Towards A Working Model of Criminal Victimization: The psychological impact of residential break and enter

by

TREVOR JOHN MARKESTEYN

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TOWARDS A WORKING MODEL OF CRIMINAL VICTIMIZATION:

THE PSYCHOLOGICAL IMPACT OF RESIDENTIAL BREAK AND ENTER

BY

TREVOR JOHN MARKESTEYN

A Thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements for the degree of

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ABSTRACT

Utilizing an extended working model of factors relevant to victim recovery originally conceived by Sales, Baum and Shore (1984), the major objective of the current study was to investigate the predictiveness of three "classes" of variables others had suggested were related to victims' psychological post-crime reactions. The model posits that the severity and persistence of short and long-term reactions following victimization depend on (1) pre-victimization factors, (2) characteristics of the offense, and (3) post-victimization factors. The study was conducted with a representative sample of residential break and enter victims selected from police records in Winnipeg, Manitoba. Six hundred thirty-three victims were interviewed over the telephone within two weeks of the offense. Follow-up interviews were conducted with 504 victims, on average, five months later. Psychological distress reactions following the residential break and enter were assessed using a battery of standardized tests including the Impact of Events Scale, the General Health Questionnaire, the State-Trait Anxiety Inventory, and selected subscales from the Hopkins Symptom Checklist. As predicted, the findings were that each of the three "classes" of variables in the model significantly contributed to the prediction of post-crime outcomes. Pre-victimization factors, particularly physical and mental health variables, accounted for the largest proportion of variance in both short and long-term psychological distress scores. As a group, characteristics associated with the offense were least predictive of subsequent reactions. The best linear combination of predictors of short-term response to break and enter selected by stepwise multiple regression consisted of a set of 20 variables that accounted for 61% of the variability in scores on standardized tests of psychological distress. Pre-crime victim depression was the best single predictor of short-term

negative reactions. Long-term distress reactions were best predicted by victim trait anxiety. The optimal set of long-term predictors consisted of a set of 12 variables that predicted 66% of the variance in psychological distress scores. The results generally support the use of the working model. A criminological analysis of break and enter incidents in Winnipeg including law enforcement officer response is also reported. Implications for future research are discussed.

ACKNOWLEDGMENTS

Over the years it has taken to complete this research project, many people have provided me with their assistance. Foremost, I must thank my academic advisor, Dr. F. L. Marcuse for the inspiration and direction he has provided me since my first days of graduate school. While the other students worked in the labs of their advisors, Fred Marcuse allowed me the opportunity to discover and explore a relatively new area of psychology, Forensics. Since then he has helped and advised me in every way one could imagine. Most importantly, both Fred and Dvora ("the woman he lives with who just happens to be his wife", F.L.M.) have been, and continue to be, my friends.

I could not have completed this project without the assistance of the Winnipeg Police Department. There is a tendency among law enforcement personnel to be protective with the information contained within their files - perhaps it is a defense mechanism against "police bashing". Nonetheless, the Winnipeg Police Department allowed access to their records and provided me with as much assistance as they could. My sincere thanks, therefore, go out to the Commissioner of Protection, Parks, and Culture, Loren Reynolds, the Chief of the Winnipeg Police, Dale Henry, the former chief, Herb Steven, the head of Community Relations, Sergeant Paul Johnson, the former head of Victim Services, Constable Richard Jones, and all the civilian staff and volunteers who helped me during the data collection.

The research was made possible by a research grant awarded by the Manitoba Victim's Assistance Committee, the Attorney General's Department and the Department of Justice. I am grateful to the Government of Manitoba for having the vision during times of financial constraint to fund this project. Without funding this project would not have been completed and consequently, I humbly submit, our

collective knowledge of the behavioral and psychological antecedents, concomitants, and consequences of criminal victimization would not have grown. My research assistants (all of them fellow students) hired to conduct the interviews with victims also thank you.

While I am on the subject, I want to express my gratitude to the people who conducted the telephone interviews. They were Arlen Nimchuk, Susan Bruce, Karen Roth, Penny Cole, Gillian Manning, Brenda Poersh, Ron Bartmanovich, Eric Kruger and Sharon Markesteyn. Thanks also to David Hill who spent many hours inputting data onto to University Mainframe Computer.

My dissertation committee consisted not only of Dr. Marcuse, but also Dr. Stephen Brickey, Dr. Cam Huynh, Dr. Ross Hartsough and Dr. Irvin Waller. Dr. Brickey, from the Department of Sociology, my research advisor, helped me throughout the project. His input, support and foresight, particularly his ability to steer me clear of potential road blocks has been invaluable. Cam Huynh labored with me for many hours over the statistical analyses, while Dr. Hartsough and Dr. Waller read and critiqued my final draft. I have always believed that everyone needs an editor. Thank you all for your help.

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INTRODUCTION

"We are all victims of crime because we are all afraid of victimization"
- Bard and Sangrey (1986, p. xviii) -

A criminal offense is not only a violation of law but in most cases harm is also inflicted on a victim (Hough, 1985). The victim may be a person, an organization, the legal system, or society. Indeed, it has been suggested that there can be no criminal offense without a victim (Schafer, 1977). Invariably, someone or something will be endangered, harmed, or destroyed by a criminal act.

Historically criminologists have been more concerned with criminal behavior, criminal law, law enforcement and more recently with the dynamics of the "criminal mind" than with victims of crime (Schneider, 1982). Victimology, that branch of criminology engaged in the "scientific study of victims and of the process, etiology, and consequences of victimization" (Wolfgang, in Schneider, 1982, p. 12), developed in the 1940's out of interest with criminal-victim relationships.

Von Hentig (1941) was one of the first to recognize the importance of the victim's place in criminological research. He viewed the victim of crime as having an active role in the process of another's criminalization (i.e., becoming an offender). Accordingly, victimization and criminalization were studied as "processes of social interaction", as "complementary partners" wherein victims "shape and mold" their offender (Schneider, 1982). This orientation of victim-as-culprit was evident in the work of others on "victim precipitation" and continued to pervade much of the victimology literature after World War II (e.g., Abrahamson, 1960; Amir, 1971; Von Hentig, 1948; Wolfgang, 1958). According to this perspective, the victim of crime was considered "an essential factor in the process of crime causation and crime

control" (Schneider, 1982, p. 13). Wolfgang (1958), for example, defined victim precipitated homicide and aggravated assault as situations in which the victim initiated insults or used physical force against an individual who responded in turn. Amir (1971) considered a sexual assault victim's "bad reputation", the use of profanity, alcohol consumption, "suggestive" clothing and provocative behavior as precipitating factors of the crime. Similarly, public protection campaigns warned that the open display of money "tempts" thieves and muggers. Weis and Borges (1973) have suggested that most of the victimology research conducted during this period could more appropriately be called "victorology" as it reflected "more interest in the winners (lat. victores) than in the losers of criminal activity" (p. 97) - the victims.

Historically, the tendency to blame victims of misfortune for their fates has not been limited to victims of crime. It has pervaded a variety of explanations of causation. The Jews during World War II were held accountable for their persecution by the Nazis, poor and less fortunate individuals have been labelled lazy, and disenfranchised native peoples have been regarded as alcoholics (Ellison & Buckhout, 1981).

The tendency of individuals to attribute responsibility to victims for their misfortune has been addressed by Ryan (1971). He has argued that every important social problem whether it is crime, mental illness, civil disorder, or unemployment can be analysed within the framework of a "victim-blaming" ideology. According to Ryan, people who are advantaged by virtue of their social position look upon others who are affected by a social problem as different in some way than themselves - perhaps less competent, less skilled, less knowledgeable, strange, etc.. When they perceive others as failing to achieve the same outcome as themselves, the tendency is to define the differences as the causes of the social problem itself. The logical outcome of analyzing social problems in terms of deficiencies in the victim is the development of programs aimed at correcting those deficiencies. The formula for action is straightforward - simply change the victim. In other words, to maintain the perception that we live in a

fair and just society we cannot easily accept the prospect that our social system is faulty; therefore we are compelled to believe that "they" are the problem. Non-victims will derogate victims to keep self-perceptions of personal deservingness intact.

Lerner (1965, 1970, 1974) and his colleagues (Lerner & Lichtman, 1968; Lerner & Matthews, 1967; Lerner & Miller, 1978; Lerner & Simmons, 1966) have postulated a theory of victim derogation that shares some of the elements of Ryan's model of victim-blaming. Lerner argues that individuals have a need to believe their environment is a just and orderly place. In this "just world" people have a strong tendency to believe that one receives what one deserves, and deserves what happens. By maintaining that a victim deserves her or his fate as a consequence of engaging in "bad" acts or having a "bad" character we are, in turn. upholding our conviction that we live in a "just world". People attempt to derogate victims perceiving them as the sort of people deserving of their misfortune.

In contrast to the orientation that "in a way, the victim is always the cause of the crime" (Amir, 1971, p. 258) is the perspective that characteristics of the victim's behavior do not excuse the offender. On this subject Ellison and Buckhout (1981) wrote "although there are indeed certain characteristics of individuals that increase the likelihood that they will be targeted as crime victims, the purpose of the law is to protect the weak, the incautious, even, as in the case of confidence games, the greedy against those who would exploit them" (p. 49). Hough (1985) has suggested that this change in perspective can be located, in part, in the context of an ever-growing skepticism among individuals who worked in the criminal justice system during the early 1970's about that system's ability to deter or rehabilitate those who pass through it. Millions were being spent to apprehend, prosecute, incarcerate, and rehabilitate offenders, yet the needs and wishes of victims went unheard.

Current interest in the effects of criminal acts can also be attributed to the feminist movement. Throughout the 1970's women grew increasingly vocal about their

experiences with and reactions to sexual assault and domestic violence (Baril, 1984; Resick, 1987b). As a result, public awareness of the frequency with which women are the targets of violence grew (Sales, Baum & Shore, 1984). It was argued that the criminal justice system should be responsive towards the victims, not solely the perpetrators, of crime. Centres offering assistance to victims emerged and crime victim advocacy groups were established which effectively lobbied to have their interests in the plight of the crime victim placed on the political agenda. In response federal, provincial, and municipal governments in North America and in other parts of the world allocated resources to victim assistance programs and have since funded research aimed at increasing our understanding of the problems suffered by the victims of crime.

Once labelled the "forgotten persons" in the criminal justice system (MacDonald, 1976), victims and their problems have become the focus of considerable attention. Over the last twenty years (circa, 1970), victimologists have shifted their focus from one of being primarily interested in how victim attributes precipitate the commission of criminal acts to an interest in victimization rates (e.g., Komesar, 1973), victim demographics (e.g., Conklin & Bittner, 1973), the reporting of crime (e.g., Smith and Maness, 1976), fear of crime (e.g., Garofalo, 1979) and the costs of criminal victimization (e.g., Pope, 1977). In addition, victimologists have recognized that there is very little known about the effects of victimization apart from its economic consequences (Parsonage, 1979). Less understood are the extent of psychological, social, and interpersonal costs associated with criminal victimization - such losses are far less tangible.

In many ways psychology, like criminology, has followed societal values in defining the nature of its interests and, thus, has just recently acknowledged the victim's plight. In 1982 the American Psychological Association established a Task Force on the

Victims of Crime and Violence and summarized psychology's prior interest (or lack thereof) in victims of crime.

> Despite a distinguished history of research on aggression and violence in a variety of forms and despite large numbers of psychologists whose interests touch upon crime-related issues (forensic psychologists, community psychologists, correctional psychologists, police psychologists, legal psychologists, etc.), literature attesting to interest in victims is sparse indeed. In fact, even psychologists interested in stress failed to include crime victimization in the category of stressful life events (A.P.A., 1985, p. 107-108).

Research conducted over the last decade has revealed that many individuals endure a wide range of psychological problems varying in intensity and duration as a direct result of criminal victimization. The current literature clearly indicates that the aspects commonly thought of as most unsettling (i.e., physical injury and/or the loss of property) may be less important than the psychological trauma experienced by victims of crime (A.P.A., 1985; Bard & Sangrey, 1986). Among the most grievous and long lasting injuries are those perceived as being at the level of feeling and behavior. The consensus among researchers and service providers is that criminal victimization produces a variety of psychological and behavioral disruptions ranging from short-term relatively minor discomfort to serious long-term post traumatic stress disorder (A.P.A., 1985; Bard & Sangrey, 1986; Burgess & Holmstrom, 1979a; Kilpatrick, Saunders, Veronen, Best & Von, 1987; Maguire, 1980; Walker, 1985; Wirtz & Harrell, 1987b). The number of victims who face the prospect of serious physical and psychological difficulties requiring health care and other services will undoubtedly continue to increase as greater numbers of people fall victim to crime each year.

Limitations of the literature

It is a generally accepted fact that victims of crime suffer. However, the precise nature of the trauma caused by the offense, the intrapsychic processes involved, the influence of moderator variables, and several other important issues remain the subjects of debate. These problems, in part, stem from the fact that researchers working in the field of victimology operate from diverse, if not opposing, academic perspectives. For example, social psychologists studying reactions to stress, negative outcomes and victimization have focused primarily on the assumptions, attributions, and perceptions that influence (or are influenced by) the psychological and behavioral responses to distress, personal failure and/or loss of control. Other psychologists, usually those with clinical training, have concentrated their efforts on the emotional trauma that may accompany unpredictable and sudden negative life-events. Many are also interested in the social support received by crime victims, the quality of service provided by victim assistance agencies, and the effectiveness of treatment strategies. Unfortunately, the theory and research findings of researchers and practitioners working in these various fields of psychology have seldom borrowed from or melded with the wealth of data on victimization accumulated by criminologists. Referring to the literature on rape, Burt and Katz (1985) were struck by "how completely individual writers have narrowly focused on their own particular perspective without regard for the wider context" (p. 327).

Perhaps the most serious problem within the victimization research is that it has been primarily phenomenon-oriented, exploratory, not theory driven. Few attempts have been made by researchers to articulate the process by which symptomology occurs. Although it is true that many phenomenological studies have provided valuable descriptions of the behavior of interest, this approach rarely generates abstract formulations from which hypotheses can be made (Burt & Katz, 1985; Peterson &

Seligman, 1983). Conversely, purely theoretical conceptualizations have been proposed that fail to integrate the existing empirical findings. For example, models have been postulated that overlook the evidence that the impact of criminal victimization is mitigated by a series of interlinked antecedent, concomitant, and consequential variables.

A phenomenon-oriented approach to the study of victimization has also resulted in a research literature split into discrete areas (Peterson & Seligman, 1983). Researchers studying the effects of crime have frequently chosen to investigate a particular type of victim without considering the implications of their findings with respect to other groups of victims. For reasons previously articulated, the vast majority of psychological research has concentrated more on victims of sexual assault than any other type of crime. Janoff-Bulman and Frieze (1983) observed that this preference extends towards studying female victims despite the type of crime investigated. Indeed, many people "tend to think of the prototypic victim as female" (p. 13).

Beyond these theoretical concerns, several methodological shortcomings should be considered when evaluating the victimology literature. Burt and Katz (1985) have identified several problems with the methods employed to study the effects of sexual assault that are also frequently found in the research on robbery, domestic violence, burglary and other crimes. First, researchers commonly do not use standardized instruments to assess reactions in terms of depression, anxiety, and other symptoms. Open-ended questions and those tailored to suit specific researchers limit the generalizability of findings and often make cross-study comparisons difficult. When standardized instruments are used, they are usually customized in some manner, perhaps for use over the telephone or shortened in length. It is rare when the psychometric properties of these modified questionnaires are reported.

Second, problems are present with the sampling procedures. Although there are some notable exceptions, many studies have relatively small sample sizes (e.g., 10-25

subjects), occasionally consisting of a single subject. In addition, victims are commonly selected by placing advertisements in newspapers, chosen from police files or identified by their presence in a victim crisis program. These methods of subject selection sample only from the ranks of people seeking assistance and, therefore, limit the generalizability of the results. To illustrate, it is well known by criminologists that many crime victims do not report the offense to law enforcement officers. For example, in Canada, it is estimated that only 32% of all robbery offenses are brought to the attention of the police (Sacco & Johnson, 1990). Research findings based solely on a small sample of robbery victims selected exclusively from police records may only be representative of a subset of the total population of robbery victims.

Finally, non-victim control groups are rarely used and, when selected, they are often chosen using different recruitment methods. Seldom are non-victims screened to determine if they have been recently traumatized. Moreover, studies conducted with clinical samples seeking treatment frequently draw control groups from other clinical populations. These sampling techniques may result in a miscalculation of the type and degree of symptomology experienced by crime victims.

In sum, the sampling procedures commonly found in the victimology research are such that the findings of individual studies may not generalize to the population of crime victims or even to other victims of the same offense. Perhaps not surprisingly, the published literature contains a large number of studies reporting variable findings. Weiler & Desgagne (1984), for example, reported that the consequences of criminal victimization are dependent on factors including the type and severity of the crime, the victim's age and physical health, the reactions of significant others, the subsequent involvement of the victim with the criminal justice system, and the immediate effects of the crime on the victim's mental health. Everstine & Everstine (1983) reported that the psychological trauma following victimization is associated with five factors: physical injury incurred, coping ability arising from prior experiences, fear of being killed

during the crime, knowledge of the offender's identity, and the location of the incident. Alternately, Bard & Sangrey (1986) identified the following variables as important predictors of subsequent victim psychological well-being: the degree of violation (crime seriousness), the capacity to deal with stress resulting from past experiences, and the availability and effectiveness of support systems.

Commonly the methodology utilized by a victimology researcher is not chosen because it is preferred. Often financial constraints dictate that sacrifices be made, perhaps in sample size, target population, subject selection, etc.. The data that is obtained is frequently collected at great expense over a considerable period of time. Despite methodological and conceptual shortcomings, it is appropriate to conclude that the literature on the impact of criminal victimization has succeeded in providing a detailed and valuable picture of the multiple psychological, behavioral, physical and material costs of crime. In particular, research on the effects of sexual assault has provided a wealth of valuable information about the general process of criminal victimization. Unfortunately, the literature on the effects of other crimes has been comparatively sparse.

Clearly, the pool of knowledge about the effects of victimization could be greatly expanded by studying the victims of a variety of crimes. A broader view of victim reactions is needed; one that integrates the findings from different areas into a more general model of criminal victimization. The research data and theoretical formulations of researchers working in a variety of fields and disciplines must be taken into consideration if a comprehensive model is to stand the rigors of scientific investigation.

Prelude to the Current Study

The primary purpose of the current study is to review the theory and research from a variety of fields related to victimology and, based upon this literature, attempt to

develop and test a model of factors predictive of short and long-term crime victim psychological response. The model is based upon three time-ordered "classes" of variables spanning the period before the crime to months, perhaps years, following the victimization that have been posited by Sales et al. (1984) as contributing to crime victims' reactions to sexual assault. The precise nature of the trauma caused by crime, the intrapsychic processes involved, the role of moderator variables, and several other issues remain the subjects of debate. It is postulated that victims' reactions to criminal events are determined by a variety of factors including: a) pre-victimization demographic, cognitive, and psychosocial variables, b) the nature the criminal offense itself, and c) a number of post-victimization factors such as the support victims receive from others and encounters with law enforcement personnel. Ultimately, it is hoped that the model will provide a framework to evaluate the psychological effects of crime in general but, for the purposes of the current study more specifically, the consequences of residential break and enter.

Model of Victim Reactions to Crime

Some Considerations

Over the last two decades a substantial number of empirical studies have been conducted that have increased our understanding about the cognitive and functional processes of criminal victimization. However, considering the profound personal impact crime can have on individuals and the apparent complexities of this event, the combined pool of published knowledge about the consequences of crime and the processes involved is disproportionately small. Moreover, the victimology literature has, for the most part, been fragmented. The research data and theoretical formulations of researchers working in a variety of fields and disciplines have not been

previously amalgamated. Various aspects of the victimization process have been explored without the direction of an overriding theoretical model.

Although a more comprehensive theoretical framework is necessary, there are some important limitations to the use of a predictive model (Janoff-Bulman & Frieze, 1983; Sales et al., 1984). First, a general model of victimization response will not predict individual outcomes. As an illustration of this point consider that people commonly differ in terms of prior life events and in terms of their abilities to cope with personal tragedy. These factors may influence the psychological responses of most victims but may be less important than, for instance, the degree of violence experienced by a particular individual. A second limitation is that one must be careful not to presume that the conclusions regarding the victims of one type of crime are generalizable to another without corroborative empirical evidence. Victimization studies commonly group a broad spectrum of victims without attempting to differentiate, for example, armed robbery from purse snatching.

The validity of these limitations notwithstanding, a more common mistake found in the victimization literature has been "to assume the uniqueness of patterns derived from a single victim group when such patterns actually characterize a broader set of victim reactions" (Sales et al., 1984, pp. 130-131). Citing the works of Krupnick and Horowitz (1980), Bard and Sangrey (1986), and Silver and Wortman (1980), Sales et al. (1984) concluded that the research on reactions to specific crises "may be more generalizable than was previously thought" (p. 131) and, particularly relevant to this discussion, "studies that span different victim groups seem to find more similarity than difference" (p. 131). In other words, the reactions of victims subjected to different crimes may be *qualitatively* similar. Support for this position is extensive and integral to the concept of a general model of victim reaction.

Variations in Reactions by Offense

In general terms, the relationship between type of crime and subsequent reactions is straight forward - the more "serious" the offense, the more serious are the psychological effects on the victim. Theoretically, this relationship is reflected in Bard and Ellison's (1974) hypothesis that a victim's psychological distress is a function of the intrusiveness (i.e., degree of personal violation) experienced. Accordingly, in as far as people regard their homes as symbolic extensions of themselves, Bard and Ellison postulate a burglary can induce a crisis of "the self". A more serious violation involving loss of control and personal autonomy may occur when a person is robbed and, moving up the scale, robbery plus personal assault invokes a double threat, both loss of control and injury to the body (the "envelope" of the self). Finally, the most serious crime, other than homicide, generally producing the most extreme personal violation, that of the "inner self", is forcible rape.

The Bard-Ellison hypothesis has been tested in two ways. First, researchers have studied the relationship between the degree of violence that is inherent in different types of crime and subsequent psychological trauma. This work has concentrated on factors related to the severity and intrusiveness of criminal events such as weapon use, physical injury, relationship with offender, and number of assailants. Generally, the research indicates that the greater the *overall* degree of violence, regardless of the particular type of offense, the more severe and long-lasting the psychological distress is for the victim (e.g., Briere & Runtz, 1988; Conte & Schuerman, 1987; Cook, Smith & Harrell, 1987; Ellis, Atkeson & Calhoun, 1981; Kilpatrick, Saunders, Amick-McMullan, Best, Veronen & Resnick, 1989; Norris & Feldman-Summers, 1981; Sales et al., 1984; Smale & Spickenheuer, 1979; Waller & Okihiro, 1978).

Second, researchers have compared the effects that different types of criminal offenses have on victim reactions. The impact of sexual assault, for example, has been

compared to the impact of robbery, burglary, etc.. A substantial body of literature has been published on this topic (Bourque, Brumback, Krug & Richardson, 1978; Brown & Yantzi, 1980; Cook et al., 1987; Fields, 1980; Friedman, Bischoff, Davis & Person, 1982; Frieze, Hymer & Greenberg, 1987; Greenberg, Ruback & Westcott, 1983; Hanson, 1990; Kilpatrick et al, 1985; Kilpatrick et al., 1987; Kilpatrick et al., 1989; Krupnick & Horowitz, 1980; Lurigio, 1987; Maguire & Corbett, 1987; Norris, Kaniasty & Scheer, 1990; Noyes & Slymen, 1979; Resick, 1987b; Shapland, Willmore & Duff, 1985; Skogan, 1987; Symonds, 1982; Wirtz & Harrell, 1987a, 1987b, 1987c). Although some studies report data to the contrary, a consensus in the literature is that victims of "serious" crimes involving an aspect of physical assault suffer more psychological distress than victims of other crimes. In particular, the conclusion most frequently reached by those who have reviewed the literature is that female victims of "completed" sexual assault experience the most trauma (see Hanson, 1990).

Bard is careful to point out, however, that: "although the injury to the self intensifies as the crime becomes more serious, the degree of violation experienced by an individual victim finally depends on the meaning of the crime in that person's life. What seems a minor incident to one victim may be a personal catastrophe for another" (Bard & Sangrey, 1986, p. 17). For example, the experience of being robbed by gun point may potentially represent a more intense violation than being sexually assaulted, depending on the individual involved.

