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Respondent Fatigue in Self-Report Victim Surveys:

Examining a Source of Nonsampling Error from Three Perspectives

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Date of Approval: March 24, 2006

Keywords: National Crime Victimization Survey, fatigue bias, nonresponse, survey research, research methods

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Dedication

This dissertation is dedicated to my wife Jennifer, whose love and support is immeasurable. It is also dedicate to our newborn son Ellis. Only a few weeks old, he has already brought a lifetime of joy into our lives. Finally, I dedicate this manuscript to my stepfather Rex, who passed away shortly before it was completed.



Acknowledgements

This dissertation might never have been completed if it were not for certain individuals, whose aid and support must not go unrecognized. First, I must thank my major professor Dr. Thomas Mieczkowski for his sage advice and subtle guidance throughout my entire graduate experience at the University of South Florida. I must also thank Dr. Kim Lersch and Dr. Wilson R. Palacios for their insight and encouragement during the writing process. Third, I could not have completed this manuscript without the assistance of Dr. John Cochran. The depth and breath of his statistical expertise proved to be an invaluable resource. Thank you. And finally, I could not have completed this dissertation without the support and guidance of my friend and colleague Dr. Callie Marie Rennison. I am truly indebted to her for the time and energy that she contributed to this endeavor.



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Respondent Fatigue in Self-Report Victim Surveys:

Examining a Source of Nonsampling Error from Three Perspectives

Timothy C. Hart

ABSTRACT

Survey research is a popular methodology used to gather data on a myriad of phenomena. Self-report victim surveys administered by the Federal government are used to substantially broaden our understanding of the nature and extent of crime. A potential source of nonsampling error, respondent fatigue is thought to manifest in contemporary victim surveys, as respondents become "test wise" after repeated exposure to survey instruments. Using a special longitudinal data file, the presence and influence of respondent fatigue in national self-report victim surveys is examined from three perspectives. Collectively, results provide a comprehensive look at how respondent fatigue may impact crime estimates produced by national self-report victim surveys.



Introduction

Survey research is a popular methodology used in the United States for more than 6 decades. Large national surveys advance and improve our understanding of employment and labor, political, agricultural, and economic issues. Federally-sponsored surveys are also used to collect data on various aspects of the criminal justice system, including law enforcement (see Reaves & Hart, 2000; see also Reaves & Hickman, 2004), criminal victimization (see Catalano, 2004, 2005), state court processing (see Hart & Reaves, 1999; see also Rainville & Reaves, 2003; see also Reaves, 2001), and prison and jail inmates (see Harrison & Beck, 2005; see also Harrison & Karberg, 2004).

Although surveys are a tool that can provide a wealth of information about a variety of topics, two sources of error can threaten the accuracy of estimates produced by this methodology: Sampling error and Nonsampling error.

Sampling error is one form of measurement error that can be produced during survey research. It occurs when a sample is drawn making it systematically different from the population that it is intended to represent. When this occurs, inferences derived from the sample and generalized to the population can be erroneous. Historically, one of the most recognized examples of sampling error occurred during the 1948 presidential election between Harry Truman and Thomas E. Dewey. Pollsters interviewed a sample of voters that was *not* representative of the overall voting population and projected



Dewey the victor. The Chicago Daily Tribune used the erroneous results and ran the famous headline "Dewey Defeats Truman," which it later retracted.

Researchers must also guard against nonsampling error when they employ survey research. Nonsampling error represents all other forms of error not associated with drawing a sample. Some sources of nonsampling error include questionnaire design and question wording, data coding, editing, entry, and processing. Another source of nonsampling error can be respondent fatigue or the burden a respondent experiences during the survey process. Although the full impact of nonsampling error cannot be quantified, researchers can design and administer surveys in ways that minimize its effects. For example, identifying factors that influence respondent fatigue in national self-report victim surveys enables researchers to develop methodological approaches guarding against it. In doing so, our ability to derive more precise national crime estimates is improved.

The current study explores the effects of respondent fatigue associated with national self-report victim surveys. It examines this issue from three perspectives. The investigation begins by reassessing the "multiple exposure to stimuli problem" believed to be associated with the survey design of the National Crime Victimization Survey (NCVS) (Lehnen & Reiss, 1978a, 1978b). The work of Lehnen and Reiss is replicated to determine whether survey-design characteristics of contemporary self-report victim surveys produce respondent fatigue.

The second perspective extends the work of Lehnen and Reiss (1978a, 1978b) by modifying the operational measure of fatigue. Lehnen and Reiss used the decline in reported victimization as a measure of fatigue. In the second perspective, however,



respondent fatigue is examined in terms of whether respondents who are exposed to longer interviews during their initial National Crime Victimization Survey interview are more likely to *refuse* to participate during their next interview.¹ This approach permits a more robust understanding of the factors that predict respondent fatigue, and provides the foundation for a more theoretically based approach for looking at this important methodological issue.

The third perspective investigates respondent fatigue over multiple waves of victim surveys, incorporating the conceptual framework of household nonresponse theory developed by Groves and Couper (1998). This strategy provides additional insight into the issue of respondent fatigue believed to be associated with the design of contemporary self-report victim surveys by combining the approaches presented from the previous two perspectives. The third facet of this research examines the "multiple exposure to stimuli problem" using nonresponse as the operational measure of fatigue, over multiple waves of victim surveys, while integrating an appropriate theoretical perspective.

Combined, these perspectives provide an in-depth look at the nature and extent of respondent fatigue associated with national self-report victim surveys. Results offer answers to questions about how respondent fatigue impacts national crime estimates produced by this methodology, and how survey administrators can minimize its effects. Each perspective is described below in greater detail; but before continuing, relevant literature is reviewed and discussed.

¹ Members of households selected to participate in National Crime Victimization Surveys (NCVS) are interviewed every 6 months for 3 years.



Literature Review

Respondent fatigue

Respondent fatigue can manifest during surveys in two distinct ways. First, participants can grow tired during an interview or boredom can overcome a respondent while completing a self-administered questionnaire. In either case, if answers given in response to questions systematically differ across respondents as a result of the burden experienced while participating, then respondent fatigue has manifest as response bias (see Weisberg, 2005). If a respondent chooses not to participate in a mail or telephone survey, partake in an interview, or skips answers during a self-administered questionnaire because they grow tired of participating, then respondent fatigue has been exhibited in an entirely different form: Nonresponse bias (see Groves & Couper, 1998; see also Groves, Dillman, Eltinge & Little, 2002). Unlike response bias, nonresponse bias is more commonly associated with longitudinal surveys. That is, when respondents are exposed to an interview during one wave of a longitudinal survey and refuse to participate in a subsequent wave(s), and the decision not to participate is systematic among nonrespondents, nonresponse bias is introduced. Regardless of how they manifest, both response bias and nonresponse bias create error in measurement and considerable research has been undertaken to better understand possible sources of each. Studies examining both are discussed below in greater detail.



Response bias

Response bias is believed to manifest from a number of sources related to the task of participating is a survey. The method by which a survey is administered (i.e., the survey mode) is one example. Face-to-face interviews, telephone interviews, and mailed or in-person self-administered questionnaires are common survey modes used to collect data. Although research fails to demonstrate that one mode is superior to another, some important generalizations about survey mode as it relates to response bias can be made.

In terms of misinterpretation, omission, or lying, all survey delivery methods appear to work well in minimizing response effects—if respondents are asked factual questions, questions that do not threaten the respondent, or that do not make the respondent feel there is a socially desirable answer (Dillman, 1978; Groves & Kahn, 1979; Groves & Mathiowetz, 1984; Hochstim, 1967; Jonsson, 1957; Sudman & Bradburn, 1974; Thornberry & Scott, 1973). Much research also suggests that survey modes which provide more anonymity are superior at minimizing response effects than those that provide less, when sensitive questions or questions associated with a higher degree of social desirability are asked (Catania, Gibson, Chitwood & Coates, 1990; Catania, Gibson, Marin, Coates & Greenblatt, 1990; Combs & Freedman, 1964; Henson, Roth & Cannell, 1974; Knudsen, Pope & Irish, 1967; Mooney, Poullack & Corsa, 1968; Turner, Lessler & Devore, 1992). Yet despite demonstrating the influence mode can have, research fails to consistently point to one survey delivery method as being better in all situations for reducing response effects.



Response bias is also suspected of being tied to question type (i.e., open-ended versus closed-ended questions) as well as question length and wording. As with survey mode, research is unable to consistently establish links between each of these task-related factors and response effects. For example, open-ended questions may produce substantively richer information than closed-end questions because they can "more accurately reflect nuances of meaning that are lost by forcing a respondent into a fairly tightly controlled set of alternative answers" (Bradburn, 1983, p. 279). However, with the exception of when topic saliency is being measured or when questions are being pretested, research fails to demonstrate that one form of question is more likely to produce unwanted response effects than the other (Dohrenwend, 1965; Schuman & Presser, 1978; Sudman & Bradburn, 1974). On the other hand, research has done a somewhat more convincing job at establishing a connection between question length and wording and response bias. Recent studies demonstrate that variations in question wording affect respondents' answers on attitudinal surveys (Lockerbie & Borrelli, 1990; Rasinski, 1989; Turner, Lessler & Devore, 1992), suggesting that survey researchers should avoid including lengthy questions or complicated wording if response effects are to be reduced.

Question order is another task-related source of response bias that receives considerable attention from researchers. Generally, the focus of question order-effect research is in one of five areas. For example, past research demonstrates a strong link between question order and recall. Results show that attitudes expressed about topics where a respondent has low saliency or recall are influenced more so by question order than topics where the respondent has high saliency (Hayes, 1964; Landon, 1971; Segall, 1959). In addition, overlapping content within different sections of the same



questionnaire can produce a redundancy effect. Past research indicates that respondent's answers can be adversely affected if they feel they are being asked the same question repeatedly throughout the same survey (Bradburn, 1983; see also Weisberg, 2005). A consistency effect is another type of question-order effect associated with the task of taking a survey. Among one of the most frequently examined topics within questionorder effect research, studies show that survey questions can produce variation in answers among respondents depending on where in relation to other questions they are placed (Ayidiya & McClendon, 1990; Benton & Daly 1991; Hart, 1998; McFarland, 1981; Narayan & Krosnick, 1996; see also Schuman & Presser, 1996). Finally, the order in which survey questions are asked can also produce response bias that manifests as either a rapport or fatigue effect. A rapport effect occurs when nervousness or hesitancy diminishes during the course of a survey due to an increase in trust or comfort developing between the interviewer and respondent, whereas a fatigue effect manifests when respondents' answers are adversely affected due to the burden produced by the task of participating in a survey (Bradburn, 1983; Lehnen & Reiss, 1978a, 1978b; Sudman & Bradburn, 1974; see also Weisberg, 2005). Again, both are tied to the order in which questions are asked and have been shown to be potential sources of response bias.

Each form of response bias discussed above is tied to the task of survey participation. While research is far from being able to provide a single protocol for administering surveys in a manner that eliminates response bias entirely, findings do provide some insight into important considerations that must be made when conducting surveys. In addition to survey task, past research demonstrates the importance of interviewers and the effects produced by interviewer-respondent interaction.



Interviewers are a likely source of response bias (Bailey, Moore & Bailar, 1978; Groves & Kahn, 1979; Hanson & Marks, 1958; Kish, 1962; Stock & Hochstim, 1951). Some of the earliest studies on interviewer effects demonstrate that their characteristics and behaviors can bias results (Hyman, 1954; Katz, 1942). Interviewer competence, prior expectations of survey results, race, age, gender and their interaction with respondents are factors that have been shown to influence respondents' answers to survey questions (Athey, Coleman, Reitman & Tang, 1960; Campbell, 1981; Cotter, Cohen & Coulter, 1982; Davis, 1997; Dohrenwend, Colombotos & Dohrenwend, 1968-69; Finkel, Guterbock & Borg, 1991; Freeman & Butler, 1976; Hatchett & Schuman, 1975-1976; Schaffer, 1980; Schuman & Converse, 1971; Tucker, 1983; Williams, 1964). Things as seemingly innocuous as an interviewer's pace, volume or choice of words used during an interview can influence survey responses (Oksenberg, Coleman & Cannell, 1986). As with factors associated with survey task, understanding how interviewers and the interviewer-respondent interaction can create response bias is vitally important if surveys that minimize its effects are to be developed and administered.

Finally, response bias may also be a product of certain respondent characteristics or personality dispositions (i.e., a response set). Couch and Kensiton (1960) identified one of the first such response sets during an investigation of a "yea-saying bias" in a study of authoritarian personalities. While later studies failed to demonstrate a similar pattern (Brandburn, Sudman, Blair & Stocking, 1978; Orne, 1969; Rover, 1965), other respondent demographics such as age, gender, and marital status have been tied to socially desirable answers to certain survey questions (Crown & Marlowe, 1964; Sudman & Brandburn, 1974; see also Weisberg, 2005). These and similar findings not only



demonstrate how certain respondent characteristics can influence survey responses, but more importantly, they emphasize the need for researchers to be cognizant of sources of response bias that are beyond their control.

To varying degrees, past research demonstrates how the survey task, interviewer characteristics, interviewer-respondent interaction, and respondent characteristics can influence survey responses (Bradburn, 1983; see also Weisberg, 2005). Yet despite numerous studies approaching the problem from different angles, no formal theory for understanding response bias has been produced from the scientific community. Thus, respondent fatigue simply remains one form of response bias that is part of a larger laundry list of many other types. Researchers investigating nonresponse bias, however, have used a much different approach. Unlike response-bias research, formal theoretical perspectives play an integral role in guiding research investigating why respondents choose to participate in surveys.

Nonresponse bias

Propositions at the core of nonresponse-bias research are derived from a formal theoretical perspective. Suggesting that survey nonresponse should be considered a form of social exchange, Don Dillman (1978) originally presented the theoretical foundations of survey nonresponse as a part of his Total Design Method (TDM) of mail and telephone surveys. Dillman's ideas serve as the cornerstone for understanding the nuances of survey participation. Recently, more refined perspectives on nonresponse have been offered (Groves & Couper, 1998; Dillman, 2000). These new ideas provide additional insight into what factors influence respondents' decisions to participate in surveys. A



discussion of the evolution of key ideas associated with survey-nonresponse research follows.

In 1978, Don Dillman developed a theoretically based methodology for conducting mail and telephone surveys: the Total Design Method (TDM). Consisting of two parts, the goal of the TDM is to maximize both the quality and the quantity of surveys. In order to achieve this goal, according to Dillman, survey researchers must "identify each aspect of the survey process that may affect either the utility or quantity of response and to shape each of them in such a way that the best possible responses are obtained" (p. 12). Dillman argues that researchers must therefore "organize the survey effects so that the design intentions are carried out in compete detail" (p. 12).

Dillman (1978) believes that the aforementioned objectives can be achieved if surveys response is viewed as a form of social exchange. Social exchange theory states that a behavior will occur if the perceived costs of the behavior are less than the perceived rewards (Blau, 1964; Goyder, 1987; Homans, 1961; Thibault & Kelly, 1959). According to Dillman and the TDM, therefore, three factors must be present in order to maximize survey response: costs must be minimized, rewards must be maximized, and trust between interviewer and respondent must be established.

The perceived cost of participating in a survey is difficult to gauge. Nevertheless, research shows that cost must be considered when administering a survey, due to its effect on response rates (Blumberg, Fuller & Hare, 1974; Carpenter, 1974-1975; Linsky, 1975; Tedin & Hofstetter, 1982). When costs are high, participation is low; but when costs are reduced, participation increases. According to Dillman (1978), several steps can be taken to minimize cost. First, the survey task must be brief. Brief surveys cost



respondents less time to complete. Surveys must also minimize mental and physical effort or cost. Again, surveys that require extensive metal or physical effort to complete will result in higher rates of nonresponse, according to Dillman. Surveys must also eliminate any chance of the respondent feeling embarrassed or insubordinate. Both are viewed as intangible cost. Finally, surveys must avoid direct monetary costs. Dillman argues that mail surveys accompanied by a postage-paid reply envelope—so as to not require respondents to spend their own money on returning it in order to participate—increases participation. In short, surveys that are brief, require little mental or physical effort, eliminate embarrassment or insubordination, and require no direct out-of-pocket expense for the respondent increases participation.

In addition to minimizing costs, Dillman (1978) argues that survey nonresponse is reduced if administrators provide rewards for completing surveys. Considerable research demonstrates a correlation between increased reward and higher response rates (Berk, Mathiowetz, Ward & White, 1987; Chromy & Horvitz, 1978; Church, 1993; Godwin, 1979; James & Bolstein, 1990, 1992; Mize, Fleece & Roos, 1984; Nederhof, 1993; Willimack, Schuman, Pennell & Lepkoski, 1995). All rewards do not need to be financial, however. For example, nonresponse can be minimized if interviewers show positive regard to respondent's participation or express appreciation for participation. Interviewers can also convey a sense of reward if they show support for respondent's values. Dillman argues that both financial and nonfinancial rewards help reduce nonresponse. In short, adopting a professional consulting approach by interviewers and administrators produces higher response rates because these approaches increase a sense of reward on the part of respondents.



Both cost and reward are key components of the TDM. According to Dillman (1978), trust in another key component that is necessary in order to reduce survey nonresponse. Trust can be established in different ways during the administration of a survey. For example, tokens of appreciate in advance of a survey can be offered (Dillman, 1978). A cover letter from a local official asking for community participation in a community survey can yield positive results, due in part to the trust that such a letter can establish (see Groves & Couper, 1998; see also Groves, et. al., 2002). Also, the organization conducting a survey can be identified and its legitimacy conveyed before a survey is administered. The Census Bureau, for example, issues notification letters to respondents in samples surveyed for the Federal government. Letters arrive in envelopes embossed with the Census Bureau's logo and address, composed on official agency letterhead. The official notification letters are designed to instill trust, via legitimacy of the survey and help minimize nonresponse (Dillman, 1978).

Dillman (1978) outlined how the quality and quantity of survey responses would increase if survey administrators adopted the TDM. Although some findings showed the TDM produced a modest effect on response rates, response quality or both, little evidence pointed to the *mechanisms* by which these effects manifested (Butz, 1985; Couper & Groves, 1991; Dillman, Gallegos & Frey, 1976; Dillman, Singer, Clark & Treat, 1996; Groves, Cialdini & Couper, 1992; Singer, 1993; Singer, Hippler & Schwarz, 1992; Singer, Mathiowetz & Couper, 1993; Singer, Von Thurn & Miller, 1995). As a result, modifications to some of the original ideas presented in the TDM were developed.

More recently, nonresponse research focuses on two areas of particular interest: controllable influences of survey nonresponse and uncontrollable influences. Building



from ideas originally proposed by Dillman (1978) and the TDM, Groves and Couper (1998) incorporate several factors that researchers are unable to control—as well those that they can control—in their theory of nonresponse in household interview surveys.

They argue that economic conditions, the survey taking climate, and neighborhood characteristics are direct causal influences of survey nonresponse. As indirect measures of "social environmental influences" on survey nonresponse, Groves and Couper argue that researchers cannot control these influential predictors of survey participation.

Household(er) factors such as household structure, socio-demographic characteristics, and psychological predisposition of the householder, are also beyond the control of survey researchers according to Groves and Couper. Yet despite being uncontrollable, as with social environmental factors, they play a key role in a respondent's decision to participate in a survey.

Groves and Couper (1998) argue that there are other factors that influence participation in household surveys, and that the researcher can control these factors. For example, Groves and Couper provide evidence that survey design features including topic, mode, and respondent selection can effect respondents' decisions to participate in surveys. Moreover, they argue that interview-related factors must be considered, since they also affect nonresponse. These factors include socio-demographic characteristics, interviewer experience, and interviewer expectations. Finally, Groves and Couper stress the importance of the interaction that takes place between householder and interviewer and its role in producing nonresponse. According to Groves and Couper's, mechanisms that influence survey participation include both those factors that can be controlled by researcher as well as those beyond their control.



With their theory of nonresponse in household interview surveys, Groves and Couper (1998) advanced our understanding of the complex process of survey participation beyond the TDM. Moreover, recent tests of components of their theoretical model² have helped identify important distinctions between nonresponse and noncontact, item nonresponse and unit nonresponse,³ and effects of nonresponse across diverse types of surveys—including cross-national programs (see Groves, et al., 2001). Collectively, this research furthers our overall understanding of nonresponse bias. In doing so, researchers are in a position to improve the survey research methodology in ways that reduce the effect of this form of nonsampling error.

Improving survey research has broad implications. For example, as noted above, the Federal government relies on self-report victim surveys to assess the nature and extent of crime in the United States. Findings from some of the earliest investigations into respondent fatigue suggested that it was a possible source of nonsampling error in the National Crime Survey (Biderman, 1967; Biderman, Johnson, McIntyre & Weir, 1967). Despite the threat respondent fatigue poses to estimation, however, little empirical attention is directed to this methodological issue and its effect on contemporary victimization estimates produced by national surveys. The remaining chapter provides an in-depth look at crime and criminal victimization, methodological issues associated with measuring crime, and the problems that respondent fatigue may pose when crime is measured by self-report victim surveys. A closer look at these issues, when combined

³ Item nonresponse occurs when a respondent does not respond to particular items within a survey. Unit nonresponse occurs when a respondent does not respond to any question on a survey.



 $^{^{2}}$ A conceptual diagram of Groves and Couper's theoretical model is provided in Chapter Six.

with the information provided above, provides the foundation for an in-depth examination of respondent fatigue associated with self-report victim surveys.

Understanding crime and criminal victimization

Defining crime

Since 1929, the Uniform Crime Reporting (UCR) program has provided official crime statistics (Federal Bureau of Investigations, 2004). Violations of criminal code brought to the attention of law enforcement officials are summarized in a classification system that standardizes offenses for reporting purposes. Law enforcement agencies then voluntarily submit these reports to the Federal Bureau of Investigations (FBI). Part I Index⁴ offenses contained within annual UCR reports include homicide, rape, robbery, aggravated assault, burglary, larceny, and auto theft. Prior to victim surveys, crime was defined only in terms of official statistics like those generated from the UCR.

Over time, it became apparent that official statistics were incomplete. Most obviously, unreported crimes were not represented in official statistics. Therefore, quantifying the amount of crime not captured by UCR summary reports was a key aim of President Johnson's Crime Commission (Biderman & Reiss, 1967; see also President's Commission on Law Enforcement and Administration of Justice, 1967). The Commission suggested using a large-scale national survey to examine crime from a

⁴As of June 2004, the FBI discontinued the use of the Crime Index in the UCR program and its publications. The FBI (2004) notes, "The Crime Index was driven upward by the offense with the highest number, in this case larceny-theft, creating a bias against a jurisdiction with a high number of larceny-thefts, but a low number of other serious crimes such as murder and forcible rape" (p. 5). They go on to conclude that, "the Crime Index no longer serves its original purpose, that the UCR Program should suspend its use, and that a more robust index should be developed" (FBI, p. 5, 2004).



victim's perspective to broaden our overall understanding of nature, extent, and consequences of crime.

Obtaining information directly from crime victims rather than official statistics offered a new perspective on crime. Using this approach, crime is defined in terms of criminal victimization, which conceptually rests on three underlying characteristics (see Skogan, 1981). First, criminal victimization is defined as a discrete rather than a continuous event that is bound by space and time. That is, victimization is an event that involves a victim(s) and an offender(s). The event has a beginning and an end, between which some criminal activity occurs. Moreover, the event not only occurs within a specific time frame, but it occurs in a specific location. Defining victimization this way permits the counting of individual criminal events such as robbery, larceny, or assault that occur at day or nighttime, at home or at school, and between relatives or strangers. This definition excludes events that are ongoing or continuous. For example, spousal abuse, bullying, or insider trading are considered criminal events, but because they are ongoing and enduring they are difficult to count. For this reason, events that span hours, days, weeks, or even months are excluded from the definition of victimization.

The second defining characteristic of crime as measured by victim surveys is that events are knowable only as distinct individual incidents. Focusing on incidents permits the creation of victimization rates or the amount of crime experienced by individuals given a standardized factor (e.g., per 1,000 persons age 12 or older) as a measure of crime. An alternative approach is to define victimization in terms of victims. Analyzing victims rather than incidents permits the creation of proportions of individuals or households victimized as a way to assess criminal activity. While both approaches are



worthwhile methods for assessing crime, using incidents and not individuals as the unit of analysis is an important distinction that is at the heart of the conceptual definition of victimization as measured by surveys.

The final defining characteristic of victimization is that it can be understood independently from the social context in which it occurs. That is, we can identify victimization regardless of the social meaning ascribed to an activity by those directly involved. While identifying criminal incidents may seem straightforward for a crime like robbery, the criminality of an incident between friends or family (e.g., intimate partner violence) is less clear. The ability to understand victimization independently from its social context allows events to be placed into standardized crime categories regardless of the way events are perceived by those affected by them. Thus, in addition to being a discrete incident bound by space and time, victimization is defined as being understandable despite its abstract social context. Combined, these characteristics provide the conceptual framework for the definition of crime as measured by surveys.

Information associated with criminal events

Data from victim surveys expanded our overall understanding of crime beyond that which could be gleaned from official statistics. Based on victims' perspectives, crime identified by self-report surveys takes on a different definition than those captured in official data, and provides additional information associated with criminal events.

Most notably, crime identified by victim surveys includes both crimes that are reported as



well as those that are not reported to the police⁵—the latter commonly referred to as the dark figure of crime (Biderman, 1967; see also Biderman & Reiss, 1967). In addition to defining crime differently, victim surveys are able to provide more detailed information on criminal incidents than official data. For example, based on the conceptual definition described above, victim surveys offer more robust victim-, offender-, and event-specific information than summary information offered by the UCR.

Despite what may be viewed as apparent inconsistencies between official data and crime measured by victim surveys results from the two crime measures are strikingly consistent, when programmatic differences are taken into account (Booth, Johnson & Choldin, 1977; Chilton & Jarvis, 1999; Maltz, 1999; see also U.S. Department of Justice, 2003b). When viewed in conjunction with official data, victimization estimates provide a more comprehensive understanding of crime. While the original objective of self-report victim surveys was to serve primarily as a calibrator or "supplementary yardstick" for UCR data (National Research Council, 1976), the realization of victim surveys as a robust measure of crime surpassed its original goal.

Crime as a social indicator

In the late 1800s, Andre-Michel Guerry's essay on the moral statistics of France offered insight into the use of crime data as a social indicator of the overall welfare of a nation (see Guerry, Whitt & Reinking, 2002). Others followed, but most defined crime in

⁵Victimization measured by the National Crime Victimization Survey (NCVS) includes threatened, attempted and completed violent crimes (i.e., rape, sexual assault, robbery, and simple and aggravated assault), property crimes (i.e., burglary, motor vehicle theft, and other property crime) and personal-property theft (i.e., pocket pickings and purse snatchings). Crimes reported to law enforcement and identified via the UCR program include homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft, and motor vehicle theft.



a way that was rooted in an "institutional" approach that focused on a legitimate, organized social response to behavior that violated legal norms (see Biderman & Reiss, 1967). Until data from victim surveys were available, crime as a social indicator was almost entirely based on official statistics.

Victim surveys offer many advantages over official statistics. Though about half of all crime is not reported to the police (Hart & Rennison, 2003), victim-survey data include information on crimes that are reported as well as not reported to the police. Moreover, victim-survey data contain detailed information on victim-, offender-, and event-characteristics of incidents. For these reasons, victimization estimates of persons and households can be used as a social indicator, often in conjunction with official statistics, to gauge a broader understanding of the overall health of the nation. On a general level, victimization estimates provide information on the annual levels and characteristics of crime as well as changes in levels of crime over longer periods of time (Biderman & Lynch, 1991; Blumstein, 2000; Blumstein & Wallman, 2000; Catalano, 2004, 2005; Klaus, 2002; LaFree & Drass, 1993; Lynch, 2001; Paez & Dodge, 1982; Rand, Lynch & Cantor, 1997; Reiss, 1977a; Rennison, 2001a; Rennison & Rand, 2003a; U.S. Department of Justice, 1994). Given the robust nature of victim-survey data, however, more specific applications of its uses as a social indicator of well-being have been realized.

Victim-survey data also permit the use of crime as a social indicator in a more refined manner, and often in ways that official statistics cannot be used. For example, the extent to which legislative efforts aimed at decreasing domestic violence have been assessed using victimization estimates (Dugan, Nagin & Rosenfeld, 1999, 2003;



Greenfeld, Rand, Craven, Klaus, Perkins, Ringel, et al., 1998; Rand & Rennison, 2004; Rennison, 2003; Rennison & Planty, 2003; Rennison & Rand, 2003b; Rennison & Welchans, 2000). Keeping the nation's schools safe is another legislative priority, and victimization estimates are used to gauge levels of violence experienced among school children and those attending colleges and universities (Bastian & Taylor, 1991; DeVoe, Peter, Kaufman, Ruddy, Miller, Planty, et al., 2003; Finkelhor, Asdigian & Dziuba-Leatherman, 1995; Fisher, Cullen & Turner, 2000; Hart, 2003). Furthermore, assessing the level of risk for certain types of crime not included in official statistics like violence in the workplace (Bachman, 1994; Duhart, 2001; Warchol, 1998), crimes involving firearms (Perkins, 2003), cybercrime (Rantala, 2004), and violence against women and the elderly (Craven, 1996, 1997; Klaus, 1999; Klaus & Rennison, 2002; Rennison & Rand, 2003b) have also been demonstrated in light of victimization data.

The availability of disaggregated victim-survey data containing comprehensive information on crime incidents, victims, offenders, and context of incidents eliminates complete reliance on official data as a social indicator. Victim-survey data offer more than just a new way to assess social welfare, however. The availability of victim-survey data also affords researchers the opportunity to explore new ideas related to criminological theory.

Building theories of crime and crime causation

Crime is a relatively infrequent event and in order to study it using self-report victim surveys, large samples of the population must be obtained. Self-report victim surveys collect information from both victims and non-victims. From crime victims, data



provide in-depth insight into victim-, offender-, and event-characteristics of criminal incidents. Based on these characteristics, data from self-report victim surveys produce a rich vein of information from which researchers mine to build theories of crime and crime causation.

The nature of emerging national level victim-survey data in the late 1970s allowed researchers to develop two general theoretical strategies to better understand crime and crime causation: approaches that focused on victims and those that focused on offenders (Cantor & Lynch, 2000). Victim-oriented approaches used survey data to develop general ideas of personal victimization (Hindelang, Gottfredson & Garofalo, 1978) as well as specific correlates to crime (Cohen & Felson, 1979). Regardless of differences within the victim-oriented strategy, efforts to understand crime and crime causation that developed from this approach shared a common theme: a focus on the occurrence of crime experienced by victims. Other theories of crime and crime causation used victim-survey data to refine ideas concerning criminal offenders, since victimsurvey respondents are asked to provide detailed offender-related information for crimes that involved victim-offender contact. Macro-level theoretical approaches that focused on offenders were difficult to entertain prior to the availability of national level victimsurvey data, given the absence of offender-based information in official statistics like the UCR.

More specific examples of the use of victim-survey data in the development of criminological theory exist. The emergence of victimization data provided researchers with insight into the relationships between social contextual, ecological, and structural correlates and victimization (Baumer, Horney, Felson & Lauritsen, 2003; Decker, 1980;



Lauritsen, 2001, 2003; Lauritsen & White, 2001). Opportunity theory and life-style factors associated with victimization have also been assessed using crime-victim data (Cohen & Cantor, 1981; Lynch & Cantor, 1992; Sampson & Lauritsen, 1990), as well as theories that address the relationships between offending and the life course (Laub & Lauritsen, 1993).

In general and specific ways, the availability of victimization data offered an entirely new perspective on crime for those developing or testing theory. Cantor and Lynch (2000) note that criminological theories such as "routine activities theory, opportunity theory, and even rational choice theories of crime flourished in large part because of the availability of victim survey data" (p. 90). As availability and application of information generated from victim surveys increased, so did the awareness and understanding of the survey's strengths and weaknesses.

Methodological issues associated with self-report victim surveys

Design and analysis of victimization surveys

In the early 1970's, the Law Enforcement Assistance Administration (LEAA)⁶ sponsored the National Crime Survey (NCS). The goal of the NCS was to "measure the levels of criminal victimization of personal and households for the crimes of rape, robbery, assault, burglary, mother vehicle theft, and larceny" (Lehnen & Skogan, 1984, p. v). In preparation for a national survey aimed at measuring crime from the victim's perspective, methodological challenges were identified, evaluated, and documented. Over time, design and analysis of victimization surveys, criteria for assessing the validity

⁶ LEAA became the Bureau of Justice Statistics (BJS) in December 1979.



of victim-survey data, and issues related to the sample design, coverage, and nonresponse were recognized as issues that could significantly impact the self-report victim survey estimation.

Design features of national level self-report victim surveys can affect survey results (Cantor & Lynch, 2000, 2005). The National Crime Victimization Survey (NCVS), for example, is drawn from a stratified, multistage, cluster sample employing a rotating panel design that is comprised of eligible household members age 12 or older, residing in the home at the time of the survey (Catalano, 2004, 2005; see also Rennison & Rand, 2003a). Survey mode, question wording and questionnaire design associated with screening procedures, and the use and length of reference periods represent some of the critical design features shown to impact estimates produced by the victim-survey methodology.

Survey mode

Survey mode—or the means by which a survey is administered—can significantly affect conclusions drawn from victim-survey results (Groves, 1977; Groves & Couper, 1992, 1993; Woltman & Bushery, 1977b). Mail, telephone, and face-to-face surveys were three modes that developers initially regarded as most promising for administering victim surveys at the national level. Further review suggested that mail surveys were a less effective option and were soon abandoned (Dodge & Turner, 1971). Initial testing of self-report victim-survey results failed however to indicate that persons interviewed by telephone were any more or less likely to refuse to participate than those who were



interviewed face-to-face (Turner, 1977). As a result, in-person and telephone survey modes were adopted for use in the NCS.

Research into the effects of different survey modes continued following the fielding of the NCS. Studies conducted after panels began completing all NCS enumerations⁷ showed that victim surveys conducted entirely in person produced higher reports of household victimization by persons *other than* household respondents;⁸ yet, interviews conducted in-person did not affect overall personal victimization estimates for any given crime type (Woltman & Bushery, 1977b). Conversely, telephone interviews were not as effective as in-person interviews in identifying less serious crimes like petty larceny. As a result, it was concluded that conducting interviews over the telephone for each interview wave risked underestimating overall victimization rates, since petty larcenies made up a considerable portion of the overall number of victimizations.

