the principles.

Second, the set of principles imply a very different training regimen for interviewers than a common practice of scripting interviewer behavior in the first moments of interaction. Instead, interviewers would be trained in a variety of techniques and given guidelines for choosing which combination to use. This philosophy may conflict with use of standardized procedures when asking questions in the interview. It would call on interviewer flexibility at the beginning of the interaction, followed by rather inflexible adherence to the questionnaire script. This may be difficult to achieve.

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