Indeed, researchers have frequently reported that victims of different types of crime experience similar mental health problems. Qualitatively similar effects have been found by researchers comparing the impact of rape, physical assault, robbery, and burglary. Cook et al. (1987), for example, compared the impact of sexual assault, domestic assault, non domestic assault, robbery and burglary and reported evidence that "criminal victimization causes a generalized psychological reaction that is common to most victims regardless of the crime" (p. 13). Not surprisingly, the type of crime

had a considerable influence on the level of victim distress but the differences between the groups were determined to be a matter of *degree* rather than *type*. Wirtz and Harrell (1987a) subjected these data to further analysis and concluded ...

> ... it would appear that response to victimization is a more unified psychological process than is typically reported in the literature. While differences (other than level) in response patterns between victims of different types of crime remain to be discovered, there appears to be a fair degree of communality in the way in which victims, as a group, respond to their victimization (p. 275).

Other researchers have also noted a similarity in victim response to different crimes (e.g., American Bar Association, 1983; Fields, 1980; Frieze et al., 1987; Greenberg et al., 1983; Kilpatrick et al., 1985; Krupnick & Horowitz, 1980; Lurigio, 1987; Mullen, Romans-Clarkson, Walton, & Herbison, 1988; Resick, 1987a, 1987b; Shepherd, Qureshi, Preston & Levers, 1990; Skogan, 1987).

Theoretically, the similarity of victim reactions can be accounted for by "crisis theory" (see Bard & Ellison, 1974; Bard & Sangrey, 1986; Beigel & Berren, 1985; Burgess & Holmstrom, 1974; Flynn, 1989; Lindemann, 1944; Paap, 1981; Shepherd, 1990; Sutherland & Scherl, 1970; Symonds, 1980, 1982; Waller, 1984). Caplan (1964) defines a crisis as "a relatively short period of psychological disequilibrium in a person who confronts a hazardous circumstance that for him [sic] constitutes an important problem which he [sic] can for the time being neither escape nor solve with his customary problem solving resources" (p. 23). Stressful life events, in particular violent crimes against an individual and even some crimes that have been traditionally considered crimes against property (e.g. breaking and entering), often precipitate a crisis reaction in the victim (Ellison & Buckhout, 1981; Bard & Ellison, 1974; Bard & Sangrey, 1986). Crisis theorists argue that the sudden and unpredictable nature of criminal victimization can produce such intense stress that the victim frequently finds it

difficult to cope. According to Bard and Sangrey (1986), the crisis evoked by this event threatens "the self" which in turn produces significant disruption in the emotions and behavior of the threatened person.

Lindemann (1944), who many consider the "father" of modern crisis theory, studied the victims and families of the famous Coconut Grove nightclub fire in Boston and observed that immediately following a crisis many victims display acute "grief" which is remarkably uniform in symptomology. Crisis reactions subsequently reported in the literature include feelings of tiredness, depression, exhaustion, helplessness, frustration, inadequacy, anxiety, shock, confusion, a range of physical symptoms and disorganized interpersonal functioning (see Bourque et al., 1978; Ellison & Buckhout, 1981; Halpern, 1973). Furthermore, Lindemann (1944) observed that when faced with a crisis, people's reactions have a regular pattern; one that tends to occur in stages.

As described in the literature, the stages of a crisis reaction frequently overlap one another and are often referred to by different names (e.g., Bard & Ellison, 1974; Bard & Sangrey, 1986; Everstine & Everstine, 1983; Sutherland & Scherl, 1970; Symonds, 1975). This disagreement in number and nomenclature is a derivative of the fact that researchers have drawn heavily from two independent sources when describing the phases of response to specific victimization experiences (i.e., Burgess and Holmstrom's, 1974, two-stage rape trauma syndrome and Sutherland and Scherl's, 1970, three-stage model). Bard and Sangrey (1986) have integrated this work and created a generic description of the stages of a crisis reaction which victims of most crimes will experience. Recognizing that the "lines of demarcation" between the stages of the recovery process frequently shift and blend into one another, they forward a model of the typical crisis reaction consisting of three stages (impact, recoil, and recognition) which serves as a "broad outline on which victims can overlay their own unique experiences" (p. 35).

The Working Model

The proposed model is based on the work of Sales et al. (1984) who developed a paradigm to account for the reactions of female victims to sexual assault. Studies comparing the psychological and behavioral consequences of different crimes on victims have indicated that there are qualitatively comparable effects of victimization. Therefore, it is postulated that Sales' model may have general applications for victims of other offenses.

In their article Sales et al. wrote that, at the time, there was very little information published on factors affecting victim reactions to crime. Subsequently a great deal of additional research on the processes involved in (and consequences of) criminal victimization has been conducted. Although the elements of Sales et al.'s original conceptualizations have remained fundamentally sound, the theoretical formulations and empirical data of others suggest a more complex model of crime victim adaptation and recovery (see Winkel, 1989).

Based on a review of the published theory and empirical data of victimology researchers from a variety of disciplines, a model of factors predictive of short and long-term victim psychological reactions to crime is postulated (see Figure 1). The model includes variables that other researchers and service providers working in a variety of disciplines (e.g., social work, medicine, psychology and criminology) have shown to be associated with; 1) victims' pre-victimization characteristics, 2) victims' post-victimization variables, and 3) factors related to the criminal event. These three sequential "classes" of variables span the period from before the crime to months, even years, following the victimization. In the model, each set of factors may influence the reactions of victims. Outcomes can be assessed by a battery of standardized measures such as the ones listed in Figure 1.

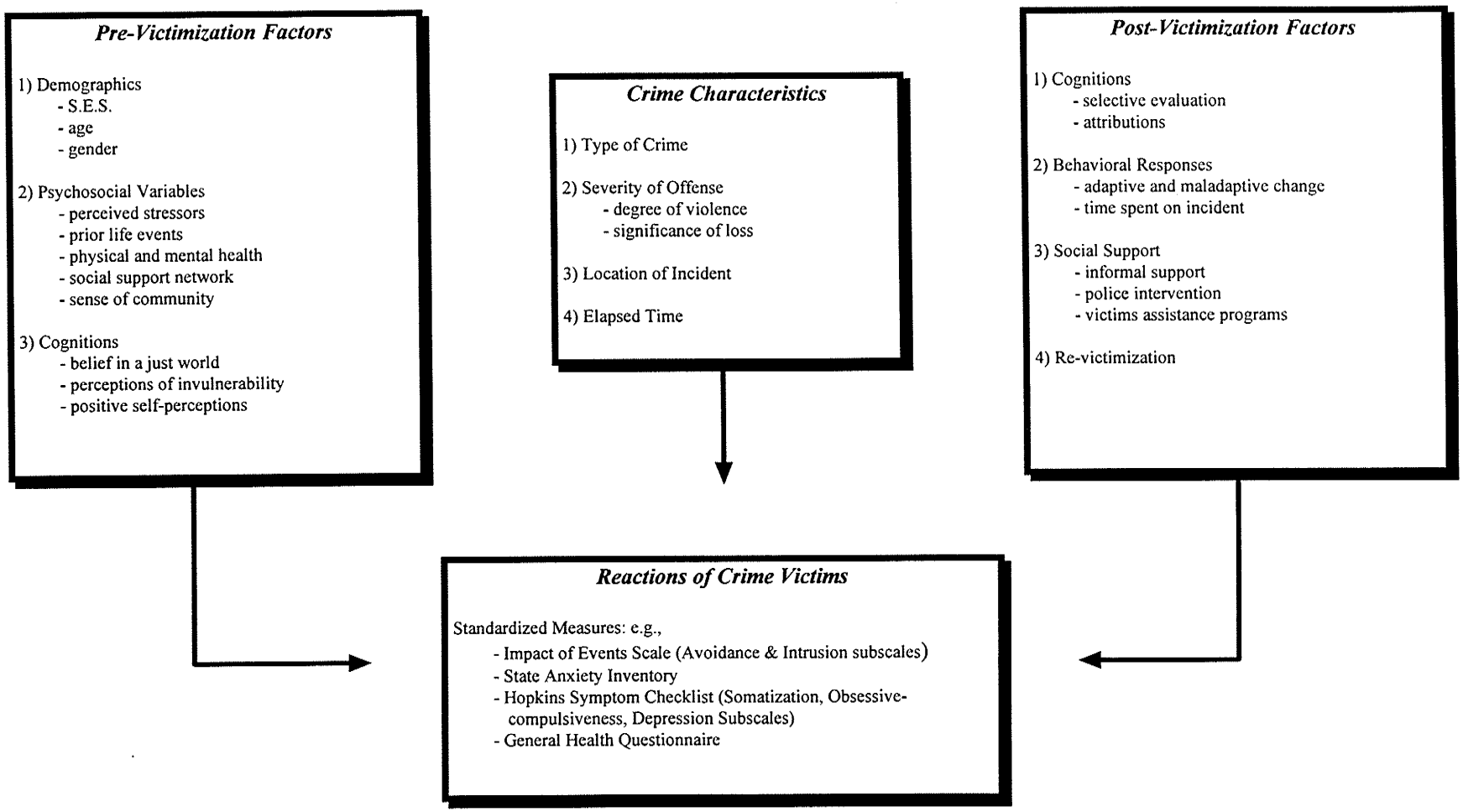

Figure 1. Working Model of Factors Predictive of Crime Victim Reactions

Pre-Victimization Factors

Discussion now turns to the pre-victimization, "background" variables that have been shown to potentially moderate crime victims' reactions. They include demographics (e.g., age, gender, income, etc.), psychosocial factors (e.g., prior physical and mental health, available social support, etc.), and theoretically important assumptions and beliefs that we possess before becoming a victim of crime (e.g., belief in a just world, perceptions of invulnerability, etc.).

Demographics

Research has shown that several demographic variables are associated with victim reactions following crime. Although the data base is small and consistent results are not always found, most available evidence suggests that socioeconomic status (e.g., income, occupation, education), gender and age are important in this regard. Studies that have looked at religious denomination (Atkeson, Calhoun, Resick & Ellis, 1982; Bourque et al., 1978; Cook, Skogan, Cook & Antunes, 1978; Frank & Stewart, 1984; Ruch & Chandler, 1983; Wirtz & Harrell, 1987b) have found it is not predictive of outcomes. In addition, only two studies (Friedman et al., 1982; Ruch & Chandler, 1983) have revealed any relation between a victim's race and subsequent symptomology (cf. Atkeson et al., 1982; Bourque et al., 1978; Burnam et al., 1988; Cook et al., 1987; Frank & Stewart, 1984; Kilpatrick et al., 1985, 1987, 1989; Sorenson & Golding, 1990).

Socioeconomic status (S.E.S.). Most of the published evidence indicates that socioeconomic status variables (e.g., income, occupation, education), are important factors related to victimization distress. Compared to those less fortunate, victims with more education, better jobs and (generally as a consequence) higher incomes display the strongest ability to recover from victimization (see Atkeson et al., 1982; Brown &

Yantzi, 1980; Burgess & Holmstrom, 1978a; Cook et al., 1978; Cook et al., 1987; Friedman et al., 1982; Maguire, 1980; Maguire & Corbett, 1987; Smale & Spickenheuer, 1979; Smith & Hill, 1991; Van den Bogaard & Wiegman, 1991). However, positive results are not always reported (e.g., Burnam et al., 1988; Frank & Stewart, 1984; Kilpatrick et al., 1985, 1987, 1989; Skogan, 1987; Sorenson & Golding, 1990).

The results of time-sequence research have shown that low S.E.S. may be more predictive of long-term victimization outcomes than short-term reactions. Cook et al. (1987) surveyed assault, robbery, and burglary victims one month after the crime and again four to six months later. They reported that as time increased, income and education became increasingly important in differentiating victims who recovered from those who did not. Specifically, compared to their counterparts, victims with higher incomes and/or education demonstrated the strongest ability to recover from their misfortune. Similar results have been reported by Atkeson et al. (1982) with victims of sexual assault. They found that S.E.S. was related to rape victims' depressive reactions at twelve months post-rape but no demographic variables were predictive of rape victims' reactions at four and eight months after the attack. Burgess and Holmstrom (1978a) also studied the relationship between "economic stress" and length of recovery from sexual assault and reported that female victims with very low paying or transitory jobs had a lower rate of both short and long-term recovery than women who were not experiencing economic difficulties.

Gender. Research has been generally consistent in showing that female crime victims suffer more post-crime psychological distress than males (Bourque et al., 1978; Elias, 1986; Hough, 1984; Leymann, 1985, 1988; Maguire, 1980; Maguire & Corbett, 1987; Markesteyn, 1991; Resick, 1987a, 1987b; Shepherd et al., 1990; Smith & Hill, 1991; Van den Bogaard & Wiegman, 1991; Waller & Okihiro, 1978; Wirtz & Harrell,

1987b). Maguire (1980), for example, reported that a larger proportion of women than men experienced "shock, fear, or upset" after they were burglarized. Of those victims experiencing the greatest acute distress, 90% were female. Almost 80% of the victims deemed to be experiencing long-term effects were also female. Similar gender differences have been reported in other studies of burglary victims by Hough (1985), Bourque et al. (1978), and Waller & Okihiro (1978). Counter indicative results, however, also exist (e.g., Brown & Yantzi, 1980; Burnam et al., 1988; Friedman et al., 1982; Gabor et al., 1987; Shapland et al., 1985; Skogan, 1987; Sorenson & Golding, 1990; Sprang, McNeil & Wright, 1989).

Researchers have noted a similar relationship between gender and victimization responses to other crimes. Wirtz and Harrell (1987b), for example, studied behavioral coping responses to rape, assault, robbery and burglary and found that females were more likely to stay at home and, if they had children, go out alone less often than men. A few studies have also shown that gender differences tend to wane over time. Cook et al. (1987) found that in the period immediately following victimization women exhibited higher levels of psychological distress than men. However, they also reported that as the post-victimization time increased the association between gender and psychological distress declined. Greater decreases in symptomology over time among women compared with those in men have also been reported by Resick (1987a, 1987b) and Shepherd et al. (1990). Post-assault psychiatric distress symptom differences between men and women were present immediately after the offense but later dissipated.

Age. Contrary to popular belief, elderly people are relatively unlikely to be victimized by crime (Eve, 1985; Lawton, 1980-1981; O'Brien, Shichor & Decker, 1982/1983; Sacco & Johnson, 1990; Solicitor General, 1985, Bull. #6). In fact, the typical profile of a victim of personal violence is a "young unmarried male, living

alone, probably looking for work or a student, with an active life outside the home" (Solicitor General, 1983, Bull. #1, p. 4). While most criminologists and gerontologists agree that the aged are not a highly victimized group, Lindquist and Duke (1982) suggest that if risk factors were considered when computing victimization rates, the elderly might be over, not under victimized. Moreover, when the elderly are victimized the economic, psychological, physical, and social consequences are usually severe (see Atkeson et al., 1982; Clemente & Kleinman, 1976; Conklin, 1976; Cook et al., 1978; Deluty & Quay, 1984; Elias, 1986; Faletti, McClelland, Quay & Johnson, 1981; Feinberg, 1981; Frank & Stewart, 1984; Koss, Koss & Woodruff, 1991; Maguire & Corbett, 1987; Mawby, 1988; O'Brien et al., 1982/1983; Ruch & Chandler, 1983; Sales et al., 1984; Smith & Hill, 1991). Atkeson et al. (1982), for example, found that age was predictive of long-term symptoms of depression for female victims of sexual assault - older and poorer women experienced more problems. Age was also found predictive of depression following sexual assault by Frank and Stewart (1984).

The empirical data are, however, equivocal. Some researchers studying the effects of sexual assault have found (1) no association between age at the time of the offense and later distress reactions (e.g., Bownes, O'Gorman & Sayers, 1991; Kilpatrick et al., 1985), (2) only a weak association (e.g., Atkeson et al., 1982; Wyatt, Notgrass & Newcomb, 1990), or (3) that young victims experience *more* difficulties (e.g., Burnam et al., 1988; Kilpatrick et al., 1989; Murphy et al., 1988; Sales et al., 1984). Studies of other crime victims reveal similar results (e.g., Brown & Yantzi, 1980; Corrado & Tompkins, 1989; Eitinger, 1982; Fields, 1980; Flynn, 1989; Friedman, et al., 1982; Gabor et al, 1987; Skogan, 1987). Bourque et al. (1978) collected data on burglary and robbery victims and reported the elderly were "no more likely to show crisis behavior than the young or middle-age victims" (p. 34). Cook et al. (1978) wrote that, overall, the data they collected "offer scant systematic support to persons who believe

that, when elderly Americans are victimized by criminals, they suffer more severe financial or physical hardship than younger persons" (p. 346). Instead, they concluded that the problems associated with victimization are related to economic conditions and the relatively large losses incurred by the poor. Other authors have also suggested that the exacerbated impact of crime on the elderly can be attributed, in part, to the indigence that is common among the old (Bard & Sangrey, 1986; Cunningham, 1976; Maguire & Corbett, 1987). Thus, although statistics show that the elderly have less property stolen and suffer less financial loss compared to people of other ages who are victimized, if the value of their losses are expressed in terms of income, the old *and the very young* may emerge as the hardest hit of all.

Further, because the elderly tend to be more frail, poor, and less mobile they are more likely to live in high crime neighborhoods and express a greater fear of victimization (Deluty & Quay, 1984). Research has shown that the elderly are more fearful of crime particularly if they live in densely populated areas found in most inner cities (Clemente & Kleinman, 1976; Cook et al., 1978). Perhaps as Cunningham (1976) and O'Brien et al. (1982/1983) suggest, the elderly are more fearful of crime because they are more likely to be victimized in or near their homes (Antunes, Cook, Cook & Skogan, 1977). The relative poverty and immobility of the elderly restricts their ability to reduce the risks of victimization by avoiding high crime risk situations in the future.

Finally, there is evidence to suggest that the elderly receive more physical injury when victimized. Conklin (1976), for example, found that despite being less likely to resist, elderly robbery victims were shoved, pushed, and knocked down more often than those who are younger. Ruch and Chandler (1983) found that among a sample of sexual assault victims, age and injury were positively correlated. Cook et al. (1978) reported that although the elderly were attacked less often than others, they were more

likely to suffer internal injuries, to lose consciousness, receive cuts and bruises, and incur medical expenses.

Psychosocial Factors

The psychosocial literature linking victimization outcomes with pre-victimization factors has proven more fertile than the literature on victim demographics. Research indicates that victims' prior experiences coping with stress (including previous victimization), their pre-crime physical and mental health, social support resources, and sense of community with others in their neighbourhood can significantly influence the recovery process.

Perceived stressors and prior life events. It has been suggested that the capacity of each person to deal with a crisis is influenced by past experiences with stressors (e.g., Dohrenwend & Dohrenwend, 1974; Silver & Wortman, 1980). Prior life stressors can either strengthen and bolster a person's ability to cope with later losses, or be debilitating and disrupt future coping ability, particularly if the prior crisis has not been satisfactorily resolved (Caplan, 1964). Research suggests that the influence of prior stressors on crime victims' abilities to cope may vary depending on the stressors' severity, chronicity, and, perhaps most important, its perceived significance (see Bourque et al., 1978; Burgess & Holmstrom, 1978a, 1978b; Cook et al., 1987; Fields, 1982; Koss et al., 1991; McMurray, 1989; Resick, 1987b; Ruch & Chandler, 1983; Ruch, Chandler & Harter, 1980; Sales et al., 1984; Singleton & Teahan, 1978; Sprang et al., 1989; Steketee & Foa, 1987; Tinklenberg, 1982; Walker, 1985; Winkel, 1989).

Sales et al. (1984) suggested that chronic, highly stressful prior life events decrease a sexual assault victim's ability to cope. In addition, they hypothesized that more modest and temporary stressors may lead to improved coping ability. In part, they based their conclusions on the work of Burgess and Holmstrom (1978a) who found that

chronic life stressors were associated with delayed recovery following rape. However, recent minor life changes like that of residence or graduation were not related to post-rape adjustment. Interestingly, the loss, separation or death of a family member within two years preceding the rape actually facilitated recovery!

Thus, the coping skills learned to resolve a prior crisis may subsequently help resolve the trauma of criminal victimization. Silver and Wortman (1980) reviewed evidence suggesting that the death of a relative can facilitate adjustment to subsequent loss or victimization (also see Allodi, 1989). Bard and Sangrey (1986) cite the case history of a rape victim whose husband had died of cancer a year earlier. The victim described herself as relatively unaffected by the attack because "the rape seemed less significant than her earlier tragedy" (p. 34). Similar findings with other sexual assault victims have been reported by Burgess and Holmstrom (1979b). They suggest that the successful resolution of previous grief for the loss of a family member may strengthen a person "psychologically".

It is unclear whether the coping skills that are apparently acquired following the loss of a family member (McMurray, 1989) are also imparted to crime victims who have been previously victimized. Perhaps as Silver and Wortman (1980) suggest, the negative effects of repeated criminal victimization are more profound for some because these victims come to feel personally inadequate, a profound sense of injustice, or heightened self-blame. Burgess and Holmstrom (1978a), for example, found that sexual assault victims who had been previously victimized took longer to recover than those who had not. The results of a long-term follow-up study of rape victims conducted by Santiago, McCall-Perez, Gorcey and Beigel (1985) revealed that the only variable related to a higher degree of depression and anxiety was prior victimization. Results demonstrating the compound negative impact of prior victimization have also been reported by Ellis, Atkeson and Calhoun (1982), Cohen and Roth (1987), Frank, Turner and Stewart (1980), Frank and Stewart (1984), Frazier (1991), Leymann

(1985), Mullen et al. (1988), Murphy et al., 1988; Normandeau (1981), Norris et al. (1990), Ruch, Amedeo, Leon, and Gartrell (1991), Resick (1987b), Skogan (1987), and Sorenson and Golding (1990).

However, other researchers have produced evidence that prior victimization is either not related to negative outcomes or is associated with subsequent positive coping (Atkeson et al., 1982; Bourque et al., 1978; Frank et al., 1980; Kemp, Rawlings & Green, 1991; Markesteyn, 1991; Mullen et al., 1988; Roth, Wayland & Woolsey, 1990; Ruch & Chandler, 1983; Smale & Spickenheuer, 1979). Bourque et al. (1978), for example, interviewed a sample of burglary and robbery victims and found no significant relationship between prior victimization and levels of trauma. Similarly, Smale and Spickenheuer (1979) reported that feelings of guilt were not influenced by property or violent crime victims' past experiences with crime. Markesteyn (1991), Roth et al. (1990), and Ruch and Chandler (1983) found that victims with a history of prior victimization were actually *less* traumatized than first-time victims. Clearly, more research is needed on the relationship between prior victimization and crime victims' ability to cope.

Researchers studying the influence of prior life stressors on the coping ability of crime victims have typically employed measures that assess stressful events "objectively". Versions of Holmes and Rahe's (1967) original measure of the impact of life-events are used to generate prior "life-stress" or "life-change" scores (e.g., Burgess & Holmstrom, 1978a; Cook et al., 1987; Ruch & Chandler, 1983). These scores are usually derived by summing the number of events the victim experienced within a specific time period (e.g., the previous year) or by summing judges' ratings of the difficulty of adjusting to those events. While there are some clear advantages to objective measures of stressful events, as Cohen, Kamarck and Mermelstein (1983) point out, the implication of the view that life events are, "in and of themselves, the precipitating cause of pathology and illness" runs counter to the widely accepted views

of Lazarus (1966) that "... persons actively interact with their environments, appraising potentially threatening or challenging events in the light of available coping resources" (p. 386). In other words, many previous researchers have not embraced the view that stressors are considered such only when an event is appraised as threatening or otherwise demanding and inadequate personal coping resourses are lacking to deal with the situation. Cohen et al. (1983) developed an instrument to measure the degree to which situations are appraised as "unpredictable", "uncontrollable", and "overloading" - three issues that have been considered central components of the experience of stress. Their Perceived Stress Scale (PSS) "... can be viewed as assessing a state that places people at risk of, i.e., is antecedent to, clinical psychiatric disorder even though that state is also part of a diverse set of feelings and states that are characteristic of disorder" (p. 394). Although the psychometric properties of the scale are impressive, to date it has not been used to assess the impact of prior stressors on the ability of crime victims to cope with their misfortune. In short, "subjective" factors must be allowed for.