Despite these findings, computer-assisted telephone interviews (CATI) were introduced to the NCVS as a part of the survey redesign⁹ completed in 1992 (Hubble & Wilder, 1988; Kindermann, Lynch & Cantor, 1997; Persely, 1996; Taylor, 1989; U.S. Department of Justice, 1989, 1994). While notable effects to victimization estimates corresponded to the adoption of the CATI mode, most were generally attributed to modifications made to question wording and questionnaire design of incident screening questions. In sum, results of early methodological studies of self-report victim surveys

⁹As a part of the redesign, the National Crime Survey was renamed the National Crime Victimization Survey.



⁷NCS sampled households were interviewed 7 times, once every 6 months, for 3 years.

⁸A household respondent is a sampled-unit respondent who provides information about the entire household.

demonstrate that the survey delivery method can impact both participation as well as reported victimization.

Question wording and questionnaire design

Improper question wording and questionnaire design related to screening questions used to identify criminal incidents can also threaten the validity of national self-report victim survey results. For this reason, these issues received considerable attention during NCS pretests. Initial results demonstrated that specific screening questions were more effective at eliciting crimes than were general questions (Dodge, 1970, 1977b); changing the order of screening questions reduced the chances of duplicating incident reports (Murphy & Dodge, 1970); subtle changes in question wording helped differentiate rape from aggravated assault and attempted rape (Turner, 1972); and quality control was improved when screening questions and incident questions were administered separately (Kalish, 1974).

The redesign of the NCS not only addressed survey-design features related to mode and question wording, but it also substantially modified screening questions based on prior research. For example, cue questions used on the Basic Screen Questionnaire (NCVS-1)¹⁰ instrument were expanded to improve respondent recall (see Biderman & Cantor, 1984; Biderman, Cantor & Reiss, 1982, 1984; Biderman & Lynch, 1981; Bushery, 1981; see also Groves & Couper, 1992, 1993). Moreover, refined descriptions of crime incidents were included and specific questions about rape and sexual assaults were added. The impact of question wording in victim surveys was quantified when

¹⁰See Appendix A for a copy of the Basic Screening Questionnaire (NCVS-1).



post-redesign results revealed that about twice the number of rapes were reported after changes were made to the survey (Bachman & Saltzman, 1995; see Bachman & Taylor, 1994). Due in large part to the survey's redesign, the dramatic rise in the number of rapes identified increased awareness of and concern for a unique type of victimization captured in self-report victim surveys.

Series victimization

Victim surveys face the unique challenge of dealing with series victimization. As noted above, one aspect of the conceptual definition of crime as measured by victim surveys is that it is a discrete event bound by space and time. Some criminal events identified in victim surveys are ongoing in nature. These incidents are classified as *series victimizations*. Because they are not consistent with the conceptual definition of crime, the question then becomes how should they be used—if at all—in the creation of aggregate victimization estimates?

According to NCVS protocol, continuous criminal events identified by survey respondents are considered series victimization if the victimization consist of at least 6 incidents¹¹ so similar in detail that a respondent is unable to distinguish events to the extent that they can be individually recorded on separate incident forms¹² (see U.S. Department of Justice, 2003a). Initial investigations into the impact of series victimization suggested that they account for about 5% of all personal and household victimization, although they are most commonly associated with assault and household

¹²See Appendix B for a copy of the NCVS Incident Form (NCVS-2).



¹¹Originally, the number of continuous indistinguishable incidents that defined series victimization was 3. The number was changed to six as part of the NCS/NCVS redesign.

larceny (Dodge, 1975). More recent research suggests that series victimizations represent between 6% and 7% of all violent victimizations recorded by the NCVS (Rennison & Welchans, 2000). Given the relatively common occurrences of these types of victimizations, however, they can substantially impact the estimates for overall victimization.

Research also suggests that reports of series victimizations is linked to interviewer experience or lack thereof, victim characteristics such as age and type of employment, crime type, and mode of interview (Dodge, 1975, 1977a; Dodge & Lentzner, 1978; Lauritsen & Quinet, 1995; Lynch, Berbaum & Planty, 1998). Since reports of series victimization are ongoing—spanning time and space—they cannot be reconciled with nonseries incidents. Therefore, according to NCVS protocol, series victimizations are excluded from annual victimization estimates ¹³ (see Catalano, 2004, 2005; Reiss, 1977b). Excluding series victimization from national estimates of crime is a result of screening-questionnaire design, which is based entirely on the conceptual definition of crime when measured by victim surveys. In addition to mode and question wording or questionnaire-design effects, other controversies associated with survey design exist. Using a reference period as means to address recall bias is one example.

Reference periods

Recall bias is a type of response effect. It is a methodological problem related to the rotating panel design of the NCVS (Woltman, Bushery & Carstensen, 1975). Recall bias occurs in retrospective surveys when respondents erroneously include or exclude

¹³They are included in other NCVS special reports.



events from a specified time frame, by virtue of failing to accurately recall the date on which an event occurred. *Including* an event that occurred on a date outside a survey reference period is considered *forward* telescoping, whereas *excluding* an event that took place during a survey reference period by reporting that it took place outside the specified time frame is called *backward* telescoping (see Biderman & Cantor, 1984; see also Murphy & Cowan; 1976). Like the issues describe above, the effect of recall bias received considerable attention during NCS pretests. Initial tests revealed that forward telescoping occurred slightly more often when a 12-month reference as opposed to a 6-month reference period was used (Dodge, 1970; Turner, 1972); and that the accuracy of recall varied across crime type (Murphy & Dodge, 1970). In later studies, the impact of recall bias—associated with a rotating panel design and introduced by telescoping—was linked to unbounded interviews¹⁴ and to certain characteristics of criminal incidents (Balvanz, 1979; Gottfredson & Hindelang, 1977; Turner, 1976b; Woltman & Cadek, 1977).

Contemporarily, effects of reference-period length on victimization estimates are made clearer upon examination of three distinct victim surveys: the NCVS, the British Crime Survey (BCS), and the National Violence Against Women Survey (NVAWS).

Despite the added costs, the NCVS uses a rotating panel design with a 6-month reference period, whereas the BCS and the NVAWS use a 12-month reference period. Despite their shared goal (i.e., assessing victimization), results across each of these victim surveys

¹⁴Bounding interviews is a quality assurance process used to minimize the effects of telescoping. Each incident reported during an interview is checked against incidents reported for the same respondent during the previous interviews. For more on bounding see Murphy & Cowan, 1976 and Addington, 2005.



are substantially different. Researchers attribute much of the variation in levels of reported victimization identified across each of these surveys to the length of reference period used (see Cantor & Lynch, 2000; Fisher, Cullen & Turner, 2000; Rand & Rennison, 2002, 2004, 2005).

In addition to studies of survey-design features discussed above, investigations into the impact of proxy interviews and small supplements to victim surveys have also been conducted (Cowan, Murphy & Wiener, 1979; Turner, 1976a). While results do not indicate that these features significantly affect survey results, the research demonstrates a need to learn more about what aspects of victim surveys can affect estimates. Indeed, efforts to better understand victim-survey methodology are evident well before (and continued long after) the fielding of initial self-report victim survey via the NCS.

Criteria for assessing the validity of victim-survey data

Carmines and Zeller (1979) define validity as "the extent to which any measuring instrument measures what it is intended to measure" (p. 17). A series of survey-design pretests conducted in Washington, DC, Baltimore, Maryland, San Jose, California and Dayton, Ohio provide some of the earliest insight into the validity of victim surveys (see Dodge, 1970; Kalish, 1974; Murphy & Dodge, 1970; Turner, 1972). Initial victim-survey pretests employed a reverse-records check technique to assess the ability of this new methodology to measure crimes known to police. In each of the studies, victims identified in official law-enforcement records were engaged in victim-survey interviews. Results of interviews were compared to information contained within police reports for each respondent. Initial findings indicated that victim surveys provided an overall valid



measure of crime. While flaws in the reverse-records check technique used to assess the validity of victim surveys have since been demonstrated (Biderman & Lynch, 1981), the ability of victim surveys to validly measure crime is generally acknowledged (Thornberry & Krohn, 2003).

Despite the general acceptance of victim surveys as a valid measure of crime, controversies over the criteria for assessing the validity of victim-survey data persist. Qualitative analysis of the classification of crimes identified in victim surveys, as well as other methods aimed as assessing the content validity of victim surveys, have been recommended (see Cantor & Lynch, 2000). While these ideas have generated relatively little reaction from the research community, issues related to sample design, coverage, and nonresponse associated with self-report victim surveys are often at the forefront of researchers' concerns, especially among those who attempt to use victim-survey data like those produced by the NCVS. Cantor and Lynch suggest, however, that a renewed interest in assessing the validity of victim-survey data if national crime estimates produced by surveys begin to substantially diverge from those produced by official records.

Sample design, coverage, and nonresponse

Sample design and selection are vital components of survey research. The impact of sample design, coverage, and nonresponse on victim surveys is widely documented and has changed over time (Biderman, 1970; Bushery, 1981; Dodge & Turner, 1971; Reiss, 1982; Taylor, 1989; Taylor & Rand, 1995; Tourangeau & McNeeley, 2003; U.S. Department of Justice, 1989, 1994; Woltman & Bushery, 1977a). Other methodological



issues like coverage and nonresponse are closely tied to sample design and present challenges to self-report victim surveys. For example, the use of victim surveys has become a common part of American culture. They also have a growing international appeal. Yet, while a trend in survey use is increasing, so is the public's *unwillingness* to cooperate and participate in surveys (de Leeuw & de Heer, 2002). Arguably, respondents' decreasing willingness to participate in surveys makes it more difficult to derive accurate estimates of a population from sample statistics. While the NCVS benefits from response rates that consistently hover near 90%, nonresponse can nevertheless present a challenge to victim surveys and their ability to produce valid and reliable estimates, especially if nonresponse manifests in systematically different ways among certain subgroups. Examples of controversies associated with victim surveys due to sample design, coverage, and nonresponse become more apparent when the analytic challenges facing those who use victim-survey data are examined.

Crime in the U.S. is not equally distributed across the population. Minorities, for example, experience a disproportionately large amount of victimization compared to the overall population (Bastian & Taylor, 1994; Greenfeld & Smith, 1999; Hindelang, 1978; Rennison, 2001b, 2002). Creating a problem for researchers using victim-survey data is the fact that those at higher risk of victimization are often not sufficiently represented in victim-survey samples (i.e., young, black males) or excluded from samples altogether (i.e., the homeless).

Crime is also disproportionately concentrated spatially (Duhart, 2000; Gibbs, 1979). In general, the distribution of crime within cities differs to a greater extent from

¹⁵Between 1989 and 2000, over 70 different countries participated in the United Nations' Office of Drugs



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the distribution of crime across cities. Thus, relatively fewer numbers of individuals are exposed to relatively high levels of risk, most notably from crimes such as rape, robbery, and assault. As a result, individuals exposed to these high-risk areas can represent certain crime types in victimization estimates disproportionately, depending on sample design and selection procedures. Those attempting to use victim-survey data like those produced from the NCVS must address the problem of crime distribution.

Another analytic challenge to using victim-survey data is the problem of large standard errors associated with sub-classes of victimization. As the National Research Council (2003) recently noted, analyzing crime data at levels of aggregation such as counties or census tracts is necessary for many researchers seeking answers to policy questions. Yet, the infrequency with which crime occurs—combined with the current sampling design—prevents data gleaned from the NCVS from yielding reliable estimates at sub-national levels. A similar problem is presented when analysis of sub-groups of the population or sub-crime type analysis is desired.

Recent figures from the NCVS reveal that estimates of rape or sexual assault experienced by males are based on 10 or fewer cases ¹⁶ for every category of victim-offender relationship identified in the survey (Catalano, 2005). A reduction in sample size produces a corresponding increase in standard error. Thus, apparent differences in victimization rates across sub-national, -population, or -crime type categories can actually be due to inherent variability rather than true differences in victimization rates.

¹⁶Estimates displayed in NCVS reports based on 10 or fewer unweighted sample cases are identified as unreliable.



and Crime's International Crime Victim Surveys (ICVS).

The analytic challenges noted above illustrate controversies related to sample design, coverage, and nonresponse associated with self-report victim surveys. While progress has been made in understanding an array of methodological problems associated with this methodology, some questions remain unanswered. Research examining the challenges victim surveys face must therefore continue if solutions that address these weaknesses are to be realized. One area in which investigation is overdue is respondent fatigue. The following section examines this particular methodological issue related to self-report victim surveys in greater detail.

Respondent fatigue in victim surveys

Past examinations of the self-report victim survey methodology exposed problems commonly associated with longitudinal surveys. For example, nonsampling error caused by nonresponse, panel attrition, telescoping, and the use of proxy interviews are issues worthy of attention in the NCS/NCVS (Biderman & Cantor, 1984; Bushery, 1978; Lehnen & Reiss, 1978a, 1978b; National Research Council, 1976; Sliwa, 1977; Taylor, 1989; Woltman, 1975; Woltman & Bushery, 1977a; 1977b; Ybarra & Lohr, 2000, 2002). In part because of these issues, the survey underwent a massive redesign that resulted in substantial methodological changes when implemented in 1992. For example, cue questions used on the Basic Screen Questionnaire (NCVS-1) were changed to improve respondent recall, more descriptions of crime incidents were included, computer-assisted telephone interviewing was introduced, and specific questions about rape, and the inclusion of questions about sexual assaults were added. Given these improvements to the survey, it is surprising that findings from some very early methodological



investigations of the self-report victim survey methodology continue to be accepted as part-and-parcel of contemporary victim surveys. One example of this 'conventional wisdom' is that multiple interviews generate fatigue and cause a decreased level in reporting victimization in response to certain survey items (Thornberry & Krohn, 2003).

One very early publication suggested that a *possible* source of nonsampling error in the NCS is respondent fatigue, also known as fatigue bias (Biderman, 1967; Biderman et. al., 1967). Biderman et al. first identified motivational fatigue during NCS pretests by comparing rival techniques of survey administration (see Skogan, 1981). The first technique allowed a respondent to become "test wise" to the survey instrument. The survey was administered in a way that permitted a respondent to link a positive response (i.e., reporting being victimized) with a lengthy respondent task (i.e., being asked more detailed questions about a victimization). The second method of survey administration circumvented this situation by asking all detailed victimization questions following all general incident-screening questions. Biderman et al. found that the second interviewing procedure (i.e., the non-test-wise version) produced 2½ times the number of reported victimizations than the test-wise version. These findings supported the idea that fatigue bias contributed to nonsampling error in the NCS. While the conclusions are important, they are based on a cross-sectional survey of only 183 respondents.

Biderman et al. (1967) noted that the issue of respondent fatigue deserved more attention. In the 1970s, claims that respondents could become "test wise" were supported by research that assessed the relationship between respondent fatigue and specific design features associated with the NCS (Lehnen & Reiss, 1978a, 1978b). Lehnen and Reiss argued that the "multiple exposure to stimuli problem" in the NCS due to repeated



exposure to the same questionnaire substantially decreases the number of reported victimizations by respondents. Indeed, Lehnen and Reiss (1978b) concluded that a principal source of response error in the NCS was due to respondents' repeated exposure to the survey. They suggested that an "NCS respondent has several opportunities to 'learn' what is desired and become sensitized to the objective of the survey" (Lehnen & Reiss, 1978a, p. 112).

The importance of the work of Lehnen and Reiss (1978a, 1978b) is clear. However, nearly three decades have passed and replications of their work have not been conducted. Given the significant changes in the NCVS methodology implemented during this time, much remains unknown about the nature and extent of respondent fatigue in self-report victim surveys. In short, the level of respondent fatigue in the contemporary victim surveys and its subsequent threat to estimation is unclear. Therefore, this dissertation investigates the methodological issue of respondent fatigue believed to be associated with contemporary national self-report victim surveys; and examines the issue from three perspectives (Figure 1). The first examines respondent fatigue and survey-design effects. The second examines respondent fatigue by modifying the operational

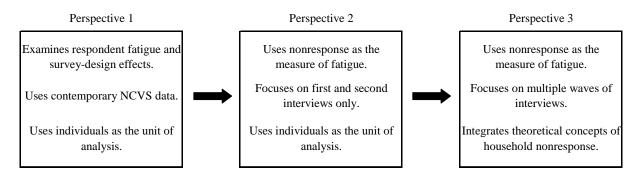


Figure 1. Three perspectives used to examine respondent fatigue



measure of fatigue, while the third assesses respondent fatigue over multiple waves of self-report victim surveys. Before each perspective is presented in greater detail and analyses conducted, a description of the data used for this study is offered.



Data

Secondary analysis of data collected via the National Crime Victimization Survey (NCVS) is used for this study. The NCVS is a stratified, multistage, cluster sample employing a rotating panel design. Stratifying the NCVS sample involves dividing the eligible population into strata or groups based on the variable(s) of stratification (e.g., region). The sample is selected from these strata. Cluster sampling is a procedure in which the population is divided into clusters (e.g., housing units selected within sampled enumeration districts). Once clustered, a probability sample of clusters is selected for study. Multistage refers to the fact that there is more than one step in the sampling process.

NCVS interviews are conducted continuously throughout the year in a rotating panel design. In this scheme the sample of households is divided into six rotation groups. Within each of the six rotation groups, six panels are designated. A different panel is interviewed once every six months covering seven interviews. A new rotation group of households enters the sample every six months, replacing a group as it is phased out after being in the sample. Household members eligible for interview are those individuals age 12 or older residing in the home at the time of the survey. Interviews with respondents are gathered through both face-to-face and telephone interviews.

During the basic screening interview, demographic information such as age,

 $^{^{17}}$ See Appendix C for a copy of the NCVS Rotation Chart (NCVS-551)



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gender, race and Hispanic origin for each eligible household member is collected. Some of this information (i.e., age and marital status) is updated during subsequent interviews if necessary. When respondents report an incident during this process, detailed incident-based data are collected. For example, characteristics of the crime (e.g., month, time, location and type of crime), victim and offender relationship, offender characteristics, self-protective actions taken by the victim, consequences of victim behaviors, whether the crime was reported to the police and the presence of any weapons represent some of the information collected on the incident form.

NCVS Longitudinal Data File

Typically, each year NCVS data are compiled and released for public use.

Recently, the Census Bureau compiled NCVS records from 1996 to 1999 and created a public-use, longitudinal data file (Bureau of Justice Statistics, 2002). The 1996-1999 NCVS Longitudinal Data File is a nested, hierarchical, incident record-defined file containing 5 types of records: 1) index address ID records; 2) address ID records; 3) household records; 4) personal records; and 5) incident records. The index address ID records are unique to the longitudinal file and allow linkage of individuals' records, for each sampled household, across all 7 waves of interviews. The address ID records contain household identifiers, as well as rotation and panel information. The household records contain information about the household as reported by the household member as reported by that person. Finally, incident records contain data for each incident reported by an individual respondent.

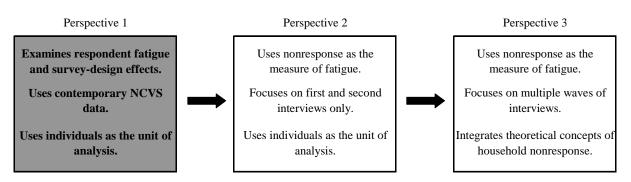


The use of the NCVS—specifically the longitudinal release of the NCVS—offers advantages in studying respondent fatigue. First, by using the longitudinal NCVS one is able to shift the unit of analysis to the individual respondent. This is a more conceptually appealing way to examine respondent fatigue since it is the individual who learns the survey design and then responds based on this knowledge. Also, by shifting the unit of analysis to the individual respondent, and using the longitudinal file, one is able to follow a specific respondent over time. The shift in unit of analysis also means that household mobility may be accounted for. Another advantage is that focusing on the individual respondent allows the removal of unbounded interviews. The use of unbounded data results in artificially high estimates of victimization, as respondents telescope out-of-scope victimizations into the current reference period (Addington, 2005). In sum, post-redesign longitudinal NCVS data allows a better opportunity to investigate the issue of respondent fatigue believed to be associated with self-report victim surveys.



Perspective 1:

Respondent Fatigue and Survey-Design Effects



<u>Figure 2</u>. Key elements of the first perspective.

The first perspective examines respondent fatigue by replicating the original work of Lehnen & Reiss (1978a, 1978b) with contemporary victimization data produced by the National Crime Victimization Survey (NCVS). The availability of longitudinal NCVS data makes it possible to not only replicate the classic work of Lehnen and Reiss (1978a, 1978b), but to extend it in many ways as well. First, the longitudinal file provides a large representative sample (n > 323,000). Initial estimates of individual fatigue bias were based on small, non-representative, cross-sectional samples raising the possibility that findings are not generalizable. Second, extant data allow the unit of analysis to shift from the "sub-group" to the individual. Lehnen and Reiss (1978a, 1978b) utilize subgroups—not individual respondents—as the unit of analysis. These subgroups are constructed



based on 4 response effect variables.¹⁸ While these findings offer insight into the variation associated with these aggregated groups, they do not indicate whether an *individual* moving across survey enumerations, would report fewer victimizations over time. Assuming that the findings from Lehnen and Reiss (1978a, 1978b) also apply to the individual would be a commission of ecological fallacy. At the time of Lehnen and Reiss' (1978a, 1978b) work, it was not possible to match individual respondents across enumerations and conclusions about *individual* fatigue bias could not be made. With new data, it is possible to assess factors that may predict *individual* fatigue bias over time.

Another way the work of Lehnen and Reiss (1978a, 1978b) is extended is by controlling for changes in household composition across interviews. As noted by Lehnen and Reiss as well as by Biderman and Cantor (1984), it is unclear how much of the suspected response effect measured in earlier work resulted from design effects or from sample attrition. The subgroup as the unit of analysis prohibited following individual respondents through successive interviews. This is problematic since research shows that households that experience victimization at higher rates are most likely to move and no longer be in the sample (Dugan, 1999). Without the ability to follow the individual, Lehnen and Reiss note, "the decline in observed reporting with number of previous interviews may be at least partially the result of sample attrition and not response fatigue" (p. 121).

Third, Lehnen and Reiss (1978a, 1978b) do not control for theoretically relevant

¹⁸The 4 variables include 1) the number of incident reports completed during the *current* interview (0, 1, 2, 3 or more); 2) the number of prior interviews completed (0, 1, 2-3, 4 or more); 3) the number of incident reports completed during the *previous* interviews (0, 1, 2, 3 or more); and 4) the survey mode used during the current interview (in person or telephone).



victimization correlates. Without controlling for important correlates of victimization risk, the true importance of number of prior interviews, number of prior reported victimizations, and survey mode on the level of victimization reporting is unclear.

Finally, it is unknown if the conclusions reached by Lehnen and Reiss (1978a, 1978b) are applicable today for two major reasons. First, the NCS underwent a major redesign that was implemented in 1992. The survey today is a substantially improved instrument. The differences between the pre- and post-redesign survey are so great that comparing estimates from the NCS to those derived from the NCVS is not recommended (Taylor & Rand, 1995). And second, advances in statistical software now allow one to account for the complex survey design of the NCVS—something not available to Lehnen and Reiss. Failure to take into account the fact that the NCS and the NCVS data come from stratified, multi-stage, cluster sampling will lead to an underestimation of standard errors and potentially erroneous conclusions.

Lehnen and Reiss (1978a, 1978b) investigated response effects to the extent possible given technological and data limitations they faced. In fact, data limitations have long hindered a thorough examination of several aspects of the NCS/NCVS methodology. Fortunately, with the availability of longitudinal NCVS data, a more rigorous testing of response effects on the level of subsequent reported victimization is possible. Not only is it possible, it is long overdue.



Objective

The objective of the first perspective is to broaden our overall understanding of respondent fatigue believed to manifest in contemporary self-report victim surveys, due to certain survey-design features. A series of questions are addressed in order to meet this goal. First, do survey-instrument characteristics (i.e., the number of prior interviews, the number of prior reported victimizations, and survey mode 19) influence a respondent's decision to report victimization? Second, are individual demographic characteristics significant predictors of whether a respondent will report victimization, independent of survey-design effects? And third, what is the relative influence of instrument, individual, and lifestyle characteristics on a respondent's decision to report victimization when considered together? Stated formally, the current study tests the following three research hypotheses:

- H_1 : Respondents are less likely to report victimization in current interviews if they participated in prior interviews, net of other relevant predictors of victimization.
- H_0 : No relationship exists between the likelihood that respondents report victimization in current interviews and the number of prior interviews in which respondents participated, while controlling for other relevant predictors of victimization.
- H_2 : Respondents are less likely to report victimization in current interviews if they reported victimization during prior interviews, net of other relevant predictors of victimization.
- H_0 : No relationship exists between the likelihood that a respondent will report victimization during current interviews and the number of previously reported victimizations, while controlling for other relevant predictors of victimization.

¹⁹Survey mode reflects the survey-delivery method (i.e., face-to-face or via the telephone) used in the respondent's current interview.



- H_3 : The likelihood that respondents report victimization during current interviews is affected by survey mode.
- H_0 : Survey mode does not affect the likelihood that respondents will report victimization during current interviews, net of other relevant predictors of victimization.

These hypotheses were testing using a series of survey-weighted logistic regression models (see Hosmer & Lemeshow, 2000; StataCorp, 2003). The initial model explores the influence of survey-design effects of reported victimization in order to address the first research question. Next, a model that includes only control variables is used to illustrate their independent effect on reported victimization. Finally, a fully specified model explores the influence of all survey-design characteristics and control variables on reported victimization together, which speaks to the third research question and provides results that are used to assess each of the aforementioned hypotheses.

By using a survey-weighted logistic regression approach, modeling takes into account the complex sample design and clustering factors associated with the NCVS survey methodology. Use of other statistical software—most of which assume a simple random sample—would lead to the underestimation of standard errors and erroneous conclusions. Before presenting the results of the models noted above, however, a description of the measures is provided.

Measures

Described in greater detail in the previous chapter, the 1996-1999 NCVS

Longitudinal Data File contains 323,265 personal records. The file consists of eighteen quarterly collection cycles. A cross-section of the data comprised of various times-in-



sample is necessary for answering the research questions and hypotheses noted above. Several selection criteria were therefore applied to the longitudinal data file in order to create a subset of data. First, a simple random sample of 1/18 of all cases was chosen. This process resulted in a cross-section of various points in times-in-sample for different respondents—approximately equal to the amount of all interviews conducted during any given quarter. Second, all unbounded interviews were excluded. The use of individuallevel data allows for an important control with respect to unbounded interviews. At the panel level, initial interviews are identified by the time-in-sample (i.e., time-in-sample one or TIS1). There are instances, however, where a respondent's initial interview does not occur during TIS1. For example, a respondent might move into a household after TIS1 or a respondent might turn 12 after the household has completed its first interview. The respondent's first (i.e., unbounded) interview in both situations describe above occurs after TIS1. Finally, since the dependent variable is current victimizations, noninterviews that occurred during the current interview were excluded. Application of these selection criteria resulted in a sample of 10,613 person-level records.

Dependent variable

As noted above, the current perspective examines how certain design features of self-report victim surveys may affect a respondent's decision to report victimization.

Therefore, the dependent variable is whether the respondent reports victimization during a current interview²⁰ and is referred to as *current victimization*. Victimization includes threatened, attempted and completed violent crimes (i.e., rape, sexual assault, robbery,

²⁰ Current interview is used to describe the most recent interview in the series of interviews in which a respondent participates. It is during the 'current' interview that reported victimization is measured.



and simple and aggravated assault), property crimes (i.e., burglary, motor vehicle theft, and property theft) and personal-property theft (i.e., pocket pickings and purse snatchings). *Current victimization* is measured as a dichotomous variable with two response categories: '0' indicates no victimization reported during a respondent's current interview, whereas '1' indicates at least one reported victimization. Most of the 10,613 respondents (94%) did not report victimization during their current (i.e., most recent) interview (see Table 1).

Conceptually, victimizations identified by the NCVS are considered discrete events measured in terms of incidents. Incidents that occur continuously that cannot be differentiated by respondents are excluded.²¹ The NCVS "only measures events that can be uniquely described, thus ignoring classes of crimes for which victimization is quite prevalent even though the frequency of individual incidents is unknown" (Skogan, 1981, p. 7). In addition to being discrete incidents, as noted above, victimizations are defined independently of those directly involved with the crime. That is, respondents are not asked to determine whether or not they have been victimized. Combined, these three conceptual elements help define the way in which victimization is measured for the current study.

Measuring victimization is not unlike measuring other self-reported social phenomena. That is, repeated application of the survey instrument will produce some level of variation in victimization measured. Since no measure is absolutely reliable, assessing the reliability of self-reported victimization is a matter of degree. Again, past research examining both test-retest as well as internal consistency measures of self-report

²¹ See Chapter Two for a more detailed description of series victimization.



Table 1. Descriptive statistics for the first perspective.

Variables	M	SD	%	Min.	Max.
Dependent variable					
Current victimizations				0	1
No			93.5		
Yes			6.5		
Independent variables					
Prior interviews (dummy variables)				1	6
1 (reference)			26.4		
2			20.2		
3			17.3		
4			13.7		
5			12.2		
6			10.2		
Prior victimizations (dummy variables)			0	3
0 (reference)			82.5		
1			12.8		
2			3.0		
3 or more			1.7		
Survey mode				0	1
Telephone			84.5		
Face-to-face			15.5		
Control variables					
Demographic characteristics					
Age (in years)	44.8	18.5		12	90
Gender				0	1
Male			45.3		
Female			54.7		
Race/ethnicity (dummy variables)				1	4
White non-Hispanic (reference)			77.0		
Black non-Hispanic			9.7		
Other non-Hispanic			3.8		
Hispanic, any race			9.5		
Marital status (dummy variables)				1	5
Married (reference)			57.9		
Never married			23.8		
Widowed			7.1		
Divorced			9.1		
Separated			2.1		
Educational attainment (in years)	13.2	3.6		0	19
Lifestyle characteristics					
Time away from homeshopping (d	ummy variat	oles)		1	5
Never (reference)			1.4		
Less than once a month			2.4		
Once a month			10.2		
Once a week			64.3		
Once a day			21.4		
Don't know			0.4		



Table 1. (Continued).

Time away from homeentertainme	ent (dummy v	variables)		1	5
Never (reference)			6.4		
Less than once a month			8.8		
Once a month			16.4		
Once a week			48.4		
Once a day			19.5		
Don't know			0.4		
Use public transportation (dummy v	ariables)			1	5
Never (reference)			78.7		
Less than once a month			10.4		
Once a month			3.8		
Once a week			3.0		
Once a day			3.9		
Don't know			0.2		
Months in current residence	140.2	141.2		1	1,068
Times moved in the past 5 years	0.7	1.2		0	15

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys. Statistics reflect weighted data. Unweighted n = 10,613.

data show that self-reported measures are on par (and in some cases exceed) most social science measures (Belson, 1968, Braukmann, Kirigin & Wolf, 1979; Hindelang, Hirschi & Weiss, 1981; Huizinga & Elliott, 1986; Kulik, Stein & Sarbin, 1968). In addition to reliability, past research has examined the validity of self-reported victimization.

Early studies used to establish interview protocol for the National Crime Survey (NCS) employed records check as a means for assessing the validity of self-reported victimization. In three different studies conducted by the U.S. Census Bureau, victims identified in official law-enforcement records were interviewed and results of the interview compared with information in contained within the police reports (Dodge, 1970; Turner, 1972; Yost & Dodge, 1970). A separate study employed reverse records check, where attempts were made to match reported victimizations with official data (Schneider, 1977). While the aforementioned studies were suspected of overestimating the accuracy of reported victimizations identified in the NCS, concordance between



official data and other types of self-reported acts (i.e., delinquency and conviction) are generally high (Blackmore, 1974; Farrington, 1973; Hardt & Petersen-Hardt, 1977; Hathaway, Monachesi & Young, 1960; Rojeck, 1983).

Independent variables

Lehnen and Reiss (1978a, 1978b) theorized that variation in reported victimization across waves of interviews resulted from one of two sources: actual changes in victimization experiences or a respondent learning about the survey design and choosing not to report victimizations in order to minimize their burden. In order to account for both of these sources, a series of instrument-level characteristics are included in the models presented below.

Consistent with the work of Lehnen and Reiss (1978a, 1978b), three instrument-level independent variables are included in the current analyses. Instrument-level variables include 1) the number of prior interviews in which a respondent has participated (*prior interviews*), 2) the total number of victimizations reported during a respondent's prior interviews (*prior victimizations*), and 3) the mode in which the current interview is conducted (*survey mode*). *Prior interviews* is measured as the number of prior interviews in which a respondent participated prior to their current interview, and ranges from 1 to 6. Nearly half of all respondents (47%) were interviewed less than 3 times prior to their current interview. *Prior victimizations* is measured as an ordinal variable with 4 response categories: '0' indicates no victimizations reported during the current interview, '1' indicates 1 victimization reported, '2' indicates 2 victimizations, and '3' indicates 3 or more victimizations reported during prior interviews. The majority of respondents (83%)



reported no victimizations prior to their current interview. The final independent variable—referred to as *survey mode*—is a dichotomous variable coded as '0' (telephone interview) or '1' (face-to-face interview) to reflect the mode of interview used during the respondent's current interview. Most of the current interviews (85%) were conducted over the telephone.

Control variables

These analyses incorporate important demographic and lifestyle predictors of victimization as control variables. Excluding predictors of victimization risks model misspecification and increases the chances of erroneous conclusions. The literature demonstrates the significance of age, gender, race and Hispanic origin, marital status, and educational attainment as correlates to victimization (e.g., see Catalano, 2004, 2005; see also Rennison & Rand, 2003). Therefore, these respondent characteristics are included in the models.

Age reflects the age of the respondent during the current interview and is coded as a continuous variable ranging from 12 to 90. Gender is coded as '0' for male respondents and '1' for female respondents. Most respondents are female (55%). Race and Hispanic origin is captured through a set of 4 dummy variables: white non-Hispanic (77%), black non-Hispanic (10%), "other" non-Hispanic (4%), and Hispanic, any race (10%). For use in the models, white non-Hispanic is the excluded category. Marital status is captured using a set of 5 dummy variables: currently married (58%), never married (24%), widowed (7%), divorced (9%), and separated (2%). Currently married is



the excluded category. Finally, *educational attainment* is measured as a continuous variable based on the years of schooling completed by the respondent. On average, respondents completed slightly more than 13 years of education at the time of their most recent interview.

Several lifestyle variables are also included in the analyses as control variables. Again, the use of individual-level data permits controlling for these correlates to victimization. Shopping reflects the frequency at which a respondent spends outside their home shopping at drug, clothing, grocery, hardware and convenience stores; and is captured using a set of 5 dummy variables: never (1%), less than a month (2%), once a month (10%), once a week (64%), and once a day (21%). Never is the reference category. Evening represents how often a respondent spends his/her evenings away from home for work, school or entertainment and is also captured using a set of 5 dummy variables: never (6%), less than a month (9%), once a month (16%), once a week (48%), and once a day (20%). Again, never is the reference category. Transportation is another lifestyle control variable, which indicates how often a respondent rides public transportation. Like the previous two lifestyle variables, it is captured using a set of 5 dummy variables: never (79%), less than a month (10%), once a month (4%), once a week (3%), and once a day (4%). Again, never is the reference category. Residency, measured in terms of months, is a continuous variable used to reflect the length of time a respondent has lived at their current residence. The length of time respondents have reported lived at their current residence ranges from 1 month to nearly 89 years. On

²² "Other" non-Hispanics category includes individuals who describe themselves as an American Indian, Aleut, Eskimo, Asian, or Pacific Islanders. "Hispanic" is a measure of ethnicity and may include persons of any race.



average, however, at the time of their most recent interview, respondents report living at their current residence for between 11 and 12 years. Finally, *moved* indicates the number of times a respondent moved during the 5 years prior to their most recent interview. On average, respondents report that they moved less than once during the previous 5 years.

Results

Do survey instrument characteristics associated with self-report victim surveys influence respondents' decision to report victimization? Initial findings reveal significant relationships between certain victim-survey design features and their influence over a respondent's decision to report victimization, and are consistent with past research (Lehnen and Reiss, 1978a, 1978b). Table 2 presents results obtained from a partially specified survey-weighted logistic regression model, using survey-design features as predictors of reported victimization. The model reveals that the number of prior interviews has a negative effect on the likelihood that a respondent will report victimization during their current interview. In general, respondents who are interviewed more than once are less likely to report victimization during their current interview than respondents who are interviewed only once. Specifically, respondents with 2 (b = -0.35), 3 (b = -0.55), 4 (b = -0.83), 5 (b = -0.82) or 6 (b = -0.87) prior interviews are less likely than respondents with only 1 prior interview to report victimization. Again, these finding are consistent with the findings presented by Lehnen and Reiss (1978a) who conclude, "...'first-timers' are more likely to report incidents" and that "there is a general decline in reporting associated with increasing the number of prior interviews" (p. 120).



Table 2. Partially specified survey-weighted logistic regression using survey-design effects to predict victimization^a.

Variables	b	SE	Wald	Exp(b)
Independent variables				
Prior interviews (dummy variables)				
1 (reference)				
2	-0.35	0.12	8.63 *	0.70
3	-0.55	0.11	23.50*	0.58
4	-0.83	0.15	30.37 *	0.44
5	-0.82	0.15	28.34 *	0.44
6	-0.87	0.17	25.65 *	0.42
Prior victimizations (dummy variables)				
0 (reference)				
1	0.77	0.10	54.51*	2.16
2	1.29	0.19	47.44*	3.63
3 or more	1.98	0.20	102.50*	7.22
Survey mode				
Telephone (reference)				
Face-to-face	-0.20	0.12	2.97 **	0.82
Constant	-2.45	0.08	962.92*	0.09
-2 Log-Likelihood	-2455.39			
Nagelkerke R-squared	0.04 *			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

Results also demonstrate that victimization reported during prior interviews has a positive effect on whether a respondent reports victimization during their current interview. In general, respondents who report victimization during prior interviews are more likely to report victimization during current interviews than respondents who have never reported victimization. Specifically, respondents who report 1 (b = .77), 2 (b = 1.29), or 3 or more (b = 1.98) victimizations during previous interviews are more likely to report victimization during their current interview than respondents who never report victimization. These findings are also consistent with findings offered by Lehnen and



^aVictimization is coded (0,1). No reported victimization equals 0 and any reported victimization equals 1. Unweighted n = 10,613

^{*}p < .05

^{**}p < .10

Reiss (1978a) who concluded, "...respondents who have reported incidents in the past are more likely to do so currently" (p.120). Paradoxically, the relationship between reporting victimization during prior interviews and the likelihood that victimization will be reported during respondents' current interview are *inconsistent* with the notion that exposure to repeated interviews due to survey-design methodology results in an increase in respondent burden and a corresponding decrease in reported victimization.

Finally, results of the first model demonstrate that survey mode has a slight effect on whether a respondent will report victimization. That is, results suggest that respondents interviewed in person are somewhat less likely to report victimization than respondents interviewed via the telephone (b = -.020, p < .10). While findings from Lehnen and Reiss (1978a) also suggest survey mode is a determinant of whether victimization is reported, they conclude that respondents who are interviewed in-person are *more* likely to report victimization than respondents whose interview is conducted over the phone.

One possible explanation of these two seemingly inconsistent findings could be attributed to the differences in the levels of analyses between the two studies. Recall that due to data limitations, Lehnen and Reiss (1978a, 1978b) were unable to conduct analyses at the individual level. Nevertheless, despite the seemingly inconsistent findings both suggest survey mode can create a response effect in self-report victim surveys. Contemporarily, this issue is important due to the fact that an increasing number of NCVS surveys are being conducted over the telephone in an attempt to reduce costs. However, respondents that complete telephone interviews without repeated attempts to make contact differ demographically from those who must be tracked down to complete a



survey in person when a telephone interview attempt fails. Since these characteristics are also correlated to victimization, an opportunity to underestimate victimization as a result of a move towards more telephone surveys could be created.

The current perspective also poses the question, "Are individual demographic characteristics significant predictors of whether a respondent reports victimization, independent of survey-design effects?" Table 3 presents findings of a second partially specified survey-weighted logistic regression model using respondent demographics as well as lifestyle characteristics as predictors of reported victimization.

Many of variables included in the second model are determinants of reported victimization. For example, younger respondents are more likely to report victimization during their current interview than older respondents (b = -.02). Similarly, female respondents are somewhat more likely than male respondents to report victimization (b = .16, p < .10); and respondents who reportedly have never been married (b = .27), are divorced (b = .81), or separated (b = .91) are more likely to report victimization than respondents who are reportedly married at the time their current interview was completed.

Several lifestyle characteristics included in the second model are also determinants of whether a respondent reports victimization. For example, in general, respondents who report spending more time away from home shopping are less likely to report victimization than respondents who report never spending time away from home shopping. Additionally, results reveal a positive relationship between the extent to which respondents reportedly use public transportation and the likelihood that a respondent will report victimization. Specifically, respondents that use public transportation less than



Table 3. Partially specified survey-weighted logistic regression using control variables to predict victimization^a.

Variables	b	SE	Wald	Exp(b)
Control variables				
Demographic characteristics				
Age	-0.02	0.00	17.77 *	0.98
Gender				
Male (reference)				
Female	0.16	0.09	3.00 **	1.17
Race/ethnicity (dummy variables)				
White non-Hispanic (reference)				
Black non-Hispanic	0.16	0.14	1.32	1.17
Other non-Hispanic	-0.12	0.21	0.33	0.89
Hispanic, any race	0.13	0.15	0.70	1.13
Marital status (dummy variables)				
Married (reference)				
Never married	0.27	0.12	5.06*	1.31
Widowed	-0.06	0.24	0.06	0.94
Divorced	0.81	0.13	40.19*	2.24
Separated	0.91	0.22	16.73 *	2.48
Educational attainment	0.01	0.01	0.68	1.01
Lifestyle characteristics				
Time away from homeshopping (dummy variab	oles)			
Never (reference)				
Less than once a month	-0.32	0.41	0.60	0.73
Once a month	-0.67	0.32	4.40 *	0.51
Once a week	-0.58	0.30	3.70 **	0.56
Once a day	-0.53	0.30	3.13 **	0.59
Time away from homeentertainment (dummy v	ariables)			
Never (reference)				
Less than once a month	0.36	0.24	2.20	1.43
Once a month	0.07	0.24	0.10	1.08
Once a week	0.19	0.21	0.83	1.21
Once a day	0.53	0.22	5.99*	1.70
Use public transportation (dummy variables)				
Never (reference)				
Less than once a month	0.44	0.13	10.69 *	1.55
Once a month	0.52	0.19	7.25 *	1.68
Once a week	-0.40	0.28	1.95	0.67
Once a day	0.46	0.19	6.14*	1.59

Table 3 (continued).

Months in current residence	0.00	0.00	0.01	1.00
Times moved in the past 5 years	0.09	0.03	7.79*	1.09
Constant	-2.36	0.39	36.86*	0.09
-2 Log-Likelihood	-2441.06			
Nagelkerke R-squared	0.04 *			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

Unweighted n = 10,613

once a month (b = .44), once a month (b = .52), or once a day (b = .46) are more likely to report victimization than respondents that reportedly never use public transportation. Results from the second model also suggest that there is a positive relationship between respondent mobility and reported victimization. That is, respondents that move more frequently are more likely to report victimization than respondents that move less frequently (b = .09).

Collectively, results from the second model demonstrate that most of the demographic and lifestyle characteristics examined are significant predictors of whether a respondent will report victimization; and also illustrate the need to consider these predictors in conjunction with instrument-level factors when considering survey-design effects on respondents' decisions to report incidents during victim-survey interviews.

The final research question asks, "What is the relative influence of instrument, individual and lifestyle characteristics on respondents' decision to report victimization when considered together?" Table 4 presents results from a fully specified survey-weighted logistic regression model. The model predicts the likelihood that a respondent will report victimization during their current interview, and contains variables related to survey-



^aVictimization is coded (0,1). No reported victimization equals 0 and any reported victimization equals 1.

^{*}p < .05

^{**}p < .10

Table 4. Fully specified survey-weighted logistic regression predicting victimization^a.

Variables	b	SE	Wald	Exp(b)
Independent variables				<u> </u>
Prior interviews (dummy variables)				
1 (reference)				
2	-0.31	0.12	6.46*	0.73
3	-0.43	0.11	14.41 *	0.65
4	-0.66	0.15	18.96*	0.51
5	-0.58	0.16	13.23 *	0.56
6	-0.60	0.17	12.56*	0.55
Prior victimizations (dummy variables)				
0 (reference)				
1	0.64	0.11	34.53 *	1.89
2	1.04	0.19	29.52*	2.83
3 or more	1.75	0.20	74.03 *	5.77
Survey mode				
Telephone (reference)				
Face-to-face	-0.29	0.13	5.37 *	0.75
Control variables				
Demographic characteristics				
Age	-0.01	0.00	10.34 *	0.99
Gender				
Male (reference)				
Female	0.17	0.09	3.64 **	1.19
Race/ethnicity (dummy variables)				
White non-Hispanic (reference)				
Black non-Hispanic	0.18	0.14	1.61	1.20
Other non-Hispanic	-0.08	0.21	0.13	0.93
Hispanic, any race	0.16	0.15	1.09	1.17
Marital status (dummy variables)				
Married (reference)				
Never married	0.23	0.12	3.60 **	1.26
Widowed	-0.10	0.25	0.18	0.90
Divorced	0.66	0.13	26.42 *	1.93
Separated	0.84	0.23	13.88*	2.33
Educational attainment	0.00	0.01	0.10	1.00
Lifestyle characteristics				
Time away from homeshopping (dummy variables)				
Never (reference)				
Less than once a month	-0.24	0.44	0.31	0.78
Once a month	-0.62	0.34	3.33 **	0.54
01		0.00		
Once a week	-0.54	0.32	2.73 **	0.58

Table 4 (continued).

Time away from homeentertainment (dummy	variables)			
Never (reference)				
Less than once a month	0.36	0.24	2.22	1.43
Once a month	0.07	0.24	0.08	1.07
Once a week	0.17	0.21	0.65	1.19
Once a day	0.52	0.22	5.74*	1.69
Use public transportation (dummy variables)				
Never (reference)				
Less than once a month	0.43	0.13	10.08 *	1.53
Once a month	0.51	0.20	6.87 *	1.67
Once a week	-0.42	0.29	2.11	0.66
Once a day	0.49	0.19	6.74 *	1.64
Months in current residence	0.00	0.00	0.01	1.00
Times moved in the past 5 years	0.06	0.03	3.39 **	1.07
Constant	-2.24	0.41	29.17 *	0.11
-2 Log-Likelihood	-2376.18	·		
Nagelkerke R-squared	0.03*			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

design characteristics as well as demographic and lifestyle factors. Results from this model not only help to answer the final research question, but also provide information that is used to evaluate each research hypothesis.

While the overall model produces a significant proportional reduction in error, a minimal amount of variance in reported victimization is explained (Nagelkerke R-squared = .03). Nevertheless, all instrument-level factors considered are predictors of reported victimization, while controlling for other individual-level factors associated with victimization. The number of prior interviews, prior victimizations, and survey mode predict the likelihood that victimization will be reported during a current interview. For



^aVictimization is coded (0,1). No reported victimization equals 0 and any reported victimization equals 1. Unweighted n = 10,613

^{*}p < .05

^{**}p < .10

example, the number of prior interviews still has a negative effect on the likelihood that a respondent will report victimization, while controlling for other relevant predictors of victimization. Respondents with 2 (b = -0.31), 3 (b = -0.43), 4 (b = -0.66), 5 (b = -0.58)or 6 (b = -0.60) prior interviews are less likely to report victimization than respondents with only 1 prior interview. Victimization reported during prior interviews also remains a positively correlated with whether a respondent reports victimization during their current interview. That is, respondents who report 1 (b = .64), 2 (b = 1.04), or 3 or more (b = 1.75) victimizations during previous interviews are more likely to report victimization than respondents who never report victimization during previous interviews, net of other relevant variables. Finally, results of the final model demonstrate that survey mode still has an effect on whether a respondent will report victimization, once other correlates to victimization are considered. That is, results suggest that respondents interviewed face-to-face (b = -0.29) are less likely to report victimization than those interviewed via the telephone. Interestingly, the relative influence of many of the survey-design effects is diminished after controlling for relevant demographics and lifestyle characteristics, which is demonstrated in Table 5.

Tests for significant differences between coefficients produced by the first (e.g., partially specified model) and third (e.g., fully specified model) are presented in the final table. Results show that the relative impact the of the number of prior interviews on the likelihood a respondent will report victimization is less when individual correlates to victimization are considered than when they are not. The relative impact of the number of prior victimizations on the likelihood that a respondent will report victimization is also

²³ A more comprehensive discussion of the model's explained variance is presented in the final chapter.



Table 5. Impact on survey-design effects after controlling for individual correlates to victimization^a.

Variables	Difference between coefficients ^b
Independent variables	
Prior interviews (dummy variables)	
1 (reference)	
2	1.46
3	2.15*
4	2.26*
5	1.80
6	1.62
Prior victimizations (dummy variables)	
0 (reference)	
1	-3.47*
2	-2.59*
3 or more	-4.23*
Survey mode	
Telephone (reference)	
Face-to-face	1.49

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

significantly diminished when other correlates to victimization are considered. That is, regardless of the number of prior victimizations reported by respondents during previous interviews, the likelihood that respondents report victimization during their current interview is less when individual and lifestyle correlates to victimization are considered than when they are not. These findings demonstrate the importance of being able to examine respondent fatigue believed to be associated with certain survey-design effects of self-report victim surveys at the individual level. More importantly, these findings enable the research hypotheses associated with this perspective to be evaluated.



^aVictimization is coded (0,1). No reported victimization equals 0 and any reported victimization equals 1. ^bSee Brame, Paternoster, Mazerolle & Piquero (1998).

^{*}p < .05

Conclusions

The current study demonstrates that survey-instrument characteristics such as the number of prior interviews, the number of prior reported victimizations, and survey mode that are associated with contemporary self-report victim surveys influence a respondent's decision to report victimization. Based on these results, we can reject the first null hypothesis in favor of the alternative: Respondents are less likely to report victimization if they have participated in prior interviews, net of other relevant predictors of victimization. Similarly, we can reject the third null hypothesis in favor of its alternative. That is, the likelihood that a respondent will report victimization depends on survey mode. However, results from the current perspective do not permit the rejection of the second null hypothesis. Although a link is established between the likelihood a respondent will report victimization during a current interview and whether victimization was reported during prior interviews, it is not in the hypothesized direction. Therefore, the second null hypothesis is not rejected.

Armed with this knowledge, self-report victim-survey administrators may want to reconsider some of the methods currently used for conducting longitudinal victim surveys like the NCVS. For example, since there is an inverse correlation between the number of prior interviews and victimization reported during longitudinal victim surveys, fatigue bias that manifests as a response effect may be reduced by decreasing the number of times a household is retained in sample. The Census Bureau attempted to identify the optimal number of months that households should remain in sample when the NCS was initially fielded (Woltman & Bushery, 1977b). Nearly three decades have passed since



those studies were completed. In light of the current findings, perhaps the time has come to reexamine the optimal number of times to retain a household in sample for contemporary longitudinal self-report victim surveys.

Self-report victim-survey administrators should also consider developing statistical methods that could be used to correct for the types of response effects observed herein. Statistical adjustments have been developed recently by Ybarra & Lohr (2000) that correct for missing NCVS data. Similar algorithms could be created that address the positive correlation between reports of victimization during previous interview waves and reports of victimization reported during a respondent's current interview. Administrators of multiple-wave victim surveys like the NCVS may also need to develop statistical adjustments that attempt to offset response effects associated with survey mode.

Telephone surveys are easier and less expensive to conduct than in-person interviews. One way administrators are attempting to reduce costs associated with the NCVS is by replacing more face-to-face interviews with telephone surveys. However, current results suggest that telephone surveys produce more reported victimization by respondents than face-to-face interviews. If mode is a source of response bias in self-report victim surveys that manifests in terms of decreased reported victimization, then the move away from a survey mode that produces *less* reported victimization may artificially inflate victimization estimates. Therefore, statistical adjustments for survey mode may need to be developed in order to address possible response bias introduced when an increased number of self-report victim surveys are conduct over the telephone.

The current study also demonstrates that individual demographic characteristics are important predictors of reported victimization, independent of survey-design effects.



More importantly, the relative influences of self-report victim-survey-designs on respondents' decisions to report victimization are diminished when considered in conjunction with individual and lifestyle correlates to victimization. Collectively, these findings underscore the need to incorporate correlates to victimization in any analyses that seeks to assess the effects of victim-survey design on respondent fatigue.

Based on current findings, the conclusion that survey-design effects of self-report victim surveys rests on the assumption that respondent fatigue manifests as a decrease in respondents' willingness to report victimization. The current study is unable to differentiate between the likelihood a respondent does not report victimization because of fatigue and when a respondent does not report victimization because he/she was simply not victimized. Findings based on this operational definition of fatigue may not necessarily be incorrect, but by revisiting this topic with an alternative definition, an improved understanding of fatigue bias as it pertains to self-report victim surveys can be realized. The second perspective offers a test of just such an alternative.



Perspective 2: Modifying the Operational Measure of Respondent Fatigue



Figure 3. Key elements of the second perspective.

Lehnen and Reiss (1978a, 1978b) define respondent fatigue in terms of a *reduction* in reported victimization during subsequent waves of victim-survey interviews. If panels report a higher number of victimizations during an initial interview compared to later interviews, respondent fatigue is indicated, according to Lehnen and Reiss. This measurement scheme does not account for instances when respondents are simply victimized less often during the second reference period compared to the first. Therefore, this measure of respondent fatigue raises the possibility of misclassifying individuals as "fatigued" when they simply are not victims of crime as much over time.

The issue of respondent fatigue can be further examined by modifying the operational measure of fatigue in terms of whether respondents who are exposed to longer interviews during their first interview (i.e., they were victims and provided



information for an incident report) are more likely to *refuse* to participate in the subsequent interview (rather than reduce the level of victimizations they reveal). Linking NCVS interviews from first-time subjects to information about their second interview 6 months later can be used to make this assessment. The level of respondents' refusal to participate—a Type-Z²⁴ noninterview in NCVS victim surveys—during the second interview can be assessed for all respondents. Furthermore, as in the initial perspective, instrument- and respondent-level characteristics can also be examined to provide a better understanding of the correlates of respondent fatigue in self-report victim surveys that is operationalized as nonresponse.

Objectives

The objective of the second perspective is to expand our understanding of respondent fatigue that may be associated with the design of contemporary self-report victim surveys. As with the initial perspective, a series of questions are addressed in order to meet this goal. First, do survey instrument characteristics (i.e., the number of prior reported victimizations, and survey mode²⁵) influence respondents' decision to participate in self-report victim surveys?²⁶ Second, are individual demographic

²⁶Since data for initial and subsequent interviews are used in this study, a variable that captures information on the number of prior interviews is not included. This variable will be reintroduced into the analysis when respondent fatigue is assessed over multiple waves of interviews.



²⁴A Type-Z noninterview (i.e., refusal or never available) occurs when an eligible respondent does not provide an interview and the respondent is not the household respondent. A household respondent is the household member that is selected by the interviewer to be the first household member interviewed. The expectation is that the household respondent will be able to provide information for all persons in the sample household.

²⁵Survey mode reflects the survey-delivery method (i.e., face-to-face or via the telephone) used in the respondent's initial interview.

characteristics significant predictors of whether a respondent will participate in self-report victim surveys, independent of survey-design effects? And third, what is the relative influence of instrument and individual characteristics on interview participation in self-report victim surveys when considered together? But for the change in operational measure of fatigue, these questions are nearly identical to those posed in the initial study and can also be stated formally as two research hypotheses:

- H_1 : Subsequent interviews are more likely result in nonresponse if respondents report victimization during initial interviews, while controlling for differences in individual demographics.
- H_0 : Alternatively, no relationship between nonresponse and victimization reported during initial interviews exists.
- H_2 : The likelihood that subsequent interviews will result in nonresponse is affected by survey mode, net of differences in respondent demographics.
- H_0 : Alternatively, survey mode has no affect on whether subsequent interviews are completed.

The analytic strategy adopted to test these hypotheses does not change across the first two perspectives. That is, tests are again carried out using a series of survey-weighted logistic regression models (StataCorp, 2003). The initial models explore the influence of instrument-level characteristics on individuals' participation during the second wave of interviews (i.e., TIS2). Specifically, these models consider the survey mode used and reporting of an incident during the screening process during the first interview. Next, a model that includes only respondent demographics to determine the role that these variables play on respondent participation during TIS2 is offered. Finally, a fully specified model follows that explores the influence of all instrument- and respondent-level characteristics on individuals' participation during TIS2. Upon review



of the fully specified model, two additional models are offer in order to provide a more detailed understanding of the particular effect survey mode has on nonresponse by assessing models for telephone and face-to-face interviews at TIS1 separately. Before presenting the results of these models, however, a description of the measures used is provided.

Measures

This perspective also relies on data contained in the NCVS Longitudinal Data File. As noted above, the 1996-1999 NCVS Longitudinal Data File contains 323,265 personal records, consisting of eighteen quarterly collection cycles. And like the previous approach, several selection criteria were applied to the longitudinal file to create a subset of data used in association with this perspective. A description of the criteria follows.

Only an individual's initial and subsequent exposures to the survey were included in the current subset of longitudinal data. Because initial exposure to the survey must have resulted in a completed face-to-face or telephone survey, all individual noninterviews (i.e., Type-Z noninterviews) at TIS1 were excluded. Further, proxy interviews during either the first or second interview were excluded. Because the sampling unit in the NCVS is a household, households were included only if the occupants did not move out of the sample address between the initial and subsequent exposure. Finally, only a Type-Z noninterview in which the respondent refused to be interviewed and noninterviews occurring when the respondent was "never available"

²⁷ For complete information concerning the NCVS Longitudinal Data File see Chapter Three.



were included in the data. Application of these selection criteria resulted in a subset of 32,612 person-level records. While many of the data contained in the models presented from this perspective are similar to those presented in the previous chapter, the 2 samples are independent of one another; therefore, descriptive statistics for the current sample are provided below, starting with the dependent variable.

Dependent variable

For the current perspective respondent fatigue is measured using Type-Z noninterviews. This include situations where a respondent 1) refuses to be interviewed outright, or 2) avoids the interviewer by never being available to participate in the interview, and is coded as 0 (interview) or 1 (noninterview). Most of the 32,612 respondents in the current investigation (97%) participated in an interview and at TIS2 (see Table 6).

Independent variables

Independent variables included in this perspective on respondent fatigue are survey mode and the number of victimizations reported during a respondent's initial interview. It is important to include these variables because they have been shown to have an effect on survey participation in the survey nonresponse literature (Dillman, Eltinge, Groves & Little, 2002; Finkelhor, et. al., 1995; Groves & Couper, 1992; 1993; 1998; Harris-Kjoetin & Tucker, 1998; Johnson, 1988; Lepkowski & Couper, 2002; Madans, Kleinman, Cox, Barbano, Feldman, Cohen, et al., 1986).

Victimizations or the number of victimizations reported during a respondent's initial interview is a continuous variable ranging from 0 to 7. Higher scores indicate



Table 6. Descriptive statistics for the second perspective.

Variables	M	SD	%	Min.	Max
Dependent variable					
Respondent fatigue (TIS2)				0	1
Interview			96.5		
Noninterview			3.5		
Instrument-level characteristics					
Reported victimizations (TIS1)				0	7
No			89.9		
Yes			10.1		
Number of victimizations	1.3	0.6			
Survey mode (TIS1)				0	1
Telephone			29.0		
Face-to-face			71.0		
Respondent-level characteristics					
Age (in years)	43.9	18.1		12	90
Gender				0	1
Male			45.7		
Female			54.3		
Race/ethnicity (dummy variables)				1	4
White non-Hispanic			77.6		
Black non-Hispanic			10.2		
Other non-Hispanic			3.6		
Hispanic, any race			8.7		
Marital status				1	5
Married			58.7		
Never married			24.1		
Widowed			6.5		
Divorced			8.7		
Separated			1.9		
Educational attainment (in years)	13.2	3.5		0	19

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys. Statistics reflect weighted data. Unweighted n = 32,612.

more reported victimizations during an initial interview. For respondents reporting victimizations, the mean number of victimizations reported at TIS1 was 1.3 with a 0.6 standard deviation. *Survey mode* is coded as 0 (telephone) or 1 (face-to-face) to reflect the mode of interview individuals experienced during their initial interview. The majority of TIS1 interviews (71%) were conducted face-to-face. Conversely, most

interviews at TIS2 (87%) were conducted over the telephone. In addition to surveydesign or instrument-level characteristics, respondent-level characteristics are included in the models as control variables.

Control variables

Past studies show age, gender, race and ethnicity, marital status, and education are correlated with survey participation (see Groves & Couper, 1998). Therefore, it is important to consider these variables when considering the survey-design effects of contemporary self-report victim surveys on participation. Excluding them would also risk model misspecification. More importantly, however, since similar demographic characteristics are correlated with victimization (e.g., see Catalano, 2004, 2005; Rennison & Rand, 2003) it is important to know whether these factors also contribute to nonresponse, given the implications this would have on the production of victimization estimates of for some groups.

Demographic variables considered in the second perspective are identical to those used in the first. They include the respondent's age, gender, race and Hispanic origin, as well as marital status and educational attainment. *Age* is a continuous variable ranging from 12 to 90. On average, respondents were reportedly about 44 years in age at the time of their initial interview. *Gender* is coded as 0 (male) or 1 (female). Most respondents represented in the current sample are female (54%). Race and Hispanic origin is captured through a set of 4 dummy variables: *white non-Hispanic* (78%), *black non-Hispanic* (10%), "other" non-Hispanic (4%), and Hispanic, any race (9%). ²⁸ For the multivariate

²⁸ See footnote 22 on page 53.



models that follow, white non-Hispanic is the excluded category. Marital status is also captured using a set of dummy variables: married (59%), never married (24%), widowed (7%), divorced (9%) and separated (2%). Married serves as the reference category. Finally, educational attainment is a continuous variable measuring the years of completed formal education. It ranges from 0 (no formal education) to 19. On average, respondents reportedly completed 13 years of formal education at the time of their initial interview.

Results

Do survey instrument characteristics influence respondents' decision to participate in self-report victim surveys? Table 7 presents a series of regression models that evaluate respondent fatigue in self-report victim surveys and that control for individual characteristics. Except for a difference in the dependent variable used and the unit of analysis, these models are similar to those produced by Lehnen and Reiss (1978a, 1978b) and to that which was presented in the previous chapter. For example, Panel A in Table 7 offers a basic model examining the effect of number of reported victimizations at TIS1 on a respondent's subsequent willingness to participate at TIS2. Findings show that the number of previously reported victimizations is a predictor of subsequent nonresponse. That is, respondents who report victimization at TIS1 are more likely to refuse to participate at TIS2 than respondents who report no victimization (b = .17).

Panel B evaluates the effects of two survey characteristics—survey mode and prior victimizations—on subsequent nonresponse. Like the model in Panel A, this model demonstrates a positive effect of prior reported victimization on subsequent nonresponse



Table 7. Partially specified survey-weighted logistic regression predicting nonresponse at TIS2.

		Pai	nel A		Panel B				Panel C			
Variables	b	SE	Wald	Exp(b)	b	SE	Wald	Exp(b)	b	SE	Wald	Exp(b)
Reported victimizations (TIS1)	0.17	0.08	4.34 *	1.19	0.17	0.08	4.42 *	1.19				
Survey mode (TIS1)												
Telephone (reference)												
Face-to-face					-0.45	0.07	43.96 *	0.64				
Age									-0.02	0.00	54.11 *	0.98
Gender												
Male (reference)												
Female									-0.55	0.07	63.72 *	0.58
Race/ethnicity (dummy variables)												
White non-Hispanic (reference)												
Black non-Hispanic									0.62	0.12	28.20 *	1.86
Other non-Hispanic									0.47	0.18	6.72 *	1.59
Hispanic, any race									0.48	0.14	10.43 *	1.61
Marital status (dummy variables)												
Married (reference)												
Never married									0.09	0.09	0.99	1.09
Widowed									-1.02	0.29	12.57 *	0.36
Divorced									-0.52	0.15	12.00 *	0.59
Separated									-0.82	0.31	6.95 *	0.44
Educational attainment									-0.01	0.01	0.60	0.99
Constant	-3.32	0.05	4540.16 *	0.00	-3.02	0.06	2330.48 *	0.05	-2.37	0.19	149.25 *	0.09
-2 Log-Likelihood	9802.17				9745.67				9393.56			
Nagelkerke R-squared	0.00 *				0.01 *				0.05 *			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

Unweighted n = 32,612.

**p* < .05



^aNonresponse is coded (0,1) where *participating* in an interview equals 0 and nonresponse equals 1.

(b = .17). In addition, findings show a negative effect of survey mode on nonresponse (b = .45). That is, respondents who report victimization during TIS1 are more likely to refuse to participate at TIS2—net the effect of survey mode—than respondents who report no victimization. In addition, persons interviewed in person are less likely to refuse to participate during the following enumeration than those interviewed via the telephone at TIS1—even when controlling for when prior victimization is reported. These findings demonstrate that rapport established between the field representative and the respondent during an in-person interview matters significantly.

The second research question asks, "Are individual demographic characteristics significant predictors of whether a respondent will participate in self-report victim surveys, independent of survey-design effects?" Panel C in Table 7 presents findings from a regression model evaluating the predictive value of respondent demographics on nonresponse. Panel C shows that nearly all of the respondent demographics included in the model exert an effect on the probability of nonresponse at TIS2. For example, Age demonstrates a negative effect on nonresponse at TIS2 (b = -.02). This means that younger persons are more likely to refuse to participate during TIS2 than older respondents. Gender also exerts a negative effect on future nonresponse (b = -.55), demonstrating that nonresponse at TIS2 is less likely among female than male respondents. Net of other individual characteristics, black non-Hispanics (b = .62), "other" non-Hispanics (b = .47) and Hispanics of any race (b = .48) are more likely than white non-Hispanics to refuse to participate during TIS2. Findings in Panel C also demonstrate that widowed (b = -1.02), divorced (b = -.52) or separated (b = -.82) respondents are less likely to refuse to participate at TIS2 than married persons. No

difference in the probability of married and never married respondents' likelihood of nonresponse at TIS2 is measured. Similarly, educational attainment fails to predict nonresponse at TIS2. Like in the first perspective, these findings not only demonstrate that respondent characteristics are a potential source or nonresponse bias in self-report victim surveys, but also illustrate the need for incorporating these factors in more robust models assessing fatigue bias.

The final question states, "What is the relative influence of instrument and individual characteristics on interview participation in self-report victim surveys when considered together?" Table 8 presents regression output from a fully specified model containing both instrument- and respondent-level indicators. Findings show that once respondent demographics are accounted for, the number of victimizations reported during TIS1 *no longer predicts* future survey nonresponse, and offer no support for the hypothesis that exposure to a longer survey instrument during an initial self-report victim survey interview results in subsequent nonresponse. In short, this facet of the survey design does not appear to produce respondent fatigue.

Controlling for individual- and instrument-level characteristics, survey mode continues to exert a negative effect of nonresponse at TIS2 (b = -.32). Specifically, respondents interviewed in-person at TIS1—compared to respondents interviewed in via the phone at TIS1—still are less likely to refuse to participate at TIS2. With few exceptions, the effects of demographic characteristics on future nonresponse do not change when controls for instrument characteristics are added to the model. One change that does emerge, however, is the positive effect that never being married has on nonresponse (b = .07). Persons who are reportedly never married are less likely to refuse



Table 8. Fully specified survey-weighted logistic regression predicting nonresponse at TIS2.