Physical and mental health. Retrospective analysis of victims' lives has revealed that a connection exists between the effects of victimization and pre-victimization physical and psychological health (Atkeson et al., 1982; Biles, Braithwaite & Braithwaite, 1979; Burgess & Holmstrom, 1978a; Cook et al., 1987; Frank, Turner, Stewart, Jacob & West, 1981; Gabor et al., 1987; Hilberman & Munson, 1978; Koss et al., 1991; Krupnick & Horowitz, 1980; Protacio-Marcelino, 1989; Ruch & Chandler, 1983; Ruch et al., 1991; Sales et al., 1984; Terr, 1983). It appears that for some people, daily struggles with chronic health, social and psychological problems may over-tax coping ability thus depleting reserve energies and ultimately leaving them more vulnerable to the adverse effects of negative life events such as criminal victimization (Silver & Wortman, 1980). Aldwin and Revenson (1987) suggest that the

relationship between coping and psychological symptoms is a mutually reinforcing cycle. In other words, individuals with poorer mental health use less effective coping strategies, which in turn leads to more emotional distress and possibly increasing the probability of problems in the future.

The link between prior health and the consequences of crime is well documented. Burgess and Holmstrom (1978a), for example, reported that 47% (9 of 19) of the sexual assault victims they interviewed who identified themselves as having "biopsychosocial" problems (e.g., alcoholism, drug use, psychiatric disorders) said they felt they had not recovered four to six years after the attack. This compared to only 19% (12/62) of the victims without a history of physical or psychiatric problems. In a different study, Atkeson et al. (1982) found that women who had a history of physical problems and anxiety, obsessive-compulsiveness, and depression were likely to recover slower from the effects of sexual assault. They concluded that of all the predictor variables they examined, pre-rape levels of psychological and physical functioning were the most predictive of later problems. Similar findings with victims of violent assault have been reported by Frank et al. (1981), Krupnick and Horowitz (1980), Ruch and Chandler (1983), Ruch et al. (1991), Sales et al. (1984), and Symonds (1980b). Again, some evidence exists to the contrary (e.g., Bownes et al., 1991; Frank et al, 1980; Frank & Stewart, 1984). It is also worth noting that Sales et al. (1984) found that the relationship between pre-existing symptoms and post-rape reactions weakens over time.

Social support network. The literature examining the impact of social support on victims' abilities to cope can be separated into two topics: (a) the quality and availability of pre-victimization supportive relationships and (b) the reactions of support systems following victimization. As Sales et al. (1984) point out, "current discussions of social support are not always clear whether prior support serves to minimize the

impact of a crisis or whether it is the supportive actions of others after the crisis has occurred that help the victim" (p. 124). The role of social support is rarely discussed or assessed in the same way by researchers in this area. Clearly the value of prior support cannot be dismissed. However, emphasis in the victimization literature is usually placed on the supportive actions of others following a crime. Therefore, social support will be discussed under the heading of "post-victimization factors" in a later section of this thesis.

Sense of community. The perpetration of crime threatens not only the lives and safety of individuals but it also disrupts the social harmony of the community. Thus, crime can be considered a social violation as well as a personal one. Community bonds act as a shield protecting individuals from unwanted intrusions that threaten their security. Indeed, community psychologists have published evidence suggesting that people who possess a strong sense of community and secure neighbourhood bonds are less afraid of crime, independent of actual crime rates (Cohn, 1978; Riger, LeBailly & Gordon, 1981), and that physical proximity is an important attribute of people who help crime victims (Friedman et al., 1982; Mrazek & Mrazek, 1987). To carry this argument further, it is hypothesized that an individual's strong sense of community may ameliorate the negative consequences of criminal victimization.

Cognitions

The social psychological literature has led to predictions about the role that individuals' pre-victimization cognitions play in determining their reactions to crime. Social psychologists have been investigating reactions to stressful and uncontrollable outcomes since the late 1950's. Early laboratory experiments (e.g., Glass & Singer, 1972) led to the development of theoretical models designed to explain how individuals react to controllable and uncontrollable outcomes. Festinger's (1957) theory of

cognitive dissonance, Brehm's (1966) theory of psychological reactance, and Maier, Seligman and Solomon's (1969) work with learned helplessness are notable in this regard.

In general, the social-psychological literature on victimization is a compilation of information from many distinct areas. Yet, the reading of this literature suggests that there may be similar psychological processes occurring among a wide variety of victims. Common among these processes is the psychological toll exacted by the victimizing event. According to social psychological theory, the psychological toll can best be understood in terms of the assumptions and beliefs we generally hold about ourselves and the world we live in. It is the shattering, or loss, of these assumptions and beliefs that induce negative reactions to crime (Bard & Sangrey, 1986; Janoff-Bulman, 1985; Janoff-Bulman & Frieze, 1983; Janoff-Bulman, Madden & Timko, 1983; Symonds, 1975; Wortman, 1983; Wortman, Abbey, Holland, Silver & Janoff-Bulman, 1980).

According to this perspective we operate on the basis of assumptions and personal theories that offer us a way of structuring and understanding our world. Built over years of experience, a conceptual system is developed that provides us with viable expectations about ourselves and our environment and is basic to our daily activities and understanding of the world (Janoff-Bulman, 1985). A victimizing experience challenges individuals to question the appropriateness and validity of their pre-victimization "cognitive baggage". Commonly, the old assumptions cannot account for the event. The victim's world view and personal beliefs are threatened by the danger, insecurity, and self-doubt frequently associated with a victimizing experience. The cognitive stability with which they were ordinarily able to function is no longer present and psychological turmoil generally follows (Janoff-Bulman & Frieze, 1983).

The number of assumptions and beliefs that are shattered, or at least seriously questioned, because of victimization undoubtedly varies depending upon the individual

involved. However, there are some similarities. Janoff-Bulman and Frieze (1983) discuss three types of assumptions shared by most people that are particularly influenced: 1) a perception of the world as meaningful and comprehensible (i.e., belief in a just world), 2) the perception of personal invulnerability, and 3) the perception of oneself in a positive light.

Belief in a just world. There is a great deal of evidence, both anecdotal and empirical, to suggest that many people view the world as a place in which events are comprehensible, orderly, and generally "make sense" (Antonovsky, 1979; Janoff-Bulman, 1985). This global perception exists because of social constructs, such as justice and humanity, and personal beliefs about control that enable us to account for specific occurrences. Lerner and his associates (Lerner, 1970, 1971; Lerner & Matthews, 1967; Lerner & Miller, 1978; Lerner & Simmons, 1966) suggest we possess a need to believe that we live in a society that is just, fair, and orderly. In this "just world" people usually get what they deserve which in turn lends stability and order to the physical and social environment. Furthermore, Lerner proposes that because this "just world" belief is strongly held, when people are confronted with an injustice (such as victimization), they are generally compelled to restore a sense of social homeostasis. To maintain their belief that the world is a just place, people will commonly persuade themselves that victims are "bad" and somehow deserving of their misfortune.

Much of the "just world" research has addressed how and why observers blame and derogate victims for their misfortune. However, some researchers are interested in how just world beliefs possibly influence victim self-perceptions (e.g., Libow & Doty, 1979; Markesteyn, 1986). Consistent with Lerner's theory, it is hypothesized that victims blame and derogate themselves in order to maintain a personal belief in a just

world. Conversely, perhaps victims who do not self-derogate, maintain a positive self-image because they do not share this strong just world belief?

Perceived Invulnerability. It is difficult to deny that we live in a violent society. Television, newspaper and radio news reports serve as constant reminders that violent crime claims the lives of many victims daily. Simultaneously, however, most of us seem to believe "it can't happen to me". This tendency of people to generally underestimate their personal vulnerability relative to others has been referred to as the "illusion of invulnerability" (Janoff-Bulman & Frieze, 1983; Janoff-Bulman et al., 1983; Lejeune & Alex, 1973; Perloff, 1983).

The self-perception of invulnerability is adaptive in some ways but maladaptive in others. The benefits are that it protects people from stress and anxiety under conditions of perceived threat, it promotes feelings of personal control, and it allows individuals to perform daily activities without being immobilized by fear. On the other hand, the illusion can be maladaptive if it leads people to think that precautionary and preventative behaviors that reduce the likelihood of victimization are unnecessary. Furthermore, if non-victims' beliefs in their unique invulnerability discourage them from taking adequate precautions, such convictions may ultimately increase their chances of being victimized.

The illusion of invulnerability can be detrimental in another important way. It may intensify victims' reactions to undesirable events after they occur (Janoff-Bulman & Frieze, 1983; Janoff-Bulman et al., 1983; Lejeune & Alex, 1973; Perloff, 1983; Reiser & Geiger, 1984; Wortman, 1983). One is no longer in a position to think "it can't happen to me" and it is unlikely that victims can return to their former assumption. Victims find themselves facing the stark reality of a malevolent world and subsequently experience a sense of insecurity and helplessness. There is evidence from research in various fields (see Perloff, 1983, for a review) to suggest that individuals who feel the

least vulnerable prior to victimization have the most difficulty adjusting to their misfortune. In other words, post-victimization coping may be influenced, in part, by pre-victimization beliefs about risk.

Positive self-perceptions. Janoff-Bulman and Frieze (1983) propose that beyond assumptions regarding meaningfulness and invulnerability, people also generally operate under the assumption that they are competent and worthwhile (also see Coates & Winston, 1983; Janoff-Bulman, 1985). People believe that they are unique in some positive, socially approved way such as being happier or more intelligent than others. At a minimum, to be appropriate in our society, the perception is that one's feelings should be at least moderately positive and happy (Coates & Winston, 1983).

The experience of victimization frequently leads to serious questioning of these positive self-perceptions (Janoff-Bulman, 1985). Feelings of anxiety, helplessness, and fear commonly associated with the experience of becoming a victim do not conform with perceptions of personal control and self-worth. To the extent that victimization activates negative self-images, victims may be inclined to question the appropriateness of their emotional distress. Furthermore, if victims compare their level of distress with what society defines as a normal or appropriate emotional response to a negative life event, this may lead to further self-questioning and additional discord. While no explicit standard exists to specify how long the emotional distress of victimization should last, there seems to be a definite bias toward condemnation of anything more than minimal, short-lived unhappiness (Coates & Winston, 1983). Thus, many victims see themselves as different from others not only because they have been singled out for misfortune, but also as a result of making social comparisons with others. Ultimately this sense of being different from others can influence victims' negative self-images of being unworthy and weak (Brewin & Furnham, 1986).

Characteristics of the Criminal Offense

A second set of variables that may have a significant influence on how victims react to the experience of criminal victimization is the characteristics of the crime itself. Sales et al. (1984) note that in many ways, the circumstances surrounding the criminal offense are "the most immediate stimuli affecting the victim" (p. 124). It is surprising, therefore, that these "crime factors" have been the subject of limited investigation. Nevertheless, the empirical data gathered thus far suggest there is sufficient evidence to pursue the potential connection between the psychological reactions to victimization and the circumstances surrounding the event itself.

Type of Crime

It is generally agreed that all types of criminal victimization can be distressing for victims (see *Variations in Reactions by Offense*). The most traumatic offenses are usually sexual, followed by non sexual assault, robbery and property crimes (Hanson, 1990). However, researchers who have compared the reactions of victims to different crimes and other traumatic events have also found remarkable similarity in these reactions (American Bar Association, 1983; Cook et al., 1987; Fields, 1980; Frieze et al., 1987; Greenberg et al., 1983; Kilpatrick et al., 1985; Krupnick & Horowitz, 1980; Lurigio, 1987; Markesteyn, 1986; Mullen et al., 1988; Resick, 1987a, 1987b; Shepherd et al., 1990; Skogan, 1987; Wirtz & Harrell, 1987a). Differences between victim groups have been shown to be quantitative (i.e., a matter of degree) rather than qualitative.

Severity of the Offense

It has been postulated that the degree of distress following victimization is directly related to the violence experienced during the commission of an offense (Bard & Ellison, 1974). Thus, researchers have studied factors related to the severity and

intrusiveness of criminal events such as weapon use, physical injury, relationship with offender, and number of assailants. Although the empirical evidence has not reliably shown that individual characteristics related to a crime's violence are predictive of subsequent psychological trauma, there are data suggesting a positive relationship between the *overall* degree of violence associated with a criminal offense and the severity of distress later experienced (cf. Agopian, 1984; Allodi, 1989; Bownes et al., 1991; Briere & Runtz, 1988; Brown & Harris, 1989; Cohen & Roth, 1987; Conte & Schuerman, 1987; Cook et al., 1987; Ellis et al., 1981; Kemp et al., 1991; Kilpatrick et al., 1989; Koss et al., 1991; McCahill, Meyer & Fischman, 1979; Mullen et al., 1988; Norris & Feldman-Summers, 1981; Norris et al., 1990; Sales et al., 1984; Smale & Spickenheuer, 1979; Wolfe, Gentile & Wolfe, 1989; Wyatt et al., 1990).

Cook et al. (1987), for example, interviewed 323 crime victims and found that the "severity" of the crime was one of the primary variables to determine the level of psychological distress experienced after the offense. When the offense resulted in a physical injury, involved the use of a weapon, and/or the offender was a "non-stranger" (e.g., a relative) more psychological distress was reported. Norris and Feldman-Summers (1981) reported that factors associated with the severity of sexual assault (i.e., weapon use, injury, medical care, etc.) significantly predicted subsequent psychosomatic symptoms such as difficulty sleeping, headaches, volatile temper, frequent crying episodes, and depression. Ellis et al. (1981) constructed a Brutality Scale to measure the amount of violence, force, injury, and other traumatic aspects of sexual assault and found that victims who were subjected to more brutal assaults were especially likely suffering from symptoms of depression, phobia, and other problems. Criminal victimization severity proved to be the single most important predictor of female medical and mental health services utilization in a study conducted by Koss et al. (1991). Sales et al. (1984) reported that the overall degree of violence to which sexual assault victims were subjected was "the variable most predictive of symptom

severity" (p. 126). Over time, the crime characteristics associated with sexual assault became increasingly important predictors of subsequent victim symptomology.

Although some evidence exists suggesting there is a positive relationship between the *overall* degree of violence associated with criminal offenses and the amount of distress experienced by victims, studies examining the relationship between psychological outcomes and specific characteristics related to the severity of the offense (e.g., weapon use, physical injury incurred, etc.) have not consistently produced positive results (cf. Atkeson et al., 1982; Frank et al., 1980; Frazier, 1991; Girelli, Resick, Marhoefer-Dvorak, and Hunter, 1986; Resick, 1987b; Ruch & Chandler, 1983; Santiago et al., 1985; Smale & Spickenheuer, 1979). Bownes et al. (1991) point out that these findings are partially a result of the fact that different measures of victim outcome have been used that are unidimensional and do not reflect the complexities of human reaction to traumatic events. Inconsistent findings in this area of research led Sales et al. (1984) to suggest that "it is possible that the *actual* violence of an attack is less crucial to victim reaction than the *felt threat*" (p. 125). Girelli et al. (1986) tested this theory with a sample of sexual assault victims and found that subjective experience of distress during the offense was a better predictor of specific aspects of fear and anxiety than were the violence dimensions. Although their findings were not conclusive (i.e., subjective distress predicted only three of the seven outcome measures they tested), it seems reasonable to hypothesize that the psychological significance of a crime's impact would potentially influence a victim's subsequent mental health.

Sales et al. (1984) also suggested that "if cues to greater harm exist, such as more assailants and verbal threats of injury, the victim may experience more trauma" (p. 125). Thus, the imminent prospect of pain and suffering may be worse than the injury itself. Partial support for this hypothesis was provided by Kilpatrick et al. (1985). They found that the mental health problems experienced by victims of attempted molestation and attempted robbery were worse than those experienced by individuals

who were actually victimized. An attempted crime may leave more room for ambiguity in a victim's mind about what the assailant intended and the actual danger they were in. Kilpatrick et al. suggest that the victim's assessment of the probability they would receive injury played a more important role in whether mental health problems later developed. However, their data on attempted versus completed sexual assault did not support this relationship. Similarly, later research by Kilpatrick et al. (1989) and others (e.g., Sales et al., 1984; Scheppele & Bart, 1983) has not found that victims of completed rape fare worse than those of attempted rape.

Location of Incident: "safe" versus "unsafe"

The geographical location of an offense and the victim's relationship with the offender may also be related to post-crime outcomes. The research that has been conducted in this area suggests that victims who are attacked in environments they perceive as "safe" or low risk (e.g., at home and by someone they trust), may suffer more severe negative reactions than those attacked in "unsafe" locations (e.g., a dimly lit parking lot by a stranger) (Frank & Stewart, 1984; Lejeune & Alex, 1973; Maguire & Corbett, 1987; McCahill et al., 1979; Roth et al., 1990; Ruch et al., 1991; Scheppele & Bart, 1983; Shapland et al., 1985).[1] Individuals who are victimized in situations where they thought they would be safe are more likely to question their general ability to assess the safety of their social and physical environments. Scheppele and Bart (1983) suggest that this reaction is related to perceptions of loss of personal control about the ability to alter future behavior. Victims question where to go and whom to turn to for sanctuary when violated in the apparent safety of their home by someone they know. What safe havens are left available? Alternatively, if a crime takes place in a situation perceived as "unsafe", the option exists of simply avoiding

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[1] Two studies reported no overall effect for the crime situation (Frank et al., 1980; Ruch & Chandler, 1983).

that situation in the future. This fosters a sense of personal control in the ability to protect oneself from further harm.

Scheppele and Bart (1983) studied women who were sexually assaulted and reported the majority reassessed their assumptions about the safety of the world following the attack. Some women became less trusting of others, some experienced incessant feelings of personal vulnerability and fear, while others felt that they could no longer control what was happening in their lives. Moreover, whether these women were raped or whether they avoided being raped during the attack, their perceptions of the world depended to a large extent on the exact circumstances in which the attack took place. Women who had previously believed that the attack situation was safe (e.g., they were at home with the doors locked) were more adversely affected and were more likely to change their view of the world, than women who were sexually assaulted in situations that they had reason to believe were dangerous. In short, assumptions about the environment were important in predicting responses to the attack.

Work with sexual assault victims may have some implications for victims of residential burglary. Specifically, it may help to account for the high levels of distress reported by many residential break and enter victims (see Brown & Harris, 1989; Maguire, 1980). Whether they rent or own, individuals generally regard their residence as a sanctuary; a refuge from the outside world where they can relax and unwind with the knowledge that they are relatively safe. To the burglary victim, the violation and intrusion into his or her personal space may represent a loss of control about the ability to avoid future victimization. The affect accompanying this loss of control is frequently depression and a sense of helplessness (Abramson, Seligman & Teasdale, 1978).

Related to the perception of an environment as either "safe" or "unsafe" is whether crime is perpetrated by acquaintances or strangers. Considerable research has been devoted to exploring the consequences of criminal actions when they are committed by

known offenders. Hanson (1991) reviewed this literature with sexual assault victims and reported that most studies find no differences. Apparently, both stranger and acquaintance rapes are equally traumatic. In contrast, data published on the consequences of residential break and enter show that the impact of this crime is exacerbated when the offender is known to the victim (Maguire & Corbett, 1987; Smale & Spickenheuer, 1979).

Elapsed Time

Elapsed time does not refer to the duration of an attack or the length of time it takes for a criminal act to transpire. Although not specifically discussed, this component of the crime situation was addressed under the heading *Degree of Violence*. Rather, elapsed time makes reference to the time that elapses between the offense and the formal assessment of its consequences.

The major theoretical framework that has been applied to describe the course of crime response has been crisis theory. According to this perspective, violent crime against individuals and more serious property crimes such as break and enter often precipitate a crisis reaction in victims (Bard & Ellison, 1974; Bard & Sangrey, 1986). Crisis reactions tend to have a pattern - one that occurs in stages (Lindemann, 1944). As the time from the offense passes, victim reactions change. According to Bard and Sangrey, there are three stages in the recovery reaction. After a phase of initial impact, victims typically pass through a period of "pseudo-adjustment" as they struggle to adapt to the crisis. Later a process of integration begins and eventually the experience is fully resolved.

Immediately following the crime and lasting for hours or days victims experience an acute crisis or "stage of impact" characterized by a loss of "personal intactness and integrity". Often in a state of shock, their coping mechanisms break down; they feel disorganized, numb, and disoriented. During this stage victims commonly report

physiological disturbances such as loss of appetite or the inability to sleep. Disbelief and denial can also occur. Some victims are so overcome by feelings of vulnerability and helplessness that they revert emotionally to a dependent, almost childlike state of development where the direction and support of others are essential (Bard & Sangrey, 1986).

The second phase in the victim's recovery process is identified by Bard and Sangrey as the "recoil stage" of a crisis reaction. During this phase victims attempt to deal with their emotions and reintegrate their sense of "self". While the process of recovery has started, it does not proceed along a straight line. It is a time of pseudo-adjustment when victims periodically experience a false sense of recovery by denying the impact of the event: "I'm all right now. Everything is back to normal". Pseudo-denial is seen as a necessary component in the recovery process because it permits victims to gradually come to terms with the unsettling emotions that might prove overwhelming if dealt with all at once. Between these periods of denial, victims begin to come to terms with the feelings brought on by their misfortune. They must face these emotions, express them, and begin the process of putting things back together.

The final stage in the normal course of a crisis reaction is "reorganization". During this period fear and anger diminish to negligible levels as the victim's emotional energy becomes appropriately invested in constructive pursuits. Conversation concerning the victimization also becomes much less upsetting as the event is placed in perspective. The reorganization stage will vary in duration across individuals. Generally, the more serious the perceived violation, the longer it will take.

Thus, while individual responses to a crisis may vary, crisis reactions tend to have a pattern that Bard and Sangrey (1986) have termed the stages of impact, recoil, and reorganization. The measured elevation of victim reactions vary depending on how much time has elapsed from the commission of the offense to the assessment period. Generally lower levels of distress are experienced the further the assessment period is

from the commission of the offense. In short, the negative effects of victimization diminish with time (see Atkeson et al., 1982; Cook et al., 1987; Feinberg, 1981; Friedman et al., 1982; Maguire & Corbett, 1987; Murphy et al., 1988; Nadelson, Notman, Zackson & Gornick, 1982; Norris et al., 1990; Resick, Calhoun, Atkeson & Ellis, 1981; Resick, 1987a; Rothbaum, Foa, Riggs, Murdock & Walsh, 1992; Sales et al., 1984; Shepherd et al., 1990).

Furthermore, it has been shown that predictor variables deviate in their ability to account for the variability in victim distress depending on when the assessment post-crime functioning is conducted (e.g., Sales et al., 1984). Certain factors act as important predictors in the period soon after the crime but lose some of their predictiveness six months later. Indeed, entirely different factors may be predictive of short-term versus long-term outcomes. Unfortunately, much of the victimization research is cross-sectional and has provided us only a "snapshot" of what happens following crime. Longitudinal research has proven expensive and methodologically problematic. Cross-sectional studies have provided a valuable base of knowledge from which to build but they do not convey information about the changing influence of predictor variables over time.

Post-Victimization Factors

Researchers and practitioners have suggested several coping mechanisms are available to victims that, if used, can lessen the psychological impact of crime. Effective coping has been conceived as including "the absence of psychiatric symptomology or extreme emotional distress, the presence of positive emotions and well-being, good physical health, effective functioning, global or general quality of life, and effective coping as defined by the victim (i.e., the extent to which the victim feels he or she has recovered from the crisis)" (Wortman, 1983, p. 217). The coping strategies employed by victims of crime are often varied and complex. They draw

upon a combination of cognitive and behavioral resources as well as the social support and professional assistance of others.

Cognitions

Historically the coping strategies used by people to minimize personal distress have been the subject of a great deal of interest (Lazarus, 1966; Selye, 1974). According to Lazarus and Launier (1978), an individual's emotional reaction to an undesirable life-event and choice of coping strategy depends to a large extent on how he or she cognitively appraises the event. The appraisal process has played an important role in several theoretical statements concerning the ability of people to deal with stressful situations (cf. Perloff, 1983; Scheppele & Bart, 1983). Several authors suggest that the impact of criminal victimization is mediated by the beliefs of individuals (e.g., Agnew, 1985; Norris & Kaniasty, 1991). Janoff-Bulman & Frieze (1983) advance a compelling argument that the coping process following victimization entails re-evaluating one's assumptions and beliefs about oneself and the world while incorporating the experience into a reordered conceptual system. Crime victims must come to terms with a world in which bad things can and do happen. Only by integrating the experience into their conceptualization of themselves and their world can they begin the process of 'de-victimization'.