Variables	\boldsymbol{b}	SE	Wald	Exp(b)
Reported victimizations (TIS1)	0.08	0.09	0.87	1.09
Survey mode (TIS1)				
Telephone (reference)				
Face-to-face	-0.32	0.07	21.51*	0.73
Age	-0.02	0.00	46.50*	0.98
Gender				
Male (reference)				
Female	-0.53	0.07	60.12*	0.59
Race/ethnicity (dummy variables)				
White non-Hispanic (reference)				
Black non-Hispanic	0.64	0.12	29.78*	1.89
Other non-Hispanic	0.49	0.18	7.46*	1.63
Hispanic, any race	0.48	0.14	11.70*	1.61
Marital status (dummy variables)				
Married (reference)				
Never married	0.07	0.09	0.58*	1.07
Widowed	1.02	0.29	12.49*	2.76
Divorced	-0.51	0.15	11.44*	0.60
Separated	-0.82	0.31	6.89*	0.44
Educational attainment	-0.01	0.01	1.14	0.99
Constant	-2.19	0.20	122.01*	0.11
-2 Log-Likelihood	9365.38			
Nagelkerke R-squared	0.05*			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

to participate at TIS2 than persons who are reportedly married. A second change measured applies to widowed persons. In Panel C of Table 7, findings suggest that widowed (b = -1.02) persons are less likely to refuse to participate at TIS2 than married respondents. In Table 8 however, the sign of the coefficient for widowed respondents



^aNonresponse is coded (0,1) where *participating* in an interview equals 0 and nonresponse equals 1. Unweighted n = 32,612

^{*}p < .05

flips. This could represent a degree of multicolinearity between this and other variables included in the model.²⁹

Thus far, models demonstrate the significance of survey mode on future nonresponse. Regression models in Table 9 evaluate whether the observed effects in the fully specified model in shown in Table 8 differ by the survey mode to which respondents were exposed during TIS1. The first set of findings presented in Table 9 are based on models only for persons interviewed in person during TIS1, whereas the second regression output in Table 9 offers findings for respondents who are interviewed over the telephone during TIS1. Results from Table 9 demonstrate that once individual characteristics of respondents are accounted for, the number of reported victimizations measured at TIS1 is not related to nonresponse at TIS2. This finding holds regardless of the mode of surveying during TIS1. Consistent with earlier models presented, and regardless of the survey mode, younger persons are more likely to refuse to participate during TIS2 than older respondents. And like earlier models, females are less likely to refuse to participate than males at TIS2, regardless of survey mode. Again, regardless of survey mode, findings show that black non-Hispanics are more likely not to participate at TIS2 than are white non-Hispanics. However, survey mode appears to play a key role in respondents' decisions to participate for some demographic groups.

Survey mode makes a difference for Hispanics and "other" non-Hispanics with respect to their decision to participate. A positive effect is found for face-to-face surveys

²⁹ It may also indicate that the model is misspecified, which could also account for the low amount of explained variance associated with this model. A more in-depth discussion on the all the models' low levels of explained variance is addressed in the final chapter.



Table 9. Survey-weighted logistic regression predicting nonresponse^a at TIS2 by survey mode.

	F	Face-to-Face Survey				Telephone Survey			
Variables	b	SE	Wald	Exp(b)	b	SE	Wald	Exp(b)	between coefficients ^b
Reported victimizations (TIS1)	0.03	0.10	0.11	1.04	0.15	0.16	0.93	1.16	-0.62
Age	-0.02	0.00	43.45 *	0.98	-0.01	0.00	6.31 *	0.99	-1.82
Gender									
Male (reference)									
Female	-0.61	0.09	44.21 *	0.54	-0.41	0.11	14.94 *	0.66	-1.42
Race/ethnicity (dummy variables)									
White non-Hispanic (reference)									
Black non-Hispanic	0.74	0.14	26.93 *	2.09	0.46	0.19	5.94 *	1.58	1.17
Other non-Hispanic	0.38	0.22	2.84	1.46	0.66	0.25	6.94 *	1.93	-0.84
Hispanic, any race	0.59	0.15	16.33 *	1.80	0.22	0.22	1.00	1.24	1.42
Marital status (dummy variables)									
Married (reference)									
Never married	-0.04	0.11	0.11	0.96	0.27	0.14	3.78	1.30	-1.70
Widowed	-0.97	0.33	8.65 *	0.38	-1.11	0.60	3.38	0.33	0.20
Divorced	-0.56	0.19	9.04 *	0.57	-0.42	0.29	2.06	0.66	-0.42
Separated	-0.87	0.39	5.53 *	0.42	-0.72	0.60	1.46	0.48	-0.20
Educational attainment	-0.01	0.01	0.75	0.99	-0.01	0.01	0.63	0.99	0.05
Constant	-2.37	0.24	99.41 *	0.09	-2.48	0.28	75.92 *	0.08	0.30
-2 Log-Likelihood	-6005.35				-3431.25				
Nagelkerke R-squared	0.04 *				0.03	*			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

^{*}*p* < .05



^aNonresponse is coded (0,1) where *participating* in an interview equals 0 and nonresponse equals 1.

^bSee Brame, Paternoster, Mazerolle & Piquero (1998).

of Hispanic respondents. When interviewed in person at TIS1, Hispanic respondents are more likely to refuse to participate in TIS2 than white non-Hispanics. In contrast, when interviewed over the phone at TIS1, "other" non-Hispanics are more likely to refuse to participate at TIS2. Differences in the survey mode models are also found for marital status by survey mode. Among those interviewed in person during TIS1, married persons are more likely to refuse to participate at TIS2 than are never married, widowed, divorced or separated respondents. In contrast, marital status does not predict future nonresponse when the survey at TIS1 is conducted over the phone.

Significant predictors of future nonresponse for respondents who are interviewed initially by telephone, and those interviewed initially in person are noted above. A useful question to ask is whether the coefficients in the two survey-mode models differ significantly. The final column in Table 9 presents findings from z-tests, which are used to assess measurable differences between coefficients (Brame, Paternoster, Mazerolle & Piquero, 1998). Findings demonstrate that despite apparent differences between coefficients in the two models, none reached the level of statistical significance. Collectively, findings provide sufficient information to evaluate the research hypotheses presented in this perspective.

Conclusions

The current study demonstrates that certain survey-instrument characteristics associated with contemporary self-report victim surveys—such as the number of prior interviews—do *not* influence a respondent's decision to participate. Based on these results, we fail to reject the first null hypothesis in favor of the alternative: No



relationship between nonresponse and victimization reported during initial interviews exists. However, results from the current perspective do not permit the rejection of the second null hypothesis. The likelihood that subsequent interviews will result in nonresponse is affected by survey mode. Thus, the current study demonstrates that other survey-instrument characteristics—such as the way a survey is administered—can influence a respondent's decision to participate.

The objective of the current study was to examine the issue of respondent fatigue in light of an improved dependent variable. The lack of support for a respondent fatigue argument is a key finding. However, other important findings have implications for self-report victim surveys. As noted above, findings show survey mode matters greatly. The effect of survey mode on future nonresponse is important to consider in terms of exposure to the survey. A majority of TIS1 interviews are conducted in person (71%). In contrast, about 87% of TIS2 surveys are conducted via the telephone. Given the increase in the proportion of surveys conducted over the phone between TIS1 and TIS2, it should come as no surprise that nonresponse increases over time. Therefore, administrative cost-saving strategies that include relying on more telephone interviews in lieu of in-person interviews should expect a corresponding increase in nonresponse and a possible increase in risk of introducing bias due to respondent fatigue—if the victim surveys are administered longitudinally.

Like victimization in general, demographic characteristics such as age, gender, and race and Hispanic origin are predictors of noninterview. If demographic characteristics are linked to nonresponse *and* to victimization, victimization estimates for these groups could be underestimated. By identifying the influences of demographics on



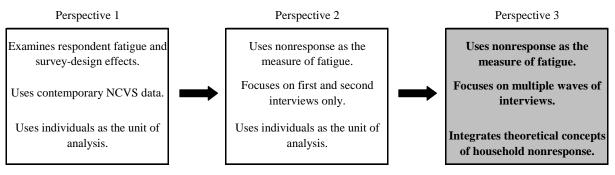
nonresponse, specific efforts can be made to retain these individuals in future data collection efforts. For example, since results from the previous chapter suggest that survey-design effects are associated with an increase likelihood of reported victimization among younger respondents and similar effects are linked to an increase likelihood of nonresponse among the same group, additional training could be provided to interviewers that not only raises their awareness of the potential impact of survey-design effects on particular subgroups of the population but that also provides them with unique strategies for preventing nonresponse for specific demographic groups.

While the current perspective offers several advantages over prior investigations of respondent fatigue thought to be associated with self-report victim surveys, findings should not be viewed as comprehensive. Although an improved operational measure of fatigue is introduced, analyses are limited to only the first 2 waves of victim surveys. The logical next step is to extend the current viewpoint by examining respondent fatigue that manifests in the form of nonresponse over multiple waves of interviews. Perhaps by incorporating multiple waves of data a "test wise" effect such as those observed in past research may emerge (see Lehnen & Reiss, 1978a). That is, respondent fatigue could be a process that occurs over time, which does not appear until after a second interview. Only through continued empirical investigation can we better understand the nature and extent respondent fatigue believed to manifest in victim surveys due to certain surveydesign effects.



Perspective 3:

Assessing Respondent Fatigue over Multiple Waves of Self-Report Victim Surveys



<u>Figure 4</u>. Key elements of the third perspective.

The third perspective provides insight into respondent fatigue believed to be associated with contemporary self-report victim surveys assessed over several waves of interviews, using nonresponse as the operational measure of fatigue. This approach brings the issue of respondent fatigue full circle. It combines the strategy of examining respondent fatigue from a survey-design perspective, using an arguably more appropriate operational measure, integrating a formal theoretical perspective on nonresponse. Groves and Couper's (1998) conceptual framework for nonresponse in household interview surveys provides the foundation upon which the integration of the first two perspectives is built. Specifically, factors out of the researcher's control (i.e., the social environment factors and household attributes) that influence nonresponse as well as those factors



under the researcher's control (i.e., survey-design features) are used to explain variation in nonresponse across multiple waves of victim surveys.

Objectives

The objective of the final strategy is to flush out the relationship between surveydesign effects of contemporary self-report victim surveys and respondent fatigue from a more theoretically robust viewpoint. Like the other perspectives, the current study relies on answers to a series of research questions to attain this goal. First, do survey-design characteristics (i.e., the number of prior interviews, the number of prior reported victimizations, and survey mode³⁰) influence the likelihood a respondent will participate in self-report victim surveys, independent of other factors? Second, do social environment factors (i.e., household income, home ownership, whether the respondent's home is a single- or multi-unit structure, whether or not the respondent operates a home business from their residence, and urbanicity) effect the likelihood a respondent will participate in self-report victim surveys, independent of other factors? Third, do household attributes such as the number of children or number of adults residing in a home effect the likelihood a respondent will participate in self-report victim surveys, independent of other factors? And finally, what is the relative influence of surveydesign, social environment and household attributes on nonresponse during multiple waves of self-report victimization surveys when considered together? Stated formally, the current study tests the following 3 research hypotheses:

³⁰ The survey-delivery method (i.e., face-to-face, telephone, or nonresponse) used during the respondent's interview immediately prior to the current interview.



- H_1 : Respondents are more likely not to participate in current interviews if they participated in prior interviews, net of other relevant predictors of victimization, while controlling for other relevant predictors of nonresponse.
- H_0 : No relationship exists between the likelihood that respondents participate in current interviews and the number of prior interviews in which respondents participated, while controlling for other relevant predictors of nonresponse.
- H_2 : Respondents are more likely not to participate in current interviews if they reported victimization during prior interviews, while controlling for other relevant predictors of nonresponse.
- H_0 : No relationship exists between the likelihood that a respondent will participate during current interviews and the number of previously reported victimizations, while controlling for other relevant predictors of nonresponse.
- H_3 : The likelihood that respondents will participate during current interviews is affected by the mode in which the survey immediately prior to the current survey is conducted, while controlling for other relevant predictors of nonresponse.
- H_0 : Survey mode does not affect the likelihood that respondents will participate during current interviews, while controlling for other relevant predictors of nonresponse.

As with the previous studies, the analytic strategy used is the same. Analyses are conducted using a series of survey-weighted logistic regression models (StataCorp, 2003). The initial model explores the influence of survey-design factors on individual nonresponse. Specifically, the model considers the effects that prior interviews, number of prior reported victimizations, and survey mode of a respondent's most recent interview have on nonresponse. Two similar models follow. The first model considers the influence of social environment factors on nonresponse, independent of all other factors. The next model considers only household attribute predictors of nonresponse. Finally, a model that explores the influence of survey-design, social environment, and household attribute effects on nonresponse is presented. A description of the analytic results for



each of the aforementioned models follows. Information obtained from the final model is used to assess the above hypotheses. Before presenting the results of these models, however, a description of the measures used is offered.

Measures

As with the other perspectives, modifications were made to the original NCVS Longitudinal Data File.³¹ First, variation in the number of prior interviews is required to assess the impact of importance of survey-design features (i.e., repeated exposure to survey instruments). Selecting any single panel from the file would not suffice, because there would be no variation in the number of prior interviews among respondents selected. Conversely, using every panel from the file would result in repeated measures of the same respondents, which is also undesirable. Therefore, a simple random sample of 1/18 of all cases was chosen, resulting in a cross-section of the data comprised of various times-in-sample. This process produced a subset of data approximately equal to the amount of all interviews conducted during any given quarter (i.e., similar in size to a survey panel). Second, initial interviews (i.e., TIS1 interviews) were excluded, since the effect that the mode of the previous interview has on nonresponse cannot be assessed. Also, only current interviews that are a Type-Z noninterview in which the respondent refused to be interviewed or noninterviews that occurred when the respondent was "never available" were included. Application of these selection criteria resulted in a subset of 10,338 person-level records for analysis. Each variable included in models below are described in greater detail in the following sections.

³¹ See Chapter Three for detailed information concerning the NCVS Longitudinal Data File.



Dependent variable

Groves and Couper's (1998) theory of nonresponse in household interview surveys provides the conceptual framework for examining respondent fatigue from the current perspective (Figure 5). Thus, the presence or absence of an interview is used as the dependent variable. Specifically, respondent fatigue is measured using Type-Z noninterviews, which include 1) refusing to be interviewed outright, or 2) avoiding the interviewer, by never being available to participate in the interview. The dependent variable is coded as 0 (interview) or 1 (noninterview). Most of the 10,338 respondents in the current investigation (94%) completed their current interview (see Table 10).

Independent variables

Groves and Couper (1998) argue that survey-design, social environment, and household attributes are determinant factors of survey participation. A series of independent variables are used in the current study to assess the relative influence of each of these concepts. For example, the number of prior interviews in which a respondent participated (*prior interviews*), the total number of victimizations reported during a respondent's prior interviews (*prior victimizations*), and the mode in which the survey most recent to the respondent's current interview was conducted (*survey mode*) are used to assess the predictive power of survey design on individual nonresponse.

Prior interviews reflect the number of prior interviews in which a respondent participated prior to their current interview, and ranges from 1 to 6. It is captured using a set of 6 dichotomous variables, using '1 prior interview' as the reference category. Prior victimizations or the number of self-reported victimizations reported during interviews



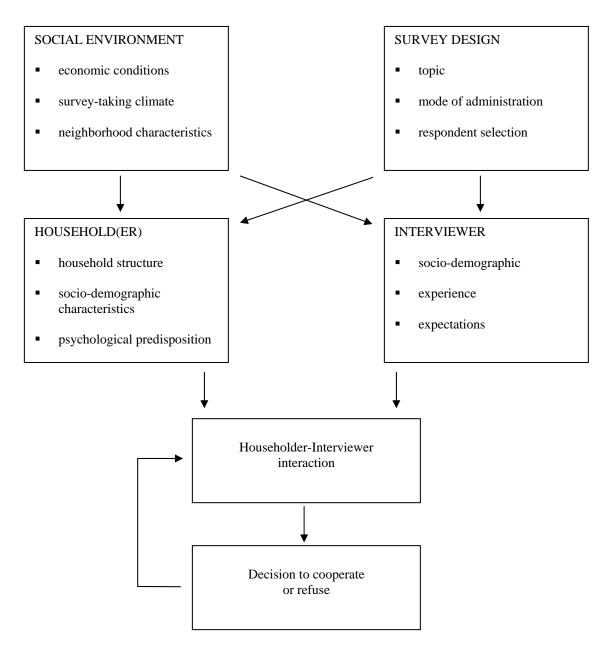


Figure 5. Groves and Couper's (1998) conceptual framework for survey cooperation.

Table 10. Descriptive statistics for the third perspective.

Variables	M	SD	%	Min.	Max.
Dependent variable					
Current interview				0	1
Nonresponse			6.7		
Completed interview			93.6		
Survey-design variables					
Prior interviews (dummy variables)				1	6
1 (reference)			21.8		
2			17.9		
3			17.5		
4			15.4		
5			14.8		
6			12.5		
Prior victimizations (dummy variables)				0	3
0 (reference)			82.1		
1			12.5		
2			3.6		
3 or more			1.8		
Survey mode ^a (dummy variables)				0	2
Non-interview			6.8		
Face-to-face			23.7		
Telephone			69.6		
Social Environment variables					
Household income (dummy variables)				1	5
Less than \$20,000			22.9		
\$20,000 to \$34,999			21.4		
\$35,000 to \$49,999			19.2		
\$50,000 to \$74,999			18.9		
\$75,000 and over			17.5		
Home ownership				0	1
Rents			20.1		
Owns			79.9		
Single-structure home					
No			16.8	0	1
Yes			83.2		
Home business					
No			91.9	0	1
Yes			8.1		
Urbanicity					
Urban			25.6	0	1
Rural			74.4		

Table 10 (continued).

Household attribute variables

Adults					
Household members 12 years and older	2.6	1.2		1	11
Children					
Household members younger than 12 years	0.5	0.9		0	7
Age	45.1	19.0		12	90
Gender				0	1
Male			46.1		
Female			53.9		
Race/ethnicity (dummy variables)				1	4
White non-Hispanic (reference)			76.1		
Black non-Hispanic			10.1		
Other non-Hispanic			3.7		
Hispanic, any race			10.1		
Marital status (dummy variables)				1	5
Married (reference)			57.2		
Never			24.9		
Widowed			7.9		
Divorced			8.1		
Separated			1.9		
Educational attainment	13.2	3.5		0	19

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

Statistics reflect weighted data. Unweighted n = 10,338.

prior to the respondent's current interview is captured through a set of 4 response categories: '0' indicates no victimizations reported during prior interviews, '1' indicates 1 victimization reported, '2' indicates 2 victimizations, and '3' indicates 3 or more victimizations. The reference category is '0'. The majority of respondents (82%) did not report victimization prior to their current interview. The final variable used to measure the effects of survey-design features is *survey mode*. It is coded as 0 (telephone interview), 1 (face-to-face interview), and 2 (noninterview) and reflects the mode of



^aSurvey mode refers to the mode in which the survey *immediately prior* to the current interview opportunity was conducted. For example, if the current interview is the respondent's fourth, survey mode refers to the mode in which the respondent's third interview was conducted.

interview experienced by the respondent during the time-in-sample immediately prior to the respondent's current interview. Most interviews conducted prior to the respondents' current interview (70%) were conducted over the telephone.

Social-environment influences on individual nonresponse are also included in the analyses because they have been shown to influence nonresponse (see Groves and Couper, 1998). For example, a respondent's household incomes (household income), whether a respondent rents or owns their home (home ownership), lives in a single- or multi-unit structure (*single-structure*), operates a home-based business (*home business*), and whether a respondent's home is located in a urban or rural area (*urbanicity*) are examined in order to assess the influence that social environment has on respondents' decisions to participate in self-report victim surveys. Household income is captured through a set of 5 dichotomous variables: Less than \$20,000, (23%), \$20,000-\$34,999 (21%), \$35,000-\$49,999 (19%), \$50,000-\$74,999 (19%), and \$75,000 and over (18%). For the multivariate models that follow, "Less than \$20,000" serves as the reference category. *Home ownership* is a dichotomous variable coded '0' (rents) or '1' (owns). Most of the respondents in the current sample indicated that they own or are in the process of buying their residence (80%). Single structure is also a dichotomous variable where '0' reflects instances in which the respondent lives in a multi-structure home and '1' reflects those cases in which the respondent resides in a single-structure home. Eighty-three percent of respondents live in a single-structure home. *Home business* is also a dichotomous variable coded '0' (no) or '1' (yes). This variable reflects whether a home business is reportedly operated from the residence. According to information collected during the current interview, about 1-in-10 sampled households operate a home-



based business. Finally, *urbanicity* is a social environment factor and reflects whether a respondent's home in located in an urban '0' or rural '1' area. Most respondents' homes are located in rural areas (74%).

Finally, Groves and Couper (1998) demonstrate the effects of household attributes on nonresponse; therefore, these factors are also incorporated in the models below. For example, the number of household members 12 years and older (*adults*) as well as the number of household members younger than 12 years of age (*children*) are examined in order to assess the relative effect each has on nonresponse. *Adults* is a continuous variable and ranges from 1 to 11. On average, there were between 2 and 3 adult household members reportedly residing in respondents' households at the time of their current interview. *Children* is also a continuous variable and ranges from 0 to 7. Each sampled household had about 1 member who was younger than 12 years of age at the time of the current interview.

Demographic factors are also considered and include age, gender, race and Hispanic origin, marital status, and educational attainment. *Age* is a continuous variable ranging from 12 to 90. Respondent's average age was about 45 years at the time of the current interview. *Gender* is coded as 0 (male) or 1 (female); and most respondents in the sample are female (54%). Race and Hispanic origin is captured through a set of 4 dichotomous variables: *white non-Hispanic* (76%), *black non-Hispanic* (10%), "other" *non-Hispanic* (4%), and *Hispanic, any race* (10%). For the multivariate models that follow, *white non-Hispanic* is the reference category. Marital status is captured using a set of 5 dichotomous variables: *married* (57%), *never married* (25%), *widowed* (8%),



divorced (8%) and separated (2%). Married serves as the reference category. Finally, educational attainment is a continuous variable measuring the years of completed formal education and ranges from 0 (no formal education) to 19 years. Years of education completed averages about 13 years of formal education completed for all respondents.

Results

Do survey-design characteristics affect nonresponse in self-report victim surveys, independent of other factors? The initial survey-weighted logistic regression model is presented in Table 11. Findings show that absent other factors unrelated to survey design, the number of prior interviews has a negligible effect on nonresponse. Specifically, when respondents participate in 5 prior interviews, they are more likely *not* to participate in their current interview than when they have not participated in any prior interviews (b = .37). Paradoxically, however, those with 6 prior interviews are *somewhat less* likely not to participate in their current interview than those respondents with no prior interviews (b = -.35; p < .10). No other substantive relationship between the number of prior interviews and nonresponse is observed in the first model.

Results examining the relationship between prior reported victimization and nonresponse provide slightly more support for the notion that respondent fatigue manifests in self-report victim surveys as nonresponse. That is, respondents who report a total of 2 victimizations (b = .37, p < .10) or 3 or more victimizations (b = .45, p < .10) during prior interviews are somewhat more likely *not* to participate during their current

³² See footnote 22 on page 53.



Table 11. Partially specified survey-weighted logistic regression using survey-design effects to predict nonresponse^a over multiple waves of interviews.

Variables	b	SE	Wald	Exp(b)
Survey-design variables				
Prior interviews (dummy variables)				
1 (reference)				
2	0.17	0.15	1.30	1.19
3	0.01	0.15	0.01	1.01
4	-0.07	0.16	0.20	0.93
5	0.37	0.17	4.57 *	1.44
6	-0.35	0.20	3.12 **	0.71
Prior victimizations (dummy variables)				
0 (reference)				
1	0.06	0.13	0.18	1.06
2	0.37	0.21	3.30 **	1.45
3 or more	0.45	0.25	3.22 **	1.57
Survey mode ^b (dummy variables)				
Non-interview (reference)				
Telephone	-1.52	0.14	122.04 *	0.22
Face-to-face	-1.64	0.11	219.55 *	0.19
Constant	-1.19	0.14	77.63 *	0.30
-2 Log-Likelihood	2417.58			
Nagelkerke R-squared	0.02 *			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

Unweighted n = 10,338

interview than respondents who never reported victimization. Again, these results could provide support for the second research hypothesis, if the relationship is maintained in later models.

The seemingly most profound survey-design effect identified in the initial model is associated with survey mode. The manner in which the survey prior to the



^aNonresponse is coded (0,1) where *participating* in an interview equals 0 and nonresponse equals 1. ^bSurvey mode refers to the mode in which the survey *immediately prior* to the current interview opportunity was conducted. For example, if the current interview is the respondent's fourth, survey mode refers to the mode in which the respondent's third interview was conducted.

^{*}p < .05

^{**}*p* < .10

respondent's current survey is conducted is a strong predictor of whether a respondent's interview during the current wave will result in nonresponse. Specifically, respondents whose previous time-in-sample interview is over the telephone (b = -1.52) or in person (b = -1.64) are less likely to have their current interview result in a nonresponse than respondents who do not participate in the interview during the previous wave. However, differences between the telephone and face-to-face interview coefficients produced by the model reveal no significant difference. The apparent influence of survey mode on nonresponse therefore has less to do with the type of interview in which a respondent participates prior to their current interview and more to do with whether or not the respondent participates during their previous interview.

The current perspective also seeks answers to the question, "Do social environment factors effect nonresponse in self-report victim surveys, independent of other factors?" Table 12 provides results from the second survey-weighted logistic regression model. Findings show that absent other factors not related to social environment, home ownership has a negative effect on nonresponse. That is, respondents who own their homes are less likely (b = -.26) *not* to participate than respondents who rent their homes. Results also show that the type of respondents' dwellings effects their decision to participate in self-report victim surveys. Respondents who reside in single-unit structures are more likely (b = .55) *not* to participate than respondents whose homes are located in a multi-unit structure. Finally, urbanicity is a determinant of nonresponse. Respondents whose homes are located in rural areas are more likely (b = .28) *not* to participate than respondents whose homes are in urban areas.



Table 12. Partially specified survey-weighted logistic regression using social environment factors to predicting nonresponse^a over multiple waves of interviews.

Variables	b	SE	Wald	Exp(b)
ocial environment variables				
Household income (dummy variables)				
Less than \$20,000 (reference)				
\$20,000 to \$34,999	-0.02	0.12	0.04	0.98
\$35,000 to \$49,999	-0.12	0.14	0.79	0.88
\$50,000 to \$74,999	0.03	0.12	0.05	1.03
\$75,000 and over	-0.11	0.14	0.70	0.89
Home ownership				
Rents (reference)				
Owns	-0.26	0.14	3.55 *	0.77
Single-structure home				
No (reference)				
Yes	0.55	0.16	11.95*	1.73
Home business				
No (reference)				
Yes	-0.24	0.17	2.04	0.78
Urbanicity				
Urban (reference)				
Rural	0.28	0.11	6.40 *	1.32
Constant	-3.04	0.16	356.06*	0.05
-2 Log-Likelihood	-2522.75		·	
Nagelkerke R-squared	0.00*			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

The third research question considers whether household attributes are predictors of nonresponse in self-report victim surveys, independent of other factors? Results show that many of the factors associated with the household exert significant effects on a decision to participate (Table 13). For example, there is positive correlation between the number of adults residing in a sampled household and nonresponse (b = .29). The more adults in a household, the more likely a subject's interview will result in nonresponse. On the other, the more children that reside in a household, the less likely a subject's



^aNonresponse is coded (0,1) where *participating* in an interview equals 0 and nonresponse equals 1. Unweighted n = 10,338

^{*}p < .05

Table 13. Partially specified survey-weighted logistic regression using household attributes to predicting nonresponse over multiple waves of interviews.

Variables	b	SE	Wald	Exp(b)
Household(er) attribute variables				
Adults				
Household members 12 years and older	0.29	0.04	64.40 *	1.34
Children				
Household members younger than 12 years	-0.11	0.05	4.89 *	0.90
Age	-0.01	0.00	11.75 *	0.99
Gender				
Male (reference)				
Female	0.36	0.09	16.40 *	1.44
Race (dummy variables)				
White non-Hispanic (reference)				1.00
Black non-Hispanic	0.37	0.14	7.03 *	1.44
Other non-Hispanic	-0.13	0.22	0.34	0.88
Hispanic, any race	0.09	0.15	0.32	1.09
Marital status (dummy variables)				
Married (reference)				
Never	-0.11	0.14	0.66	0.89
Widowed	-0.38	0.28	1.92	0.68
Divorced	-0.55	0.22	6.64 *	0.57
Separated	-0.25	0.31	0.63	0.78
Educational attainment	0.00	0.01	0.00	1.00
Constant	-3.04	0.32	90.25 *	0.05
-2 Log-Likelihood	-2418.79			
Nagelkerke R-squared	0.02 *			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

interview will result in nonresponse (b = -.11). Age also demonstrates a negative effect on nonresponse (b = -.01). Younger persons are more likely *not* to participate in self-report victim surveys than older respondents, absent of other factors believed to influence nonresponse. Gender exerts a significant effect on nonresponse (b = .36), demonstrating that nonresponse is more likely among female than male respondents. Net of other individual demographic characteristics, black non-Hispanics (b = .37) are more likely than white non-Hispanics to refuse to participate in self-report victim surveys



^aNonresponse is coded (0,1) where *participating* in an interview equals 0 and nonresponse equals 1. Unweighted n = 10,338

^{*}p < .05

administered overall multiple waves. And findings presented in Table 13 demonstrate that divorced (b = -.55) respondents are less likely to refuse to participate than respondents who are reportedly married at the time of their interview.

Models presented in Tables 12 and 13 demonstrate the predictive power of social environment factors and household attributes on nonresponse measured in self-report victim surveys that are administered over multiple waves. If survey-design effects are suspected of producing respondent fatigue that manifests as nonresponse in contemporary longitudinal self-report victim surveys, then tests of survey-design effects should include these theoretically relevant variables in their models (see Groves & Couper, 1998). Therefore, these factors are incorporated in the models used to answer the third and final research question: What is the relative influence of survey-design, social environment and household attributes on nonresponse—over multiple waves of interviews—when considered together?

Table 14 presents output from a survey-weighted logistic regression model containing survey-design, social environment, and household attributes variables as indicators of individual nonresponse during multiple wave self-report victim surveys. Again, while the overall model produces a significant proportional reduction in error, a minimal amount of variance in nonresponse is explained (Nagelkerke R-squared = .04). Nevertheless, findings show that once theoretically relevant factors are considered, neither the number of prior interviews nor prior reported victimization impacts the for likelihood of subsequent individual nonresponse. In short, these findings offer no support

³³ Again, a more comprehensive discussion of the model's explained variance is presented in the final chapter.



Table 14. Survey-weighted logistic regression predicting nonresponse^a over multiple waves of interviews.

Variables	b	SE	Wald	Exp(b)
Survey-design variables				
Prior interviews (dummy variables)				
1 (reference)				
2	0.18	0.15	1.44	1.20
3	0.09	0.15	0.33	1.09
4	0.01	0.17	0.00	1.01
5	-0.29	0.17	2.72	0.75
6	-0.24	0.20	1.38	0.79
Prior victimizations (dummy variables)				
0 (reference)				
1	-0.01	0.13	0.00	0.99
2	0.28	0.21	1.71	1.32
3 or more	0.41	0.27	2.36	1.51
Survey mode ^a (dummy variables)				
Non-interview (reference)				
Telephone	-1.24	0.15	71.60 *	0.29
Face-to-face	-1.41	0.12	144.38 *	0.24
ocial environment variables		0.12	1	0.2
Household income (dummy variables)				
Less than \$20,000 (reference)				
\$20,000 to \$34,999	-0.07	0.13	0.35	0.93
\$35,000 to \$49,999	-0.30	0.15	3.78 **	0.74
\$50,000 to \$74,999	-0.22	0.13	2.72	0.80
\$75,000 and over	-0.38	0.16	5.68	0.68
Home ownership				
Rents (reference)				
Owns	-0.13	0.15	0.71	0.88
Single-structure home		*****		
No (reference)				
Yes	0.39	0.17	5.42 *	1.47
Home business	,	***		
No (reference)				
Yes	-0.28	0.17	2.58	0.76
Urbanicity	0.20	0.17	2.00	0.70
Urban (reference)				
Rural	0.20	0.11	3.02 **	1.22
lousehold attribute variables	0.20	0.11	2.02	1.22
Adults				
Household members 12 years and older	0.27	0.04	46.78 *	1.31
Children				
Household members younger than 12 years	-0.11	0.05	4.83 *	0.90



ole 14 (continued).				
Age	-0.01	0.00	10.41 *	0.99
Gender				
Male (reference)				
Female	0.31	0.09	11.21 *	1.37
Race/ethnicity (dummy variables)				
White non-Hispanic (reference)				
Black non-Hispanic	0.17	0.14	1.41	1.19
Other non-Hispanic	-0.30	0.21	1.98	0.74
Hispanic, any race	-0.02	0.15	0.01	0.98
Marital status (dummy variables)				
Married (reference)				
Never	-0.20	0.14	2.02	0.82
Widowed	-0.40	0.28	2.14	0.67
Divorced	-0.62	0.22	8.12 *	0.54
Separated	-0.36	0.34	1.15	0.70
Educational attainment	0.01	0.01	0.53	1.01
Constant	-2.04	0.36	32.65 *	0.13
-2 Log-Likelihood	-2318.66	•		•
Nagelkerke R-squared	0.04 *			

Note: Data file is 1996 to 1999 longitudinally linked National Crime Victimization Surveys.

either of the first two research hypotheses. Participation in previous interviews, on the other hand, provides meaningful insight into whether a respondent's current interview will result in nonresponse. Net of other factors, fewer social environment variables are predictors of nonresponse when considered in the final model than when assessed independently of other factors. Specifically, there is a positive relationship between respondents who live in a single-unit structure (b = .39) and the likelihood that they will not participate in self-report victim surveys. Furthermore, there is a slightly positive relationship between urbanicity and nonresponse (b = .20; p < .10). Respondents who



^aNonresponse is coded (0,1) where *participating* in an interview equals 0 and nonresponse equals 1. Unweighted n = 10,338

^{*}*p* < .05

^{**}*p* < .10

live in rural areas are somewhat more likely *not* to participate than respondents residing in urban areas, net of other factors.

The impact of other household attributes on nonresponse is also observed in the final model. For example, the effect that the number of household members 12 years and older has on nonresponse is positive (b = .27), whereas the impact that the number of household members under 12 years has on nonresponse is negative (b = -.11). This means that households with more adults are more likely *not* to participate in interviews than households with fewer adults; and households with more children are less likely *not* to participate in interviews than households with fewer children.

Despite an absence of evidence supporting survey-design effects producing nonresponse, some demographic factors still predict nonresponse when considered in conjunction with household attribute variables and factors associated with survey design. Results from Table 14 show that both age and gender remain predictors of nonresponse, net of other theoretically relevant factors. As age increases, the likelihood that an interview will result in a nonresponse decreases (b = -.01). Younger respondents remain more likely to refuse to participate in self-report victim surveys than are older respondents. And females are still more likely *not* to participate during multiple waves of self-report victim surveys than are males (b = .31). Findings also suggest that divorced respondents are still less likely *not* to participate in self-report victim surveys than are respondents who are currently married (b = -.62). Collectively, important conclusions can be drawn from these results.



Conclusions

The objective of the third and final perspective on respondent fatigue was to examine the effect of contemporary self-report victim survey design on nonresponse, controlling for theoretically significant factors that influence participation in household surveys. Based on results produced from the models above, we fail to reject the first null hypothesis in favor of the alternative. That is, no relationship exists between the likelihood that a respondent will participate in an interview and the number of prior interviews in which a respondent participated previously, while controlling for other relevant predictors of nonresponse. Furthermore, based on these results, we fail to reject the second null hypothesis in favor of its alternative: No relationship exists between the likelihood that a respondent will participate during current interviews and the number of previously reported victimizations, while controlling for other relevant predictors of nonresponse. Both of these findings are important in that they provide no support for the notion that respondent fatigue manifests as nonresponse in contemporary self-report victim surveys.

The lack of support for the respondent fatigue argument is the key finding from this perspective. However, other important findings are observed that have implications for the victim-survey methodology. Results from the previous chapter suggested that survey mode influences individual nonresponse during the first two waves of surveys. However, findings from this study suggest that it is not *how* respondents' prior interviews are conducted that matters, but *whether* respondents participate in prior interviews. Understanding the relationship between past nonresponse and future nonresponse is important and can help survey administrators develop strategies to reduce survey



nonresponse. For example, Groves and Couper (1998) argue that if some information about the respondent, his/her social setting, or other household attributes can be obtained during initial contact despite a noninterview then follow-up contacts can be tailored in ways to increase the likelihood of participation in subsequent interview attempts. In these instances, they argue that "letters sent to householders after an unsuccessful first contact would be more successful when the letter acknowledged the householder's comments, expressed an understanding for their legitimacy, and then provided counterarguments tailored to them" (Groves & Couper, 1998, p. 309).

Finally, like victimization in general, some demographic characteristics such as age and gender are related to survey nonresponse. As noted above, if demographic characteristics are linked to both nonresponse and victimization, victimization estimates may be underestimated for certain subgroups. In these instances, the error associated with crime estimates is not attributable to specific survey design features. Rather, it is due to the fact these subgroups are more likelihood to be victimized *and* less likelihood to participate in victim surveys. By identifying the effects of demographics on nonresponse, specific efforts can be made to retain these individuals in future data collection efforts. Longitudinal victim-surveys can be tailed to address the specific reasons that certain subgroups that are more likely to be victimized have for not participating.

Although findings from the current study are informative, they fall short of being comprehensive. Results suggest the need for additional research on respondent fatigue. The current research borrowed heavily on household nonresponse theory as a theoretical guide. However, an important component identified by Groves and Couper (1998) could not be incorporated into the final model—given specific data limitations. Groves and



Couper demonstrate the impact that interviewer characteristics have on nonresponse.

Unfortunately, data from the NCVS Longitudinal Data File do not contain this information. Interviewer characteristics such as socio-demographic factors, experience, and expectations are strong influences on survey participation. The inability to include such factors in the current study was unavoidable. Future research into respondent fatigue associated with self-report victim surveys should strive to assess the nature and extent of the relationship between interview characteristics and nonresponse.

Each of the three perspectives presented herein provide important information about respondent fatigue as a potential source of nonsampling error in contemporary self-report victim surveys. However, the information from each is presented independent of one another. The final chapter provides a discussion of the findings produced from each perspective, collectively.



Discussion

For more than three decades, the National Crime Victimization Survey (NCVS) and its predecessor the National Crime Survey (NCS) have been used to generate national estimates of crime victimization. While being developed, the self-report victim survey methodology benefited from a great deal scientific scrutiny. For example, research was conducted that identified the best way to ask probing questions that reveal victimization; studies were conducted that helped determine the ideal length for a reference period; and research was undertaken to assess the validity of reported victimization (see Skogan 1981). Efforts were also undertaken to investigate whether longer interviews, which resulted from respondents answering affirmatively to certain cue questions, resulted in a decrease in reported victimization during subsequent interviews. Initial results provided some support for the idea that certain survey-design features caused "respondent fatigue" (see Biderman et. al, 1967; see Lehnen & Reiss, 1978a, 1978b; see also Skogan 1981).

Despite improvements in available data, analytic software and significant modifications to the way in which national self-report victim-survey data is collected, initial findings of respondent fatigue believed to be associated with survey-design features of self-report victim surveys have not been revisited. The current study examined this issue from three perspectives. A discussion of the findings associated with each follows.



Respondent fatigue and survey-design effects

The initial study examined respondent fatigue by focusing on the relationship between survey-design features of self-report victim surveys and their effects on reported victimization. Results provided mixed support for the fatigue-bias argument. That is, respondents exposed to more than 1 prior interview were less likely to report victimization than respondents who are exposed to only 1 prior interview; however, the relationship between prior reported victimization and victimization reported during a current interview was less supportive of a fatigue bias argument. The mixed results might be partially explained by the data used in the analyses.

Unbounded interviews were excluded from the data used in the initial study. Including unbounded interviews would have raised initial victimization estimates and called into question the conclusions reached about subsequent reported victimization. Respondents' first *bounded* interviews were used as the reference category to assess the relative effect of the number of prior interviews on the likelihood a respondent would report victimization. However, a systematic shift in survey mode has taken place by the respondents' second interview (i.e., their first unbounded interview). This shift has important consequences that could have masked the effect that prior reported victimizations has on respondent fatigue.

The survey mode of about 85% of the cases used in the initial study was the telephone (see Table 1). The disparity between the number of telephone and face-to-face interviews is due to NCVS protocol. Interviewers are trained to conduct every *initial* NCVS interview with the household respondent in person. During the initial interview, the household respondent is asked if *subsequent* interviews—and interviews with other



members of the household not available at the time the household respondent's interview is completed—can be completed over the telephone. Most household respondents agree to the change in mode. After excluding unbounded interviews, findings from the first perspective show that respondents are *less* likely to report victimization if the interview is conducted in person. Therefore, NCVS protocol could be producing an overall underestimate of fatigue since it creates a reduction in the type of interview that is associated with *less* reported victimization. Despite possibly underestimating a fatigue effect, findings reveal an important relationship between reported victimization during previous interviews and the likelihood victimization is reported during a current interview, which goes against the grain of a fatigue-bias argument. This finding is meaningful and raises two important questions.

First, the relationship between victimization reported during prior interviews and victimization reported during current interviews demonstrates that crime is not distributed evenly across individuals (see Sampson & Lauritsen, 1994). Relatively few individuals account for most reported victimizations. During initial developments of a national survey to measure crime, different approaches were discussed (see National Research Council, 1976). Some researchers recommended a measure of *propensity* for victimization, while others argued for a measure of *prevalence*. Findings from the first perspective, combined with the decrease in victimization prevalence measured over the last decade suggest that a new perspective on crime may be worthwhile. Current findings beg the question: Has the time come to supplement current measures of victimization prevalence with measures of victimization propensity?



Second, the initial investigation into respondent fatigue combines all types of victimization in the dependent variable.³⁴ It is possible that a response effect associated with prior reported victimization might manifest for certain types of crime and not others. By considering all types of crime together, a fatigue effect that may manifest for a certain type of crime might be masked by other types that do not produce a similar effect. If more types of victimization produce a rapport effect than a fatigue effect when reported, for example, it could explain why the relationship in the first study between prior reported victimizations and the likelihood victimization would be reported in a current interview is observed. The question then becomes, are current findings that are associated with victimization reporting patterns, which fail to support a fatigue-bias argument, a byproduct of not considering different forms of victimization independent of one another? The answer to this question is beyond the scope of the current study, but future research should attempt to address it.

Again, when viewed collectively results from the first perspective on respondent fatigue are somewhat conflicting. Survey-design effects such as the number of prior interviews and survey mode support the notion that respondent fatigue may manifest in contemporary self-report victim surveys; however, the effect of prior reported victimization is less persuasive. The analytic approach employed to investigate the relationship between survey-design effects and respondent fatigue and the corresponding negligible amount of explained variance produced by the models might be contributing to the confusion. Both are addressed below in greater detail.

³⁴ See footnote 4 on page 19.



Analytic methods employed during the initial perspective may explain some of the apparent inconsistent results that emerged in the initial perspective. As noted above, crime is a rare phenomenon. This is a claim that is well illustrated by the frequency distribution of the dichotomous dependent variable used in the analyses. Logistic regression techniques for analyzing "rare events" data have been recently developed (King & Langche, 2001). King and Langche argue that normal logistic regression techniques produce significant *underestimates* of the probability of rare events, such as reported victimization. In their research, King and Langche demonstrate how underestimations can be as much as the probability estimates produced by models not employing rare events logistic regression techniques. While survey-weighted logistic regression is available in STATA, survey-weighted rare events logistic regression is not. The extent to which survey-weighted rare events logistic regression would have improved the probability estimates produced by the models therefore is unclear. Until a rare events technique is developed that includes a component that controls for complex sampling methods, its full potential cannot be realized with these data. Nevertheless, the current analytic method (i.e., survey-weighted logistic regression) may not be the most appropriate method for these data and may be a contributing factor to the seemingly inconsistent findings produced in the first perspective on respondent fatigue.³⁵ The limited amount of explained variance produced by the models may also be a source of confusion.

35 This issue applies to all the models used in this study, since all employ survey-weighted logistic regression and not rare events logistic regression.



In multivariate linear regression, R-squared is used to quantify a model's goodness of fit and indicates the "proportion of variation in Y 'explained' by all the independent variables" (Lewis-Beck, 1980, p. 53). Obviously, researchers strive to produce models that generate large R-squared values. While the model presented in Table 4 creates a significant proportional reduction in error, only 3% of variance in reported victimization is explained. The model's explained variance is estimated by Nagelkerke R-squared, which is an approximation of the R-squared value produced in linear regression (Nagelkerke, 1991). Its corresponding low value associated with the model presented in Table 4 may be explained by the skewed distribution of the dependent variable.

A dichotomous dependent variable's variance is directly tied to its frequency distribution. Variance for a dichotomous dependent variable is at a maximum when one half of its observed values fall within one of the categories and the other half fall within the other category (see Cox & Snell, 1989; see also Nagelkerke, 1991). Conversely, variance for a dichotomous dependent variable decreases as the split of its values moves farther away from fifty-fifty. Table 1 reveals that respondents do not report victimization in approximately 94% of all current interviews. This means that the variance associated with the dichotomous dependent variable presented in Table 4 is extremely low, which would make explaining the variance more difficult than it would be had the distribution of cases been closer to a fifty-fifty split. So while the observed R-squared value associated with the model represented in Table 4 is much lower than desired, it may be a



product of the nature of the dichotomous dependent variable's distribution. ³⁶ It may not necessarily reflect a poorly constructed model.

Combined, the analytic technique employed (i.e., survey-weighted logistic regression) and the skewed distribution of the dependent variable might be factors that contribute to the tendency of some to view the findings produced from the first perspective with caution. Nevertheless, the initial investigation produced meaningful results and provided an appropriate platform from which to expand the respondent fatigue study. In an attempt to add to the knowledge produced from the first approach, a subsequent investigation into respondent fatigue and self-report victim surveys was undertaken.

Modifying the operational measure of respondent fatigue

The second perspective examined respondent fatigue in self-report victim surveys using a more conceptually appealing measure of fatigue: *nonresponse*. The survey utilized only initial and subsequent waves of interviews. Unlike the findings produced in the initial approach, results failed to demonstrate support for the idea that a link between survey design and respondent fatigue exists—once individual correlates to victimization are taken into account. However, results suggested that systematic nonresponse is associated with certain individual demographics.

Some of the links between nonresponse and individual characteristics can potentially bias victimization estimates downward for some populations. For example, minorities are more likely to refuse to participate during the second wave of self-report

³⁶ This issue also applies to all the subsequent models used after the first perspective, since the dependent



victim surveys than are non-Hispanic whites. Minorities are victimized at disproportionately higher rates than non-Hispanic whites. Combined, this could produce victimization rates that are underestimated for minorities. Similarly, after their initial exposure to a survey, men are more likely to refuse to participate than women; and younger respondents are more likely to refuse to participate than older respondents. Men are more likely to be victimized than are women and age and victimization is inversely correlated. Again, if men and younger respondents refuse to participate in self-report victim surveys at rates that are systematically different than their counterparts, then estimates produced from victim-surveys for each group could be downwardly biased. Modifications to current self-report victim survey methodology could improve overall victimization estimates, especially for some populations.

Current methodology could be tailored in a way that addresses individual correlates to nonresponse *and* victimization. For example, Hispanics are more likely to refuse to participate during the second wave of interviews than white, non-Hispanics if the initial interview is conducted in-person (see Table 9). A similar pattern of nonresponse between Hispanics and non-Hispanic whites does not emerge when the initial survey is conducted over the telephone. Research shows that Hispanics trust the police less than white, non-Hispanics; and report some crimes to the police at lower levels than their white, non-Hispanic counterparts (Hart & Rennison, 2003; Ong & Jenks, 2004; Rennison, forthcoming; Skogan & Hartnett, 1997; Thomas & Burns, 2005). It is possible that Hispanics see official victim-survey interviewers as authoritarian figures associated with the criminal justice system, and during in-person interviews their distrust

variable used for each is heavily skewed.



facilitates a decision not to participate. Perhaps one approach to reducing nonresponse among Hispanics would be to conduct more *initial* interviews over the telephone.

Additional interviewer training could also be provided to survey-interviews that focus on respondents that are characteristically more likely to refuse to participate.

Taking a proactive approach that targets groups more likely to refuse to participate could help to ultimately produce more accurate estimates of victimization—especially for those groups that are both more likely not to participate and who are also more likely to be victims of crime. Certainly any modification to established self-report victim survey methodology like those associated with the NCVS would be costly; nevertheless, the second study demonstrates the important impact nonresponse has on the production of victimization estimates. It also provides support for considering changes to the current methodology. Finally, the second perspective raises an important question: would the patterns of nonresponse observed hold true over multiple waves of surveys?

Assessing respondent fatigue over multiple waves of self-report victim surveys

Examining respondent fatigue over multiple waves of interviews provided additional insight into this potential source of nonsampling error. Survey-design effects were assessed to determine whether they influence respondents' decisions not to participate in multiple waves of victim surveys, while controlling for factors that contribute to household nonresponse (Groves & Couper, 1998). Overall, survey-design effects failed to produce nonresponse in contemporary longitudinal self-report victim surveys. Although findings from the final perspective did not support the notion that prior number of interviews or prior reported victimizations predict nonresponse, they do



point to ways that systematic nonresponse in self-report victim surveys can be reduced—thereby improving victimization estimates.

Results indicated that participants in self-report victim surveys tend to continue participating, whereas those who fail to participate tend to continue *not* participating. Researchers have focused on introductory comments made by interviewers and their effects on nonresponse as one area that could affect respondents' decisions to initially participate in surveys (see Groves & Lyberg, 1988). However, studies undertaken to examine the effects of introductory statements on nonresponse are inconclusive (Dillman, et al., 1976; O'Neil, Groves & Cannell, 1979). Nevertheless, interviewers and survey administrators must do all they can to obtain an initial interview, given the pattern that emerged in the final perspective. Contemporary national victim-survey interviewers undergo extensive training, including being provided with scripted introductions for both in-person and telephone surveys. However, information about what is actually said during the survey's introduction, along with other information regarding the interaction between interviewer and respondent, is not collected. Until it is, assessments about the effects of introductory statements on initial survey nonresponse cannot be made.

Social environment and household attribute effects on individual nonresponse were also examined; and findings provide insight into ways to improve overall estimates of victimization produced by self-report surveys. Lauritsen and Schaum (2004) identify family structure as an important determinant of victimization. Victimization is less likely to be recorded in households comprised of a single woman than in households comprised of a single woman with children. Moreover, victimization is less likely to be recorded in households comprised of a married couple (see Lauritsen & Schaum, 2004). Results



from the final perspective reveal that respondents living in homes comprised of more adults and homes comprised of more children are both less likely to participate in self-report victim surveys. If victimization is correlated to the number of adults and children in a sampled household in one direction and nonresponse is correlated to similar household attributes in the opposite direction, then victimization estimates for these groups could be downwardly biased. Although nothing can be done to change the composition of sampled households, steps can be taken to improve the strategies for obtaining interviews among respondents living in homes comprised of several adults or of several children. Improving interviewer training is one possible solution.

Other correlates to nonresponse that are associated with household attributes are evident. For example, respondents' age and gender predict nonresponse. As noted during the discussion of finding produced in the second perspective, if men and younger respondents systematically refuse to participate in self-report victim surveys conducted over multiple waves, estimates produced from victim-surveys will be downwardly biased. Attempts should be made to encourage participation among these subpopulations in multiple-wave victim surveys. Otherwise, the validity of victimization estimates like those produced by contemporary victim surveys, for certain subgroups of the population, is questionable.

Summary

Does nonsampling error, produced by respondent fatigue, manifest in contemporary self-report victim surveys? The answer to this seemingly straightforward question is, "It depends." As the findings of this study collectively demonstrate, it



depends on how respondent fatigue is operationalized. If respondent fatigue is defined in terms of response bias (i.e., reported victimization), then there is limited support for the argument that it does. On the other hand, if fatigue is defined in terms of nonresponse bias (i.e., non-participation), then the argument that it does is far less convincing. With regard to being defined in terms of nonresponse, it also depends on the degree to which available data is able to construct sufficient models to gauge fatigue. Due to data limitations the current research is unable to assess the role that vital components of Groves and Couper's (1998) theory of household nonresponse play in producing nonresponse (see Figure 5). Future research must incorporate information regarding interviewers (i.e., interviewer experience, expectations, and demographics) as well as information concerning householder-interviewer interactions into models predicting nonresponse—if a more complete understanding of fatigue bias (that might manifest in terms of nonresponse) is to be realized. Until then the full effect of respondent fatigue in contemporary self-report victim surveys cannot be fully realized.



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Appendices



Appendix A: NCVS-1 Basic Screen Questionnaire

NOTICE – We are conducting this survey under the authority of Title 13, United States Code, Socion 8. Section 9 of this law requires us to keep all information about you and your household shirtly confidential. We may use this information only for statistical purposes, Also, Title 42, Section 3732, United States Code, authorizes the Bureau of Justice Statistics, Department of Justice, to collect information using this survey. Title 42, Sections 37399 and 3735, United States Code, also requires us to keep all information duty out of your household shirtly confidential. BEFORE INTERVIEW – TRANSCRIBE FROM CONTROL CARD						
Sample Control number (cc item 2)	NCVS-1 BASIC SCREEN QUESTIONNAIRE AFTER INTERVIEW - TRANSCRIBE FROM CONTROL CARD - Cont.					
ITEMS FILLED AT START OF INTERVIEW	12a. Household Income (cc item 28)					
Field representative identification Code Name Unit status	214 1 Lass than \$5,000 6 15,000 - 11 35,000 - 2 \$5,000 - 7 17,500 - 12 40,000 - 3 7,500 - 8 20,000 - 13 50,000 - 4 10,000 - 9 25,000 - 14 75,000 and over 5 12,500 - 10 30,000 -					
202 1 ☐ Unit in sample the previous enumeration period – Fill 3 2 ☐ Unit in sample first time this period – SKIP to 4	12b. College/University (cc item 8b) 218 1 ☐ Yes 2 ☐ No					
3. Household status - Mark first box that applies. 203 1 Same household interviewed the previous enumeration 2 Replacement household since the previous enumeration 3 Noninterview the previous enumeration 4 Other - Specify 4. Line number of household respondent	12C. Public Housing (cc item 8c) 219					
204 Go to page 2	2 ☐ Not public housing 4 ☐ Other – Specify					
AFTER INTERVIEW - TRANSCRIBE FROM CONTROL CARD	12e. Indian Reservation or Indian Lands (cc item 8e)					
5. Special place/GQ type code (cc item 6d)	221 1 ☐ Yes 2 ☐ No					
205	ITEMS FILLED DURING AND/OR AFTER INTERVIEW					
6. Tenure (cc item 8a) 206 1 Owned or 2 Rented 3 No cash being bought for cash rent	13. Proxy information – Fill for all proxy interviews a. Proxy interview obtained for Line No. Name Line No. (Enter code)					
7. Land use (cc item 9) 207 1 ☐ Urban 2 ☐ Rural	301 303					
8. Farm sales (cc item 10)	304 305 306					
208 x ☐ Item blank 1 ☐ \$1,000 2 ☐ Less than	308 309					
9. Type of living quarters (cc items 11c and 11d)	310 311 312					
Housing unit 209 1 House, apartment, flat 2 HU in nontransient hotel, motel, etc. 3 HU permanent in transient hotel, motel, etc. 4 HU in rooming house	Codes for item 13c 1-12-13 years old and parent refused permission for self interview 2- Physically/mentally unable to answer } 3- TA and won't return before closeout } FILL INTER-COMM 14. Type Z noninterview					
Ho in torning flower Mobile home or trailer with no permanent room added Mobile home or trailer with one or more permanent rooms added	a. Interview not obtained for (Enter Line No. (Enter code) 2 - Refused					
7 ☐ HU not specified above – Describe	313 mentally FILL					
OTHER unit	315 316 answer — no proxy available COMM					
8 Quarters not HU in rooming or boarding house	317 4 - TA and no proxy available					
 Unit not permanent in transient hotel, motel, etc. Unoccupied site for mobile home, trailer, or tent 	319 320 5 - Other					
11 ☐ Student quarters in college dormitory 12 ☐ OTHER unit not specified above – Describe	Complete 17—28 for each Line No. in 14a					
2 - OTHER will not specified above - pescribe g	15a. Household members 12 years of age and OVER					
Use of telephone (cc item 26a and b)	Total number					
10a. Locationofphone - Mark first box that applies. 210 1 ☐ Phone in unit	15b. Household members UNDER 12 years of age 322 Total number □ None					
3 ☐ Phone in another unit (neighbor, friend, etc.) 4 ☐ Work/office phone	15C. Crime Incident Reports filled 323 Total number of NCVS-2s filled					
10b. Is phone interview acceptable? (cc item 26d) 211 1 Yes 2 No 3 Refused to give number	o ☐ None 16. Changes in Household Composition (cc item 25a) a. Line No. b. Reason (Enter code)					
11a. Number of housing units in structure (cc item 27a) 212 1	324 325 Only transcribe changes discovered during the current					
3 3 6 10+ 8 Only OTHER units	328 329 enumeration					
11b. Direct outside access (cc item 27b)						



			.D RESPONDE							19.	
17. NAME (of h		18. Type of interview									
Last		401				402					
First			Self-responde Self-responder								
1 1100						3 ☐ Per. – F 4 ☐ Tel. – P	roxy] Fill 10	on cover page	9		
						4 L. 101 F	ТОХУ	, ,		Line No.	
AFTER INTERVIEW - TRANS						25a.	NTROL CAR	26.	27.	20	
20. (cc 13b) Relationship to reference person	21. (cc 17) Age last birthday	22a. (cc 18) Marital status THIS survey period	22b. (From previous enumeration) Marital status LAST survey period	23. (cc 19) Sex	24. (cc 20) Armed Forces member	(cc 21a) Education -highest	(cc 21b)	(cc 22) Attending school	(cc 23) Race	28. (cc 24, His- panic origin	
403	404	405	406	407	408	409	410	411	412	413	
ot	Age	1 Married 2 Widowed 3 Divorced 4 Separated 5 Never married	1 Married 2 Widowed 3 Divorced 4 Separated 5 Not interviewed last survey	1	1 Yes 2 No	Grade	1 □ Yes 2 □ No	o Regular school 1 College/ University 2 Trade school 3 Vocational school 4 None of the above schools	1 White 2 Black 3 Amer. Indian, Aleut, Eskimd 4 Asian, Pacific Is- lander 5 Other	1	
Before we questions crimes oc	that are	ne crime quest helpful in stud	ions, I have s	ome	QUEST	IONS					
If unsure, A 33a. How long (Enter numb	have you		ddress?		1	505	OR	nths (1-11) - \$		e year) –	
CHECK					-		Fill	Check Item A			
CHECK ITEM A	w many yea	ars are entered in	33a?			☐ 5 years or more — SKIP to 34 ☐ Less than 5 years — <i>Ask 33b</i>					
33b. Altogethe 5 years, ti		any times have		n the la	ast	508	Nur	mber of times			
		BUS	INESS OPERA	TED F	ROM SAI	MPLE ADDE	RESS				
34. Does anyo from this		s household op	oerate a busin	ess] []		'es – Go to 3: lo – SKIP to				
PERSONAL – Fill by observation. TELEPHONE – Ask. 35. Is there a sign on the premises or some other indication to the general public that a business is operated from this address?						TS31 1					



	HOUSEHOLD RESPONDENT	
36a.	I'm going to read some examples that will give you an idea of the kinds of crimes this study covers.	Briefly describe incident(s) 🔀
	As I go through them, tell me if any of these happened to you in the last 6 months, that is since, 20	
	Was something belonging to YOU stolen, such as -	
	(a) Things that you carry, like luggage, a wallet, purse, briefcase, book –	
	(b) Clothing, jewelry, or calculator -	8
	(c) Bicycle or sports equipment -	
	(d) Things in your home – like a TV, stereo, or tools (e) Things outside your home such as a garden hose or lawn furniture –	
	(f) Things belonging to children in the household – (g) Things from a vehicle, such as a package, groceries, camera, or cassette tapes –	
	OR (h) Did anyone ATTEMPT to steal anything belonging to you?	
	1	
		-
36b.	MARK OR ASK — Did any incidents of this type happen to you?	532 1 Yes - What happened? Describe above 2 No - SKIP to 37a
360	How many times?	Z NO - ONE NO O'd
30C.	How many times?	533
		Number of times (36c)
37a.	(Other than any incidents already mentioned,) has anyone –	Briefly describe incident(s)
	(a) Broken in or ATTEMPTED to break into your home by forcing a door or window, pushing past someone, jimmying a lock, cutting a screen, or entering through an open door or window?	
	(b) Has anyone illegally gotten in or tried to get into a garage, shed or storage room?	
	OR (c) Illegally gotten in or tried to get into a hotel or motel room or vacation home where you were staying?	
	1	
	j	
37b.	MARK OR ASK – Did any incidents of this type happen to you?	534 1 ☐ Yes – What happened? Describe above 2 ☐ No – SKIP to 38
37c.	How many times?	
		535
		Number of times (37c)



	HOUSEHOLD RESPONDENT	'S SCREEN QUESTIONS
38.	What was the TOTAL number of cars, vans, trucks, motorcycles, or other motor vehicles owned by you or any other member of this household during the last 6 months? Include those you no longer own.	536 0 None - SKIP to 40a 1 1 1 2 2 2 3 3 3 4 4 or more
39a.	During the last 6 months, (other than any incidents already mentioned,) (was the vehicle/were any of the vehicles) – (a) Stolen or used without permission? (b) Did anyone steal any parts such as a tire, tape deck, hubcap or battery? (c) Did anyone steal any gas from (it/them)? OR (d) Did anyone ATTEMPT to steal any vehicle or parts attached to (it/them)?	Briefly describe incident(s) χ
39b.	MARK OR ASK – Did any incidents of this type happen to you?	537 1 Yes - What happened? Describe above 2 No - SKIP to 40a
39c.	. How many times?	538 Number of times (39c)
40a.	(Other than any incidents already mentioned,) since, 20 were you attacked or threatened OR did you have something stolen from you - (a) At home including the porch or yard - (b) At or near a friend's, relative's, or neighbor's home - (c) At work or school - (d) In places such as a storage shed or laundry room, a shopping mall, restaurant, bank, or airport - (e) While riding in any vehicle - (f) On the street or in a parking lot - (g) At such places as a party, theater, gym, picnic area, bowling lanes, or while fishing or hunting - OR (h) Did anyone ATTEMPT to attack or ATTEMPT to steal anything belonging to you from any of these places?	Briefly describe incident(s)
40b.	MARK OR ASK – Did any incidents of this type happen to you?	539 1 Yes - What happened? Describe above 2 No - SKIP to 41a
40c.	How many times?	Number of times (40c)



	HOUSEHOLD RESPONDE	I Programme and the second of
41a.	(Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (Exclude telephone threats) –	Briefly describe incident(s)
	(a) With any weapon, for instance, a gun or knife –	3
	(b) With anything like a baseball bat, frying pan, scissors, or stick –	
	(c) By something thrown, such as a rock or bottle –	l ————————————————————————————————————
	(d) Include any grabbing, punching, or choking,	
	(e) Any rape, attempted rape or other type of sexual attack –	
	(f) Any face to face threats – OR	i —————————
	(g) Any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.	
41b.	MARK OR ASK – Did any incidents of this type happen to you?	541 1 Yes - What happened? Describe above 2 No - SKIP to 42a
41c.	How many times?	
		Number of times (41c)
40-		1 2000000000000000000000000000000000000
4 z a.	People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned,) did you have something stolen from you OR were you attacked or threatened by (Exclude telephone threats) –	Briefly describe incident(s)
	(a) Someone at work or school -	
	(b) A neighbor or friend – (c) A relative or family member –	
	(d) Any other person you've met or known?	
		1
42b.	MARK OR ASK – Did any incidents of this type happen to you?	1 Yes – What happened? Describe above 2 No – SKIP to 43a
42c.	How many times?	
		Number of times (42c)
120	Incidents involving forced or unwanted sexual	Briefly describe incident(s)
40 0.	acts are often difficult to talk about. (Other than any incidents already mentioned,) have you been forced or coerced to engage in unwanted sexual activity by –	Dien's describe modernial &
	(a) Someone you didn't know before -	\
	(b) A casual acquaintance – OR	
	(c) Someone you know well?	
	MARK OR ASK -	
43b.	Did any incidents of this type happen to you?	545 1 Yes - What happened? Describe above 2 No - SKIP to 44a
43c.	How many times?	
		Number of times (43c)



44a. During the last 6 months, (other than any incidents already metioned,) did you call the police to report something that happened to YOU which you thought was a crime?			ribe incid	110001000	
				547	1 ☐ Yes - What happened? Describe above 2 ☐ No - SKIP to 45a
	548	į	1	1	OFFICE USE ONLY
CHECK ITEM C Look at 44a. If unsure, ASK, otherwise, mark without asking. Were you (was the respondent) attacked or threatened, or was something stolen or an attempt made to steal something that belonged to you (the respondent) or another household member?				549	1 ☐ Yes – <i>Ask 44b</i> 2 ☐ No – <i>SKIP</i> to 45a
44b. How many times?				1	
	 			550	Number of times (44b)
45a. During the last 6 months, (other than any incidents already mentioned.) did anything which you thought was a crime happen to YOU, but you did NOT report to the police?			ribe incid		
				551	1 ☐ Yes - What happened? Describe above 2 ☐ No - SKIP to INTRO at top of page 7
	552	į	l i	1	OFFICE USE ONLY
CHECK ITEM B Look at 45a. If unsure, ASK, otherwise, mark without asking. Were you (was the respondent) attacked or threatened, or was something stolen or an attempt made to steal something that belonged to you (the respondent) or another household member?				553	1 ☐ Yes – Ask 45b 2 ☐ No – SKIP to INTRO at top of page 7
45b. How many times?	 			554	Number of times (45b)
NOTES	1			1	radiibel of tilles (400)



FIEL	D REPRESENTATIVE - Read introduction.	
INT	RO: The next series of questions are about YOU computers, laptops, or access to WebTV us or for operating a home business.	UR use of a computer. Please include ALL sed at home, work, or school for PERSONAL USE
45c.	During the last 6 months, have YOU used a computer, laptop, or WebTV for the following purposes (flead answer categories 1-4) – Mark (X) all that apply.	100 1 For personal use at home? 2 For personal use at work? 3 For personal use at school, libraries, etc.? 4 To operate a home business? 5 None of the above - SKIP to Check Item D
45d.	How many computers do you have access to for personal use or for operating a home business?	101 0 None 1 1 1 2 2 2 3 3 3 4 4 4 or more
45e.	Do YOU use the Internet for personal use or for operating a home business?	102 1 Personal use 2 Operating a home business 3 Both 4 None of the above
45f.	Have you experienced any of the following COMPUTER-RELATED incidents in the last 6 months (flead answer categories 1-6) – Mark (X) all that apply.	103 1 ☐ Fraud in purchasing something over the Internet? 2 ☐ Computer virus attack? 3 ☐ Threats of harm or physical attack made while online or through E-mail? 4 ☐ Unrequested lewd or obscene messages, communications, or images while online or through E-mail? 5 ☐ (Only ask it box 4 is marked in Item 45c) Software copyright violation in connection with a home business? 6 ☐ Something else that you consider a computer-related crime?-Specify p
45g.	Did you suffer any monetary loss as a result of the incident(s) you just mentioned?	7 No computer-related incidents – SKIP to Check Item D
45h.	How much money did you lose as a result of the incident(s)?	105 \$.00 Amount of loss
45i.	Did you report the incident(s) you just mentioned to (Read answer categories 1 –5) – Mark (X) all that apply.	106 1 A law enforcement agency? 2 An Internet Service provider? 3 A Website administrator? 4 A Systems Administrator? 5 Someone else? - Specify
	HOUSEHOI D RESPONDE	ENT'S CHECK ITEMS D AND E
CHE	CK Who hasides the respondent was present when the	SS5 1 Telephone interview - SKIP to 46a Personal interview - Mark all that apply. 2 No one besides respondent present 3 Respondent's spouse 4 HHLD member(s) 12+, not spouse 5 HHLD member(s) under 12 6 Nonhousehold member(s) 7 Someone was present - Can't say who 8 Don't know if someone else present
CHE	If self-response interview, SKIP to 46a Did the person for whom this interview was taken help the proxy respondent answer any screen questions?	556 1 Yes 2 No 3 Person for whom interview taken not present



this/these act(s) of vandalism? Anything else?" until you get a "No" response. Mark (X) all property that was damaged or destroyed by vandalism during reference period. 46c. What kind of damage was done in this/these act(s) of vandalism? Anything else?" until you get a "No" response. Mark (X) all kinds of damage by vandals that occurred during reference period. 46d. What was the total dollar amount of the damage caused by this/these act(s) of vandalism during the last 6 months? (Use repair costs if the property was repaired.) (EXCLUDE any damage done in incidents already mentioned.) 46e. Was the damage under \$100 or \$100 or more? (INCLUDE total amount for all incidents of vandalism during the last 6 months.) Briefly d	Motor vehicle (including parts) Bicycle (including parts) Bicycle (including parts) Mailbox House window/screen/door Yard or garden (trees, shrubs, fence, etc.) Furniture, other household goods Clothing Animal (pet, livestock, etc.) Other - Specify Broken glass: window, windshield, glass in door, mirror Defaced: marred, graffiti, dirtied Burned: use of fire, heat or explosives Drove into or ran over with vehicle Other breaking or tearing njured or killed animals Other - Specify Other - Specif
Continue asking "Anything else?" until you get a "No" response. Mark (X) all property that was damaged or destroyed by vandalism during reference period. 46c. What kind of damage was done in this/these act(s) of vandalism? Anything else? Continue asking "Anything else?" until you get a "No" response. Mark (X) all kinds of damage by vandals that occurred during reference period. 46d. What was the total dollar amount of the damage caused by this/these act(s) of vandalism during the last 6 months? (Use repair costs if the property was repaired.) (EXCLUDE any damage done in incidents already mentioned.) 46e. Was the damage under \$100 or \$100 or more? (INCLUDE total amount for all incidents of vandalism during the last 6 months.) Briefly d	Bicycle (including parts) Mailbox House window/screen/door Yard or garden (trees, shrubs, fence, etc.) Furniture, other household goods Clothing Animal (pet, livestock, etc.) Other – Specify Broken glass: window, windshield, glass in door, mirror Defaced: marred, graffiti, dirtied Burned: use of fire, heat or explosives Drove into or ran over with vehicle Other breaking or tearing injured or killed animals Other – Specify Other - Specify Other breaking or tearing injured or killed animals Other - Specify Other breaking or tearing
Vandalism't Anything else?" until you get a "No" response. Mark (X) all kinds of damage by vandals that occurred during reference period. 4dd. What was the total dollar amount of the damage caused by this/these act(s) of vandalism during the last 6 months? (Use repair costs if the property was repaired.) (EXCLUDE any damage done in incidents already mentioned.) 4Ge. Was the damage under \$100 or \$100 or more? (INCLUDE total amount for all incidents of vandalism during the last 6 months.) CHECK TEM F1 Look at 46a. If unsure, ASK, otherwise, mark without	plass in door, mirror Defaced: marred, graffiti, dirtied Burned: use of fire, heat or explosives Drove into or ran over with vehicle Other breaking or tearing njured or killed animals Other – Specify
this/these act(s) of vandalism during the last 6 months? (Use repair costs if the property was repaired.) (EXCLUDE any damage done in incidents already mentioned.) 46e. Was the damage under \$100 or \$100 or more? (INCLUDE total amount for all incidents of vandalism during the last 6 months.) CHECK ITEM F1 Look at 46a. If unsure, ASK, otherwise, mark without	. Item F1
(INCLUDE total amount for all incidents of vandalism during the last 6 months.) CHECK ITEM F1 Look at 46a. If unsure, ASK, otherwise, mark without	Don't know No cost – SKIP to Check Item F1
TEM F1 Look at 46a. If unsure, ASK, otherwise, mark without	Under \$100 \$100 or more Don't know
asking. In the vandalism just mentioned, were you (was the respondent) attacked or threatened, or was something stolen or an attempt made to steal something that belonged to you (the respondent) or another household member? (other than any incident(s) already mentioned)	scribe incident(s) 562 1
46f. How many times?	Sea Number of times (46f)