Selective evaluation. Crime victims frequently employ certain beliefs to convince themselves that their misfortune was not particularly harmful (Agnew, 1985). Taylor, Wood and Lichtman (1983) suggest that victims can eliminate or at least minimize the extent of their misfortune by evaluating themselves and/or their misfortune against selected standards of comparison. They offer five cognitive mechanisms which victims may employ to accomplish this task. Each mechanism is designed to minimize the significance of victimization by selectively focusing on the beneficial qualities of the

situation. First, victims may attempt to restore their self-esteem by making a downward social comparison with less fortunate people. Second, they may accent an attribute on which they emerge as better than others, rather than worse off. Third, victims may create hypothetical worse worlds by imagining what could have happened and comparing it with what had in reality occurred. They commonly make statements like: "I was actually very lucky. If I'd been home at the time of the burglary, there is no telling what might have happened". A fourth mechanism used to minimize victimization is to construe benefits from the experience. This is accomplished by finding meaning in the event. For example, Frankl (1963) noted that the most successful survivors of the Nazi concentration camps were the prisoners best able to use the experience to find personal meaning in their lives. Finally, some victims may fully acknowledge what has happened to them but manufacture a normative standard of adjustment against which they can compare themselves. If victims' self-concepts are threatened, rather than seek an honest appraisal of their own coping, they may create a hypothetical norm of coping ability and evaluate their coping with respect to this artificial standard.

Many aspects of Taylor et al.'s (1983) theory of selective evaluation are similar to those of Perloff (1983) who theorized that some victims of crime possess a sense of "universal vulnerability". Perloff (1983) suggested that, beyond illusions of invulnerability before victimization, beliefs about personal vulnerability after victimization may mediate victims' adjustment. Specifically, she posits that victim coping depends on whether the experience makes individuals feel "uniquely vulnerable" or "universally vulnerable".

Research has shown that recent crime victims report feeling highly vulnerable to future victimization (Burgess & Holmstrom, 1974; Friedman et al., 1982; Greenberg et al., 1983; Lanza, 1983; Lejeune & Alex, 1973; Lurigio, 1987; Medea & Thompson, 1974; Tyler, 1980). Data also exist showing that victims who perceive themselves

uniquely (as opposed to universally) at risk experience more psychological sequelae (Hill & Zautra, 1989). Victims who perceive themselves as uniquely at risk believe they are more vulnerable than others to victimization. They think of themselves as isolated, different from others, and attribute their misfortune to internal factors. Associated with these cognitions is negative affect. Hill and Zautra (1989) found that rape victims who felt the chances of being raped in the future were more likely than other women experienced increased psychological problems such as low self-esteem, anxiety, and feelings of helplessness. Victims with a sense of "universal vulnerability", on the other hand, saw themselves and others as equally at risk. These victims were more likely to attribute their misfortune to external causes such as chance or the perpetrator. Research suggests that victims may derive comfort from the presence of, or the knowledge about, others who are "in the same boat" (Coates & Winston, 1983; Perloff, 1983). Perloff reasons that "perceptions of consensus may serve an important ego-defensive function by mitigating peoples' feelings of distinctiveness, isolation, and stigma" (p. 56).

Although most people possess a range of cognitive mechanisms that can potentially reduce the negative consequences of victimization, not all are equally successful at employing these techniques. Agnew (1985) suggests that "techniques of neutralization" may be less effective if the perpetrated crime is serious, the targets are socially isolated, and the community does not foster their use. Taylor et al. (1983) write that "clearly, minimizing one's status as a victim is only one task of adequate coping, and these mechanisms are not comprehensive enough to meet all one's coping needs. Rather, they can be viewed as one step in the coping efforts that must occur to overcome a victimizing event" (p. 37). Indeed, the initiation of multiple coping methods, as opposed to a single dominant strategy, have proven very effective with cancer patients (e.g., Collins, Taylor & Skogan, 1990). Thus, coping with the

consequences of crime potentially involves several cognitive processes. Perhaps most important among these are the victim's causal attributions for the event.

Attributions. Attribution theory describes the process whereby individuals draw upon situational information and their beliefs, assumptions, and motivations, to deal with ambiguity about the causes of life events (Metalsky & Abramson, 1981). Over the last thirty years attribution theory has been one of the most influential topics in social psychology. To date, a substantial body of literature has been published suggesting that peoples' beliefs about the causes of events in their lives have important implications for their psychological well-being. Moreover, there is reason to surmise that an individual's causal attributions may be one of the most important moderators of the impact of crime (see Abramson et al., 1978; Bard & Sangrey, 1986; Janoff-Bulman, 1979; Seligman, 1975; Shapiro, 1989; Weiner, 1972, 1980, 1985).

Seligman and his associates suggest that causal attributions and expectancies determine responses to uncontrollable situations. Prior experiences with success and failure foster a tendency to make particular kinds of causal inferences rather than others. This characteristic way of explaining bad events occurs across situations and is referred to as an attributional *style* (Metalsky & Abramson, 1981; Peterson et al., 1982; Seligman, Abramson, Semmel & von Bayer, 1979). Furthermore, they argue that if a victim has learned to perceive the cause of his or her misfortune as internal, stable and global they are likely to experience depressive reactions and/or a loss of self-esteem, typical of the learned helplessness response first observed in laboratory animals (see Abramson et al., 1978; Abramson, Garber & Seligman, 1980; Burns & Seligman, 1989; McCormick, Taber & Kruedelbach, 1989; Metalsky, Abramson, Seligman, Semmel, & Peterson, 1982; Peterson, Schwartz & Seligman, 1981; Peterson, Seligman & Vaillant, 1988; Tennen & Herzberger, 1987). Although empirical support for the concept of an attribution style is equivocal (see Bagby, Atkinson, Dickens & Gavin,

1990; Cutrona, Russell & Jones, 1984; Hammen, Krantz, & Cochran, 1981; Russell, 1991), Seligman's theory has been cited when explanations are offered for the distress reactions of crime victims (Blair, 1986; Elias, 1986; Peterson & Seligman, 1983; Walker, 1978, 1985; Wolfe et al., 1989). This research notwithstanding, legitimate concerns remain about whether Seligman's reformulated theory is well suited to the study of criminal victimization in an ecologically valid context.

More commonly, victimization researchers examining the role of attributions have employed the theoretical postulates of Wortman (Wortman, 1976; Wortman & Brehm, 1975) and Janoff-Bulman (Janoff-Bulman, 1979, 1982, 1985; Bulman & Wortman, 1977). Contrary to the traditional views of many researchers and health providers (e.g., Beck, 1967), Wortman and Janoff-Bulman argue that self-blame should not necessarily be perceived as maladaptive. Rather, they suggest that the self-blame commonly engaged in by crime victims can be adaptive and reflect a desire to regain control in their lives. Victims who engage in adaptive self-blame are attributing the cause to some action or behavior that is modifiable. Only victims who attribute the cause of their misfortune to their character experience low self-esteem, depression and the other deficits usually associated with criminal victimization. Unfortunately, data supporting Janoff-Bulman's theory have come only from samples of college students (e.g., Janoff-Bulman, 1979, 1982; Peterson, Schwartz & Seligman, 1981; Stoltz & Galassi, 1989) or hospital patients (e.g., Bulman & Wortman, 1977; Chodoff, Friedman & Hamburg, 1964; Tennen, Affleck & Gershman, 1986; Timko & Janoff-Bulman, 1985). There are a few exceptions (Friedman et al., 1982; Hill & Zautra, 1989), however, overall the empirical data gathered on "real" victims of crime have not corroborated these findings (e.g., Frazier, 1990, 1991; Gold, 1986; Markesteyn, 1986; Meyer & Taylor, 1986; Miller & Porter, 1983).

For example, Meyer and Taylor (1986) tested Janoff-Bulman's theory with sexual assault victims recruited from six rape crisis centers in California and one in New

York. As hypothesized, they found a high rate of self-blame among rape victims and evidence that self-blame consists of two components. However, no one form of self-blame was found to be adaptive. Behavioral and characterological self-blame were both associated with poor post-victimization adjustment. Disconfirming findings were also reported by Gold (1986). She found a strong positive correlation between behavioral and characterological self-blame among a sample of adult women who had been sexually assaulted as children. Again, both self-blame strategies were related to maladaptive patterns of coping. Frazier (1990) studied the relation between trauma and attributions with a sample of 98 women who were sexually abused. She also found that most victims do not make the distinction between blaming their behavior and character and that both attributions are associated with increased post-rape depression.

Discussion will now turn to the attribution theory of Weiner (see Weiner, 1972, 1974, 1980, 1983, 1985; Weiner et al., 1971; Weiner, Graham & Chandler, 1982). The attributional analysis of depression advanced by Seligman and the oft-cited distinction between characterological versus behavioral self-blame proposed by Janoff-Bulman both have Weiner's attributional approach as their base (Weiner, 1985).

According to Weiner, depending on whether an event is perceived as favourable or unfavourable, it will lead to either a positive or negative emotional response, which he called an attribution independent emotion. Individuals then engage in a search for causal understanding along three dimensions to answer the question "Why?". Causal ascriptions are examined in terms of their locus, stability, and controllability. Negative emotional reactions typical of those reported by crime victims, including low self-esteem, anger, guilt, shame, and helplessness, are postulated to arise because of attributions made to internal, stable, uncontrollable causes (see Brown & Weiner, 1984; Weiner, 1985; Weiner et al., 1982).

A considerable amount of research has been conducted which empirically supports Weiner's contention that there are three dimensions of perceived causality for success

and failure. Factor analysis, multidimensional scaling, and correlation procedures have yielded comparable positive results. Weiner (1985) concludes: "the empirical dimensions that have emerged (namely locus, stability, and controllability) are reliable, generalize across situations, and meaningful" (p. 552). Moreover, the data also suggest that the applications of Weiner's attribution theory are not limited to the achievement-related contexts in which the model was originally conceived and tested. Weiner provides examples where his theory has been successfully employed to examine peoples' attributions for several personal and social failures such as alcoholism, crime, parole, depression, deprivation, loneliness, smoking, and wife battering.

Thus, it appears that, to the extent that attributions do, in fact, influence affect (cf. Brewin, 1985; Robins, 1988), Weiner's model of emotion may prove particularly relevant to the study of the psychological effects of victimization. Therefore, it was decided to include a measure of attributions conceived by one of Weiner's colleagues in the current study. Russell (1982; 1991) developed a reliable and valid measure of Weiner's three causal dimensions that appears promising. With minor modifications it can be used to assess whether the causal attributions made by victims account for the affect they experience.

Behavioral Responses

The discussion thus far has focused on the cognitive processes involved in effective post-victimization coping. How victims appraise the event itself, the extent to which they can minimize their status as a victim, the causal attributions made for their misfortune, and the relation of these attributions to affect have been the subject of interest to several social and clinical psychologists. Relatively few researchers though, have studied the issue of behavioral adaptation. The actions individuals engage in following victimization, how well they perform at work, in social, and personal roles,

and the relation of these behavioral responses to effective coping are important in this regard.

The range and extent of security related behaviors engaged in by crime victims has been well documented (cf. Brown & Harris, 1989; Brown & Yantzi, 1980; Burgess & Holmstrom, 1979b; Burt & Katz, 1985; Elias, 1986; Friedman et al., 1982; Greenberg et al., 1983; Lavrakas, 1981; Sacco & Johnson, 1990; Skogan, 1987). There is also evidence that these behaviors vary depending on the characteristics of the offense (e.g., Maguire & Corbett, 1987; Wirtz & Harrell, 1987b). People who have been robbed or mugged, for example, may install new locks on their doors, bars on their windows, go out at night less often, move residences, and/or obtain different employment (Cohn, 1974; Lejeune & Alex, 1973). Burglary victims frequently engage in security-related behaviors such as fitting doors and windows with new or additional locks, staying at home more often, installing burglar alarm systems, updating their insurance, and becoming more security conscious (Maguire, 1980; Reppetto, 1974; Waller & Okihiro, 1978; Wirtz & Harrell, 1987b). Nearly all victims report an increased sense of awareness about their personal security following a victimizing experience. Lurigio (1987) reported that burglary, robbery and assault victims were significantly more likely than non-victims to look out for suspicious people, avoid strangers during walks, and check behind doors when they enter their residences. Eighty-two percent of the 450 crime victims interviewed by Harris and his associates (1984) reported that since being victimized they were more careful about where they went and what they did. This feeling was strongest among victims who were mugged (94%) but extended to victims of burglary (81%) as well.

Tyler (1980, 1981) has demonstrated that behavioral reactions to the threat of criminal victimization are strongly related to victims' perceptions of personal control. He found that, despite past experiences with crime, people who believe the risks of victimization can be controlled engage in behavioral activity aimed at minimizing them.

Direct actions can provide victims with a sense of control over their environment and, in so doing, reduce feelings of vulnerability, inequity and helplessness (Van den Bogaard & Wiegman, 1991). Janoff-Bulman and Frieze (1983) suggest that direct actions following victimization can provide victims with a sense of "environmental control", reduce their perceptions of vulnerability, and enhance their self-images (also see Frieze et al., 1989). They concur with Burgess and Holmstrom (1979b) that behavior aimed at changing the conditions associated with victimization can be adaptive and consequently may combat feelings of helplessness. As evidence of this Burgess and Holmstrom published data showing that rape victims who changed occupations, kept busy, moved, or obtained an unlisted phone number, recovered faster from the trauma associated with the offense than women who did not utilize these coping strategies. Collins et al. (1990) found additional evidence that active coping efforts appear to be conducive to positive belief changes following victimization. Indeed, it has been suggested that the majority of security-related actions undertaken by crime victims may serve a greater psychological than practical purpose. On this point Maguire (1980) wrote that burglary victims "generally recognized that it is impossible to create a "thief-proof" house, but rather the very act of making it more difficult to get in gave them some sense of control" (p. 266).

While some behavioral strategies following victimization may be adaptive, the link between post-victimization response and subsequent recovery is not clearly delineated. The literature suggests that "some responses may not only fail to facilitate recovery but may actually be counterproductive" (Wirtz & Harrell, 1987b, p. 866). These maladaptive behavioral responses have been referred to by others as "avoidance" oriented (e.g., Billings & Moos, 1981; Burt & Katz, 1985; Fattah & Sacco, 1989; Greenberg et al., 1983). For example, in a desperate attempt to feel secure, some rape victims place severe restrictions on the people with whom they interact, on the hours when they venture out of doors, on the places they go, and whether they go out alone

(Burt and Katz, 1985). These women pursue avoidance-oriented activities to eschew situations in which they feel vulnerable. Wirtz and Harrell (1987b) note that avoiding social contact and not leaving the residence are common behavioral responses reported by victims of a wide variety of crime. Eve (1985) reports that among the elderly, the most frequently recorded social response to criminal victimization is withdrawal. Similarly, Cunningham (1976) found 40% of the older victims he surveyed no longer expressed the desire to go certain places or engage in particular activities following their misfortune. There is mounting evidence that social withdrawal and other avoidance activities are not particularly effective methods of coping with the negative psychological consequences of crime. Burgess and Holmstrom (1979b), for example, reported that rape victims who had not yet recovered four to six years after the offense engaged in more avoidance-related behaviors such as substance abuse, remaining at home and withdrawing from others. Cohn (1978) found that avoidance behaviors, such as staying home behind locked doors, did little to reduce people's fears of victimization. Elias (1986) and Winkel (1989) concur that engaging in extreme preventative measures and/or avoidance strategies may degenerate into a pathology of defensiveness that produces both psychological and social damage. Avoidance-oriented behaviors such as those described above are more likely to be related to psychological distress and depressive symptoms than are constructive behaviors and/or cognitive coping strategies (Aldwin & Revenson, 1987; Billings and Moos, 1981; Parker, Brown & Blignault, 1986; Pearlin and Schooler, 1978).

It appears the relationship between the use of behavioral coping strategies and post-victimization adjustment is complex. Data suggest that simple avoidance-oriented behaviors such as not interacting with others or refusing to venture outdoors are related with short-term psychological distress and prolonged feelings of vulnerability, while constructive, active coping strategies like improving security actions seem to facilitate recovery (also see Frieze et al., 1987; Skogan & Maxfield, 1981). The empirical

evidence remains inconclusive about whether these effects are transferable to long-term post-crime outcomes (e.g., Brown & Harris, 1989). In perhaps the most thorough study conducted on this matter Wirtz and Harrell (1987b) compared the coping strategies and psychological distress levels of five groups of victims twice over a period of six months and concluded "... although certain (behavioral) coping responses vary by crime type and may serve as indicators of high levels of initial distress, common responses do not appear to significantly facilitate (or impede) the recovery process" (p. 866). They suggest that other factors such as personality may have influenced their results. Thus, it appears necessary to assess both the behavioral coping strategies engaged in by crime victims as well examine the relationship between these strategies and other factors such as victim beliefs and characteristics.

Social Support

Another important factor related to the ability to cope is the availability and effectiveness of the social support received from others. The availability of social support refers to the existence of a network of "... people on whom we can rely; people who let us know that they care about, value, and love us" (Sarason, Levine, Basham, & Sarason, 1983, p. 127). Crime victims seeking emotional support as well as other forms of assistance may turn to their informal support system consisting of relatives, friends, and neighbours, or to more structured support groups such as law enforcement, medical, mental health or victim services professionals for assistance. Effective social support refers to the efficacious provision of assistance and/or empathy as perceived by the recipient - in this case, the crime victim. Acting in different ways, individuals and organizations can be extremely helpful if they understand and accept the victim's reactions.

Although not all victims seek help from others, those who do are sometimes adversely affected by the people they turn to for assistance. In order to maintain their

own beliefs in a just world and personal invulnerability, it has been suggested that non-victims regard crime victims as blameworthy, as somehow responsible for their fate and/or as losers who are to be ignored (Lerner, 1970; Ryan, 1971; Janoff-Bulman, 1979). Some people avoid victims of misfortune to reduce fears of guilt by association (Fredrick, 1980) or perhaps because they prefer not to be around unhappy or emotionally upset people (Coates, Wortman & Abbey, 1979). Coates et al. (1979) found that observers rated depressed rape victims as coping less well and unlikable. The more the victim engaged in self-blame, the greater tendency observers had to associate this with maladjustment, to like the victim less and to blame her more. Other research has shown that, in general terms, the more individuals are perceived as responsible for their own fate, the less likely they are to receive help from others (Brickman et al., 1982). Even well-intentioned help may not have the desired effect. Potential helpers can unwittingly add to victims' distress by being critical of their reactions, by putting forth their own value-laden beliefs, by "over-pathologizing", or by making moral judgments (A.P.A., 1985; Bard & Sangrey, 1986; Coates et al., 1979). Others may reinforce victims' maladaptive attributions and beliefs and thus make it more difficult for them to accept the reality of their situation and cope with it effectively (Janoff-Bulman et al., 1983; Wortman, 1983). No matter how altruistic their intentions, people who come in contact with victims after a crime has been committed, including family, relatives, the police, and professionals, must be aware of the potentially negative impact of their behavior and reactions.

The majority of authors who have conducted research or reviewed the relevant literature on social support have emphasized its benefits rather than its deleterious effects (e.g., Bard & Sangrey, 1986; Coates & Winston, 1983; Fattah & Sacco, 1989; Feinberg, 1981; Frieze et al., 1987; Hanson, 1991; Sarason et al., 1983; Shepherd, 1990; Silver & Wortman, 1980; Stekette & Foa, 1987). Most contend that the quality of pre-existing support and the subsequent reactions of others are crucial components in

the coping process. By relaying to victims that they are respected, cared for, and loved, the behaviors and reactions of others can maintain and enhance self-esteem (Cobb, 1976). Agnew (1985) proposes that the social support of others is beneficial because family and friends often suggest various cognitive "neutralization" techniques. For example, they may relay stories of how others were victimized (leading to denial of injury) or provide information on how to avoid future risk (denial of vulnerability). A victim's support network can also foster the use of these techniques by accepting the neutralizations made by the victim. In other words, positive social support can legitimize personal beliefs, assumptions, attributions, and emotions (Coates & Winston, 1983; Silver & Wortman, 1980). Victims report feeling more comfortable if provided with an environment conducive to the free expression of their thoughts and feelings. The literature suggests that individuals who receive positive support from others develop increased self-confidence and feelings of autonomy. They are less likely to distort or deny the impact of negative life-events and are less susceptible to a variety of pathological states including physical illness, depression, and alcoholism (see Janoff-Bulman & Frieze, 1983; Sarason et al., 1983; Silver and Wortman, 1980). Social support can be demonstrated by expressing positive affect, encouraging the open expression of affect and thoughts, relaying the appropriateness of those feelings and beliefs, providing meaningful material aid or information, or merely by conveying to another person that they are part of a mutually supportive help system (Silver & Wortman, 1980).

There are numerous empirical studies demonstrating the benefits of social support with victims of crime (Agopian, 1984; Atkeson et al., 1982; Brown & Yantzi, 1980; Cohen & Roth, 1987; Fields, 1980; Gottfredson, Reiser & Tsegaye-Spates, 1987; Norris & Feldman-Summers, 1981; Ruch & Chandler, 1983). Friedman et al. (1982), for example, found that when victims receive all the support they need, the better they adjust. Burgess and Holmstrom (1978a) reported that social support was strongly

related to both short and long-term recovery from rape. The women in their sample who lacked social support because they were either living alone, unemployed or not in regular contact with family members all reported experiencing psychological problems months after the sexual assault, whereas, almost half the victims receiving some support during the same period indicated they had completely recovered. Further, more than half the women without support had not recovered four to six years later. Of the 66 women receiving social support, 80% (53) had recovered. Sales et al. (1984) found that although the presence of a healthy pre-victimization support network was not predictive of rape victims' immediate reactions post-crime, women with more positive and close relationships with other family members have significantly fewer long-term symptoms. Further evidence of the importance of family support has been provided by Maguire (1980). He reported that among a sample of female burglary victims who were the worst affected, 62% (21/34) were either widowed, separated, or divorced. Finally, Gold (1986) reported that among her sample of women who were sexually victimized as children, high levels of social support were positively correlated with self-esteem, less depression, fewer psychological problems, and fewer sex related problems.

With few exceptions (e.g., Brown & Harris, 1989; Cook et al., 1987; Frazier, 1991, McMurray, 1989), research suggests that a positive relationship exists between being offered and/or receiving social support and people's subsequent effective coping to stressful life-events, including criminal victimization. Janoff-Bulman and Frieze (1983) write: "support from family, friends, the helping and legal professions and the community-at-large is vital in the recovery and readjustment of crime victims" (p. 12).

Law Enforcement Officer Intervention. It was stated that the support provided to victims by law enforcement officers, medical personnel, lawyers, and other professionals can play an important a role in the coping process following

victimization. The intervention of law enforcement personnel receives special consideration here because often a police officer is the first and only criminal justice official with whom crime victims will have contact. Although slightly less than half of all crimes are reported to the police (Blumberg & Ranton, 1978; Greenberg & Ruback, 1985; Hough, 1984; Kidd & Chayet, 1984; Solicitor General, 1984, Bull. #2.), more victims report what happen to this agency than any other. Moreover, the police are the agency best situated to initiate crisis support (Waller, 1984). It is well known that early intervention is crucial to prevent the onset of psychological distress. "Minutes of skillful support by a sensitive person immediately after the crime can be worth more than hours of professional counseling later" (Bard and Sangrey, 1986, p. 41).

Several authors have been critical of the manner in which the police treat crime victims (e.g., Bard & Ellison, 1974; Brown, 1984; Gottfredson et et., 1987; Maguire, 1984). Kidd and Chayet (1984) contend that a major reason for failure to report crime is that victims view the police as a potential source of further harm. Although police officers generally maintain a calm, authoritative, and listening attitude, they may inadvertently make a comment or gesture that can have a lasting negative impact (Waller, 1984, 1985, 1989). Bard and Sangrey (1986) caution that the self-protective armor worn by many officers to shield them from the psychological stress of their jobs can result in them becoming detached from any human feeling for the victim. "Since the victim is a person who has recently been treated like an object by the criminal, this behavior on the part of police officers is sure to make the victim feel even more violated" (p. 120). Waller (1985) refers to case studies that suggest the police can often exacerbate victims' difficulties. For example, officers commonly advise victims on the precautions they might have taken to avoid being victimized. While offering advice on crime prevention is generally an effective means of offering support, it is important that the officer's advice not be accusative or denunciatory. If an officer leaves a victim with the impression that they believe the victim somehow contributed to

his or her own victimization it may lead to attributions of self-blame and subsequent feelings of guilt. Rosenbaum (1987) cites evidence showing the police are more inclined to blame crime victims for their actions than the general public. He notes that in light of research showing that "... victims tend to internalize negative societal beliefs about victimization, the deleterious effects of police behavior may be especially strong in the immediate aftermath of victimization when crime victims are more susceptible to the influence of others" (p. 504). Similarly, police attempts to reassure victims with comments like "Don't worry, it wasn't as bad as it might have been. You might have been killed", are not generally very helpful. Remarks such as these can make the victim feel invalidated, vulnerable, or worse, increase the fear of re-victimization as many believe that offenders usually return to the scene of the crime (Maguire, 1984).