(b) Your religion? (c) Your ethnic background or national origin (for example, people of Hispanic origin)? (d) Any disability (by this I mean physical, mental, or developmental disabilities) you may have? (e) Your gender? (f) Your sexual orientation? (g) Your sexual orientation? (h) Yes, SAY – (by this we mean homosexual, bisexual, or heterosexual) 46i. Some offenders target people because they associate with certain people or the (offender perceives) offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)? (b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s)) thought you were Jewish because you went into a	G
of reasons, but we are only going to ask you about a few today. Do you suspect the offender(s) targeted you because of (a) Your rece?	
(b) Your ethic background or national origin; for example, people of Hispanic origin;? (d) Any disability (by this I mean physical, mental, or developmental disabilities) you may have? (e) Your gender? (f) Your sexual orientation? (g) Your sexual orientation? (g) Your sexual orientation? (g) Your sexual, or heterosexual, bisexual, or heterosexual, bisexual, or heterosexual) 46i. Some offenders target people because they associate with certain people or the (offender perceives) offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)? (b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s) thought you were Jowish because you went into a synagogue)? Are one or more boxes marked "Yes" in 46h OR 46i? CHECK ITEM P2 Are one or more boxes marked "Yes" in 46h OR 46i?	
(c) Your ethnic background or national origin (for example, people of Hispanic origini?	Don't know
example, people of Hispanic origini?	Don't know
(d) Any disability (by this I mean physical, mental, or developmental disabilities) you may have? 567 1 Yes 2 No 3 Yes 2 No	Don't know
(e) Your gender?	
(f) Your sexual orientation? If "Yes," SAY – (by this we mean homosexual, bisexual, or heterosexual) 46i. Some offenders target people because they associate with certain people or the (offender perceives) offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)? (b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s)'s hought you were Jewish because you went into a synagogue)? Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i? Do you have any evidence that this vandalism was a	Don't know
	☐ Don't know ☐ Don't know
associate with certain people or the (offender perceives) offenders perceives) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)?	_ borre know
(a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)?	
have certain characteristics or religious beliefs (for example, a multiracial couple)? (b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s) thought you were Jewish because you went into a synagogue)? CHECK ITEM F2 Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i?	
wultiracial couple)? S87	
(b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s) thought you were Jewish because you went into a synagogue)? CHECK ITEM F2 Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i?	☐ Don't know
(b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s) thought you were Jewish because you went into a synagogue)? CHECK ITEM F2 Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i?	
characteristics or religious beliefs (for example, the offender(s) thought you were Jewish because you went into a synagogue)? CHECK ITEM F2 Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i?	
were Jewish because you went into a synagogue)?	
CHECK ITEM F2 Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i? No - SKIP to Check Item G	76 61
CHECK ITEM F2 Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i?	Don't know
Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i? No - SKIP to Check Item G	
Are one or more boxes marked "Yes" in 46h OR 46i? Are one or more boxes marked "Yes" in 46h OR 46i? No - SKIP to Check Item G	
OR 46i?	
46j. Do you have any evidence that this vandalism was a	
If "No" or "Don't know," ASK –	G
Did the offender(s) say something, write anything,	
or leave anything behind at the crime scene that would suggest you were targeted because of your characteristics or religious beliefs?	



- 1	The next questions salt shout the cuidence us			
1	The next questions ask about the evidence you nave that makes you suspect this vandalism was a nate crime or a crime of projudice or bigotry. As I read the following questions, please tell me if any of the following happened:	1		
(a) Did the offender(s) make fun of you, make negative comments, use slang, hurtful words, or abusive language?	592 1 Yes	2 No	з 🗌 Don't know
(Were any hate symbols present at the crime scene to indicate the offender(s) targeted you for a particular reason (for example, a swastika,			
	graffiti on the walls of a temple, a burning cross, or written words)?	593 1 ☐ Yes	2 🗆 No	з 🗆 Don't know
(c) Did a police investigation confirm the offender(s) targeted you (for example, did the offender(s) confess a motive, or did the police find books, journals, or pictures that indicated the offender(s) (was/were) prejudiced against people with certain characteristics or religious beliefs)?	594 1 Yes	2 🗆 No	3 ☐ Don't know
(d) Do you know the offender(s) (has/have) committed similar hate crimes or crimes of prejudice or bigotry in the past?	595 1 Yes	2 🗆 No	з 🗆 Don't know
(Did the vandalism occur on or near a holiday, event, location, gathering place, or building commonly associated with a specific group (for example, at the Gay Pride March or at a synagogue, Korean church, or gay bar)?	596 1 Yes	2 🗆 No	з 🗆 Don't know
(f) Have other hate crimes or crimes of prejudice or bigotry happened to you or in your area/ neighborhood where people have been targeted?	597 1 Yes	2 🗆 No	з □ Don't know
(g) Do your feelings, instincts, or perception lead you to suspect this vandalism was a hate crime or crime of prejudice or bigotry, but you do not have enough evidence to know for sure?	 	2 🗆 No	з 🗆 Don't know
	HOUSEHOLD RESPOND	ENT'S CHECK ITEM	G	
HEC EM	Transcribe "number of times" entry for each of the following:	□ No entries Check Iter	transcribed below - n H	Go to
	(a) Screen Question, Item 36c, page 3	i	Number of times (36	c)
	(a) Screen Question, Item 36c, page 3(b) Screen Question, Item 37c, page 3	1	Number of times (36 Number of times (37	
	A			c)
	(b) Screen Question, Item 37c, page 3		Number of times (37	c) c)
	(b) Screen Question, Item 37c, page 3(c) Screen Question, Item 39c, page 4		Number of times (37 Number of times (39	c) c)
	(b) Screen Question, Item 37c, page 3(c) Screen Question, Item 39c, page 4(d) Screen Question, Item 40c, page 4		Number of times (37 Number of times (39 Number of times (40	c) c) c)
	 (b) Screen Question, Item 37c, page 3 (c) Screen Question, Item 39c, page 4 (d) Screen Question, Item 40c, page 4 (e) Screen Question, Item 41c, page 5 		Number of times (37 Number of times (39 Number of times (40 Number of times (41	c) c) c) c)
	 (b) Screen Question, Item 37c, page 3 (c) Screen Question, Item 39c, page 4 (d) Screen Question, Item 40c, page 4 (e) Screen Question, Item 41c, page 5 (f) Screen Question, Item 42c, page 5 		Number of times (37 Number of times (39 Number of times (40 Number of times (41 Number of times (42	c) c) c) c) c)
	 (b) Screen Question, Item 37c, page 3 (c) Screen Question, Item 39c, page 4 (d) Screen Question, Item 40c, page 4 (e) Screen Question, Item 41c, page 5 (f) Screen Question, Item 42c, page 5 (g) Screen Question, Item 43c, page 5 		Number of times (37 Number of times (39 Number of times (40 Number of times (41 Number of times (42 Number of times (43	c) c) c) c) c) c)
	 (b) Screen Question, Item 37c, page 3 (c) Screen Question, Item 39c, page 4 (d) Screen Question, Item 40c, page 4 (e) Screen Question, Item 41c, page 5 (f) Screen Question, Item 42c, page 5 (g) Screen Question, Item 43c, page 5 (h) Screen Question, Item 44b, page 6 		Number of times (37 Number of times (39 Number of times (40 Number of times (41 Number of times (42 Number of times (43 Number of times (44	c) c) c) c) c) c) b)



Be s	eure to fill any incident reports before marking Check It	om H.
CHE	CK	1 ☐ Yes – Ask 47a 2 ☐ No – SKIP to Check Item I
47a.	Did you have a job or work at a business LAST WEEK? (Do not include volunteer work or work around the house.) (If farm or business operator in household, ask about unpaid work.)	576 1 ☐ Yes - SKIP to 48a 2 ☐ No - Ask 47b
47b.	ASK OR VERIFY – Did you have a job or work at a business DURING THE LAST 6 MONTHS?	1 Yes - Ask 47c 2 No - SKIP to Check Item I
47c.	Did that (job/work) last 2 consecutive weeks or more?	578 1 Yes - Ask 48a 2 No - SKIP to Check Item I
48a.	ASK OR VERIFY – Which of the following best describes your job? PERSONAL INTERVIEW (Show flashcard) TELEPHONE INTERVIEW – Were you employed in the (Read main headings until you get a yes. Then read answer categories) – Mark (X) only one category.	Medical Profession - As a -
48b.	ASK OR VERIFY – Is your job with (Read answer categories) –	580 1 ☐ A private company, business, or individual for wage 2 ☐ The Federal government? 3 ☐ A State, county, or local government? 4 ☐ Yourself (Self-employed) in your own business, professional practice, or farm?
48c.	If box 12 is marked in 48a, mark without asking. Are you employed by a college or university?	581 1 Yes 2 No
	While working at your job, do you work mostly in (Read answer categories) –	582 1 A city? 2 Suburban area? 3 Rural area? 4 Combination of any of these?
CHE	Is this the last household member to be interviewed?	☐ Yes – Ask or verify Control Card items. Then END interview. ☐ No – Ask or verify Control Card items. See note below before interviewing next household member.



17. NAME			DIVIDUAL'S PE			18. Туре с				19. Line No.
Last						2 Tel. – 3 Per. – 4 Tel. – 5 Noninte	Proxy Fill	ent I 13 on cover ; Z) - Fill 19 :		402
		AFTE	R INTERVIEW -	- TRAN	SCRIBE F	ROM CON	TROL CARD)		
20. (cc 13b) Relationship to reference person		22a. (cc 18) Marital status THIS survey period	22b. (From previous enumeration) Marital status LAST survey period	Sex	24. (cc 20) Armed Forces member	25a. (cc 21a) Education -highest grade	25b. (cc 21b) Education -complete that year?	26. (cc 22) Attending school	27. (cc 23) Race	28. (cc 24) His- panic origin
403 on Husband on Daughter on Hather on Hather on Hather on Sister on Other relative on Nonrelative on Husband on Husban		405 1 Married 2 Nidowed 3 Divorced 4 Separated 5 Never married	3 Divorced 4 Separated 5 Never married 6 Not inter- viewed last survey period	BILITY	QUESTIC	Grade 501 Mon	410 1 Yes 2 No	411 o Regular school College/ University Trade school Vocational school None of the above schools	412 1 White 2 Black 3 Amer. Indian, Aleut, Eskime 4 Asian, Pacific Is- lander 5 Other	1
questions crimes occ If unsure, A 33a. How long	that are hour. SK OR VE have you	nelpful in stud RIFY –	ing where and		 	505	OR Year	ths (1-11) – Si s (Round to no Check Item A		e year) –
CHECK ITEM A	w many ye	ears are entered	in 33a?					ere – SKIP to s ears – <i>Ask 33t</i>		
33b. Altogethe 5 years, th		nny times have ce		the la	st	508	Num	ber of times		



	INDIVIDUAL'S SCR	EEN QUESTIONS
366.	I'm going to read some examples that will give you an idea of the kinds of crimes this study covers. As I go through them, tell me if any of these happened to you in the last 6 months, that is since	Briefly describe incident(s)
	MARK OR ASK -	
36b.	Did any incidents of this type happen to you?	532 1 ☐ Yes – What happened? Describe above 2 ☐ No – SKIP to 40a
36c.	How many times?	533 Number of times (36c)
40 a.	(Other than any incidents already mentioned,) since, 20, were you attacked or threatened OR did you have something stolen from you - (a) At home including the porch or yard - (b) At or near a friend's, relative's, or neighbor's home - (c) At work or school - (d) In places such as a storage shed or laundry room, a shopping mall, restaurant, bank, or airport - (e) While riding in any vehicle - (f) On the street or in a parking lot - (g) At such places as a party, theater, gym, picnic area, bowling lanes, or while fishing or hunting - OR (h) Did anyone ATTEMPT to attack or ATTEMPT to steal anything belonging to you from any of these places?	Briefly describe incident(s) g
40b.	MARK OR ASK – Did any incidents of this type happen to you?	S39 1 Yes - What happened? Describe above 2 No - SKIP to 41a
40c.	How many times?	Number of times (40c)



	INDIVIDUAL'S SC	REEN QUESTIONS
41 a.	(Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (Exclude telephone threats) – (a) With any weapon, for instance, a gun or knife – (b) With anything like a baseball bat, frying pan, scissors, or stick – (c) By something thrown, such as a rock or bottle – (d) Include any grabbing, punching, or choking, (e) Any rape, attempted rape or other type of sexual attack – (f) Any face to face threats – OR (g) Any attack or threat or use of force by anyone at all? Please mention it even if you	REEN QUESTIONS Briefly describe incident(s)
41b.	MARK OR ASK — Did any incidents of this type happen to you?	541 1 □ Yes - What happened? Describe above 2 □ No - SKIP to 42a
41c.	How many times?	Number of times (41c)
42 0.	People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned,) did you have something stolen from you OR were you attacked or threatened by (Exclude telephone threats) – (a) Someone at work or school – (b) A neighbor or friend – (c) A relative or family member – (d) Any other person you've met or known?	Briefly describe incident(s)
42b.	MARK OR ASK – Did any incidents of this type happen to you?	543 1 Yes - What happened? Describe above 2 No - SKIP to 43a
42c.	How many times?	Number of times (42c)
43 a.	Incidents involving forced or unwanted sexual acts are often difficult to talk about. (Other than any incidents already mentioned,) have you been forced or coerced to engage in unwanted sexual activity by – (a) Someone you didn't know before – (b) A casual acquaintance – OR (c) Someone you know well?	Briefly describe incident(s)
43b.	MARK OR ASK – Did any incidents of this type happen to you?	545 1 Yes - What happened? Describe above 2 No - SKIP to 44a
43c.	How many times?	546 Number of times (43c)



	REEN QUESTIONS
44a. During the last 6 months, (other than any incidents already mentioned,) did you call the police to report something that happened to YOU which you thought was a crime?	Briefly describe incident(s)
	1
	547 1 ☐ Yes - What happened? Describe above 2 ☐ No - SKIP to 45a
	548 OFFICE USE ONLY
CHECK ITEM B Look at 44a. If unsure, ASK, otherwise, mark without asking. Were you (was the respondent) attacked or threatened, or was something stolen or an attempt made to steal something that belonged to you (the respondent) or another household member?	549 1
14b. How many times?	550 Number of times (44b)
15a. During the last 6 months, (other than any incidents already mentioned,) did anything which you thought was a crime happen to YOU, but you did NOT report to the police?	Briefly describe incident(s)
	S51 1 Yes - What happened? Describe above 2 No - SKIP to INTRO below
	552 OFFICE USE ONLY
CHECK ITEM C Look at 45a. If unsure, ASK, otherwise, mark without asking. Were you (was the respondent) attacked or threatened, or was something stolen or an attempt made to steal something that belonged to you (the respondent) or another household member?	553 1 Yes – Ask 45b 2 No – SKIP to INTRO below
45b. How many times?	554
INDIVIDUAL/C COMPUTED	
FIELD REPRESENTATIVE – Read introduction.	CRIME SCREEN QUESTIONS
INTRO: The next series of questions are about YOUR use of laptops, or access to WebTV used at home, work, on home business.	
45c. During the last 6 months, have YOU used a computer laptop, or WebTV for the following purposes (Read answer categories 1–4) – Mark (X) all that apply.	, 100 1 For personal use at home? * 2 For personal use at work? 3 For personal use at school, libraries, etc.? 4 To operate a home business? 5 None of the above - SKIP to Check Item D
45d. How many computers do you have access to for personal use or for operating a home business?	101 0 None 1 1 1 2 2 2 3 3 3 4 4 4 or more
456. Do YOU use the Internet for personal use or for operating a home business?	102 1 Personal use 2 Operating a home business 3 Both 4 None of the above



451.	Have you experienced any of the following COMPUTER-RELATED incidents in the last 6 months (Read answer categories 1–6) – Mark (X) all that apply.	*	1 ☐ Fraud in purchasing something over the Internet? 2 ☐ Computer virus attack? 3 ☐ Threats of harm or physical attack made while online or through E-mail? 4 ☐ Unrequested lewd or obscene messages, communications, or images while online or through E-mail? 5 ☐ (Only ask if box 4 is marked in Item 45c) Software copyright violation in connection with a home business? 6 ☐ Something else that you consider a computer-related crime? - Specify Z
45g.	Did you suffer any monetary loss as a result of the incident(s) you just mentioned?		1
45h.	How much money did you lose as a result of the incident(s)?		\$00 Amount of loss
45i.	Did you report the incident(s) you just mentioned to (Read answer categories 1–5) – Mark (X) all that apply.	*	1 ☐ A law enforcement agency? 2 ☐ An Internet Service provider? 3 ☐ A Website administrator? 4 ☐ A Systems Administrator? 5 ☐ Someone else? – Specify ;
			6 ☐ None of the above
	INDIVIDUAL'S CHEC	K ITEMS	D, E, AND G
CHEC		* - - - -	Telephone interview - SKIP to Check Item G Personal interview - Mark all that apply. No one besides respondent present Respondent's spouse HILD member(s) 12+, not spouse HILD member(s) under 12 Nonhousehold member(s) Someone was present - Can't say who Don't know if someone else present
CHEC	If self-response interview, SKIP to Check Item G	+	
ITEN	Did the person for whom this interview was taken help the proxy respondent answer any screen questions?		1 □ Yes 2 □ No 3 □ Person for whom interview taken not present
CHE	Transcribe "number of times" entry for each of the following:		☐ No entries transcribed below – Go to Check Item H
	(a) Screen Question, Item 36c, page 13	i	Number of times (36c)
	(b) Screen Question, Item 40c, page 13	1	Number of times (40c)
	(c) Screen Question, Item 41c, page 14	j .	Number of times (41c)
	(d) Screen Question, Item 42c, page 14	1	Number of times (42c)
	(e) Screen Question, Item 43c, page 14	1	Number of times (43c)
	(f) Screen Question, Item 44b, page 15	1	Number of times (44b)
	(g) Screen Question, Item 45b, page 15	1	Number of times (45b)
	FIELD REPRESENTATIVE – After completing Check Item G, fi has an entry of 1 or more. Do this		



Bee	ure to fill any incident reports before marking Check It.	em H.
CHE	CK	
ITEN		1 ☐ Yes – Ask 47a 2 ☐ No – SKIP to Check Item I
47a.	Did you have a job or work at a business LAST WEEK? (Do not include volunteer work or work around the house.) (If farm or business operator in household, ask about unpaid work.)	
	ASK OR VERIFY –	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
47b.	Did you have a job or work at a business DURING THE LAST 6 MONTHS?	1 Yes - Ask 47c
17c.	Did that (job/work) last 2 consecutive weeks or more?	578 1 ☐ Yes - Ask 48a 2 ☐ No - SKIP to Check Item I
	ASK OR VERIFY -	
48a.	Which of the following best describes your job? PERSONAL INTERVIEW (Show flashcard) TELEPHONE INTERVIEW – Were you employed in the (Read main headings until you get a yes. Then read answer categories) – Mark (X) only one category.	Medical Profession - As a - 1 Physician 1 Physician 2 Nurse 3 Technician 4 Other - Specify
		Teaching Profession - Were you employed in a - 8
		Retail Sales - Were you employed as a - 20
18b.	ASK OR VERIFY – Is your job with (Read answer categories) –	S80 1
48c.	If box 12 is marked in 48a, mark without asking. Are you employed by a college or university?	581 1 Yes 2 No
	While working at your job, do you work mostly in (Read answer categories) –	582 1
CHE	Is this the last household member to be interviewed?	☐ Yes – END interview. ☐ No – See note below before interviewing next household member.



17. NAME						18. Туре с	of interview	,		19. Line No.
Last						5 Noninte	elf-responde roxy roxy Fill 1	ent 13 on cover pa 2) – Fill 19–2		402
		AFTER	R INTERV	IEW						
20. (cc 13b) Relationship to reference person		22a. (cc 18) Marital status THIS survey period	22b. (From previous enumeration) Marital status LAST survey period	Sex	24. (cc 20) Armed Forces member	25a. (cc 21a) Education -highest grade	25b. (cc 21b) Education -complete that year?	26. (cc 22) Attending school	27. (cc 23) Race	28. (cc 24) His- panic origin
403 o1 Husband o2 Wife o3 Son o4 Daughter o5 Father o6 Mother o7 Brother o8 Sister o9 Other relative 11 Ref. person	Age	405 1 Married 2 Widowed 3 Divorced 4 Separated 5 Never married	406 Married Widowed Soporated Separated Not interviewed last survey period		408 1 Yes 2 No	Grade	410 1	411 o Regular school College/ University Trade school Vocational school None of the above schools	412 1 White 2 Black 3 Amer. Indian, Aleut, Eskimo 4 Asian, Pacific Ie- Iander 5 Other	413 1
	get to th	e crime questi	ons, I have one	e or tw	QUESTIC	Mont	h Day	You	r	
If unsure, A	cur. ASK OR VE have you			d why	I L	505	OR Year	ths (1-11) – Si s (Round to no Check Item A		e year) –
CHECK ITEM A	w many ye	ears are entered	in 33a?					ore – SKIP to s ears – Ask 33t		
33b. Altogethe 5 years, th	r, how ma	nny times have ce	you moved in , 19?	the las	st [508	Num	ber of times		



	INDIVIDUAL'S SCRE	EN QUESTIONS
86a.	I'm going to read some examples that will give you an idea of the kinds of crimes this study covers. As I go through them, tell me if any of these happened to you in the last 6 months, that is since, 20 Was something belonging to YOU stolen, such as - (a) Things that you carry, like luggage, a wallet, purse, briefcase, book - (b) Clothing, jewelry, or calculator - (c) Bicycle or sports equipment - (d) Things in your home - like a TV, stereo, or tools - (e) Things from a vehicle, such as a package, groceries, camera, or cassette tapes - OR (f) Did anyone ATTEMPT to steal anything belonging to you?	Briefly describe incident(s)
36b.	MARK OR ASK – Did any incidents of this type happen to you?	1 ☐ Yes – What happened? Describe above 2 ☐ No - SKIP to 40a
36c.	How many times?	533 Number of times (36c)
40a.	(Other than any incidents already mentioned,) since, 20, were you attacked or threatened OR did you have something stolen from you - (a) At home including the porch or yard - (b) At or near a friend's, relative's, or neighbor's home - (c) At work or school - (d) In places such as a storage shed or laundry room, a shopping mall, restaurant, bank, or airport - (e) While riding in any vehicle - (f) On the street or in a parking lot - (g) At such places as a party, theater, gym, picnic area, bowling lanes, or while fishing or hunting - OR (h) Did anyone ATTEMPT to attack or ATTEMPT to steal anything belonging to you from any of these places?	Briefly describe incident(s)
40b.	MARK OR ASK – Did any incidents of this type happen to you?	539 1 Yes - What happened? Describe above 2 No - SKIP to 41a
400	How many times?	
400.		Number of times (40c)



	INDIVIDUAL'S SCI	REEN QUESTIONS
41a.	(Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (Exclude telephone threats) –	Briefly describe incident(s)
	(a) With any weapon, for instance, a gun or knife –	
	(b) With anything like a baseball bat, frying pan, scissors, or stick –	
	(c) By something thrown, such as a rock or bottle –	
	(d) Include any grabbing, punching, or choking,	
	(e) Any rape, attempted rape or other type of sexual attack –	
	(f) Any face to face threats – OR	[·
	(g) Any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.	
41b.	MARK OR ASK – Did any incidents of this type happen to you?	541 1 Yes - What happened? Describe above
41.		2 □ No - SKIP to 42a
41C.	How many times?	542
		Number of times (41c)
42a.	People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned), did you have something stolen from you OR were you attacked or threatened by (Exclude telephone threats) – (a) Someone at work or school –	Briefly describe incident(s)
	(b) A neighbor or friend –	
	(c) A relative or family member – (d) Any other person you've met or known?	[] [
	MARK OR ASK -	
42b.	Did any incidents of this type happen to you?	543 1 Yes - What happened? Describe above 2 No - SKIP to 43a
42c.	How many times?	
		Number of times (42c)
120	Incidents involving forced or unwanted sexual	Briefly describe incident(s)
40 0.	acts are often difficult to talk about. (Other than any incidents already mentioned.) have you been forced or coerced to engage in unwanted sexual activity by –	I I I I I I I I I I I I I I I I I I I
	(a) Someone you didn't know before –	
	(b) A casual acquaintance –	
	(c) Someone you know well?	
	MARK OR ASK -	
	Did i ii	545 1 ☐ Yes - What happened? Describe above
43b.	Did any incidents of this type happen to you?	2 □ No - SKIP to 44a
	How many times?	



	CREEN QU				21220	
44a. During the last 6 months, (other than any incidents already mentioned,) did you call the police to report something that happened to YOU which you thought was a crime?	Briefly	desci	ribe in	cider	it(s) 🗾	
				- 818	547	1 ☐ Yes - What happened? Describe above 2 ☐ No - SKIP to 45a
	548	i	i	T	į	OFFICE USE ONLY
CHECK ITEM B Look at 44a. If unsure, ASK, otherwise, mark without asking. Were you (was the respondent) attacked or threatened, or was something stolen or an attempt made to steal something that belonged to you (the respondent) or another household member?					549	1 Yes – <i>Ask 44b</i> 2 No – <i>SKIP</i> to 45a
44b. How many times?					550	Number of times (44b)
45a. During the last 6 months, (other than any incidents already mentioned,) did anything which you thought was a crime happen to YOU, but you did NOT report to the police?	Briefly	desci	ribe in	cider	it(s)	55 5775
					551	1 Yes - What happened? Describe above 2 No - SKIP to INTRO below
	552	į	-	Т	į	OFFICE USE ONLY
CHECK ITEM C Look at 45a. If unsure, ASK, otherwise, mark without asking. Were you (was the respondent) attacked or threatened, or was something stolen or an attempt made to steal something that belonged to you (the respondent) or another household member?					553	1 Yes - Ask 45b 2 No - SKIP to INTRO below
45b. How many times?	1				554	Number of times (45b)
INDIVIDUAL'S COMPUTER O	RIME SCR	EEN	QUE	STIO	NS	
FIELD REPRESENTATIVE – Read introduction.						
INTRO: The next series of questions are about YOUR use of laptops, or access to WebTV used at home, work, or home business.						
45c. During the last 6 months, have YOU used a computer, laptop, or WebTV for the following purposes (Read answer categories 1–4) – Mark (X) all that apply.	* 2 3 4	Fo Fo	pers pers oper	onal onal ate a	use at	t home? t work? t school, libraries, etc.? business? SKIP to Check Item D
45d. How many computers do you have access to for personal use or for operating a home business?	3	1 2 3	ne r mor	e		
456. Do YOU use the Internet for personal use or for operating a home business?			eratin		ome bi	usiness



45f.	Have you experienced any of the following COMPUTER-RELATED incidents in the last 6 months (Read answer categories 1–6) – Mark (X) all that apply.	*	Fraud in purchasing something over the Internet? Computer virus attack? Threats of harm or physical attack made while online or through E-mail? Unrequested lewd or obscene messages, communications, or images while online or through E-mail? (Only ask if box 4 is marked in Item 45c) Software copyright violation in connection with a home business? Something else that you consider a computer-related crime? -Specify
45g.	Did you suffer any monetary loss as a result of the incident(s) you just mentioned?	104	7 No computer-related incidents – SKIP to Check Item I
45h.	How much money did you lose as a result of the		2 □ No – SKIP to 45i
	incident(s)?		\$00 Amount of loss × _ Don't know
45i.	Did you report the incident(s) you just mentioned to (Read answer categories 1 –5) – Mark (X) all that apply.	*	1 A law enforcement agency? 2 An Internet Service provider? 3 A Website administrator? 4 A Systems Administrator? 5 Someone else? - Specify
			6 ☐ None of the above
	INDIVIDUAL'S CHECK	ITEMS	D, E, AND G
CHEC	Who besides the respondent was present when the screen questions were asked? (If telephone interview, mark box 1 only.)	*	Telephone interview – SKIP to Check Item G Personal Interview – Mark all that apply. No one besides respondent present Respondent's spouse HILD member(s) 12+, not spouse HILD member(s) under 12 Nonhousehold member(s) Someone was present – Can't say who Don't know if someone else present
CHEC	If self-response interview, SKIP to Check Item G	i	
II EN	Did the person for whom this interview was taken help the proxy respondent answer any screen questions?		1 □ Yes 2 □ No 3 □ Person for whom interview taken not present
CHE	Transcribe "number of times" entry for each of the following:		☐ No entries transcribed below – Go to Check Item H
	(a) Screen Question, Item 36c, page 19	1	Number of times (36c)
	(b) Screen Question, Item 40c, page 19	1	Number of times (40c)
	(c) Screen Question, Item 41c, page 20		Number of times (41c)
	(d) Screen Question, Item 42c, page 20	1	Number of times (42c)
	(e) Screen Question, Item 43c, page 20	1	Number of times (43c)
	(f) Screen Question, Item 44b, page 21	ĺ	Number of times (44b)
FI	(g) Screen Question, Item 45b, page 21 ELD REPRESENTATIVE – After completing Check Item G, fill a an entry of 1 or more. Do this before		



Page 22

Ros	ure to fill any incident reports before marking Check It.	em H.
CHE		····
ITEM		1
47a.	Did you have a job or work at a business LAST WEEK? (Do not include volunteer work or work around the house.) (If farm or business operator in household, ask about unpaid work.)	576 1 ☐ Yes – SKIP to 48a 2 ☐ No – Ask 47b
47b.	ASK OR VERIFY – Did you have a job or work at a business DURING THE LAST 6 MONTHS?	
17c.	Did that (job/work) last 2 consecutive weeks or more?	578 1 ☐ Yes – Ask 48a 2 ☐ No – SKIP to Check Item I
	ASK OR VERIFY -	
48a.	Which of the following best describes your job? PERSONAL INTERVIEW (Show flashcard) TELEPHONE INTERVIEW – Were you employed in the (Read main headings until you get a yes. Then read answer categories) – Mark (X) only one category.	Medical Profession - As a - 1
18h	ASK OR VERIFY – Is your job with (Read answer categories) –	20
+ 00.	is your job with (nead answer categories) =	2 The Federal government? 3 A State, county, or local government? 4 Yourself (Self-employed) in your own business, professional practice, or farm?
48c.	If box 12 is marked in 48a, mark without asking. Are you employed by a college or university?	581 1 Yes 2 No
	While working at your job, do you work mostly in (Read answer categories) –	582 1 A city? 2 Suburban area? 3 Rural area? 4 Combination of any of these?
CHE	Is this the last household member to be interviewed?	☐ Yes – END interview. ☐ No – See note below before interviewing next household member.