The police have also been criticized for not consistently providing victims with information on the social, legal, or practical services that are available to them. Wirtz and Harrell (1987c) found that the police do not follow-up their initial contacts or mention the availability of victim service programs to all crime victims equally. Waller (1984) has questioned the effectiveness of the information offered by the police on crime prevention and has noted that they are frequently tardy returning recovered stolen property to its rightful owner. The police have also come under attack by Waller for neglecting to keep victims informed about the progress of the investigation. Many victims express the desire to know whether anyone has been arrested and if so, when and where the accused will be tried. Harris and his associates (1984) reported that only 11% of the 450 victims they interviewed were informed that arrests were made and only one in five were aware that the suspects had been brought to trial and found guilty.

Despite these criticisms, many researchers report that crime victims generally have a positive opinion of the police (e.g., Greenberg et al., 1983; Sales et al., 1984; Shapland et al., 1985; Waller & Okihiro, 1978; Woytowich; 1986). Burgess and

Holmstrom (1975) found that most of the 61 rape victims in their study spoke favourably about the way the police had treated them. Two-thirds of their sample felt that the police "treated them well" and some said that the behavior of the police during all phases of the investigation was "outstanding" and "unbelievably kind". Kennedy and Homant (1983, 1984) reported that the majority of the battered women in their study found the police to be at least "a little helpful". Most of the burglary and robbery victims studied by Bourque et al. (1978) reported that the responding officer was "... patient, helpful and sympathetic; they were generally pleased with the way they had been treated" (p. 43). The more sensitive the police officers, the more satisfied the victims were with police performance. In addition, they reported that the officers were more sensitive to the robbery victims and that they did not seem to understand the emotional impact of burglary. Greater satisfaction with police performance among victims of more serious types of crime has also been reported by others (Poister & McDavid, 1978; Shapland et al., 1985). Perhaps this is a reflection of the fact that police officers tend to provide more services to, and are more supportive of, people victimized by serious crimes such as rape (Wirtz & Harrell, 1987c). Nonetheless, there is evidence that crime victims are less concerned about the specifics of an investigation such as whether an offender was arrested than they are with receiving what they perceive as "the appropriate response to the incident" (Maguire, 1980; Normandeau, 1981). This may partially explain why even though the majority of the crime victims interviewed by Harris and his associates (1984) reported the police did not keep them informed about what was happening during the investigation, most still said they were satisfied with the way their case was handled.

In the course of conducting an investigation, several actions may be taken by the police to help victims in a meaningful way. Silver and Wortman (1980) discuss various methods in which social support can be demonstrated by law enforcement personnel. Upon arriving at the scene of a crime, the attending officer can (1) express positive

affect by indicating to the victim that they are there to help, that they sincerely care about what occurred, (2) encourage the expression of affect and thoughts by asking the victim how he or she feels about what happened and by taking an interest in the response, (3) provide the victim with sufficient time to tell their story about what happened, ask questions, and if they must cut them off because other duties require their attention, do so with tact, (4) provide meaningful material aid and information concerning such matters as crime prevention, community watch programs, and the availability of victim assistance programs, and finally, (5) reinforce their message by providing the victim with a phone number where they can be contacted.

Unfortunately, empirical research on the relationship between law enforcement officer intervention and psychological outcomes following criminal victimization has not been extensive. Again, the results of this research are equivocal (cf. Brown, 1984; Friedman et al., 1982; Maguire, 1984; Sales et al., 1984; Skogan & Wycoff, 1987; Van den Bogaard & Wiegman, 1991). Brown and Harris (1989) interviewed 44 female suburban burglary victims and reported that their overall satisfaction with the police response (as measured by response time, satisfaction with procedures and sensitivity) was related to lower subsequent distress and greater feeling of security. However, of all the people the women turned to for help, the police provided the least comfort. Cohen and Roth (1987) published evidence that women who are sexually assaulted and report to the police have better overall adjustment and lower levels of fear. Rosenbaum (1987) trained police recruits to be more sensitive to the needs of crimes in order to test the hypothesis that police training would have a positive influence on victims' psychological recovery. The specially trained officers left recruit training with measurably more victim sensitivity than other graduating recruits but after a four month period this sensitivity had dropped considerably. In addition, only weak evidence was found that crime victims noticed a difference in the behavior of the trained versus untrained officers. Moreover, the training program had virtually no effect on victim

psychological and behavioral reactions. On the other hand, Winkel (1989; 1991a, 1991b; Winkel & Koppelaar, 1988) has published evidence that with appropriate training, effective victim coping can be promoted by police officers.

Clearly, if victims' needs are not recognized and police officers do not display appropriate concern and understanding, victims' encounters with law enforcement personnel may be detrimental and frightening. Alternatively, by responding promptly, effectively, and providing appropriate support, the police may also have a crucial role in lessening the psychological trauma victims experience. In sum, their actions may generate further feelings of violation or, alternatively, initiate the process of "de-victimization".

Victims Assistance Programs. The "injustices" suffered by victims, not only by the police but throughout the criminal process, have been well documented (e.g., Bard & Sangrey, 1986; Burgess & Holmstrom, 1978b; Frieze et al., 1987; MacDonald, 1976; Normandeau, 1981; Rodino, 1985; Resick, 1987b; Symonds, 1975, 1980a; Waller, 1984, 1985, 1989). Having recently suffered harm, victims are frequently dismayed to learn that the central preoccupation of the justice system is to apprehend, prosecute, and incarcerate the criminal (A.P.A., 1985). Acknowledging this concern, many local, regional, and federal governments have established programs specifically to assist victims and assure that their needs are addressed. Many police departments, for example, have established child abuse units, rape units, domestic violence units and specialized victim support services. Whether assistance is provided as a service directly by the police, or the police work closely with other external organizations that provide services, most of the programs that have been established have proven to be of significant value to the victims they service (Cook et al., 1987; Feinberg, 1981; Finn & Lee, 1985; Flynn, 1989; Harris et al., 1984; Shepherd, 1990; Waller, 1984).

According to Finn and Lee (1985) there are six general categories of service which victim support programs incorporate: emergency services, counseling, advocacy and support services, claims assistance, court-related services, and system-wide services. At a minimum, most programs provide some type of counseling along with practical advice for dealing with the problems that can arise following criminal victimization. If the program is run by a local police department, one or more "victim liaison" officers, usually assisted by a social worker and number of volunteers, is typically assigned to work directly with victims. Many victim/witness assistance programs also provide court-related services such as explaining the criminal justice system, escorting victims who are about to testify to the courtroom, sitting with them during the proceedings, and providing information on future court dates. These programs benefit not only victims but also the law enforcement agency supplying the service. Victims assistance programs aid law enforcement agencies by partially relieving key investigation unit personnel of the stress that is commonly associated with dealing with crime victims while increasing the time police officers need to perform other duties (Finn & Lee, 1985). More importantly, though, victim aid workers benefit crime victims by providing them with the undivided attention they want and deserve. At every stage in the criminal justice system the attitudes and behaviors of people who have contact with victims of crime are vital. Their responses can either facilitate or impede victim readjustment (Sales et al., 1984).

Cook et al. (1987) and Davis (1987) evaluated the effectiveness of victims' services programs in Tucson, Arizona and New York City, respectively. Although both studies found only slight evidence that the services offered to victims helped to reduce their emotional trauma, those who received assistance indicated they were "overwhelmingly positive" about the value of the help provided. In particular, the victims suggested they benefited most from the crisis intervention assistance they received. Both studies also found evidence that the assistance received by victims helped them cope behaviorally

with their misfortune. People who received aid later reported fewer problems adjusting to their daily routines of life and work. In their recommendations, Cook et al. (1987) strongly advised other legal jurisdictions without victims services to consider establishing such programs and recommended that established programs consider adding a crisis intervention component if one does not already exist. Crisis intervention may prove particularly important as there is some evidence that professional help provided to crime victims is only useful when it is supplied quickly. However, brief interventions should be viewed merely as a starting point. Alone, they may have little lasting value (Norris et al., 1990).

Re-victimization

Finally, "re-victimization" may influence crime victims' reactions. Fear of re-victimization and retaliation by offenders is a significant concern for burglary, assault and robbery victims (Friedman et al., 1982; Shapland et al., 1985). Statistics show that one-third of property offense victims and one-quarter of the victims of personal crime have previously experienced a similar incident (Conklin, 1972; Solicitor General, 1988, Bull. #10). This is a particular concern for victims of domestic violence and child abuse because they are subjected to repeated violent episodes that commonly occur over the course of years (Walker, 1985). Again, more research is necessary to clarify whether coping abilities are impeded or facilitated as a consequence of multiple victimization over time (cf. Atkeson et al., 1982; Cohen & Roth, Frank et al., 1980; Kemp et al., 1991; Norris et al., 1990; Resick, 1987b).

HYPOTHESES

The primary purpose of the present research is to test the applicability of the proposed model of factors relevant to short and long-term reactions to criminal victimization (see Figure 1, p. 17). The following hypotheses are proposed. Correlational analyses are expected to reveal that:

Pre-Victimization Factors

Demographics

1. Employment status will be negatively related to psychological distress.
2. Post-crime distress will be negatively associated with level of educational achievement.
3. Victims' income will be negatively related to trauma.
4. The chronological age of victims at the time of the offense will be directly related to negative reactions.
5. Female gender will be positively associated with distress reactions following victimization.

Psychosocial Variables

6. Victim perceived stress will be directly related to post-crime distress.
7. Recent family death will be inversely related to post-crime distress.
8. Prior victimization will be directly related to victim trauma.
9. Prior criminal activity engaged in by victims will be inversely related to negative outcomes.

10. Poor victim physical and mental health will be positively associated with distress following victimization.
11. The presence of an existing social support network will be related to fewer negative reactions following criminal victimization.
12. Victims' sense of community will be inversely related to post-crime psychological distress.

Cognitions[2]

13. Belief in a just world will be directly related to post-crime negative reactions.

Crime Characteristics

Type of Crime

14. It is hypothesized that residential break and enter victims will experience many of the same reactions that have been reported by researchers studying the effects of different kinds of crime. Burglary victims are expected to indicate qualitatively similar but quantitatively less symptomology than has been reported in the victimology literature on the consequences of other crimes.[3]

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[2] Victims' pre-victimization positive self-perceptions and conceptions of invulnerability were discussed in the literature review. However, it is difficult, if not impossible to obtain an accurate post-crime assessment of these pre-victimization beliefs. A victimizing event will taint these assessments. Conversely, "belief in a just world" is postulated by Lerner (1971) to be a more durable cognition and less likely to be corrupted by personal victimization.

[3] This hypothesis cannot be tested using correlational analysis. Rather, non-statistical comparisons with findings reported in the existing victimology literature on the psychological consequences of other crimes will be made.

Severity of Offense

15. Degree of violence associated with a crime will be directly related to victims' distress following the offense.
16. Significance of loss experienced by victims will be positively associated with adverse reactions following crime.

Location of Incident

17. Victims' perceptions of low neighbourhood crime rate will be associated with adverse consequences following victimization.
18. Pre-crime measures undertaken to ensure one's environment was "safe" will be related to more negative post-crime reactions.
19. Victim-perpetrator relationships will influence victim post-crime reactions such that familiarity will be positively associated with increases distress.

Elapsed Time

20. It is hypothesized that the level (degree) of trauma experienced by victims will decrease with time.[4]

Post-Victimization Factors

Cognitions

21. Victims perceptions of "uniquely vulnerable" to future victimization will be directly related to negative reactions.

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[4] This hypothesis will also not be tested with correlational statistics. Rather, victims' distress scores obtained shortly after the offense will be compared to those obtained months later using paired t-tests.

22. Victims perceptions of "universally vulnerable" to future victimization will be inversely related to negative reactions.
23. Victims attributions of the crime to internal causes will be associated with negative psychological reactions.
24. Victims attributions of the crime to stable factors will be associated with negative psychological reactions.
25. Victims attributions of the crime to controllable factors will be associated with negative psychological reactions.
26. The perception of personal control over the probability of future victimization will be inversely related to negative reactions following victimization.

Behavioural Responses

27. Engagement in constructive behavioural responses will be inversely associated with distress reactions.
28. Engagement in avoidance oriented behaviours will be positively associated with distress reactions.
29. Time spent on matters related to the crime will be directly related to the long-term distress victims' experience.

Social Support

30. Negative psychological reactions following victimization will be inversely related post-victimization informal social support.
31. Support and assistance victims receive from law enforcement officers will be inversely related to victimization distress reactions.
32. Support received from the Victim Services assistance program will be inversely related to negative post-crime reactions.

Revictimization

33. Revictimization following the commission of a crime will be directly related to victims' distress.

The Overall Model

The working model presented in Figure 1 will be tested using multiple regression to determine the individual and interactive contribution of the independent variables to the prediction of reactions following criminal victimization. Specifically it is hypothesized that:

34. The overall model will be predictive of both short-term and long-term victims' reactions to crime.
35. Pre-victimization factors, crime characteristics, and post-victimization factors will significantly contribute to the prediction of short and long-term post-crime distress.

METHOD

Overview of Design

The present study employed a passive-observational design. That is, no manipulations were undertaken and no attempt was made to infer causal relationships. The respondent selection was non-random. Aspects of the victimization experience were employed as independent variables. The dependent variables were the subjects' psychological well-being. The hypotheses were tested using correlational and multiple regression analyses.

Participants

The working model (see Figure 1) was tested with victims of residential breaking and entering (i.e., burglary). Broadly, residential burglary can be defined as breaking into a residence with felonious intent (Waller & Okihiro, 1978). The term "burglary" is the American equivalent of "breaking and entering". For the purposes of the present study, residential burglary is defined as breaking and entering into a dwelling house. Entry into the residence must have been gained but theft need not have occurred.

Residential breaking and entering victims were selected for participation in the present study for several reasons. Property crime is by far the most common type of criminal offense. In Canada, historically, property crimes have accounted for approximately two-thirds of all Criminal Code violations (Statistics Canada, 1988). Every year more than one million incidents of breaking and entering, theft, car theft, fraud, and possession of stolen goods are reported to the police. Moreover, each

incident created one or more victims. Although property crime victims generally escape direct personal harm, there may still be considerable psychological impact following the violation of one's property. In particular, research shows that having one's house broken into can produce effects ranging from minor discomfort to long-term psychological distress (Bard & Sangrey, 1986; Bourque et al., 1978; Hough, 1985; Kilpatrick et al., 1987; Maguire, 1980; Maguire & Bennett, 1982; Waller & Okihiro, 1978; Wirtz & Harrell, 1987c).

Although property crime victimization is not infrequent and it can have significant consequences, there has been relatively little discussion of its impact in the victimization literature. Burglary may be a minor offense compared to more direct and violent assaults, but it is a very real and personal concern for a significant portion of the population and therefore deserving of careful study.

The research was conducted in the City of Winnipeg, Manitoba during the spring and summer of 1991. The victims of residential breaking and entering were identified through the Winnipeg Police Department's daily crime incident reports. These reports are a record of the preceding day's criminal activities. The types and locations of offenses, names and gender of those involved, home telephone numbers, and a brief description of each incident are recorded and compiled daily. Although these records are not normally accessible to the public, permission was granted by the Police Department for the purposes of this study.

A concern with using police records as the means of selecting participants is that nothing is learned about those victims who did not report their crime to the police - the so called "dark figure" is excluded from the study. However, a major advantage of using police records rather than population surveys is the monetary costs associated with locating the target population are significantly reduced. Moreover, using a community survey it would have been difficult and very expensive to locate the target population soon after they were victimized. Thus, determining the short-term

consequences and predictors of victimization, one of the primary objectives of this study, would not have been possible.

In addition, the "dark figure" is lower when studying break and enter via accessing police records than is the case when using this method to research most other crimes. Results of the 1988 General Social Survey with approximately 10,000 Canadians aged 15 and over were that, in total, 40% of crime incidents involving victims are brought to the attention of the authorities. Break and enters are reported most frequently. Between 64% and 70% are known to the police across Canada (Canadian Urban Victimization Survey, 1982; Sacco & Johnson, 1990).

Over a four month period (March through June), 1315 victims of residential break and enter were identified from the daily incident reports of the Winnipeg Police Department. This sample size was chosen for several reasons. Estimates made by researchers who have studied various interviewing techniques were that, when conducting interviews over the telephone, despite call-back efforts, we would not be able to contact approximately 10% of the selected sample because of "no answers" and/or "busy signals" (Backstrom & Hursh-Cesar, 1981; Dillman, 1978). This same research also showed that we would not be able to contact an additional 15% of the initial sample because they would either not possess a telephone or their number would be unlisted. A 10% refusal rate was anticipated and we estimated that, given the multicultural make-up of Winnipeg, roughly 5% of the respondents would not be able to understand the interviewer because of a language barrier. The cumulative effect of these difficulties would likely decrease the response rate by approximately 40% which would effectively reduce the number of respondents by 500.

Previous research estimates were that we would be able to obtain follow-up data several months later on approximately 75% of the victims who provided an initial telephone interview (e.g., Wirtz & Harrell, 1987b). Tabachnick and Fidell (1989) recommend a minimum of 5 subjects per independent variable. We anticipated that,

when operationalized, the working model would contain approximately 100 independent variables. Thus, in order to obtain sufficient statistical power to test the proposed model of factors relevant to victim recovery, complete final data on approximately 600 residential break and enter victims were needed. Given the attrition discussed above, to end up with this number, over 1315 victims were selected from the police incident reports for participation in the study.

Procedure

Data were collected using telephone interviews. Commencing on March 10, 1991, the name, address, postal code, crime incident number, gender (if available), date of offense, approximate time of day the offense occurred, and telephone number of every residential break and enter victim in Winnipeg who reported the incident was selected from the daily crime incident reports of the Winnipeg Police Department by a trained civilian employee. The relevant information was recorded on the top of the second page of the initial interview instrument (Appendix B) by the Department employee and then checked by the principal researcher. Later that day this information was used to generate addressed letters and envelopes. The following morning an initial contact letter (Appendix A) written on official Winnipeg Police Department letterhead and signed by the Community Relations Staff Sergeant was mailed to the break and enter victims.[1] The letter briefly described the study and informed the recipient that they could expect to soon receive a telephone call.

Within the next few days the victims were contacted by telephone by a trained interviewer (details to be discussed) and asked if they would be willing to participate in the study. Participants were guaranteed confidentiality, anonymity and informed that

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[5] The letters sent to the crime victims were modified versions of those used by Woytowich (1986) and Waller & Okihiro (1978).

they were under no obligation to participate in the study. In addition, respondents were told they did not have to answer any individual question they deemed too personal. They were promised a copy of the research findings subsequent to the completion of the research.

The interviewers then administered the Initial Assessment Schedule (Appendix B). At the conclusion of the interview respondents were thanked for their participation and told that they would be contacted again in approximately four months. They were asked to provided a name and telephone number of a relative or friend whom would know how to reach them should they move residences or change telephone numbers. In addition, they were told that they could expect to receive a telephone call from a Winnipeg Police Department volunteer within the next few weeks.[1]

Roughly five months after the break and enter was reported to the police, victims who participated in the initial stage of the study were sent a "follow-up" letter (Appendix C) asking for their participation in the second stage of the study and informing them that they could expect to receive another telephone call within the next few days. Confidentiality and anonymity were again affirmed in the letter and it was typed on official Winnipeg Police Department letterhead as well as signed by the Community Relations Staff Sergeant. A few days after the letter was mailed, the victims were telephoned by interviewers and administered the Follow-up questionnaire instrument (Appendix E).

Victims who could not be contacted by telephone were sent another letter (Appendix D) underlining the importance of having all respondents participate in the study and informing them of the difficulty we were having contacting them. They were urged to telephone either the principal investigator or the police constable responsible for the

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[6] It is standard procedure for the Winnipeg Police Department Victim Services Unit to attempt to contact all residential break and enter victims.

Victim Services Unit. It was hoped that, although they may have moved and changed telephone numbers, they were still having their mail forwarded to them at their new address and would respond to our request.

When the study was completed a final letter was sent to each of the participants who requested one thanking them for their cooperation during both stages of the study and providing a summary of the research findings (Appendix G).

Interviewer Training

The interviewers who conducted the telephone interviews were hired by the principal investigator if they possessed requisite interpersonal communication skills and had clearly audible voices over the telephone.[1] All of the interviewers were University students. They received approximately four hours training with both of the interview instruments. During the training sessions, the interviewers reviewed each question and discussed their impressions and concerns with the principal investigator. Each of the interviewers also received a training manual to assist them with the administration of the questionnaires (Appendix F). Interviewers were reimbursed approximately $50.00 per training session.

To help ensure consistency of procedures across interviews, roughly 50% of the completed interviews were reviewed by the principal investigator for administration and coding errors. Accordingly, feedback was subsequently provided to the interviewers. For each completed interview they returned, the interviewers were paid $10.00.

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[7] Gender was not part of the hiring criteria for interviewers. Based on their years of conducting telephone interviews, Dillman (1978) and his associates concluded that the gender of the interviewer does not affect response rates. Although they originally hypothesized that "the female voice would be considerably less threatening than the male's" (p. 257), their research subsequently showed that both males and females interviewers generally receive an equal number of refusals.

The interviewers were instructed to make telephone calls primarily during the following times: Saturdays between 10 A.M. and 9 P.M., Sundays between 11 A.M. and 9 P.M., Weekdays between 6 P.M. and 9 P.M., and on holidays between 10 A.M. and 9 P.M.. Research conducted by Backstrom and Hursh-Cesar (1981) showed these are the best times to find people at home and willing to respond to telephone interviews.

Telephone Interviewing

Telephone interviewing has been used extensively in victimology research (e.g., Burgess & Holmstrom, 1978a, 1979a; Bourque et al., 1978; Canadian Urban Victimization Survey, 1983; Cook et al., 1987; Harris, 1984; Kilpatrick et al., 1985; Smith & Maness, 1976; Wirtz & Harrell, 1987b). There are several advantages of the telephone interview method. Compared to face-to-face interviews, (1) telephone interviews are less expensive to conduct, (2) maintain better control over social desirability, (3) can be implemented quicker and, therefore, measure transient beliefs and feelings more accurately, and (4) provide no worse and often better completion rates (Backstrom & Hursh-Cesar, 1981; Dillman, 1978). The quality of the data gathered by telephone and personal interviewing is also comparable. In many cases the anonymity that respondents feel in telephone interviews reduces the anxiety they sometimes experience when answering sensitive questions (Backstrom & Hursh-Cesar, 1981). Compared to mail-out surveys, telephone interviews (1) offer higher response rates, (2) allow for more complex screening questions, (3) have greater success receiving answers to tedious or boring questions, (4) reduce the likelihood that others in the household will influence responses, and (5) can be implemented quicker (Backstrom & Hursh-Cesar, 1981; Dillman, 1978).

Telephone interviews are fast to complete and relatively easy to administer. In addition, telephone interviews can be as lengthy as face-to-face interviews and

considerably longer and more complex than mail surveys (Sudman & Bradburn, 1983). Dillman (1978) reviewed the literature on how long questionnaires can be before response rates begin to significantly decline and concluded that "once people are on the telephone, the length of interview does not appear to be a major problem" (p. 55). Backstrom and Hursh-Cesar (1981) concurred. Individuals who refuse to complete telephone interviews, usually do so at the point of introduction. Furthermore, people will respond to questions over the telephone for roughly the same duration as they will for an in-person interview. If the topic is salient and interesting, telephone interviews can last for several hours before termination becomes a significant problem (Backstrom & Hursh-Cesar, 1981; Dillman, 1978; Sudman & Bradburn, 1983).

Measures

Appendices B and E contain a copy of the survey questionnaires - the Initial Assessment Schedule and the Follow-up Interview, respectively. The majority of the questions were either borrowed or adapted from previous victimization surveys conducted by Maguire (1980), Hough (1987), Waller & Okihiro (1978), Markesteyn & de Paiva (1988) and the Canadian Urban Victimization Survey (Solicitor General, 1983) (Appendix H). Standardized tests of physiological and psychological well-being, attributions, and belief systems were also used. Occasionally, but only when necessary, pilot questions were constructed and incorporated into the interview instruments. In general, the measures were developed or chosen to maximize simplicity, comprehensibility, brevity and content validity.

The questionnaires were constructed according to the guidelines recommended by Backstrom & Hursh-Cesar (1981), Dillman (1978) and Sudman & Bradburn (1983). Attention was paid to both the phrasing and order of the questions. Every effort was made to develop questions that respondents without a post-secondary education could

answer. Less sensitive, more interesting, salient questions were asked at the beginning of the interview and items were grouped according to subject matter. Moreover, each question was designed to meet a specific research objective (Appendix H). No cards or visual aids were used, so the response categories were kept simple. The majority of response options were restricted (closed) to facilitate computer data entry and reduce coding errors. The response categories for the closed questions were precoded (Appendix B & Appendix E).

Both questionnaires were pilot tested to identify potential problems such as confusing instructions, interpretation difficulties, and lack of response variability. First, a panel of seven psychology graduate students who had experience with survey design and questionnaire construction reviewed the measures and made suggestions on how they might be improved. Based on their feedback, revisions were conducted. The principal investigator also administered the questionnaire to a sample of residential break and enter victims (N=25) obtained from Winnipeg Police Department files. Their responses were analysed and some minor changes to the measures were again made. Finally, the questionnaires were reviewed by the commanding officer of the Winnipeg Police Department Community Relations Unit. Comments from the police were sought to ensure that, where appropriate, the questions asked also addressed their concerns.

The reactions of victims were assessed by four standardized tests; the Impact of Event Scale, the State subtest of the State-Trait Anxiety Inventory, the General Health Questionnaire, and the Hopkins Symptom Checklist. These measures were included in both the Initial Assessment Schedule and the Follow-up Interview. The Initial Assessment Schedule also included the Perceived Stress Scale, the Causal Dimension Scale and a measure of social support, whereas the Follow-up Interview contained the Trait subscale of the Trait-Anxiety Inventory and the Belief in a Just World Scale.

Impact of Event Scale (IES)

The IES (Horowitz, Wilner, & Alvarez, 1979) was used to measure respondents' "current degree of impact" experienced as a result of the break and enter. The IES is a 15-item self-report measure of two common responses to stressful events: intrusion (n=7), and avoidance (n=8). Respondents were required to indicate on a 4-point scale how often they have experienced each item since the break and enter. The point values for the intrusion subscale questions were summed to produce a single score for intrusion. Likewise, the point values received for the avoidance subscale questions were summed to produce an avoidance subscore. Horowitz et al. report internal consistency coefficients of .78 for the intrusion subscale and .82 for the avoidance subscale. Test-retest reliability is .89 for the intrusion subscale and .79 for the avoidance subscale.

State-Trait Anxiety Inventory - Form Y (STAI)

The STAI (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) is a standardized measure which provides information about an individual's level of state and trait anxiety. State anxiety refers to the transitory feelings of fear or worry people experience from time to time. Trait anxiety, on the other hand, refers to the relatively stable tendency of an individual to respond anxiously to stressful situations.

State anxiety was assessed by a 20-item self-report questionnaire (STAI-S). Respondents were asked to indicate on a 4-point scale how often they have experienced certain feelings since the break and enter into their home. Scores for each response were summed across the 20 items to produce a score for state anxiety. Internal consistency coefficients across various groups are reported to range from .86 to .95 (Spielberger et al., 1983). One item (number 7) was deemed not applicable to the present study so was excluded (see Wirtz & Harrell, 1987b who also deleted this item).

Trait anxiety was assessed on a 20-item self-report questionnaire (STAI-T). Respondents were required to choose among four alternatives the one that best describes how they generally feel in response to each item. High internal consistency coefficients (from .89 to .91) were reported by Spielberger et al. (1983). As well, test-retest reliability over a 30-day period was recorded as .71 for males and .75 for females. Sixty-day test-retest reliability was also high, ranging from .68 for males to .65 for females.

General Health Questionnaire (GHQ)

The GHQ (Goldberg, 1972) is a self-report screening instrument aimed at detecting those individuals who: a) are unable to carry out normal 'healthy' functions, and b) possess symptoms of a distressing nature. Subjects are asked questions about current or recent complaints and responses are scored on a 4-point scale. In the present study, the 12-item version of the GHQ was utilized. Goldberg reported the test-retest reliability for the short-form ranged from .52 to .73. The split-half reliability coefficient was measured at .83. The 12-item GHQ was also shown by Goldberg to correlate highly (.77) with independent clinical assessments.

Hopkins Symptom Checklist (HSCL)

The HSCL (Derogatis, Lipman, Rickles, Uhlenhuth, & Covi, 1974) provides a self-report of the number and intensity of symptoms experienced by respondents in the prior seven days. It is comprised of 58 items which measure five dimensions or symptoms (somatization, obsessive-compulsiveness, interpersonal sensitivity, anxiety and depression) on a 4-point rating scale. Scores for each dimension item are summed to produce one score for each subscale. Internal consistency for each of the dimensions ranges from .84 to .87 and test-retest reliability over a one week period ranges from

.75 to .84. Inter-rater reliability ranges from .64 for depression to .80 for interpersonal sensitivity.

Three subscales were used in the present study: somatization, obsessive-compulsiveness, and depression. The anxiety subscale was excluded because the State-Trait Anxiety Inventory will measure this dimension. Interpersonal sensitivity was dropped because it was not deemed relevant for the purposes of the current study. Items that form the somatization dimension reflect the distress an individual feels as a result of perceived bodily dysfunctions. Items comprising the obsessive-compulsive dimension focus on thoughts, impulses, or actions an individual experiences as irresistible and unremitting. Items on the depression dimension measure concomitants of a clinical depressive syndrome such as feelings of hopelessness, loss of interest, dysphoric mood and affect, and withdrawal. Abridged versions of the three scales were developed for use in the current study. Four items from each subscale on which the highest percentage of the test development sample were symptomatic were selected for inclusion (i.e., items 1, 14, 27, and 42 from the somatization dimension; items 9, 10, 28, and 55 from the obsessive-compulsive dimension; and items 26, 29, 30, and 31 from the depression dimension). In the initial assessment, ratings for the past seven days and ratings for the past year were obtained. The ratings for the past year were used as a measure of pre-victimization functioning. In the Follow-up Interview, only ratings for the past seven days were collected.

Perceived Stress scale (PSS)

The PSS (Cohen, Kamarck, & Mermelstein, 1983) is a 14-item measure of the degree to which situations in one's life are appraised as stressful. On a 5-point scale respondents are asked to indicate how often they have experienced certain thoughts or feelings during the last month. To obtain an overall PSS score, the scores are summed. Cohen et al. reported coefficient alpha reliabilities of .84, .85, and .86 across three

samples. The test-retest correlation over two days was .85. Over six months, it was .55.

For use in a telephone survey, Cohen et al. (1983) developed a shorter version of the PSS consisting of four items (2, 6, 7, and 14) that were correlated most highly with the original 14-item scale. An internal consistency coefficient of .72 was obtained for the 4-item scale, and the test-retest reliability over a two-month period reached .55. Cohen et al. reported that the changes in perceived stress, as measured by the 4-item version of the PSS, were significantly related to changes in behavior and recommends the scale in situations where a very short measure of perceived stress is required.

Causal Dimension Scale (CDS)

The CDS is theoretically based on the work of Weiner (1979) and was developed by Russell (1982) as a measure of "how the attributor perceives the causes he or she has stated for an event" (p. 1137). It is a 9-item self-report instrument that has been slightly modified for administration over the telephone for use in the current study. Break and enter victims were asked to assess causal perceptions in terms of locus of causality (items 1, 5 and 7), controllability (items 2, 4 and 9), and stability (items 3, 6 and 8). An average score for each dimension (ranging from 1 to 9) was obtained by summing the responses on the three relevant items and dividing by three. Russell reported that the three subscales are internally consistent (α ranged from .73 to .87) and that a factor analysis confirmed the three dimensional structure of the scale.

Social Support

This measure was developed specifically for the current study. Partly based on the work of Sarason et al. (1983), it is a 28-item self-report scale designed to assess the existence of, availability of, and satisfaction with the social support received by break and enter victims. The items designed to assess prior social support consist of

questions 4, 5, 12, 13, 14 and 19 in the second half of the Initial Assessment Schedule (Appendix B). The post-victimization support items consists of questions 1, 2 and 3, of the Initial Assessment Schedule and question 25 of the Follow-up Interview (Appendix E). The total score is obtained by summing the values corresponding to the responses given to these questions (Appendix I). The range is from 0 to 72. The internal consistency of the scale is reported in the Results.

Belief in a Just World Scale (BJW)

The BJW (Rubin & Peplau, 1973) is designed as a self-report measure of an individual's beliefs that the world is a just and orderly place where people usually receive what they deserve. The respondent is asked to indicate his or her degree of agreement or disagreement on a 6-point continuum to 20 statements. An overall score is obtained by summing scale scores across all the items. The high internal consistency (α = .85) of the scale suggests it is tapping an underlying general belief that can be viewed as a single attitudinal continuum. Questions 5, 16, and 17 were slightly modified to reflect Canadian, rather than American, content (see Appendix E).

RESULTS

Study Participants

Participation Rates

In the initial assessment stage of the study, the majority of telephone interviews (61.2%) were conducted between 4 p.m. and 10 p.m.. On average, they were carried out 10.9 days after the residential break and enter was reported to the police. No interviews were conducted after 14 days had passed from the day the crime was reported. It took an average of 31 minutes to complete the initial assessment schedule.

Table 1 presents the results of our efforts to interview the potential participants selected from police files. Of the initial 1315, 110 were ruled ineligible because they did not possess a telephone. We obtained responses from 645 break and enter victims. Included in this number are 12 interviews conducted with people who did not complete the entire interview but nevertheless provided answers to many questions. Excluding those people who did not possess a phone, 633 interviews out of the remaining 1205 were successfully completed in their entirety. Thus, the participation rate of victims who possessed telephones for the initial stage of the study was 52.5%.

In the follow-up stage, we successfully interviewed 504 break and enter victims, yielding a return rate of 79.6% (Table 2). These telephone interviews were conducted an average of 168 days (five and a half months) after the offense was first reported to the police. The interviewer made a maximum of 14 attempts (call-backs) to contact each victim. Sixty-two percent of the interviews were conducted between 4 p.m. and 10 p.m. and, on average, each follow-up interview took 31 minutes to complete.

Table 1

Breakdown of Sample by Result of Initial Contact Effort

Category	Frequency	Percent	Cumulative Frequency	Cumulative Percent
No phone	110	8.4	110	8.4
Not in service	81	6.2	191	14.6
No answer	152	11.6	343	26.2
Plus 14 days	158	12.0	501	38.1
Communication problem	68	5.2	569	43.4
Respondent refusal	87	6.6	656	50.0
Household refusal	14	1.1	670	51.1
Incomplete	12	0.9	682	52.0
Complete	633	48.1	1315	100.0
Complete with phone	633	52.5	1205	100.0

Table 2

Breakdown of Sample by Result of Follow-up Contact Effort

Category	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Not in service	53	8.4	53	8.4
No answer	2	0.3	55	8.7
Plus 14 attempts	9	1.4	64	10.1
Communication problem	6	0.9	70	11.0
Respondent refusal	51	8.1	121	19.1
Household refusal	7	1.1	128	20.2
Incomplete	1	0.2	129	20.4
Complete	504	79.6	633	100.0

Population Comparisons

In order to determine if the study sample was similar to the population from which it was drawn, several comparisons were made. First, the sample selected from police files (N=1315) was compared to the Winnipeg Police Department's annual records of residential break and enter by district for 1991, the year in which the sample was drawn. For law enforcement and other civic matters, Winnipeg is divided into six city wards or Districts (see Figure 2). A Chi-square analysis revealed that the current study sample did not significantly differ from the yearly police statistics gathered on each District, χ^2 (5) = 5.87, p = .32. These data are graphically displayed in Figure 3. The figure also shows the Winnipeg police statistics on residential break and enter for the years 1989 and 1990. The overall Chi-square results revealed significant differences between the four samples. Nonetheless, the victims selected from police files for participation in the current research appear to be proportionally representative of people who had their homes broken into in Winnipeg over the three year period.

Second, the original sample was compared to the 1991 Winnipeg Area Study (WAS) sample to assess how the distribution of break and enter victims compared with the larger urban population. The WAS is an annual survey conducted on a systematic random sample of households in the City of Winnipeg. The samples selected on the WAS have been shown to be consistently representative of the population when compared with Census data (e.g., Currie, 1986, 1987). The boundaries of the WAS neighbourhoods closely correspond with the Winnipeg Police Department District borders. Figure 4 graphically shows that, compared to the distribution of Winnipeggers by neighbourhood district in 1991, the break and enter victims selected for participation in the present study were likely to live in particular areas of the city. Six statistical tests (one for each District) of the equality of independent population

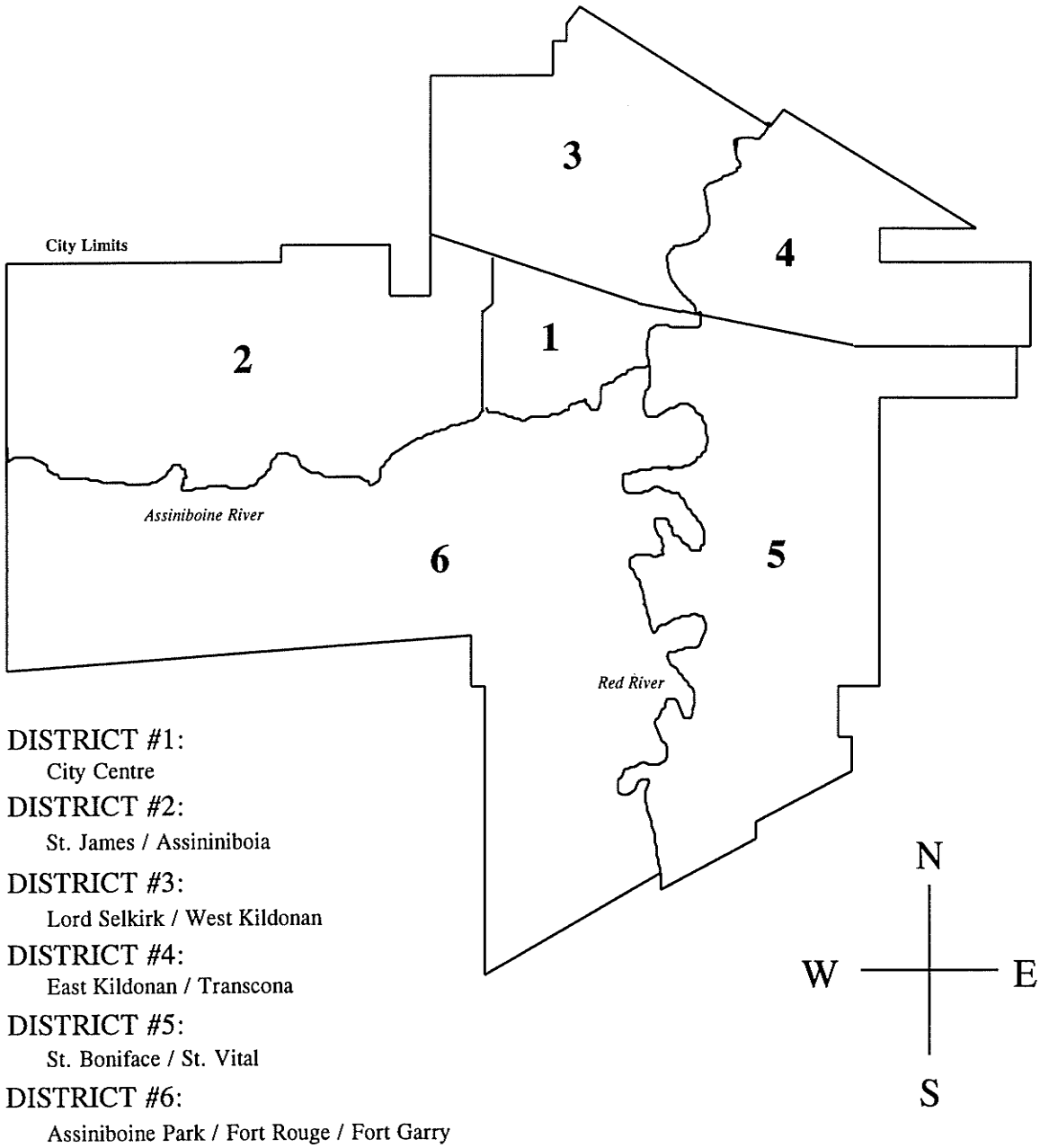


Figure 2. Winnipeg Police Department city map depicting the six districts.

Figure 3.
Comparison of Study Sample Selected from Police Reports (N = 1315) with Police Statistics of Residential Break and Enter in Winnipeg from 1989 to 1991 by District

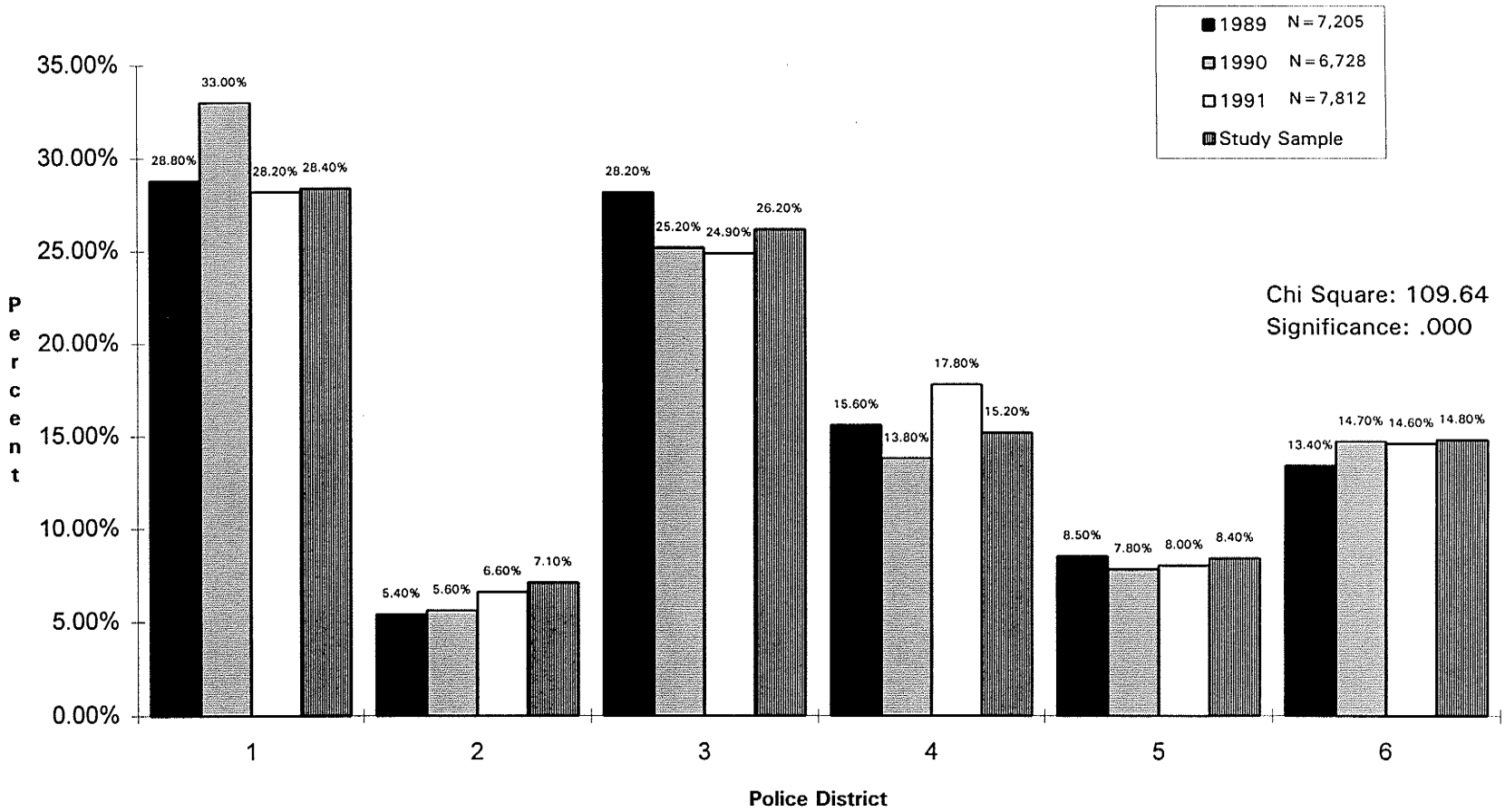
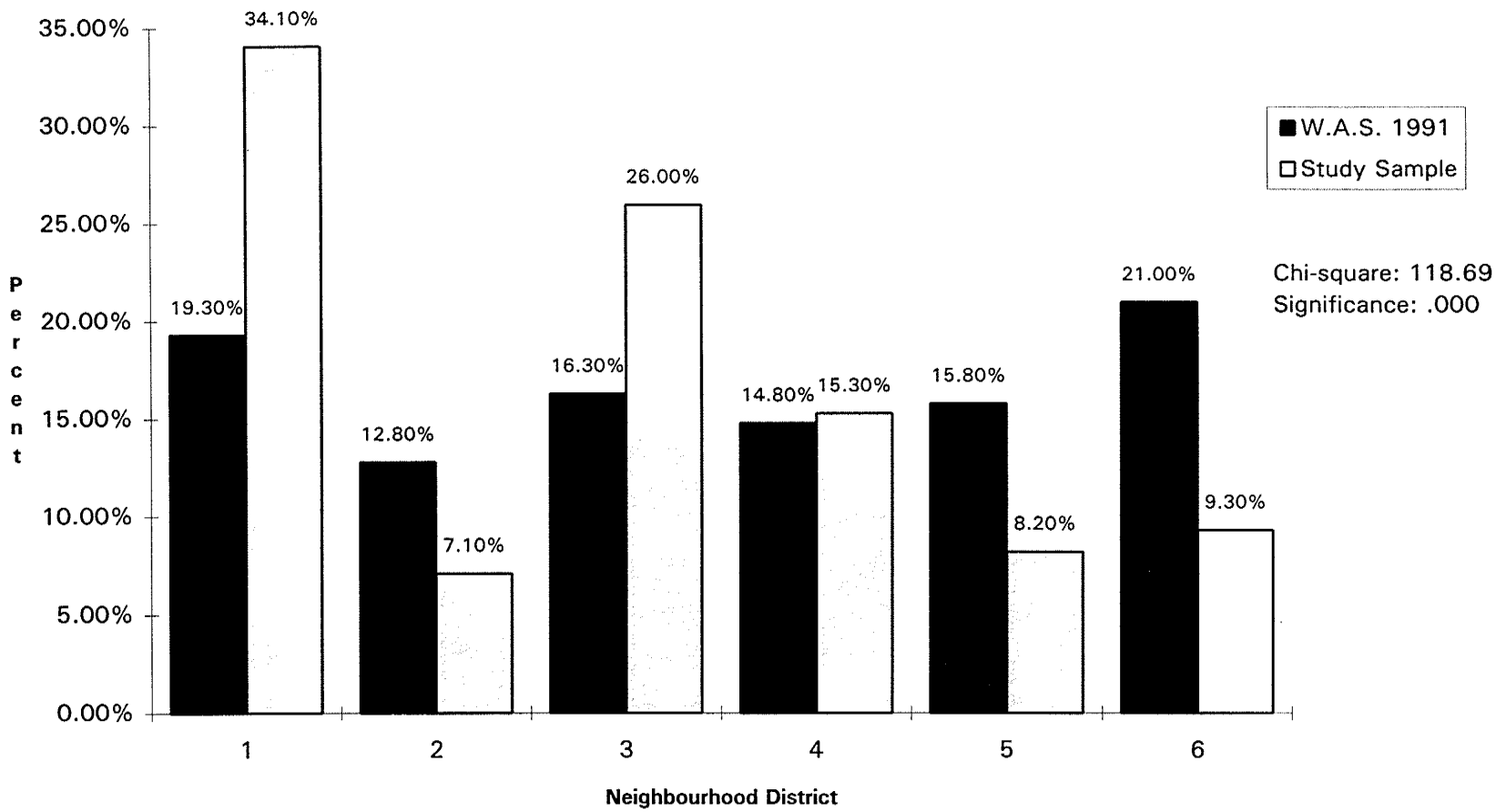


Figure 4.
Comparison of Study Sample Selected from Police Reports (N = 1315) with 1991 W.A.S. (N = 533) by Neighbourhood



proportions were conducted. The results showed break and enter victims were proportionately more likely to reside in District 1 ($Z^{\alpha = .05 \text{ (1-tailed)}} = 6.41$) and District 3 ($Z^{\alpha = .05 \text{ (1-tailed)}} = 4.47$). They were less likely to live in District 5 ($Z^{\alpha = .05 \text{ (1-tailed)}} = 4.75$), District 6 ($Z^{\alpha = .05 \text{ (1-tailed)}} = 6.88$) and District 2 ($Z^{\alpha = .05 \text{ (1-tailed)}} = 4.07$). There was no statistical difference for District 4. Not surprisingly, the overall Chi-square was also significant (see Figure 4).