Line No. A01			INI	DIVIDUAL'S PE	RSON	AL CHAR					40
Age	17. NAME						IO. Type o	of interview	,		
First Per Self-respondent	Last						401				
AFTER INTERVIEW — TRANSCRIBE FROM CONTROL CARD 20. (cc 12) Age last Wharited status bordronce birthday THIS survey period 403 403 404 405 1 Married 2 Wife status LAST survey period 20 Wife status LAST survey period 403 505 505 505 606 407 608 609 609 609 609 609 609 609 609 609 609							1 Per S				
AFTER INTERVIEW - TRANSCRIBE FROM CONTROL CARD 20. (cc 13b) (cc 17) (cc 18) (First						2	elf-responde roxy)	ent		
AFTER INTERVIEW - TRANSCRIBE FROM CONTROL CARD 20. (cc 13b)											Line No.
22. 22. (cc 13b)										8 on this	
Relationship to reference person Relati			AFTE	R INTERVIEW -	TRAN	SCRIBE I	ROM CONT	ROL CARD			
403 404 405 1 Married 2 Widowed 3 Divorced 4 Separated 5 Never married 6 Not interviewed last survey period 29. Date of interview 408 409 410 411 412 413 1 Yes school 1 Separated 5 Separated 5 Never married 6 Not interviewed last survey period 400 400 400 400 400 400 400 4	(cc 13b) Relationship to reference	(cc 17) Age last	(cc 18) Marital status THIS survey	(From previous enumeration) Marital status LAST	(cc 19) Sex	(cc 20) Armed Forces	(cc 21a) Education -highest	(cc 21b) Education -complete	(cc 22) Attending	(cc 23)	(cc 24)
Wife 33 Son 30 S	403	404	405			408	409	410	411	412	413
Divorced Separated Separ	o 1 🗌 Husband								o 🗌 Regular		1 🗆 Yes
Separate	o2 ☐ Wife o3 ☐ Son	l			2 🗆 F	2 No		2 No	1 College/		2 No
Mother of Shorther school scho	o4 Daughter	Age					Grade				
29. Date of interview Sister Solid Sister Solid Sol	o 6 Mother			married							
29. Date of interview Solid Solid	os ☐ Sister			viewed							
29. Date of interview MOBILITY QUESTIONS	o9 ☐ Other relative 10 ☐ Nonrelative			survey							
MOBILITY QUESTIONS Before we get to the crime questions, I have one or two questions that are helpful in studying where and why crimes occur. If unsure, ASK OR VERIFY – 33a. How long have you lived at this address? (Enter number of months OR years.) OR So6 Years (Round to nearest whole year) – Fill Check Item A	11 Ref. person			period					the		
Month Day Year Month Day Year									schools		
Before we get to the crime questions, I have one or two questions that are helpful in studying where and why crimes occur. If unsure, ASK OR VERIFY - 33a. How long have you lived at this address? (Enter number of months OR years.) OR 506 Years (Round to nearest whole year) - Fill Check Item A	29. Date of in	nterview					Mont	h Day	Year	!	
crimes occur. If unsure, ASK OR VERIFY – 33a. How long have you lived at this address? (Enter number of months OR years.) So5 Months (1-11) – SKIP to 33b OR So6 Years (Round to nearest whole year) – Fill Check Item A	Before we	get to th	e crime questi				ONS				
33a. How long have you lived at this address? (Enter number of months OR years.) OR Soe Years (Round to nearest whole year) - Fill Check Item A			nelpful in stud	ying where and	d why						
(Enter number of months OR years.) OR Social Section 1							505	Man	h- (1 11) C	VID 4= 224	
Fill Check Item A	(Enter nun	have you nber of mo	nths OR years.)	idress?		 			tns (1-11) - 31	MP 10 33D	
Fill Check Item A						L	506	Vear	s (Round to n	earest whole	vear) _
CHECK						Ī		Fill	Check Item A	ourost whole	your
☐ 5 years or more - SKIP to 36a	CHECK ITEM A							voore or me	ro SVID to	260	
How many years are entered in 33a?	Ho	ow many ye	ears are entered	in 33a?							
33b. Altogether, how many times have you moved in the last 5 years, that is, since , 19 ? Number of times					the la	st	508	Niges	har of times		
V yours, diat 19, since, 19t	5 years, t	a. 15, 51A		, 19		Г		Num	Del OI UITIES		



	INDIVIDUAL'S SCRE	EN QUESTIONS
36a.	INDIVIDUAL'S SCRE I'm going to read some examples that will give you an idea of the kinds of crimes this study covers. As I go through them, tell me if any of these happened to you in the last 6 months, that is since	Briefly describe incident(s)
36b.	MARK OR ASK — Did any incidents of this type happen to you?	532 1 Yes - What happened? Describe above 2 No - SKIP to 40s
36c.	How many times?	Number of times (36c)
40a.	(Other than any incidents already mentioned,) since, 20, were you attacked or threatened OR did you have something stolen from you - (a) At home including the porch or yard - (b) At or near a friend's, relative's, or neighbor's home - (c) At work or school - (d) In places such as a storage shed or laundry room, a shopping mall, restaurant, bank, or airport - (e) While riding in any vehicle - (f) On the street or in a parking lot - (g) At such places as a party, theater, gym, picnic area, bowling lanes, or while fishing or hunting - OR (h) Did anyone ATTEMPT to attack or ATTEMPT to steal anything belonging to you from any of these places?	Briefly describe incident(s)
40b.	MARK OR ASK – Did any incidents of this type happen to you?	1 Yes - What happened? Describe above 2 No - SKIP to 41a
40c.	How many times?	Number of times (40c)
	How many times?	



	INDIVIDUAL'S S	CREEN QUESTIONS
41a.	(Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (Exclude telephone threats) — (a) With any weapon, for instance, a gun or knife — (b) With anything like a baseball bat, frying pan, scissors, or stick — (c) By something thrown, such as a rock or bottle — (d) Include any grabbing, punching, or choking, (e) Any rape, attempted rape or other type of sexual attack — (f) Any face to face threats — OR (g) Any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.	Briefly describe incident(s)
41b.	MARK OR ASK – Did any incidents of this type happen to you?	541 1 Yes - What happened? Describe above 2 No - SKIP to 42a
41c.	How many times?	542 Number of times (41c)
	People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned.) did you have something stolen from you OR were you attacked or threatened by (Exclude telephone threats) – (a) Someone at work or school – (b) A neighbor or friend – (c) A relative or family member – (d) Any other person you've met or known?	Briefly describe incident(s)
42b.	MARK OR ASK — Did any incidents of this type happen to you?	543 1 □ Yes - What happened? Describe above 2 □ No - SKIP to 43a
42c.	How many times?	544 Number of times (42c)
43 a.	Incidents involving forced or unwanted sexual acts are often difficult to talk about. (Other than any incidents already mentioned,) have you been forced or coerced to engage in unwanted sexual activity by – (a) Someone you didn't know before – (b) A casual acquaintance – OR (c) Someone you know well?	Briefly describe incident(s)
43b.	MARK OR ASK – Did any incidents of this type happen to you?	545 1 □ Yes - What happened? Describe above 2 □ No - SKIP to 44a
43c.	How many times?	546



Briefly describe incident(s)		
-		
547 1 Yes - What happened? Describe above 2 No - SKIP to 45a		
548 OFFICE USE ONLY		
549 1 ☐ Yes – Ask 44b 2 ☐ No – SKIP to 45a		
550 Number of times (44b)		
Briefly describe incident(s)		
-		
551 1 Yes - What happened? Describe above 2 No - SKIP to INTRO belov		
552 OFFICE USE ONLY		
553 1 ☐ Yes – Ask 45b 2 ☐ No – SKIP to INTRO below		
Number of times (45b)		
R CRIME SCREEN QUESTIONS		
n Chime Scheen Coestions		
of a computer. Please include ALL computers, , or school for PERSONAL USE <u>or</u> for operating a		
ter, 100 1		
101 0 None 1 1 1 2 2 2 3 3 3 4 4 4 or more		
102 1 Personal use 2 Operating a home business 3 Both 4 None of the above		

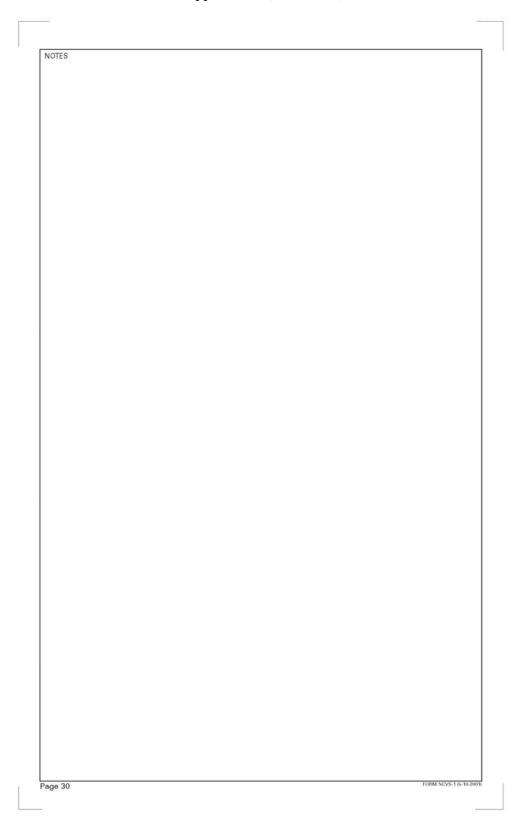


451.	Have you experienced any of the following COMPUTER-RELATED incidents in the last 6 months (Read answer categories 1–6) – Mark (X) all that apply.	103	vhile or ware ome uter-
45g.	Did you suffer any monetary loss as a result of the incident(s) you just mentioned?	104 1 ☐ Yes 2 ☐ No - SKIP to 45 <i>i</i>	
45h.	How much money did you lose as a result of the incident(s)?	\$.00 Amount of loss	
45i.	Did you report the incident(s) you just mentioned to (Read answer categories 1 –5) – Mark (X) all that apply.	106 1 A law enforcement agency? 2 An Internet Service provider? 3 A Website administrator? 4 A Systems Administrator? 5 Someone else? - Specify F	
		6 ☐ None of the above	
	INDIVIDUAL'S CHECH	TEMS D, E, AND G	
CHE	Who besides the respondent was present when the screen questions were asked? (If telephone interview, mark box 1 only.)	Telephone interview - SKIP to Check Item G Personal interview - Mark all that apply. No one besides respondent present	
CHE	CK If self-response interview, SKIP to Check Item G		
ITEN	Did the person for whom this interview was taken help the proxy respondent answer any screen questions?	556 1 Yes 2 No 3 Person for whom interview taken not present	
CHE	Transcribe "number of times" entry for each of the following:	☐ No entries transcribed below – Go to Check Item H	
	(a) Screen Question, Item 36c, page 25	Number of times (36c)	
	(b) Screen Question, Item 40c, page 25	Number of times (40c)	
	(c) Screen Question, Item 41c, page 26	Number of times (41c)	
	(d) Screen Question, Item 42c, page 26	Number of times (42c)	
	(e) Screen Question, Item 43c, page 26	Number of times (43c)	
	(f) Screen Question, Item 44b, page 27	Number of times (44b)	
	(g) Screen Question, Item 45b, page 27	Number of times (45b)	
FIE	LD REPRESENTATIVE – After completing Check Item G, fill a s entry of 1 or more. Do this before ma		has an



Be s	ure to fill any incident reports before marking Check It	em H.
CHE		1 ☐ Yes – Ask 47a
ITE	Is the respondent 16 years or older?	2 No - SKIP to Check Item I
47a.	Did you have a job or work at a business LAST WEEK? (Do not include volunteer work or work around the house.) (If farm or business operator in household, ask about	
	unpaid work.) ASK OR VERIFY –	2 110 - ASA 470
47b.	Did you have a job or work at a business DURING THE LAST 6 MONTHS?	577 1 ☐ Yes - Ask 47c 2 ☐ No - SKIP to Check Item I
47c.	Did that (job/work) last 2 consecutive weeks or more?	578 1 ☐ Yes – Ask 48a 2 ☐ No – SKIP to Check Item I
	ASK OR VERIFY -	
48a.	Which of the following best describes your job? PERSONAL INTERVIEW (Show flashcard) TELEPHONE INTERVIEW — Were you employed in the (Read main headings until you get a yes. Then read answer categories) — Mark (X) only one category.	Medical Profession - As a - Physician Physician
48b.	ASK OR VERIFY – Is your job with (Read answer categories) –	21 Gas station attendant 22 Bartender 23 Other - Specify Transportation Field - Were you employed as a - 24 Bus driver 25 Taxi cab driver 26 Other - Specify OR 27 Something else - Specify 580 1 A private company, business, or individual for wage 2 The Federal government? 3 A State, county, or local government?
40	If box 12 is marked in 48a, mark without asking.	4 Yourself (Self-employed) in your own business, professional practice, or farm?
48c.	Are you employed by a college or university?	2 No
	While working at your job, do you work mostly in (Read answer categories) –	582 1 ☐ A city? 2 ☐ Suburban area? 3 ☐ Rural area? 4 ☐ Combination of any of these?
CHE		☐ Yes – END interview. ☐ No – See note below before interviewing next household member.





Appendix B: NCVS-2 Crime Incident Report

ORM 0-3-2	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU ACTING AS COLLECTING ACENT FOR THE BUREAU OF JUSTICE STATISTICS U.S. DEPARTMENT OF JUSTICE CRIME INCIDENT REPORT	Sample Control number PSU Segment CK Serial No.
	LINE NUMBER OF RESPONDENT	601 Line number (ex., 01)
	SCREEN QUESTION NUMBER	Screen question number (ex., 39)
c.	INCIDENT NUMBER	Incident number (ex., 01)
	Has the respondent lived at this address for more than 6 months? (If not sure, refer to 33a on the NCVS-1 or ASK.)	☐ Yes (more than 6 months) – <i>SKIP</i> to 3 ☐ No (6 months or less) – <i>Ask 2</i>
•	You said that during the last 6 months - (Refer to appropriate screen question for description of crime.) Did (this/the first) incident happen while you were living here or before you moved to this address?	1 □ While living at this address 2 □ Before moving to this address
•	(You said that during the last 6 months – (Refer to appropriate screen question for description of crime.)) In what month did (this/the first) incident happen? (Show calendar if necessary. Encourage respondent to give exact month.)	Month Year
•	If known, mark without asking. If not sure, ASK – Altogether, how many times did this type of incident happen during the last 6 months?	607 Number of incidents
	ECK EM B How many incidents? (Refer to 4.)	1 1-5 incidents (not a "series") - SKIP to 6 2 6 or more incidents - Fill Check Item C
	Are these incidents similar to each other in detail, or are they for different types of crimes? (If not sure, ASK.)	1 Similar – Fill Check Item D 2 Different (not a "series") – SKIP to 6
	ECK SM D Can you (respondent) recall enough details of each incident to distinguish them from each other? (If not sure, ASK.)	Si0 1 Yes (not a "series") - SKIP to 6 2 No (is a "series") - Reduce entry in screen question if necessary - Read 5
•	The following questions refer only to the most recent incident. (ASK item 6.)	
•	About what time did (this/the most recent) incident happen?	During day 512 1



7.	In what city, town, or village did this incident occur?	1 □ Outside U.S. – SKIP to 10 2 □ Not inside a city/town/village – Ask 8a 3 □ SAME city/town/village as present residence – SKIP to 9 4 □ DIFFERENT city/town/village from present residence – Specify Ask 8a
		5 🗆 Don't know – Ask 8a
8a.	In what county and state did it occur?	614 County State
8b.	Is this the same county and state as your present residence?	615 1 Yes 2 No
9.	Did this incident occur on an Indian Reservation or on Indian Lands?	633 1 Yes 2 No
10.	Where did this incident happen?	IN RESPONDENT'S HOME OR LODGING
	Mark (X) only one box.	1 □ In own dwelling, own attached garage, or enclosed porch (Include illegal entry or attempted illegal entry of same)
		2 ☐ In detached building on own property, such as detached garage, storage shed, etc. (Include illegal entry or attempted illegal entry of same) 3 ☐ In vacation home/second home (Include illegal entry or attempted illegal entry of same) 4 ☐ In hotel or motel room respondent was staying in (Include illegal entry or attempted illegal entry of same)
		NEAR OWN HOME
		5 □ Own yard, sidewalk, driveway, carport, unenclosed porch (does not include apartment yards)
		AT, IN, OR NEAR A FRIEND'S/RELATIVE'S/ NEIGHBOR'S HOME
		8 At or in home or other building on their property 9 Yard, sidewalk, driveway, carport (does not include apartment yards) 10 Apartment hall, storage area, laundry room (does not include apartment parking lot/garage) 11 On street immediately adjacent to their home
		COMMERCIAL PLACES
		12 ☐ Inside restaurant, bar, nightclub 24 ☐ Inside bank 25 ☐ Inside gas station 26 ☐ Inside other commercial building, such as a store 14 ☐ Inside office 27 ☐ Inside factory or warehouse
		PARKING LOTS/GARAGES
		15 ☐ Commercial parking lot/garage
		SCHOOL 18 nside school building
		OPEN AREAS, ON STREET OR PUBLIC TRANSPORTATION
		20 In apartment yard, park, field, playground (other
		than school) 21 □ On the street (other than immediately adjacent to own/friend's/relative's/neighbor's home) 22 □ On public transportation or in station (bus, train, plane, airport, depot, etc.)
		OTHER
		23 🗆 Other – Specify 🙀



11.	Did the offender live (here/there) or have a right to be (here/there), for instance, as a guest or a repairperson?	1 Yes - SKIP to 19 2 No
12.	Did the offender actually get INSIDE your (house/apartment /room/garage/shed/ enclosed porch)?	1 618 1 Yes - SKIP to 14 2 No
13.	Did the offender TRY to get in your (house/apartment/room/garage/shed/ enclosed porch)?	619 1 Yes – Ask 14 2 No – SKIP to 19 3 Don't know – Ask 14
14.	Was there any evidence, such as a broken lock or broken window, that the offender(s) (got in by force/TRIED to get in by force)?	1 Yes – Ask 15 2 No – SKIP to 16
15.	What was the evidence? Anything else? Mark (X) all that apply. How did the offender (get in/TRY to get in)? Mark (X) only one box.	Window 625
17a.	Was it your school?	lock, used credit card, etc., other than key 7 □ Through LOCKED door or window – Don't know how 8 □ Don't know 9 □ Other – Specify → 628 1 □ Yes 2 □ No – SKIP to 17c
17b.	In what part of the school building did it happen?	629 1
17c.	ASK OR VERIFY – Did the incident happen in an area restricted to certain people or was it open to the public at the time?	1 Open to the public 2 Restricted to certain people (or nobody had a right to be there) 3 Don't know 4 Other - Specify
18.	ASK OR VERIFY – Did it happen outdoors, indoors, or both?	631 1
19.	ASK OR VERIFY – How far away from home did this happen?	632 1 At, in, or near the building containing the respondent's home/next door 2 A mile or less 3 Five miles or less
	PROBE – Was it within a mile, 5 miles, 50 miles or more?	4 Fifty miles or less 5 More than 50 miles 6 Don't know how far



20a.	ASK OR VERIFY – Were you or any other member of this household present when this incident occurred?	634 1 ☐ Yes – <i>Ask 20b</i> 2 ☐ No – <i>SKIP</i> to 56, page 8
20b.	ASK OR VERIFY – Which household members were present? FIELD REPRESENTATIVE – If proxy interview, "Respondent" refers to the person for whom the proxy interview is taken, not the proxy respondent.	1 Respondent only
21.	ASK OR VERIFY – Did you personally see an offender? FIELD REPRESENTATIVE – If proxy interview, replace "you" with the name of person for whom the proxy interview is being taken in 21–115.	_636 1 □ Yes 2 □ No
22.	Did the offender have a weapon such as a gun or knife, or something to use as a weapon, such as a bottle or wrench?	637 1 Yes - Ask 23 2 No
23.	What was the weapon? Anything else? Mark (X) all that apply.	# 2 Other sharp object (scissors, ice pick, axe, etc.) Blunt object (rock, club, blackjack, etc.) Other - Specify Characteristics Characteristics
24.	Did the offender hit you, knock you down or actually attack you in any way?	
25.	Did the offender TRY to attack you?	
26.	Did the offender THREATEN you with harm in any way?	641 1
27.	What actually happened? Anything else? Mark (X) all that apply. FIELD REPRESENTATIVE – If box 4, ASK – Do you mean forced or coerced sexual intercourse including attempts? If "Yes," change entry in Item 24 to "Yes." Delete entries in 25–27.	Something taken without permission Attempted or threatened to take something Harassed, argument, abusive language Unwanted sexual contact with force (grabbing, fondling, etc.) Unwanted sexual contact without force (grabbing, fondling, etc.) Forcible entry or attempted forcible entry of house/apartment Forcible entry or attempted forcible entry of car Damaged or destroyed property Attempted or threatened to damage or destroy property Other - Specify Other
28a. 28b.	How did the offender TRY to attack you? Any other way? How were you threatened? Any other way? Mark (X) all that apply. FIELD REPRESENTATIVE – If box 5, ASK – Do you mean forced or coerced sexual intercourse including attempts? If "Yes," change entry in Item 24 to "Yes." Delete entries in 25–28.	# 2 Verbal threat of rape # 2 Verbal threat to kill 3 Verbal threat of attack other than to kill or rape 4 Verbal threat of sexual assault other than rape 5 Unwanted sexual contact with force (grabbing, fondling, etc.) 6 Unwanted sexual contact without force (grabbing, fondling, etc.) 7 Weapon present or threatened with weapon 8 Shot at (but missed) 9 Attempted attack with knife/sharp weapon 10 Attempted attack with weapon other than gun/knife/sharp weapon 4 Object thrown at person 12 Followed or surrounded 13 Tried to hit, slap, knock down, grab, hold, trip, jump, push, etc. 14 Other - Specify



37.	How many days did you stay (in the hospital)?	Number of days
36.	Did you stay overnight in the hospital?	662 1 Yes – Ask 37 2 No – SKIP to 38
CHE	Is (box 6) "Hospital" marked in 35?	☐ Yes – <i>Ask 36</i> ☐ No – <i>SKIP</i> to 38
35.	Where did you receive this care? Anywhere else? Mark (X) all that apply.	* 2
34.	Were you injured to the extent that you received any medical care, including self treatment?	
33.	Which injuries were caused by a weapon OTHER than a gun or knife? Enter code(s) from 31.	658 * Code Code Code
32.	ASK OR VERIFY – Were any of the injuries caused by a weapon other than a gun or knife?	
	coerced sexual intercourse? If No, ASK – What do you mean?	
	If attempted rape and box 2 in item 29 is NOT marked, ASK – Do you mean attempted forced or	swelling, chipped teeth 11 □ Other − Specify 12 □ Other − Specify 13 □ Other − Specify 14 □ Other − Specify 15 □ Other − Specify 16 □ Other − Specify 17 □ Other − Specify 18 □ Other − Specify 19 □ Other − Specify 10 □ Other − Specify 11 □ Other − Specify 11 □ Other − Specify 11 □ Other − Specify 12 □ Other − Specify 13 □ Other − Specify 14 □ Other − Specify 15 □ Other − Specify 16 □ Other − Specify 17 □ Other − Specify 18 □ Other − Specify 18 □ Other − Specify 19 □ Other − Specify 10 □ Other − Specify 10 □ Other − Specify 11 □ Other − Specify 11 □ Other − Specify 12 □ Other − Specify 13 □ Other − Specify 14 □ Other − Specify 15 □ Other − Specify 16 □ Other − Specify 17 □ Other − Specify 18 □ Other − Specif
	If No, ASK - What do you mean?	* 8 Internal injuries 9 Knocked unconscious 10 Bruises, black eye, cuts, scratches,
	in item 29 is NOT marked, ASK – Do you mean forced or coerced sexual intercourse?	5 Knife or stab wounds 6 Gun shot, bullet wounds 7 Broken bones or teeth knocked out
	Mark (X) all that apply. FIELD REPRESENTATIVE – If raped and box 1	* 2
31.	What were the injuries you suffered, if any? Anything else?	655 1 None - SKIP to 40
30.	Did the offender THREATEN to hurt you before you were actually attacked?	G49 1 ☐ Yes 2 ☐ No 3 ☐ Other – Specify ⊋
		13 ☐ Grabbed, held, tripped, jumped, pushed, etc. 14 ☐ Other – Specify
	coerced sexual intercourse? If No, ASK – What do you mean?	gun/knife/sharp weapon * 12 Hit, slapped, knocked down
	If tried to rape, ASK – Do you mean attempted forced or	10 ☐ Hit by thrown object 648 11 ☐ Attempted attack with weapon other than
		* 8 Attempted attack with knife/sharp weapon 9 Hit by object (other than gun) held in hand
	intercourse? If No, ASK – What do you mean?	6 ☐ Hit with gun held in hand 647 7 ☐ Stabbed/cut with knife/sharp weapon
	FIELD REPRESENTATIVE – If raped, ASK – Do you mean forced or coerced sexual	4 ☐ Shot 5 ☐ Shot at (but missed)
	Mark (X) all that apply.	# 2 Tried to rape 3 Sexual assault other than rape or attempted rape
	How were you attacked? Any other way?	646 1 ☐ Raped



38.	At the time of the incident, were you covered by any medical insurance, or were you eligible for benefits from any other type of health benefits program, such as medicaid, Veterans Administration, or Public Welfare?	1 Yes 2 No 3 Don't know
39.	What was the total amount of your medical expenses resulting from this incident (INCLUDING anything paid by insurance)? Include hospital and doctor bills, medicine, therapy, braces, and any other injury related expenses. FIELD REPRESENTATIVE – Obtain an estimate, if necessary.	\$ O0 Total amount 0 □ No cost x □ Don't know
40.	Did you do anything with the idea of protecting YOURSELF or your PROPERTY while the incident was going on?	1 G66 1 ☐ Yes – SKIP to 42 2 ☐ No/took no action/kept still – Ask 41
41.	Was there anything you did or tried to do about the incident while it was going on?	1 ☐ Yes – Ask 42 2 ☐ No/took no action/kept still – SKIP to 47
42.	What did you do? Anything else?	USED PHYSICAL FORCE TOWARD OFFENDER
	Mark (X) all that apply. Then fill Check Item F.	668 1
		RESISTED OR CAPTURED OFFENDER
		7 Defended self or property (struggled, ducked, blocked blows, held onto property) 8 Chased, tried to catch or hold offender
		SCARED OR WARNED OFF OFFENDER
		9 Yelled at offender, turned on lights, threatened to call police, etc.
		PERSUADED OR APPEASED OFFENDER
		10 Cooperated, or pretended to (stalled, did what they asked) 670 11 Argued, reasoned, pleaded, bargained, etc.
		* ESCAPED OR GOT AWAY
		12 \square Ran or drove away, or tried; hid, locked door
		GOT HELP OR GAVE ALARM
		13 Called police or guard 671 14 Tried to attract attention or help, warn others (cried out for help, called children inside)
		REACTED TO PAIN OR EMOTION
		15 Screamed from pain or fear OTHER
		16 ☐ Other – Specify ⊋
CHE	Was the respondent injured in this incident? (Is box 2–11 marked in 31 on page 5?)	☐ Yes – <i>Ask 43a</i> ☐ No – SKIP to 43b
43a.	Did you take these actions before, after, or at the same time that you were injured?	672 1 Actions taken before injury * 2 Actions taken after injury
	Mark (X) all that apply.	3 ☐ Actions taken at same time as injury
43b.	Did (any of) your action(s) help the situation in any way?	673 1 Yes - Ask 44
	Probe – Did your actions help you avoid injury, protect your property, escape from the offender – or were they helpful in some other way?	2 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \



44.	How were they helpful? Any other way? Mark (X) all that apply.	674	1 Helped avoid injury or greater injury to respondent
	mark (A) an dial apply.	* 	2 Scared or chased offender off 3 Helped respondent get away from offender
		! ! !	4 ☐ Protected property 5 ☐ Protected other people 6 ☐ Other – Specify ₹
45			
45.	Did (any of) your action(s) make the situation worse in any way?	675	1 Yes - Ask 46 2 No
	PROBE – Did your actions lead to injury, greater injury, loss of property, make the offender angrier, or make the situation worse in some other way?	1	3 □ Don't know } SKIP to 47
46.	How did they make the situation worse? Any other way?	676	1 ☐ Led to injury or greater injury to respondent 2 ☐ Caused greater loss of property or damage to property
	Mark (X) all that apply.	**	a ☐ Other people got hurt (worse) □ Offender got away □ Made offender angrier, more aggressive, etc. □ Other – Specify
47.	Was anyone present during the incident besides you and the offender? (Other than children under age 12.)	677	1 □ Yes - Ask 48 2 □ No] SKIP to Check Item G
	than children under age 12./		3 □ Don't know } SKIP to Check Item G
48.	Did the actions of (this person/any of these people) help the situation in any way?	678	1
49.	How did they help the situation? Any other way?	679	1 Helped avoid injury or greater injury to respondent
	Mark (X) all that apply.	*	2 ☐ Scared or chased offender off 3 ☐ Helped respondent get away from offender 4 ☐ Protected property 5 ☐ Protected other people 6 ☐ Other – Specify
50.	Did the actions of (this person/any of these people) make the situation worse in any way?	680	1 □ Yes - <i>Ask</i> 51 2 □ No
51.	How did they make the situation worse? Any other way?	681	1 ☐ Led to injury or greater injury to respondent
	Mark (X) all that apply.	* * * * * * * * * * * * * * * * * * *	2 □ Caused greater loss of property or damage to property 3 □ Other people got hurt (worse) 4 □ Offender got away 5 □ Made offender angrier, more aggressive, etc. 6 □ Other – Specify ✓
52.	Not counting yourself, were any of the persons present during the incident harmed (Pause), threatened with harm (Pause), or robbed by force or threat of harm? (Do not include yourself, the offender, or children under 12 years of age.)	682	1 □ Yes - Ask 53 2 □ No
53.	How many? (Do not include yourself, the offender or children under 12 years of age.)	683	Number of persons
54.	How many of these persons are members of your household now? (Do not include yourself, the offender or children under 12 years of age.)	684	0 □ None Number of persons
	FIELD REPRESENTATIVE – Enter name(s) or line number(s) of other household member(s). If not sure, ask.	1	Name(s) P OR Line number(s)
		1	- 0 0



GK M G Did respondent use or threaten to use physical force against the offender? (Is box 1–6 marked in 42 on page 6?)	1 Yes - Ask 55 2 No - SKIP to 60
Who was the first to use or threaten to use physical force – you, the offender, or someone else? Mark (X) only one box.	1 Gespondent 2 Offender(s) 3 Someone else 4 Don't know
If household member was present, SKIP to 59. Do you know or have you learned anything about the offender(s) – for instance, whether there was one or more than one offender involved, whether it was someone young or old, or male or female?	1 Yes – Ask 57 2 No – SKIP to 88, page 11
How sure are you of this information? Do you have a suspicion, are you fairly sure or are you certain?	1 Suspicion 2 Fairly sure 3 Certain
How did you learn about the offender(s)? Any other way? Mark (X) all that apply.	* 2 From other member of household who was eyewitness
What actually happened? Anything else? Mark (X) all that apply.	Something taken without permission
ASK OR VERIFY – Was the crime committed by only one or by more than one offender?	692 1 ☐ Only one – SKIP to 62 2 ☐ More than one – SKIP to 73 3 ☐ Don't know – Ask 61
Do you know anything about one of the offenders?	693 1 ☐ Yes – Ask 62 2 ☐ No – SKIP to 88, page 11
s	i
	Did respondent use or threaten to use physical force against the offender? (Is box 1-6 marked in 42 on page 6?) Who was the first to use or threaten to use physical force – you, the offender, or someone else? Mark (X) only one box. If household member was present, SKIP to 59. Do you know or have you learned anything about the offender(s) – for instance, whether there was one or more than one offender involved, whether it was someone young or old, or male or female? How sure are you of this information? Do you have a suspicion, are you fairly sure or are you certain? How did you learn about the offender(s)? Any other way? Mark (X) all that apply. What actually happened? Anything else? Mark (X) all that apply.