Third, the social-demographic characteristics of the victims obtained during the initial assessment (N = 645) were compared with the 1991 Winnipeg Area Study data. The WAS includes an extensive set of variables concerned with social-demographics. A major advantage of using the WAS over Census data is that it is conducted on an annual basis which allows for same-year comparisons, whereas the last Census prior to conducting the current study was 1986. Table 3 provides a comparison of the respondents on the initial assessment schedule with the 1991 WAS participants on gender, age, marital status, education, household income, ownership, type, size and length of residency.

Gender

The study sample consisted of roughly equal numbers of males and females (49.9% and 50.1%, respectively). The 1986 Census for Winnipeg reported 52.6% female in the population over twenty years of age. Since 1986, the WAS has consistently estimated the percentage of females in Winnipeg to be in the mid-fifty's. In 1991, the WAS reported 42% male and 58% female in the population. Therefore, the current study slightly under sampled women, or conversely, over sampled men.

Age

The average age of the break and enter victims we surveyed was 39. They ranged from age 16 to 85. From 1991 through 1987 the median age of Winnipeggers was reported by the WAS to be 40, 39, 40, 38, and 37, respectively. A comparison with

Table 3

Comparison of Study Sample and the 1991 Winnipeg Area Study (WAS) Sample on Major Social- Demographic Characteristics

Characteristic	Study Sample (%)	WAS Sample (%)	χ^2	p
Gender	(N = 645)	(N = 533)		
Male	49.9	42		
Female	50.1	58	7.32	.01
Age	(N = 611)	(N = 516)		
20-24	12.1	8.5		
25-34	32.9	25.8		
35-44	28.3	26.2		
45-54	9.5	14.5		
55-64	9.8	11.2		
65-74	6.1	9.3		
Over 75	1.3	4.5	29.24	.00
Marital Status	(N = 628)	(N = 530)		
Single	29.5	16.4		
Common-law	5.7	7.2		
Married	41.7	50.8		
Separated	8.8	6.8		
Divorced	9.7	8.9		
Widowed	4.6	10.0	40.25	.00
Education	(N = 629)	(N = 533)		
Junior high or less	8.1	13.1		
High school or other non-university	64.5	55.2		
Some university or more	27.3	31.7	13.09	.00
Household Income	(N = 580)	(N = 436)		
Less than $20,000	26.6	19.7		
$20,000 to $29,999	19.8	15.6		
$30,000 to $39,999	16.0	16.7		
$40,000 or more	37.6	47.9	13.81	.00
Home Ownership	(N = 633)	N = 529)		
Own	61.1	65.8		
Rent	38.9	34.2	2.68	.10

Table 3 (continued)

Characteristic	Study Sample (%)	WAS Sample (%)	χ^2	p
Type of Dwelling	(N = 633)	(N = 533)		
Single house	72.2	67.4		
Side by side	5.7	3.0		
Row housing	3.3	4.9		
Duplex	2.4	2.6		
Lowrise	11.5	12.2		
Highrise	3.5	9.6		
Other (e.g.., trailer)	1.4	0.4	28.09	.00
Length of Residency	(N = 645)	(N = 533)		
Less than 1 year	28.4	9.8		
1 to 2 years	12.7	16.7		
2 to 5 years	18.3	29.5		
5 to 10 years	16.7	15.4		
10 to 20 years	13.2	15.6		
More than 20 years	10.7	13.1	72.44	.00
Household Size	(N = 633)	(N = 531)		
1 resident	20.9	25.2		
2 residents	31.6	32.0		
3 residents	20.2	16.9		
4 or 5 residents	23.4	22.8		
6 or more residents	3.9	3.0	4.89	.30

the 1991 WAS respondents revealed the victims in our sample were more likely to be younger members of the community (34 and under) (45.0% vs. 34.3%) and, conversely, less likely to be older citizens (45 and over) (26.7% vs. 36.5%).

Marital Status

Compared with the 1991 WAS data on "current living arrangement", the break and enter victims were more likely to be single (29.5% vs. 16.4%) and conversely, somewhat less likely to be married (41.7% vs. 50.8%). It should be noted, however, that the 1991 WAS estimate of the number of single persons in the community was

uncharacteristically low. Since 1986 the percentage of single individuals has traditionally hovered around 22%. The proportion of married persons has remained constant over this period and in 1991 (i.e., around 50%).

Education

Sixty-five percent of the break and enter victims reported they achieved some high school education or other non-university training compared to 55% of respondents interviewed on the 1991 WAS. Eight percent of the victims said that they completed junior high school or less, whereas 13% of the WAS respondents indicated that they obtained this level of education. In addition, fewer break and enter victims (27.3%) said they possessed some University education or higher than did the WAS respondents (31.7%).

Household Income

A comparison of the household income of residential break and enter victims with the WAS data gathered on Winnipeg citizens in 1991 showed that the crime victims we interviewed were disproportionately from lower income households. Twenty-seven percent reported an annual household income of $20,000 or less, whereas only 20% of WAS respondents claimed an equivalent income. On the other end of the scale, 48% of the 1991 WAS respondents reported an annual household income of $40,000 or more. Only 38% of the victims we surveyed claimed to earn this much money annually.

Type of Dwelling and Ownership

A comparison of the percentage of break and enters in Winnipeg by type of dwelling with the percentage of WAS respondents who reported that they resided in a particular type of dwelling in 1991 revealed that certain types of dwellings are more frequently the targets of break and enter than others. Specifically, the residents of single family

dwellings and side by side (double) residences are disproportionately at risk. On the other hand, residents of high-rise apartments (more than 4 stories) and to, a lesser degree, residents of row-housing are less frequently the targets of break and enter.

Sixty-one percent of the victims owned their residences, while 39% rented. In terms of home ownership, no significant differences were found between the two samples.

Length of Residency

Over one quarter (28.4%) of the crime victims we surveyed reported that they were residents of their present households for less than 1 year. Responses on the WAS showed that only 9.8% of respondents were current residents for an equivalent duration. Overall, our data showed that the break and enter victims we interviewed were more transient than others living in Winnipeg during 1991.

Household Size

The average household size (i.e., number of people living in the residence) of the break and enter victims we interviewed was 1.7. Twenty-one percent of the households had one resident, 32% had two residents, 20% had three, 23% had either four or five, and 4% of the households were made up of six or more residents. These numbers compare favourably with the 1991 WAS data as well as the 1986 Census data on household size in Winnipeg.

Comparisons between Respondents and Non-Respondents

To determine if the potential study participants selected from police files differed from the break and enter victims who completed the initial assessment schedule, these two groups were compared on the limited information we were able to obtain about the non-respondents from police records. Table 4 presents a comparison of the respondents and non-respondents on gender and the 1991 Winnipeg Area Study neighbourhood district from which they were selected. In regard to neighbourhood

Table 4

Comparison of Initial Assessment Respondents and Non-Respondents on Neighbourhood District and Gender

Neighbourhood District	Respondents (%) (N = 633)	Non-Respondents (%) (N = 572)	χ^2	p
1	29.1	36.7		
2	8.8	5.9		
3	25.8	26.0		
4	17.7	13.6		
5	8.5	7.9		
6	10.1	9.8	12.10	.03
Gender*	(N = 633)	(N = 553)*		
Male	50.1	56.6		
Female	49.9	43.4	5.04	.02

Notes. Victims without telephones (n = 110) were excluded from this analysis.

* The gender of 19 victims identified by police records was unknown. They were, therefore, also omitted from this analysis

district, significant differences were found between the participants and non-participants, χ^2 (5) = 12.10, $p < .05$. Specifically, we were unable to interview a disproportionate number of residents from the city center who had reported a residential break-in to the police. Potential participants and initial assessment respondents were also compared on gender. The results of this analysis revealed that we were unable to survey a significant proportion of males originally selected for participation from police files. Conversely, more females were interviewed than originally selected for participation, χ^2 (1) = 5.04, $p < .05$.

A comparison between the 504 victims who completed both phases of the study and the 129 who did not ("drop-outs") was also conducted. The two groups were compared on a number of social-demographic variables and on measures of

victimization distress. To determine if there were any group differences, where appropriate, t-tests or chi-square analyses were carried out.

As can be seen in Table 5, with regard to social-demographics, there were three significant differences between the "drop-out" group and those people who completed both the initial assessment schedule and the follow-up interview. The victims who did not complete both interviews had lower annual household incomes, χ^2 (5) = 22.15, $p < .001$, were less educated, χ^2 (2) = 9.87, $p < .01$, and were less often employed, χ^2 (1) = 3.73, $p < .05$. Overall, these comparisons suggest that there was a tendency for victims with a lower socioeconomic status not to complete both phases of the study.

Table 6 presents a comparison of the same two groups on the standardized measures used to assess victims' short-term reactions to victimization. T-test results revealed that the "drop-outs" displayed significantly higher post-crime distress on the Avoidance subscale of the Impact of Events Scale, t (636) = -3.15, $p < .01$, the Full-scale IES score, t (635) = -1.96, $p < .05$, the State subscale of the State-Trait Anxiety Inventory, t (619) = -1.93, $p < .05$, and the General Health Questionnaire, t (169.3) = -1.96, $p < .05$. However, when the Bonferroni correction for multiple tests was calculated ($p \leq .006$), only the Avoidance subscale of the IES remained significant at the adjusted level.

Interpreting the results with the Bonferroni correction, it appears that those victims who consciously denied and avoided the meaning and consequences of the break-in decided not to participate in the second phase of the research project. Indeed, almost half (46%) of the "drop-outs" did not take part in the Follow-up Interview because they "refused". The majority of the remaining "drop-outs" (41%) could not be interviewed because their telephones were "no longer in service". Using the conventional α values of $p < .05$, the results can be interpreted as showing that the victims who "dropped-out" of the study and did not complete the Follow-up Interview were suffering from

Table 5

Comparison of Respondents who Completed both Phases of the Study and those who did not (Drop-outs) on Social-Demographic Characteristics

Characteristic	Respondents (%)	Drop-outs (%)	χ^2	p
Gender	(N = 504)	(N = 141)		
Male	50.4	48.3		
Female	49.6	51.8	0.21	.65
District	(N = 504)	(N = 141)		
1	28.2	32.6		
2	9.5	5.6		
3	24.6	31.9		
4	19.3	11.4		
5	8.1	9.2		
6	10.3	9.2	9.09	.11
Age	(N = 491)	(N = 120)		
20-24	10.6	18.33		
25-34	32.2	35.8		
35-44	29.7	22.5		
45-54	10.4	5.8		
55-64	9.8	10.0		
65-74	6.3	5.0		
Over 75	1.0	2.5	10.95	.09
Marital Status	(N = 500)	(N = 128)		
Single	28.8	32.0		
Common-law	5.2	7.8		
Married	44.2	32.0		
Separated	8.8	8.6		
Divorced	8.4	14.9		
Widowed	4.6	4.7	9.56	.09
Education	(N = 502)	(N = 127)		
Junior high or less	6.8	13.4		
High school or other non-university	63.7	67.7		
Some university or more	29.5	18.9	9.87	.01
Household Income	(N = 469)	(N = 111)		
Less than $20,000	22.8	42.3		
$20,000 to $29,999	19.2	22.5		
$30,000 to $39,999	17.3	10.8		
$40,000 or more	40.7	24.3	22.15	.00

Table 6

Group Means of Respondents who Completed both Phases of the Study and those who did not (Drop-outs) on Standardized Measures of Victim Response

	Respondents		Drop-outs			
Measure	n	M	n	M	t	p
Impact of Events Scale						
Avoidance Subscale	503	11.8	135	14.5	-3.15	.002
Intrusion Subscale	504	15.9	136	16.1	-0.29	.766
Full-scale	503	27.6	134	30.6	-1.96	.050
State-Trait Anxiety Inventory						
State Subscale	495	50.1	126	52.6	-1.93	.054
Hopkins Symptom Checklist						
Somatization Subscale	503	1.9	128	1.9	-0.14	.888
Obsessive Compulsive	504	2.0	129	1.9	0.84	.401
Depression Subscale[a]	500	2.0	127	2.1	-1.32	.188
General Health Questionnaire[a]	503	12.1	128	13.3	-1.96	.052

[a] The variances of the groups were unequal ($p < .05$). Satterthwaite's solution was, therefore, used to approximate the degrees of freedom.

more overall psychological distress than those individuals we were able to contact and interview.

Descriptive Analysis of Break and Enter Incidents

Temporal Variations

When the names and addresses of residential break and enter victims were selected from the Winnipeg Police Department daily incident reports, the time of day the offense occurred was also recorded. This information is presented in Table 7. The

Table 7

Time of Day the Break and Enter Occurred

Category	Frequency	Percent	Cumulative Frequency	Cumulative Percent
8a.m.-4p.m.	345	26.2	345	26.2
4p.m.-Midnight	312	23.7	657	49.9
Midnight-8a.m.	136	10.3	793	60.2
Unknown	140	10.6	933	70.8
Cannot Categorize	382	29.1	1315	100.0

time of offense was recorded as "unknown" if the victim was away from their residence for more than 24 hours and therefore could not provide an accurate estimate. "Cannot categorize" represents those incidents that did not "fit" into one of the three precoded categories (e.g., the offense occurred between 11p.m. and 1a.m.). As the tables shows, relatively fewer residential break and enters were committed between midnight and 8 a.m.. Most victims reported that the offense occurred while their residences' were frequently vacant, that is, during working hours or in the evening.

Results also showed that the residential break and enters were evenly distributed over the months in which the data were gathered. In other words, a similar number of offenses were committed during the middle of the month as occurred during the beginning or end. The data were also analyzed by day. Again, no differences were noteworthy. In total, 39% of the break-ins occurred on a Saturday or Sunday. Given the limited span of the data collection (4 months), seasonal variations in Winnipeg break-ins were not possible to determine.

Means of Entry

The methods used by burglars to gain entry into the respondents' homes are reported in Table 8. Fifty-one percent of the entries were gained via a door and another 42%

Table 8

Means of Entry

Category	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Door - forced	267	41.2	267	41.2
Window - forced	222	34.4	489	75.6
Door - unforced	60	9.3	549	84.9
Window - unforced	50	7.8	599	92.7
Had Key	14	2.2	613	94.9
Other	12	1.9	625	96.9
Don't Know	20	3.1	645	100.0

through a window. In 9% of the cases in which entry was gained through a door, it was unlocked. Two percent of the victims reported that the perpetrator used a key to gain entry. In total, approximately 20% of the break and enters were completed without the use of force. Of those cases in which means of entry was forced, 93% of the time physical damage to the victim's residence occurred.

Confrontation with Offender

Only 14% of the 645 victims surveyed reported that they and/or another resident were home at the time of the break and enter. Of this number, less than one quarter (N = 20) or 3% of the total sample said that they had some sort of contact with the intruder(s) while the break-in was in progress. Five victims (1%) reported the perpetrator possessed some sort of instrument they were using as a weapon. On three occasions the victim was physically attacked and twice people in the household were threatened.

Table 9

Type and Frequency of Stolen Property

Property	Frequency	Percent	Cumulative Frequency	Cumulative Percent[a]
Electronics	438	67.9	438	67.9
Money	306	47.4	744	115.3
Jewelry	299	46.4	1043	161.7
Clothing	136	21.1	1179	182.8
Liquor	97	15.0	1276	197.8
Other	325	50.4	1601	248.2

[a] Percentages do not total 100 as more than one item may have been stolen.

Type and Value of Property Losses

Ninety-five percent of 645 break and enter victims reported losses due to theft of property. Table 9 shows the percentage of respondents in the current study reporting particular items stolen. The reported property losses were substantial. Money was taken in 47% (N = 306) of the break-ins. The amount of money stolen ranged from $1.00 to $3,000.00. The average amount of cash taken was $194.00. The mean value of property stolen (excluding money) was $2,695.00. Sixty-four percent (N = 354) of the respondents who reported theft of property estimated the value of their losses to be $1,000.00 or more. Fourty-one percent (N = 253) said the stolen property had "a lot of sentimental value", 39% (N = 237) indicated it had "a little", whereas 20% (N = 121) reported that the stolen items had "no sentimental value".

Estimates of the value of break and enter property loss usually include the costs associated with the physical damage caused by the perpetrator while committing the offense. Of the 645 victims we spoke to, 71% indicated that some damage was done to their house or its contents during the break and enter. The breakage was sustained

while the perpetrator was gaining entry into the residence on 97% (N = 443) of these occasions. Typically, respondents said their door frames and window panes were broken. Thirty-one percent (N = 457) of the break and enter victims who reported damage, indicated it was done to the contents of their residences (e.g., furniture, clothing, carpeting). The cost of the total damages ranged from $4.00 to $14,000.00. It averaged $385.69 and equaled or exceeded $1,000 in 8% (N = 24) of the incidents. Only 4% (N = 19) of the victims mentioned that the damaged property had "a lot" of sentimental value. Ninety percent (N = 410) said it had "none".

In addition to physical property damage, break and enter victims complain that perpetrators rummage through their belongings and generally create a mess in the course of committing the burglary. Thirty-one percent of the 645 break and enter victims we interviewed reported that they experienced "extensive disarrangement" of their possessions during the incident. Another third of the respondents (35%) said the mess caused during the break-in was "minor" and the remaining 34% reported that their possessions were not scattered about or disarranged.

Young-Rifai (1979) effectively argues that in order to accurately determine the *total* economic cost of criminal victimization one should ascertain, among other things, the amount of time victims spend involved in property repair and engaged in other matters related to the crime, as well as an assessment of the amount of work hours lost as a result of the incident. Slightly more than half (52.3%) of the 505 break and enter victims we spoke to five months after the offense reported that they spent at least one day (more than six hours) on matters directly related to the crime. Twelve percent (N = 59) said that activities related to the break-in took more than one week of their time to resolve. Of the 484 people who said they were employed at the time of the break and enter, 28% reported that they or another member of their household had to take time off from work because of what happened. Twenty-six percent (N = 36) of these people missed half a day or less, 32% (N = 44) took between half a day and one full

day of work off, another 32% (N = 44) lost between one and two days, and the remaining 9% (N = 12) were off work for more than three days.

Concerning compensation for the stolen and/or damaged property, 398 victims (79%) reported that they possessed household insurance when their homes were broken into. Fifty-three percent (N = 212) said they received full compensation (excluding the deductible and depreciation), 23% (N = 92) reported they received some compensation, 10% (N = 39) did not receive any money or were still waiting five months later, while another 13% (N = 53) did not bother to file a claim. Sixteen percent (N = 80) of the respondents purchased more or new household insurance as a direct result of the break-in.

Law Enforcement Officer Intervention

Response Time

The residential break and enter victims were asked to estimate how long it took for the police to arrive at the scene after they were notified of the incident. The results are reported in Table 10. Over 50% of the calls reporting a residential break and enter were responded to by the police within one hour. It took six or more hours to respond to approximately 15% of the break and enters.

The victims were also asked to consider the circumstances of the break and enter into their residence and answer the question "Did the police come as quickly as you thought they should have?". Sixty percent (N = 363) of the victims responded that they thought the police did a "good job" of responding promptly. Twenty-seven (N = 166) percent thought the police did an "average job" and only 13% (N = 76) said they did a "poor job".

Table 10

Victim Estimates of Police Response Time

Response Time	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Within 5 minutes	40	6.2	40	6.2
6 - 15 minutes	79	12.2	119	18.4
15 - 30 minutes	109	16.9	228	35.3
30 minutes - 1 hour	109	16.9	337	52.2
1 - 6 hours	182	28.2	519	80.5
6 - 24 hours	75	11.6	594	92.1
More than 24 hours	20	3.1	614	95.2
Don't Know	30	4.7	644	99.8
Police did not Respond to Call	1	0.2	645	100.0

Behavior of the Attending Officer(s)

Excluding the respondents who answered "I don't know", 98% of 621 break and enter victims reported that the attending police asked questions when they arrived at the scene. Ninety-nine percent (N = 606) of those who recalled said the police took notes. In 50% (N = 310) of cases, fingerprints were taken by a special identification unit. The majority of victims (94%, N = 584) said that the attending police officer(s) provided them with enough time to convey their version of events. Although 598 victims (96%) reported that the police provided a number where they could be reached, only 222 (37%) indicated that they were provided with information on crime prevention and even fewer (30%, N = 174) said that a law enforcement officer informed them about the existence of Winnipeg Police Department's Victim Services Unit.

Overall, the victims reported that the police responded to their call in a caring, professional manner. Roughly three-quarters of respondents (77%, N = 466) indicated that the attending police officer took an interest in their feelings and concerns (i.e.,

displayed empathy) and 92% (N = 570) reported that the police did not make them feel responsible for the break-in or engage in any form of "victim-blaming".

Ratings of Police

The overall rating of how well the police treated individual victims "as a person" was high. By a ratio of 9:1 break and enter victims indicated they were "satisfied" with the treatment they received. Fifty-six percent of 619 respondents reported that they were "very satisfied", whereas only 4% said they were "very dissatisfied".

On the follow-up interview administered approximately five months after the break and enter, victims were asked to assess how satisfied, "overall", they were with the way the police handled their case. By a ratio of 3:1 their response was that they were "satisfied". One-third of the 494 respondents who offered an opinion indicated that they were "very satisfied", 43% reported they were "somewhat satisfied" and 25% said that they were either "somewhat dissatisfied" or "very dissatisfied". An overwhelming majority of victims (87%) rejected the notion that after their experience, they "would be less likely to contact the police again" (see Table 11).

Victims also evaluated law enforcement personnel performance in other areas. They were asked to evaluate the effort of the police to keep them informed about what was happening during the course of the investigation (see Table 11). Only 7.3% (N = 37) of the break and enter victims interviewed reported that the police informed them as to whether or not anyone was charged in connection with the offense. Thus, perhaps not surprisingly, the majority (69%) did not feel that the police made enough effort to keep them informed about the progress of the investigation. In addition, less than half (37%) agreed that "the police did all they could to locate the criminal" (see Table 11). One-third disagreed with this statement and another 31% did not know whether the police did all they could or not. Thus, in total, 63% of break and enter victims expressed doubt about the effort the police made to apprehend the perpetrator.

Table 11

Victim Evaluations of the Police and Criminal Justice System Response

Statement	Victim Evaluations (N = 505)				
	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Don't Know
"The police kept me informed about the investigation."	8.3%	20.2%	23.2%	45.9%	2.4%
"The police did all they could to locate the criminal."	12.9%	24.2%	14.9%	17.1%	30.9%
"I would be less likely to contact the police again."	6.3%	5.0%	10.3%	77.2%	1.2%
"The criminal justice system does not seem to care about the victim."	25.0%	31.5%	28.1%	9.1%	6.3%

Victim Services

During the follow-up interview we asked victims the following question: "Since the Break and Enter into your home 5 months ago, have you been contacted by the Winnipeg Police Department Victim Services Unit?". Fourty-four percent (N = 223) responded "yes". Three (1%) people reported that they telephoned Victim Services and 16 (3%) could not recall whether they were contacted or not. Most of the break and enter victims (N = 262, 52%) said that they were not contacted by Victim Services.

We then asked the victims who said they had contact with Victim Services how they would rate the quality of the service provided. While 42% (N = 94) of the victims gave the quality of the service they received a positive review, 31% (N = 71) said it was fair, and 15% (N = 33) rated the service as either "poor" or "terrible". An additional 12% (N = 28) could not recall whether the help they received from Victim Services was good or poor.

The Criminal Justice System

The victims were not asked questions directly about their experiences, if they had any, with the court system during the trial process, but rather were asked to convey their general impressions about the criminal justice systems' treatment of victims. Although 37% (N = 188) rejected the statement "The criminal justice system, in general, does not seem to care about the victim", more than half (N = 285, 56%) the victims agreed with it. Moreover, one-quarter (N = 126) of those who agreed with the statement, expressed "strong" agreement (see Table 11).

The perception of the majority of break and enter victims, then, was that more could be done to help victims of crime. As further evidence of this, 92% (N = 583) of the victims indicated that they thought psychological counseling should be made available for break and enter victims and 99% (N = 625) felt counseling should made available for other crime victims.