2. 1	Was the offender male or female?	698 1 ☐ Male 2 ☐ Female
		3 □ Don't know
	How old would you say the offender was?	1 Under 12 5 21–29 2 12–14 6 30+ 3 15–17 7 Don't know
	Was the offender a member of a street gang, or don't you know?	1 Yes (a member of a street gang) 2 No (not a member of a street gang) 3 Don't know (if a member of a street gang)
	Was the offender drinking or on drugs, or don't you know?	701 1 ☐ Yes (drinking or on drugs) – Ask 65 2 ☐ No (not drinking/not on drugs)
5. 1	Which was it? (Drinking or on drugs?)	702 1 □ Drinking 2 □ On drugs 3 □ Both (drinking and on drugs) 4 □ Drinking or on drugs – could not tell which
	Was the offender someone you knew or a stranger you had never seen before?	1 703 1 Knew or had seen before – SKIP to 68 2 Stranger 3 Don't know
	Would you be able to recognize the offender if you saw him/her?	704 1 Yes
1	How well did you know the offender – by sight only, casual acquaintance, or well known?	1 Sight only – Ask 69 2 Casual acquaintance 3 Well known
	Would you have been able to tell the police how they might find the offender, for instance, where he/she lived, worked, went to school, or spent time?	706 1 ☐ Yes
	How well did you know the offender? For example, was the offender a friend, cousin, etc.? Mark (X) first box that applies.	RELATIVE 707
	Was the offender White, Black, or some other race?	1 White 2 Black 3 Other - Specify
í	Was this the only time this offender committed a crime against you or your household or made threats against you or your household?	709 1 Yes (only time)
3. 1	How many offenders?	710 Number of offenders x □ Don't know (number of offenders)
lotes		
	2 (10-3-2001)	



74.	Were they male or female?	711 1 All male
75.	If there were only 2 offenders (item 73), SKIP to 76. Were they mostly male or mostly female?	712 1 Mostly male 2 Mostly female 3 Evenly divided 4 Don't know
76.	How old would you say the youngest was?	713 1 Under 12 4 18–20 7 Don't know 2 12–14 5 21–29 3 15–17 6 30+
77.	How old would you say the oldest was?	7714 1 Under 12 4 18–20 7 Don't know 5 21–29 3 15–17 6 30+
78a.	Were any of the offenders a member of a street gang, or don't you know?	715 1 ☐ Yes (a member of a street gang) 2 ☐ No (not a member of a street gang) 3 ☐ Don't know (if a member of a street gang)
78b.	Were any of the offenders drinking or on drugs, or don't you know?	716 1 Yes (drinking or on drugs) – Ask 79 2 No (not drinking/not on drugs)
79.	Which was it? (Drinking or on drugs?)	717 1 Drinking 2 On drugs 3 Both (drinking and on drugs) 4 Drinking or on drugs – could not tell which
80.	Were any of the offenders known to you, or were they strangers you had never seen before?	718 1 All known SKIP 3 All strangers 2 Some known to 82 4 Don't know Ask 8
81.	Would you be able to recognize any of them if you saw them?	719 1 Yes
82.	How well did you know the offender(s) – by sight only, casual acquaintance or well known? Mark (X) all that apply.	1 Sight only 2 Casual acquaintance 3 Well known
CHE	Is "casual acquaintance" or "well known" marked in 82?	☐ Yes - SKIP to 84 ☐ No - Ask 83
83.	Would you have been able to tell the police how they might find any of them, for instance, where they lived, worked, went to school, or spent time? Mark (X) only one box.	722 1
84.	How did you know them? For example, were they friends, cousins, etc.?	RELATIVE
	Mark (X) all that apply.	723 Spouse at time of incident 2 Ex-spouse at time of incident 3 Parent or step-parent 4 Own child or step-child 5 Brother/sister 6 Other relative - Specify
		NONRELATIVE
		724 7 Boyfriend or girlfriend, ex-boyfriend or ex-girlfriend 8 Friend or ex-friend 9 Roommate, boarder 10 Schoolmate
		725
		17 ☐ Co-worker (current or former) 13 ☐ Other nonrelative – Specify
85.	Were the offenders White, Black, or some	1 ☐ White
	other race? Mark (X) all that apply.	
86.	If only one box marked in 85, SKIP to 87.	727 1 Mostly White
	What race were most of the offenders?	2 Mostly Black



87.	Was this the only time any of these offenders committed a crime against you or your household or made threats against you or your household?	1 ☐ Yes (only time) 2 ☐ No (there were other times) 3 ☐ Don't know
88.	ASK OR VERIFY – Was something stolen or taken without permission that belonged to you or others in the household?	731 1
	FIELD REPRESENTATIVE –Include anything stolen from an unrecognizable business. Do not include any items stolen from a recognizable business operated in the respondent's home or in a commercial establishment.	
89.	ASK OR VERIFY – Did the offender(s) ATTEMPT to take something that belonged to you or others in the household?	1
90.	What did the offender try to take? Anything else? Mark (X) all that apply?	733 Cash 2
91.	Did the (property/money) the offender tried to take belong to you personally, to someone else in the household, or to both you and other household members? Mark (X) only one box.	738 1 ☐ Respondent only - SKIP to 92 2 ☐ Respondent and other household member(s) - Fill Check Item J 3 ☐ Other household member(s) only - Fill Check Item J 4 ☐ Nonhousehold member(s) only 5 ☐ Other - Specify →
CHI	Besides the respondent, which household member(s) owned the (property/money) the offender tried to take? If not sure, ask. Do not enter the respondent's line number.	Line number Line number Line number OR 40 Household property
92.	ASK OR VERIFY – Was/Were the article(s) IN or ATTACHED to a motor vehicle when the attempt was made to take (it/them)?	740 1 Yes 2 No
CHI	Did the offender try to take cash, a purse, or a wallet? (Is box 1, 2, or 3 marked in 90?)	☐ Yes – <i>Ask 93</i> ☐ No – SKIP to 94
93.	ASK OR VERIFY – Was the (cash/purse/wallet) on your person, for instance, in a pocket or being held?	1 Yes 2 No



94.	ASK OR VERIFY – Was there anything (else) the offender(s) tried to take directly from you, for instance, from your pocket or hands, or something that you were wearing?	1 ☐ Yes – Ask 95 2 ☐ No – SKIP to 110, page 14
	Exclude property not belonging to respondent or other household member.	
95.	Which items did the offender(s) try to take directly from you?	746 - SKIP to 110, page 14
	Enter code(s) from 90. Do not include cash/purse/wallet. Exclude property not belonging to respondent or other household member.	Code Code Code OR 40 Tried to take everything marked in 90 directly from respondent – SKIP to 110, page 14
96.	What was taken that belonged to you or others in the household? Anything else? Mark (X) all that apply.	Cash S
	FIELD REPRESENTATIVE – If purse or wallet	748 1 Only cash taken – Enter amount above
	stolen, ASK -	Property PURSE/WALLET/CREDIT CARDS
	Did it contain any money? Enter amount of stolen cash where indicated. Mark the appropriate box(es) for stolen	2 ☐ Purse 3 ☐ Wallet \\ Ask: Did it contain money?
	property or the box for only cash taken.	4 Credit cards, check, bank cards
		VEHICLE OR PARTS 5
		HOUSEHOLD FURNISHINGS
		750 11 □ TV, VCR, stereo, other household appliances 12 □ Silver, china, art objects 13 □ Other household furnishings (furniture, rugs, etc.) PERSONAL EFFECTS
		751 14
		FIREARMS
		753 20 ☐ Handgun (pistol, revolver) 21 ☐ Other firearm (rifle, shotgun)
		MISCELLANEOUS
		22 ☐ Tools, machines, office equipment 754 23 ☐ Farm or garden produce, plants, fruit, logs 22 ☐ Animals – pet or livestock 25 ☐ Food or liquor 755 26 ☐ Other – Specify **
		27 🗆 Don't know
Note	S	



97.	Did the stolen (property/money) belong to you personally, to someone else in the household, or to both you and other household members? Mark (X) only one box.	760 1 ☐ Respondent only - SKIP to Check Item M 2 ☐ Respondent and other household member(s) - Fill Check Item L 3 ☐ Other household member(s) only - Fill Check Item L 4 ☐ Nonhousehold member(s) only 5 ☐ Other - Specify SKIP to Check Item M
CHEC	Besides the respondent, which household member(s) owned the stolen (property/money)? If not sure, ask. Do not enter the respondent's line number.	Line number Line number Line number OR 40 Household property
CHE		☐ Yes – <i>Ask 98</i> ☐ No – <i>SKIP to 100</i>
98.	Had permission to use the (car/motor vehicle) ever been given to the offender(s)?	1
99.	Did the offender return the (car/motor vehicle) this time?	1 Yes SKIP to Check Item N
100.	ASK OR VERIFY – Was/Were the article(s) IN or ATTACHED to a motor vehicle when (they were/it was) taken?	765 1 Yes 2 No
CHE	Was cash, purse, or a wallet taken? (Is a cash amount entered or box 1, 2, or 3 marked in 96?)	☐ Yes – <i>Ask 101</i> ☐ No – <i>SKIP</i> to 102
101.	ASK OR VERIFY – Was the (cash/purse/wallet) on your person, for instance, in a pocket or being held?	767 1 Yes 2 No
102.	ASK OR VERIFY – Was there anything (else) the offender(s) took directly from you, for instance, from your pocket or hands, or something that you were wearing? Exclude property not belonging to respondent or other household member.	768 1 □ Yes – <i>Ask 103</i> 2 □ No – <i>SKIP</i> to 104
103.	Which items did the offender(s) take directly from you? Enter code(s) from 96. Do not include cash/purse/wallet. Exclude property not belonging to respondent or other household member.	769 Code Code Code OR 40 Everything marked in 96 was taken directly from respondent
104.	If only cash/checks/credit cards is marked in item 96, SKIP to 106. What was the value of the PROPERTY that was taken? Include recovered property. (Exclude any stolen cash/checks/credit cards. If jointly owned with a nonhousehold member(s), include only share owned by household members.)	770 \$ 00 Value of property taken
105.	How did you decide the value of the property that was taken? Any other way? Mark (X) all that apply.	1
106.	Was all or part of the stolen (money/ property) recovered, not counting anything received from insurance?	772 1 All – SKIP to Check Item O 2 Part – Ask 107 3 None – SKIP to 109



107.	What was recovered? Anything else? Mark (X) all that apply.	775 Cash
	FIELD REPRESENTATIVE – If purse or wallet	\$ Amount of cash recovered
	recovered, ASK – Did it contain any money? Enter amount of recovered cash where indicated. Mark the appropriate box(es) for recovered property or the box for only cash recovered.	Trick Tric
CHE	Was PROPERTY other than cash, checks or credit cards recovered? (If not sure, ask.)	1 Yes – Ask 108 2 No – SKIP to 109
108.	Considering any damage, what was the value of the property after it was recovered? (Do not include recovered cash, checks, or credit cards.)	\$ Value of property recovered
109.	Was the theft reported to an insurance company?	1779 1 Yes 2 No or don't have insurance 3 Don't know
110.	(Other than any stolen property) was anything that belonged to you or other members of the household damaged in this incident?	780 1 Yes – Ask 111 2 No – SKIP to 115
	PROBE – For example, was (a lock or window broken/clothing damaged/damage done to a car), or something else?	
111.	Was/Were the damaged item(s) repaired or replaced?	781 1 Yes, all 2 Yes, part SKIP to 113 3 No, none – Ask 112
112.	How much would it cost to repair or replace the damaged item(s)?	\$ 00 Cost to repair/replace - SKIP to 114 0 \(\text{No cost} - SKIP to 115 \(\text{x} \(\text{Don't know} - SKIP to 114
113.	How much was the repair or replacement cost?	\$ 00 Cost to repair/replace – Ask 114 0 □ No cost – SKIP to 115 x □ Don't know – Ask 114
114.	Who (paid/will pay) for the repairs or replacement? Anyone else? Mark (X) all that apply.	1
Notes	i	Ŷ



115.	Were the police informed or did they find out about this incident in any way?	1
116.	How did the police find out about it?	801 1 ☐ Respondent – SKIP to 119
	Mark (X) first box that applies. FIELD REPRESENTATIVE – If proxy interview, we want the proxy respondent to answer questions 116–134 for herself/himself, not for the person for whom the proxy interview is being taken.	Some other way – Specify SKIP to 119
117.	What was the reason it was not reported to the police? (Can you tell me a little more?) Any other reason? Mark (X) all that apply. STRUCTURED PROBE — Was the reason because you dealt with it another way, it wasn't important enough to you, insurance wouldn't cover it, police couldn't do anything, police wouldn't help, or was there some other reason?	DEALT WITH ANOTHER WAY Reported to another official (guard, apt. manager, school official, etc.) Private or personal matter or took care of it myself or informally; told offender's parent NOT IMPORTANT ENOUGH TO RESPONDENT Minor or unsuccessful crime, small or no loss, recovered property Child offender(s), "kid stuff" Not clear it was a crime or that harm was intended
CHE		1
118.	Which of these would you say was the most important reason why the incident was not reported to the police? Enter code from 117.	S08 Code - SKIP to 130, page 17 30 □ No one reason more important - SKIP to 130, page 17
Notes	3	page 17



119.	Besides the fact that it was a crime, did YOU have any other reason for	TO GET HELP WITH THIS INCIDENT
	reporting this incident to the police?	1 Stop or prevent THIS incident from happening 2 Needed help after incident due to injury, etc.
	Any other reason?	TO RECOVER LOSS
	Mark (X) all that apply. STRUCTURED PROBE –	3 ☐ To recover property
	Did you report it to get help with this	4 ☐ To collect insurance
	incident, to recover your loss, to stop or punish the offender, to let police know about it, or was there some other reason?	TO GET OFFENDER 5 To prevent further crimes against respondent/ respondent's household by this offender 6 To stop this offender from committing other crimes against anyone 1 To punish offender 8 Catch or find offender – other reason or no reason given
		TO LET POLICE KNOW 9 ☐ To improve police surveillance of respondent's home, area, etc. 10 ☐ Duty to let police know about crime OTHER
		811 11 ☐ Other reason – <i>Specify</i> * 12 ☐ No other reason – <i>SKIP</i> to 121
CHE		☐ Yes – <i>Ask 120</i> ☐ No – <i>SKIP</i> to 121
120.	Which of these would you say was the most important reason why the incident was reported to the police?	813 Code
	Enter code from 119.	21 ☐ No one reason more important 22 ☐ Because it was a crime was most important
121.	Did the police come when they found out about the incident?	1 Yes - Ask 122 2 No
122.	How soon after the police found out did they respond? Was it within 5 minutes, within 10 minutes, an hour, a day, or longer? Mark (X) first category respondent is sure of.	815 1 Within 5 minutes 2 Within 10 minutes 3 Within an hour 4 Within a day 5 Longer than a day 6 Don't know how soon
123.	What did they do while they were (there/here)? Anything else? Mark (X) all that apply.	816
124.	Did you (or anyone in your household) have any later contact with the police about the incident?	1
125.	Did the police get in touch with you or did you get in touch with them?	1 Police contacted respondent or other HHLD member 2 Respondent (or other HHLD member) contacted police 3 Both 4 Don't know 5 Other - Specify
126.	Was that in person, by phone, or some other way?	1 In person 2 Not in person (by phone, mail, etc.) 3 Both in person and not in person 4 Don't know
127.	What did the police do in following up this incident? Anything else? Mark (X) all that apply.	321 1
		8 Nothing (to respondent's knowledge) 9 Don't know



****	2 □ No
ASK OR VERIFY – As far as you know, was anyone arrested or were charges brought against anyone in connection with this incident?	
Did you (or someone in your household) receive any help or advice from any office or agency — other than the police — that deals with victims of crime?	
Was that a government or private agency?	828 1 Government 2 Private 3 Don't know
CK 1 R Were the police informed? (Is "Yes" marked in 115 on page 15?)	☐ Yes – <i>Ask 132</i> ☐ No – <i>SKIP</i> to 135
Have you (or someone in your household) had contact with any other authorities about this incident (such as a prosecutor, court, or juvenile officer)?	
Which authorities? Any others? Mark (X) all that apply.	1 Prosecutor, district attorney 2 Magistrate 3 Court 4 Juvenile, probation or parole officer 5 Other – Specify
Do you expect the police, courts, or other authorities will be doing anything further in connection with this incident?	1 Ves -Specify 2 No 3 Don't know
ASK OR VERIFY – What were you doing when this incident (happened/started)? Mark (X) only one box. FIELD REPRESENTATIVE – If proxy interview, replace "you" with the name of the person for whom the proxy interview is being taken in 135–176.	1 Working or on duty – SKIP to 138a 2 On the way to or from work – SKIP to Check Item S 3 On the way to or from school 4 On the way to or from other place 5 Shopping, errands 6 Attending school 7 Leisure activity away from home 8 Sleeping 9 Other activities at home 10 Other – Specify
ASK OR VERIFY – Did you have a job at the time of the incident?	840 1 □ Yes - SKIP to Check Item S 2 □ No
What was your major activity the week of the incident — were you looking for work, keeping house, going to school, or doing something else? Mark (X) only one box.	841 1 Looking for work 2 Keeping house 3 Going to school 4 Unable to work 5 Retired 6 Other – Specify
3	
	receive any help or advice from any office or agency — other than the police — that deals with victims of crime? Was that a government or private agency? Were the police informed? (Is "Yes" marked in 115 on page 15?) Have you (or someone in your household) had contact with any other authorities about this incident (such as a prosecutor, court, or juvenile officer)? Which authorities? Any others? Mark (X) all that apply. Do you expect the police, courts, or other authorities will be doing anything further in connection with this incident? ASK OR VERIFY — What were you doing when this incident (happened/started)? Mark (X) only one box. FIELD REPRESENTATIVE — If proxy interview, replace "you" with the name of the person for whom the proxy interview is being taken in 135–176. ASK OR VERIFY — Did you have a job at the time of the incident? What was your major activity the week of the incident — were you looking for work, keeping house, going to school, or doing something else? Mark (X) only one box.



138a.	Now I have a few questions about the job at which you worked during the time of the incident. Were you employed by (Read answer categories) –	343 1
138b.	Is this business incorporated?	staritable organization? – Ask 138b
138c.	What is the name of the (company/ government agency/business/ non-profit organization) for which you worked at the time of the incident?	954
138d.	What kind of business or industry is this?	955
	Read if necessary: What do they make or do where you worked at the time of the incident?	
138e.	Is this mainly (Read answer categories) –	956 1 Manufacturing? 2 Retail trade?
	Mark (X) only one box.	3 ☐ Wholesale trade? 4 ☐ Something else?
138f.	What kind of work did you do, that is, what was your occupation at the time of the incident?	957
	For example: plumber, typist, farmer)	
139.	What were your usual activities or duties at this job?	958
140.	While working at this job, did you work mostly in (Read answer categories) –	1 A city? 2 Suburban area? 3 Rural area? 4 Combination of any of these?
141a.	ASK OR VERIFY – Did this incident happen at your work site?	1
141b.	Did you usually work days or nights?	846 1 Days 2 Nights 3 Both days and nights/rotating shifts
142.	Is this your current job?	959 1 Yes 2 No
CHE	Was the respondent injured in this incident? (Is box 2–11 marked in 31 on page 5?)	☐ Yes (injury marked in 31) – <i>Ask 143</i> ☐ No (blank or None marked in 31) – <i>SKIP</i> to 147
143.	Did YOU lose time from work because of the injuries you suffered in this incident?	1 Yes – Ask 144 2 No – SKIP to 147
144.	How much time did you lose because of injuries?	Number of days – Ask 145 0 Less than one day – SKIP to 147 x Don't know – Ask 145
145.	During these days, did you lose any pay that was not covered by unemployment insurance, sick leave, or some other source?	872 1 ☐ Yes – <i>Ask 146</i> 2 ☐ No – <i>SKIP</i> to 147
146.	About how much pay did you lose?	S O0 Amount of pay lost



147.	work because of this incident for such things as cooperating with a police investigation, testifying in court, or repairing or replacing damaged or stolen property?	1 Police related activities
	Mark (X) all that apply. If no time was lost for any of these reasons, mark None (box 6).	6 ☐ None (did not lose time from work for any of these reasons) – SKIP to 151
148.	How much time did you lose altogether because of (name all reasons marked in 147)?	Number of days – <i>Ask 149</i> 0 ☐ Less than one day – <i>SKIP</i> to 151 x ☐ Don't know – <i>Ask 149</i>
149.	During these days, did you lose any pay that was not covered by unemployment insurance, paid leave, or some other source?	876 1 Yes - Ask 150 2 No - SKIP to 151
150.	About how much pay did you lose?	\$ 00 Amount of pay lost
151.	Were there any (other) household members 16 years or older who lost time from work because of this incident?	1 Ves – Ask 152 2 No – SKIP to Check Item T
152.	How much time did they lose altogether?	Number of days
		x □ Don't know
CHE		☐ Yes – Ask 153 ☐ No – SKIP to Check Item U
153.	ASK OR VERIFY – You told me earlier you were on the way (to/from) (work/school/some place) when the incident happened. What means of transportation were you using? Mark (X) only one box.	S81
CHE	Is this incident part of a series of crimes? (Is box 2 (is a "series") marked in Check Item D on page 1?)	☐ Yes – <i>Ask 154</i> ☐ No – <i>SKIP</i> to 161, page 21
154.	You have told me about the most recent incident. How many times did this kind of thing happen to you during the last 6 months?	Number of incidents – Ask 155 OR Don't know – Is that because there is no way of knowing, or because it happened too many times, or is there some other reason? 1 No way of knowing 2 Happened too many times 3 Some other reason – Specify
) A
155.	In what month or months did these incidents take place? If more than one quarter involved, ASK >	Number of incidents per quarter Jan. Feb., April May, July Aug., Oct. Nov.
155.		Number of incidents per quarter Jan., Feb., or March Otr., May, or Sept. or Dec. (Qtr. 1) (Qtr. 2) (Qtr. 3) (Qtr. 4) 885 886 887 888



occi	all, some, or none of these incidents ur in the same place?	1 ☐ All in the same place 2 ☐ Some in the same place
Mari	k (X) only one box.	3 None in the same place
inci	e all, some, or none of these dents done by the same person(s)? k (X) only one box.	1
the frie	at (was/were) the relationship(s) of offender(s) to you? For example, and, spouse, schoolmate, etc. k (X) all that apply.	Relative 891 1 Spouse at time of incident 2 Ex-spouse at time of incident 3 Parent or step-parent 4 Other relative - Specify
		Nonrelative
159. Did	the same thing happen each time?	893 1 Yes 2 No - How did the incidents differ?
160. Is th	ne trouble still going on?	894 1 Yes 2 No - What ended it?
CHECK ITEM V1	Mark the ONE category that best describes this series of crimes. If more than one category describes this series, mark the box with the lowest number.	Contact crimes S95 Completed or threatened violence in the course of the victim's job (police officer, security guard, psychiatric social worker, etc.) Completed or threatened violence between spouses other relatives, friends, neighbors, etc. Completed or threatened violence at school or on school property Other contact crimes (other violence, pocket picking purse snatching, etc.) – Specify
		Noncontact crimes 5 ☐ Theft or attempted theft of motor vehicles 6 ☐ Theft or attempted theft of motor vehicle parts (tire, hubcap, battery, attached tape deck, etc.) 7 ☐ Theft or attempted theft of contents of motor vehicle, including unattached parts 8 ☐ Theft or attempted theft at school or on school property 9 ☐ Illegal entry of, or attempt to enter, victim's home, other building on property, second home, hotel, motel 10 ☐ Theft or attempted theft from victim's home or vicinity by person(s) known to victim (roommate, babysitter, etc.) 11 ☐ Theft or attempted theft from victim's home or vicinity by person(s) unknown to victim 12 ☐ Other theft or attempted theft (at work, while shopping, etc.) – Specify p



161.	Hate crimes or crimes of prejudice or bigotry occur when (an offender/offenders) target(s) people because of one or more of their characteristics or religious beliefs.	1 1 1 1 1		
	Do you have any reason to suspect the incident just discussed was a hate crime or crime of prejudice or bigotry?	910 1 Yes - As 2 No 3 Don't kno	k 162 ow} SKIP to 163	7
162.	An offender/Offenders can target people for a variety of reasons, but we are only going to ask you about a few today. Do you suspect the offender(s) targeted you because of	1 1 1 1 1		
	(a) Your race?	896 1 Yes	2 \square No	3 🗆 Don't know
	(b) Your religion?	897 1 ☐ Yes	2 \square No	3 ☐ Don't know
	(c) Your ethnic background or national origin (for example, people of Hispanic origin)?	898 1 Yes	2 🗆 No	3 □ Don't know
	(d) Any disability (by this I mean physical, mental, or developmental disabilities) you may have?	899 1 Yes	2 🗆 No	3 □ Don't know
	(e) Your gender?	900 1 ☐ Yes	2 \square No	3 ☐ Don't know
	(f) Your sexual orientation?	901 1 Yes	2 \square No	3 ☐ Don't know
	If "Yes," SAY – (by this we mean homosexual, bisexual, or heterosexual)	1		
163.	Some offenders target people because			
100.	they associate with certain people or the (offender perceives/offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because			
100.	they associate with certain people or the (offender perceives/offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a	911 1 Yes - Spe	ecify _₹ 2 □ No	3 □ Don′t know
100.	they associate with certain people or the (offender perceives/offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)?		ecify _¥ 2 □ No	3 □ Don't know
100.	they associate with certain people or the (offender perceives/offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)?			3 □ Don't know
100.	they associate with certain people or the (offender perceives/offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)? (b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s) thought you were Jewish because you went into a	912		222
CHEC	they associate with certain people or the (offender perceives/offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)? (b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s) thought you were Jewish because you went into a synagogue)?	912 913 1 Yes - Spe	ecify ⊋ 2 □ No	222
CHE	they associate with certain people or the (offender perceives/offenders perceive) them as having certain characteristics or religious beliefs. Do you suspect you were targeted because of (a) Your association with people who have certain characteristics or religious beliefs (for example, a multiracial couple)? (b) The offender(s)'s perception of your characteristics or religious beliefs (for example, the offender(s)' thought you were Jewish because you went into a synagogue)?	912 913 1 Yes - Special 914 914 915 1 Yes - As	ecify	3 □ Don't know



	The next questions ask about the evidence you have that makes you suspect this incident was a hate crime or a crime of prejudice or bigotry. As I read the following questions, please tell me if any of the following happened:			
	(a) Did the offender(s) make fun of you, make negative comments, use slang, hurtful words, or abusive language?	916 1 Yes	2 □ No	3 □ Don't know
	(b) Were any hate symbols present at the crime scene to indicate the offender(s) targeted you for a particular reason (for example, a swastika, graffiti on the walls of a temple, a burning cross, or written words)?	917 1 Yes	2 □ No	3 □ Don't know
	(c) Did a police investigation confirm the offender(s) targeted you (for example, did the offender(s) confess a motive, or did the police find books, journals, or pictures that indicated the offender(s) (was/were) prejudiced against people with certain characteristics or religious beliefs)?	918 1 Y es	2 □ No	3 □ Don't know
	(d) Do you know the offender(s) (has/have) committed similar hate crimes or crimes of prejudice or bigotry in the past?	919 1 Yes	2 □ No	3 □ Don't know
	(e) Did the incident occur on or near a holiday, event, location, gathering place, or building commonly associated with a specific group (for example, at the Gay Pride March or at a synagogue, Korean church, or gay bar)?	1920 1 Yes	2 □ No	3 □ Don't know
	(f) Have other hate crimes or crimes of prejudice or bigotry happened to you or in your area/ neighborhood where people have been targeted?	921 1 Yes	2 🗆 No	3 □ Don't know
	(g) Do your feelings, instincts, or perception lead you to suspect this incident was a hate crime or crime of prejudice or bigotry, but you do not have enough evidence to know for sure?	922 1 Yes	2 🗆 No	з □ Don′t know
166.	At any time, did you tell the police that you believed the incident was a hate crime or crime of prejudice or bigotry?	908 1 Yes 2 No		
Notes	•	i		



167.	The next questions ask about any health conditions, impairments, or disabilities you may have.	1 1 1 1		
	Due to a health condition, impairment, or disability, are you limited in any of the following major life activities? (Read categories a-g below.)	E 1 1 1 1 1 1		
	(a) Self-care, such as bathing, dressing, or feeding yourself?	923 1 ☐ Yes	2 □ No	3 ☐ Don't know
	(b) Communicating, such as talking with or listening to other people?	924 1 ☐ Yes	2 □ No	3 ☐ Don't know
	(c) Learning any new skills or activities?	925 1 ☐ Yes	2 🗆 No	3 🗆 Don't know
	(d) Mobility, such as bending, walking, climbing stairs, or carrying something weighing approximately 10 pounds?	926 1 Yes	2 🗆 No	3 ☐ Don't know
	(e) Self-direction, such as making important decisions concerning your health care, education, or career?	927 1 Yes	2 □ No	3 ☐ Don't know
	(f) Living independently, such as preparing meals, shopping for groceries and personal items, and doing housework?	928 1 Yes	2 🗆 No	3 ☐ Don't know
	(g) Managing finances, such as keeping track of your money and paying bills?	929 1 Yes	2 □ No	3 □ Don't know
CHEC		☐ Yes - As	k 168 IP to Check Item \	W
168.	What specific health conditions, impairments, or disabilities do you have which limit your ability to (fill with "Yes" responses from 167/? FIELD REPRESENTATIVES – List up to 3 different conditions reported by the respondent. Do not repeat conditions.	930 0 None - \$	(First health cor (Second health (Third health co	odition)
CHE	Look at 168. Is only one health condition, impairment, or disability reported?	☐ Yes – <i>As</i> ☐ No – <i>SK</i>		
169.	You just reported that (fill with health condition from 168) limits your major life activities. Has this condition lasted longer than six months?	934 1 Yes 2 No		
170.	Do you consider your (fill with health condition from 168) to be mild, moderate, or severe?	1 935 1 Mild 2 Moderate 3 Severe 4 Don't known		
CHE	Is respondent's age greater than or equal to 22? (Look at control card item 17.)	☐ Yes - As		
171.	Did your (fill with health condition from 168)	936 1 Yes	1	

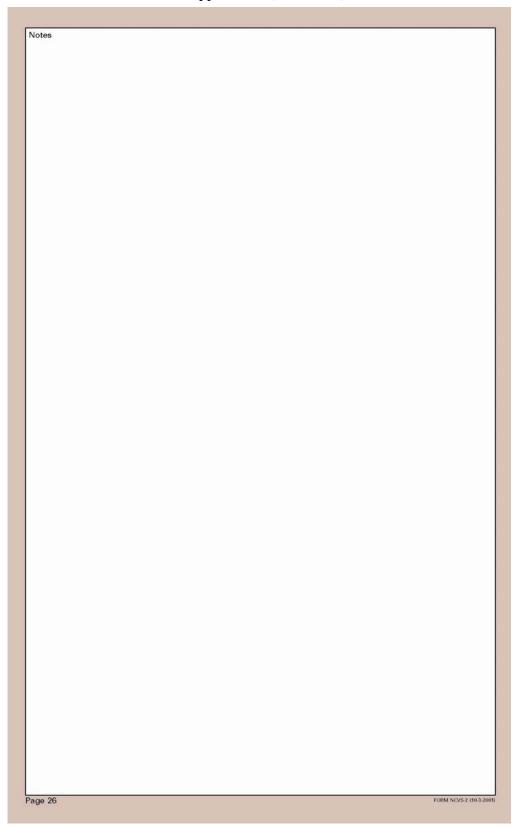


72.	conditions from 168) limits your major life activities. Which of these conditions lasted	937 0 None
	longer than six months?	(First health condition)
		939 (Second health condition)
		(Third health condition)
73.	Do you consider your (fill with FIRST health condition from 168) to be mild, moderate, or severe?	941 1 Mild 2 Moderate 3 Severe
	FIELD REPRESENTATIVE – Read only if a second health condition is listed in 168.	4 □ Don't know
	And what about your (fill with SECOND health condition from 168) Do you consider it to be mild, moderate, or severe?	942 1 Mild 2 Moderate 3 Severe 4 Don't know
	FIELD REPRESENTATIVE – Read only if a third health condition is listed in 168.	
	And what about your (fill with THIRD health condition from 168) Do you consider it to be mild, moderate, or severe?	1 Mild 2 Moderate 3 Severe 4 Don't know
	Is respondent's age greater than or equal to 22? (Look at control card item 17.)	☐ Yes – <i>Ask 174</i> ☐ No – <i>SKIP</i> to 175
74.	Which of your health conditions, impairments, or disabilities began before age 22?	944 0 None
		945 (First health condition)
		(Second health condition)
		(Third health condition)
75.	During the incident you just told me about, do you have any reason to suspect you were victimized because of your health condition(s), impairment(s) or disability(ies)?	948 1 ☐ Yes – Fill Check Item V8 2 ☐ No
TEN	Is more than one health condition, impairment or disability listed in item 168?	☐ Yes – <i>Ask 176</i> ☐ No – <i>SKIP</i> to Check Item W
76.	Which of your health conditions, impairments, or disabilities do you believe caused you to be targeted for this incident?	949 0 None
		(First health condition)
		(Second health condition)
		952 (Third health condition)
	FIELD REPRESENTATIVE - Go to Chec	k Item W and complete summary report.



CHECK TEM W	Summarize this incident or series of incidents. Include what was taken, how entry was gained, how victim was threatened/attacked, what weapons were present and how they were used, any injuries, what victim was doing at time of attack/threat, whether the incident was reported to the police or whether only nonhousehold property was stolen. ALSO INCLUDE DETAILS ABOUT THE INCIDENT THAT ARE NOT PROVIDED IN THE ANSWER CATEGORIES AND THAT WILL HELP CLARIFY THE INCIDENT. FIELD REPRESENTATIVE – Check BOUNDING INFORMATION on the back of the control card.	
		CHECK BOUNDING INFORMATION
CHECK TEM X	Is there an entry for *Number of persons*? (Refer to 54 on page 7.)	Yes – Be sure you fill or have filled an Incident Report for each interviewed household member 12 years of age or over who was harmed, threatened with harm, or had something taken from him/her by force or threat in this incident.
CHECK TEM Y	Is this the last Incident Report to be filled for this screen question?	☐ Yes – Fill Check Item Z ☐ No – Go to next Crime Incident Report
CHECK TEM Z	Is this the last Incident Report to be filled for this respondent?	☐ Yes – FILL NCVS-1, Check Item H ☐ No – Go to next Crime Incident Report





Appendix C: NCVS-551 Rotation Chart

Form NCVS-551													U.S		MENT OF C	
(3-10-98)														BUR	EAU OF TH	E CENSUS
						NCV	S ROT	ATIO	ON C	CHAI	RT					
							1998					1				
					ou.	iuui y	1000	٠,			200	•				
Year/Month			J [.]	19					J2	0					J21	
1998 JAN	11	12	13	14	15	16	11									
FEB	21	22	23	24	25	26	21									
MAR	31	32	33	34	35	36	31									
APR	41	42	43	44	45	46	41									
MAY	51	52	53	54	55	56	51									
JUNE	61	62	63	64	65	66	61									
JULY		12	13	14	15	16	11	12								
AUG		22	23	24	25	26	21	22								
SEPT OCT		32 42	33	34 44	35 45	36 46	31 41	32 42								
NOV		42 52	43 53	44 54	45 55	46 56	51	42 52								
DEC		62	63	64	65	66	61	62								
1999 JAN		02	13	14	15	16	11	12	13							
FEB			23	24	25	26	21	22	23							
MAR			33	34	35	36	31	32	33							
APR			43	44	45	46	41	42	43							
MAY			53	54	55	56	51	52	53							
JUNE			63	64	65	66	61	62	63							
JULY				14	15	16	11	12	13	14						
AUG				24	25	26	21	22	23	24						
SEPT				34	35	36	31	32	33	34						
OCT				44	45	46	41	42	43	44						
NOV DEC				54 64	55 65	56	51	52 62	53 63	54 64						
2000 JAN				04	15	66 16	61 11	12	13	64 14	15					
FEB					25	26	21	22	23	24	25					
MAR					35	36	31	32	33	34	35					
APR					45	46	41	42	43	44	45					
MAY					55	56	51	52	53	54	55					
JUNE					65	66	61	62	63	64	65					
JULY						16	11	12	13	14	15	16				
AUG						26	21	22	23	24	25	26				
SEPT						36	31	32	33	34	35	36				
OCT						46	41	42	43	44	45	46				
NOV						56	51	52	53	54	55	56				
DEC DEC						66	61 11	62	63	64 14	65 15	66	11			
2001 JAN FEB							21	12 22	13 23	24	15 25	16 26	11 21			
MAR							31	32	33	34	25 35	36	31			
APR							41	42	43	44	45	46	41			
MAY							51	52	53	54	55	56	51			
JUNE							61	62	63	64	65	66	61			
JULY							1	12	13	14	15	16	11	12		
AUG								22	23	24	25	26	21	22		
SEPT								32	33	34	35	36	31	32		
OCT								42	43	44	45	46	41	42		
NOV								52	53	54	55	56	51	52		
DEC								62	63	64	65	66	61	62		



About the Author

Timothy Hart received a Bachelor's Degree in Criminal Justice from the University of Florida in 1992 and a M. A. in Criminal Justice from the University of Memphis in 1997. Upon graduation, he was awarded a two year Presidential Management Fellowship with federal government. He continued in civil service for four years following the fellowship, working for the Bureau of Justice Statistics as well as the Drug Enforcement Administration. Mr. Hart entered the Ph.D. program at the University of South Florida in 2003.

While in the Ph.D. program, Mr. Hart actively developed his research interests in survey research, applied statistics, and geographic information systems (GIS). He coauthored an article published in the *Journal of Quantitative Criminology*, designed and administered two community surveys for the Hillsborough County Sheriff's Office, and was awarded a grant from the American Statistical Association to study response effects in the National Crime Victimization Survey.