Behavioral Responses and Crime Prevention Measures

Most victims, no matter the crime, will engage in one or more behavioral coping strategies following victimization. A majority of the break and enter victims we spoke to said they felt they possessed some personal control over the probability of becoming a victim of crime in the future. Eighty-four percent (N = 424) indicated to us that their chances of becoming a victim depend, to some extent, on what they personally do to try to protect themselves. These victims, in turn, engaged in a variety of crime preventative behaviors.

We asked victims to indicate whether or not they engaged in a number of actions "in direct response" to the break and enter into their home five months previously. Their feedback is reported in Table 12. The majority of respondents said they were more careful to lock windows and doors when leaving the house and/or leave the lights on

Table 12

Frequency of Victim Coping Actions and Crime Prevention Behaviors

Behavior	Frequency	Percent	Cumulative Frequency	Cumulative Percent[a]
More care locking up	414	82.0	414	82.0
Leave lights on when going out	384	76.0	798	158.0
Changed locks	251	49.7	1049	207.7
Spend more time at home	165	32.7	1214	240.4
Installed bars	130	25.7	1344	266.1
Purchased more / new insurance	80	15.8	1424	281.9
Installed alarm system	79	15.6	1503	297.5
Changed residence	68	13.5	1571	311.0
Purchased guard dog	32	6.3	1603	317.3
Joined neighbourhood watch	22	4.4	1625	321.7
Purchased weapon	15	3.0	1640	324.7

[a] Percentages total more than 100 as victims usually engaged in more than 1 behavior

when going out at night. Half the victims changed the locks on their windows or doors and one-quarter installed bars. Sixteen percent invested in a electronic burglar-alarm security system and 6% purchased a dog to guard their home. Of note is that 5% of the break-ins occurred to residences that already had an electronic security system that for some reason failed to keep the perpetrator out of the premises. Seventeen percent of the victims responded that they owned a dog that was supposed to guard the premises. It is unknown, however, whether the dog was guarding the residence while the break and enter was committed.

Approximately one-third of the victims went so far as to change their lifestyle by not leaving their residence as frequently as they did before the break and enter. A small minority (N = 15) decided to purchase a weapon to protect themselves and/or their family from future victimization. Slightly more victims (N = 22) decided on a less extreme course of action and became a member of their local Neighbourhood Watch

program. Nineteen percent (N = 95) reported they were members of the program before the burglary into their home.

Victim Social Support

The break and enter victims told us that they sometimes found it reassuring to have friends, neighbours, or someone else with whom they could talk or turn to for "assistance" after their home was broken into. Eighty-three percent of the 633 victims we interviewed shortly after the break-in said that someone offered them some kind of help. Support was received from their immediate family members and/or close friends most frequently and equally as often (N = 276, 52%). Neighbours helped the victims almost as frequently (N = 247, 47%). Co-workers (N = 83, 16%), relatives (N = 75, 14%), and boyfriends/girlfriends (N = 47, 9%) also provided assistance. Others whom victims occasionally mentioned as support providers included police officers (N = 28, 5%), mental health, medical or legal professionals (N = 18, 3%), church members (N = 3, 1%), and miscellaneous people who could not otherwise be categorized (N = 32, 6%). Seventy-nine percent of the victims (N = 499) said that, if they needed help, there was someone *else* they could have turned to for assistance.

The nature of the support victims received varied. Most commonly they reported that someone talked with them about the break-in (N = 504, 96%). Occasionally the police were called (N = 24, 5%), help cleaning-up was provided (N = 30, 6%), broken doors and/or windows were repaired (N = 35, 7%), help replacing stolen items was offered (N = 14, 3%), money was loaned (N = 8, 2%), someone stayed with the victim overnight (N = 33, 6%) or supplied temporary accommodations (N = 13, 2%). Other, uncategorized assistance was also provided to victims (N = 93, 18%).

In general terms, victims reported that they were satisfied with the amount of support they usually receive from their friends and family when they need it. Seventy percent (N = 440) said they were "very satisfied" and 19% (N = 119) indicated they

were "somewhat satisfied". A minority (N = 68, 11%) were either "somewhat" or "very dissatisfied" with the support they receive from others.

Access to their support network was readily available to most of the victims. Sixty-two percent (N = 390) of those interviewed said they lived with either their spouse or family. Twelve percent (N = 79) reported they resided with either a friend or sexual partner. Only 21% (N = 136) indicated they lived alone. The remainder (N = 28, 4%) lived in some other situation or refused to answer the question. Eighty-four percent (N = 530) of the victims said that they had immediate family living in Winnipeg, other than those who were residing in their household.

As part of the Follow-up Interview, we asked the break and enter victims if they had obtained any type of psychological, medical, legal, or other professional assistance since the burglary into their home. Although the majority (N = 479, 95%) answered that they had not, 12 victims (2%) received some form of psychological intervention, six (1%) sought legal counsel, four (1%) obtained medical care, and three (1%) got financial advice.

Prior and Re-Victimization

Sixty-one percent (N = 395) of the break and enter victims interviewed shortly after their homes were broken into reported that they had previously been a victim of crime some time during their lives. The number of prior victimization incidents ranged from one to 30 ($\underline{M}$ = 2.74).

We also asked victims which one of these incidents they considered the most serious. If they were only victimized once, we simply asked what happened. Two-thirds (63%) of the victims reported that a residential break and enter was the most serious previous victimization experienced by them (Table 13). Thirty-one percent (N = 123) of the respondents reported that the incident occurred within one year of the current break and enter, 41% (N = 161) said that it happened within one and five

Table 13

The Most Serious Previous Victimization Experienced by Break and Enter Victims

Crime	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Residential Break & Enter	250	63.3	250	63.3
Theft, Fraud or Vandalism	83	21.0	333	84.3
Physical or Sexual Assault	34	8.6	367	92.9
Robbery or Purse snatching	17	4.3	384	97.2
Other	11	2.8	395	100.0

years, and 27% (N = 108) indicated it took place more than five years before the break-in. Three victims (1%) could not recall when they were previously victimized.

During the Follow-up Interview we asked victims if they had been victimized again since the break and enter into their homes five months earlier. Eighteen percent (N = 88) of the respondents answered "yes". Of this number, 73% (N = 64) reported a single victimization experience, 17% (N = 15) said they were victimized twice, and 10% (N = 9) said they were victimized on more than two occasions. The majority (N = 49, 56%) reported that they had their homes broken into again and/or something was stolen during the break and enter.

Descriptive Analysis of Other Miscellaneous Respondent Characteristics

Prior Life Events

Forty percent (N = 246) of the victims reported they had experienced the loss, death, or separation of a family member within two years prior to having their homes broken into. Sixty-one percent (N = 383) said they had not experienced any recent family losses and 1% (N = 4) could not recall.

We were interested in knowing how many victims had themselves been involved in criminal activity at some time during their lives, regardless of whether they were formally charged or convicted with an offense. We asked this question last on the Follow-up Interview and fifty-two percent (N = 263) of the respondents admitted to having had previously committed a crime. Forty-six percent (N = 230) answered "no", 1% (N = 5) could not recall one way or the other, and 1% (N = 6) refused to answer the question.

Physical and Mental Health

We asked victims to rate their physical health over the course of the year prior to the break and enter. Overall, their self-assessments were positive. Almost one-quarter (N = 147, 23%) of the respondents rated their physical health as "excellent" and close to one half (N = 293, 46%) said it was "very good". Another 25% (N = 170) reported that they were in "fair" health over the previous year. Only 5% (N = 33) described their health as either "poor" or "terrible". Four victims did not know and one refused to answer the question.

We also asked victims to estimate how many times they had seen a medical doctor to receive health care in the year prior to the break and enter. Eighteen percent (N = 112) said "never", 22% (N = 140) reported they had been "once", 17% (N = 108) estimated they had seen a physician "twice", and 23% (N = 148) put the number between three and six times. Nineteen percent (N = 120) said they had been to a medical doctor more than six times and 1% (N = 6) either did not know or refused to answer the question.

On the Follow-up Interview the victims reported whether or not they had been to see a mental health professional during the year prior to the break-in five months earlier. The vast majority (N = 484, 96%) said they had not. Three percent (N = 17) answered "yes" and two other respondents (0.4%) said that even though they did not

see a mental health professional, they wanted or needed to see one. Only one person refused to answer the question.

Alcohol consumption during a "typical week" prior to the break and enter was, on average, less than five drinks. Thirty-four percent (N = 218) said that they normally never drink alcohol and 32% (N = 201) said that typically they have less than five drinks per week. Fifteen percent (N = 94) have five or more, 10% (N = 60) consume 10 or more, and the remaining 8% (N = 52) reported they drink 15 or more alcoholic beverages during a typical week. Eight victims (1%) refused to answer this question.

Sense of Community

First, we asked victims on the Follow-up Interview to indicate to what degree they felt a sense of community with other people in their neighbourhood. Eighteen percent (N = 90) responded "not at all", 21% (N = 104) said "a little bit", 32% (N = 162) answered "moderately", 20% (N = 102) indicated "quite a bit", and 9% (N = 43) said they felt "a great deal" of community with others in their neighbourhood. Four respondents (1%) did not answer the question.

We then asked victims how *important* it was for them to feel a sense of community with others. Approximately one-quarter (N = 134, 27%) of the respondents said it was "very important" to them or "quite important" (N = 136, 27%). Another 25% (N = 126) responded that it was "moderately important" to them to feel a social bond with their neighbours, and the remainder (N = 106, 21%) said it was either "not at all" or only "a little" important to them. Three respondents (1%) did not know how to answer.

Regarding the length of time victims resided in the same residence and whether they rented or owned their dwellings, these data were reported earlier (see Table 3). In addition, we asked the victims who reported that they had moved within the previous five years (N = 371) how many times they relocated during that time. The majority

(N = 214, 58%) moved either once or twice. One-quarter of the sample (N = 93) said they moved three times, 16% (N = 58) relocated between four and six times, and 8% (N = 30) reported they changed residences on seven or more occasions.

Location of Incident - Safe vs. Unsafe

In order to determine victim perceptions of how secure they felt in their residences and neighbourhoods before the break and enter we asked them a number of questions including whether or not they were Neighbourhood Watch members, if they had an electronic home security system, and whether they had a guard dog to protect their residence. These data were reported earlier.

We also asked victims to compare their perceptions of the crime rate in their neighbourhood with the rest of the City of Winnipeg. Six percent (N = 41) thought there was "much more" crime in their neighbourhood, 21% (N = 132) believed there was "more" crime, 36% (N = 234) guessed it was "about the same", 25% (N = 164), thought there was "less" crime in their neighbourhood, and 3% (N = 21) believed there was "much less" crime. An additional 8% (N = 53) felt they could not answer the question.

Finally, we believed victims' perceptions of whether or not they perceive their environment as "safe" could be measured by determining if they knew the identity of the person(s) who broke into their home. Twelve percent (N = 62) of the victims said that they could identify who the perpetrator was. Most frequently (N = 24, 39%) the burglar was identified as a neighbour.

Selective Evaluation

Victims' perceptions of universal vulnerability were assessed by asking them on the Follow-up Interview to estimate how many homes in their neighbourhood, out of a possible 100, will be broken into during the next year. Thirty (6%) victims had no

idea but the remainder (N = 474), on average, estimated that almost one-quarter (23.8%) of the residences in their neighbourhood would be burglarized.

Perceptions of personal vulnerability were measured by asking victims to estimate their chances of being broken into during the following year compared with others in their neighbourhood. Thirty percent (N = 153) believed their personal chances were less than others, 20% (N = 102) estimated they were greater, and almost half of those asked (48%, N = 242) judged they were about the same as other people in their neighbourhood. Seven people (1%) said they did not know.

Data Preparation

Psychometric Properties of the Scales

Preliminary statistical analyses were conducted to ascertain the characteristics of the scales administered to the respondents. The scales that were used along with the percentage of respondents who provided complete information on them are reported in Table 14.

The pattern of missing data was visually inspected in order to ensure it was scattered across items on the scales. A few missing responses were tolerated. When the number of missing responses did not exceed the predesignated cut-off (see Table 14), the missing values were replaced by the arithmetic mean score of the respondent's answers to the remaining questions on that scale. Substituting the arithmetic mean is considered a conservative method of dealing with missing data since it does not appreciably alter the overall mean value of the variable. It is considered particularly appropriate if the amount of missing data is not large (Tabachnick & Fidell, 1989, p. 64). If a respondent failed to answer more questions than the scale's cut-off, their score on that

Table 14

Percentage of Complete Responses, the Missing Data Cut-off Scores, and the Percentage of Respondents in Excess of the Cut-off for the Scales

Scale	Percentage of Complete Responses	Missing Data Cut-off Scores	Percentage of Respondents in Excess of Cut-off
Hopkins Symptom Checklist			
- obsessive compulsiveness*	96.9%	1/2	1.3%
- somatization*	97.0%	1/2	1.5%
- depression*	96.9%	1/2	1.9%
General Health Questionnaire	96.5%	3/4	1.2%
Impact of Events Scale			
- avoidance[a]	91.8%	2/3	0.6%
- intrusion[a]	97.6%	2/3	0.4%
- total[a]	90.5%	2/3	0.7%
State-Trait Anxiety Inventory			
- state anxiety[a]	90.3%	2/3	2.2%
- trait anxiety	96.0%	2/3	0.6%
Causal Dimension Scale			
- locus of causality	98.1%	1/2	1.9%
- stability	98.0%	1/2	1.9%
- controllability	98.0%	1/2	1.9%
Perceived Stress Scale	94.1%	1/2	2.9%
Belief in a Just World Scale	68.9%	4/5	5.6%
Social Support			
- pre-victimization	100%	none	0.0%
- post-victimization	100%	none	0.0%

* Average of three administrations; pre-victimization, initial assessment & follow-up
[a] Average of two administrations; initial assessment & follow-up

scale was deleted from further analysis. Overall, there were relatively few occasions when the number of missing cases exceeded the cut-off and respondents were dropped from the study (> 2%).

Mean values, standard deviations, minimum and maximum values as well as the number of respondents who completed each scale are reported in Table 15.

Table 15

Means, Standard Deviations, Minimum and Maximum Values, and Total Number of Respondents for the Scales

Scale	Mean	S.D.	Min.	Max.	N
HSCL (Pre-victimization)					
- obsessive compulsiveness	1.79	0.5	1.0	4.0	634
- somatization	1.87	0.6	1.0	4.0	632
- depression	1.83	0.6	1.0	4.0	628
HSCL (Initial Assessment)					
- obsessive compulsiveness	1.98	0.6	1.0	4.0	633
- somatization	1.95	0.7	1.0	4.0	631
- depression	2.02	0.7	1.0	4.0	627
HSCL (Follow-up)					
- obsessive compulsiveness	1.72	0.6	1.0	3.5	503
- somatization	1.80	0.6	1.0	4.0	503
- depression	1.68	0.6	1.0	4.0	503
GHQ (Initial Assessment)	12.38	5.5	3.0	34.0	631
GHQ (Follow-up)	10.19	4.7	1.0	32.0	503
IES (Initial Assessment)					
- avoidance	12.36	8.9	0	40.0	638
- intrusion	15.92	8.9	0	35.0	640
- total	28.27	15.6	0	73.0	637
IES (Follow-up)					
- avoidance	9.57	8.5	0	36.0	504
- intrusion	11.56	8.6	0	35.0	504
- total	21.13	15.3	0	70.0	504
STAI (Initial Assessment)	50.59	13.2	22.1	76.8	621
STAI (Follow-up)	35.86	11.2	22.1	75.8	503
Trait Anxiety	33.97	10.1	17.0	72.0	500
CDS					
- locus of causality	2.91	1.5	1.0	9.0	633
- stability	4.70	1.7	1.0	9.0	633
- controllability	5.78	1.6	1.0	9.0	633
PSS	9.39	3.2	4.0	20.0	626
BJW	2.49	0.3	1.3	3.6	476
Social Support					
- pre-victimization	14.61	4.7	0	22.0	633
- post-victimization	9.78	5.2	0	26.0	633

Table 16

Internal Consistency of the Scales: Cronbach's Alpha

Scale	Published Alpha	Pre-Victimization	Initial Assessment	Follow-up Interview
HSCL				
- obsessive compulsiveness	.87	.55	.58	.67
- somatization	.87	.65	.69	.69
- depression	.86	.72	.73	.77
GHQ	-	-	.86	.83
IES				
- avoidance	.82	-	.75	.77
- intrusion	.78	-	.81	.83
- total	-	-	.85	.87
STAI				
- state anxiety	.93	-	.91	.92
- trait anxiety	.91	.92	-	-
CDS				
- locus of causality	.87	-	.68	-
- stability	.84	-	.46	-
- controllability	.73	-	.12	-
PSS	.72	.71	-	-
BJW	.80	.67	-	-
Social Support				
- pre-victimization	-	.55	-	-
- post-victimization	-	-	.64	.64

The internal consistency (Cronbach's alpha) of the scales as reported in the literature ranged from .72 to .93 (see Table 16). Excluding the Controllability subscale of the Causal Dimension Scale[8], the range of the reliability was from .46 to .92 for the current sample and was consistent across the measurement periods.

[8] Cronbach's alpha for this scale only reached .12 and was reason for concern. Given the exploratory nature of the research, it was decided to retain this subscale in subsequent analyses, but it was also recognized that caution would have to be exercised when interpreting any findings that relate to this variable.

Table 17

Paired Comparison T-Tests of Scale Differences across Time

Scale	Mean[a]	Std Error	T Value	Significance
HSCL				
- obsessive compulsiveness	-0.26	0.03	9.25	.0001
- somatization	-0.15	0.03	4.96	.0001
- depression	-0.34	0.03	11.08	.0001
GHQ	-2.19	0.02	8.61	.0001
IES				
- avoidance	-2.79	0.03	6.46	.0001
- intrusion	-4.36	0.03	12.61	.0001
- total	-7.14	0.06	11.88	.0001
STAI	-14.73	0.05	26.72	.0001

[a] Mean difference score (Follow-up minus Initial Assessment score)

Paired comparison t-tests were conducted to determine if there was a significant change over time in victims' scores on the eight scales measuring psychological distress. Hypothesis 20 was that the degree of distress experienced by break and enter victims would appreciably decrease over time from the Initial Assessment to the Follow-up Interview. This postulate was confirmed, as can be seen in Table 17. The average scores on all of the scales were significantly lower five months after the break and enter.

In order to make the number of dependent scales measuring victim distress more manageable, two combined TRAUMA scales were created out of the appropriate scales listed in Table 17[9]; one for each of the two time frames. Where necessary, the original

[9] The Total Impact of Events score was not included in the victim distress scale TRAUMA. Instead, the Intrusion and Avoidance subscales were used. It would have been redundant to include all three as the Full-scale score is merely the sum of the two subscales. Moreover, Horowitz et al. (1979) advocate the use of separate Intrusion and Avoidance scores rather than the Full-scale.

scales were first converted into a 4-point continuum ranging from one to four. For example, the Intrusion subscale was originally scored 0, 1, 3, 5. To make it compatible with other scales, it was changed so that 0=1, 1=2, 3=3, and 5=4. An inspection of the bivariate correlations among the seven scales in each separate time frame was then conducted to ensure that redundant variables were not included in the TRAUMA scales. It showed that none exceeded .70, the level recommended by Tabachnick and Fidell (1989, p. 87). Finally, the respective scales were summed to create the overall TRAUMA scores. Table 18 presents the means, standard deviations, and the individual scales' correlations with TRAUMA for both time frames.

The total score for victim distress measured on the Initial Assessment Schedule,

Table 18

Means, Standard Deviations, and Scale Correlations with TRAUMA for the Initial Assessment Schedule and the Follow-up Interview

Scale	Mean	S.D.	Correlation with TRAUMA
HSCL (Initial Assessment)			
- obsessive compulsiveness	1.98	0.6	.58
- somatization	1.95	0.7	.53
- depression	2.02	0.7	.70
HSCL (Follow-up)			
- obsessive compulsiveness	1.72	0.6	.54
- somatization	1.80	0.6	.52
- depression	1.68	0.6	.70
GHQ (Initial Assessment)	2.03	0.5	.73
GHQ (Follow-up)	1.85	0.4	.71
IES (Initial Assessment)			
- avoidance	2.02	0.7	.48
- intrusion	2.47	0.7	.69
IES (Follow-up)			
- avoidance	1.81	0.7	.49
- intrusion	2.12	0.7	.60
STAI (Initial Assessment)	2.54	0.7	.71
STAI (Follow-up)	1.80	0.6	.67

TRAUMA1, was based on the responses of 613 break and enter victims. The scores ranged from 1.11 to 3.53. The mean was 2.14 and the standard deviation was .47. Internal consistency for TRAUMA1 was measured at .86 which indicates good reliability.

TRAUMA2, the overall victim distress score obtained on the Follow-up Interview, was based on 502 responses. The range was between 1.09 and 3.26. TRAUMA2 had a mean of 1.82 and a standard deviation of .43. The internal consistency was also good ($\alpha = .84$).

The mean change in victims' TRAUMA scores from the Initial Assessment Schedule to the Follow-up Interview was -0.32 and the standard error was .02. A paired t-test was conducted that showed, as predicted in Hypothesis 20, the change in victims' overall TRAUMA scores significantly decreased over time ($t = 19.04$, $p < .0001$).

Following the procedures recommended by Tabachnick and Fidell (1989, Chap. 4), the TRAUMA scales were also examined for univariate outliers. This process involved a visual examination of histograms, box plots, and normal probability plots as well as an inspection of skewness and kurtosis values. With large sample sizes Tabachnick and Fidell (1989) advise that a visual inspection of the appearance of a distribution is most appropriate. It confirmed that both scales were normally distributed. The skewness and kurtosis of TRAUMA1 were 0.31 and -0.28 respectively, which, given the large N, were within acceptable limits. For TRAUMA2 the skewness and kurtosis were 0.82 and 0.35 respectively. There was a slight tendency towards positive skewness but, again, it was not deemed a problem given the current sample size. Since the general psychological well-being of the victims was expected to improve with time, the positive skewness was also not surprising. Multivariate outliers, the assumptions of normality, linearity and homoscedasticity, and multicollinearity diagnostics will be discussed later in conjunction with regression analyses.

Univariate Outliers among Independent Variables

Dichotomous dummy coded variables were inspected and deleted if there was an extremely uneven spilt between the categories (i.e., approaching 90%-10%) (see Tabachnick & Fidell, 1989, p. 67). Twenty-one variables were subsequently deleted from further analyses. They were as follows: VAR247, mental health status during year prior to the break and enter (96%-4%); VAR020, victim confrontation with offender (97%-3%); VAR021, weapon use (99%-1%); VAR022, victim sustained injury (99.5%-0.5%); VAR023, perpetrator threat of personal violence (99.6%-0.4%); VAR024, threat of violence to family (99.6%-0.4%); VAR025, anything stolen (95%-5%); VAR207, property recovered (89-11%%); VAR039, sentimental value of damaged property (90%-10%); VAR237, psychological significance of property damage (97%-3%); VAR237, psychological significance of vandalism (99%-1%); VAR233, possession of burglar alarm (95%-5%); VAR237, psychological significance of disillusionment with society (90%-10%); VAR230, subsequent joining of Neighbourhood Watch (96%-4%); VAR234, purchasing of guard dog (94%-6%); VAR236, purchasing of weapon (97%-3%); VAR237, psychological significance of the inconvenience (97%-3%); VAR061, patience demonstrated by police (91%-9%); VAR062, police blaming victim (92%-8%); VAR064, police provision of contact number (93%-7%); and VAR213, arrest made (93%-7%).

Univariate outliers among independent continuous variables were inspected by graphically examining their standardized distributions. Occasionally, a few cases were detected beyond ± 3 standard deviations of the mean ($>1\%$). However, given the large N, they were tolerated so long as they appeared to be attached to the rest of the distribution (Tabachnick & Fidell, 1989, p. 68). "Don't know" responses were recoded as the arithmetic mean of the group response. "Not applicable" answers were recoded as 0, as long as it was logically appropriate to do so.

In order to maintain the largest possible N in subsequent analyses it was decided to only delete those variables with more than 200 (31%) "not applicable" or "don't know" responses that could not be meaningfully dummy coded and/or variables that had in excess of 200 (31%) missing responses. A fewer number of missing responses were tolerated because as many as 141 victims did not complete the Follow-up Interview. Six variables with more than 200 missing responses and/or non-codable responses were deleted. They were: VAR070, seriousness of prior victimization (251 missing); VAR071, time since prior victimization (250 missing); VAR216, victim's relationship with offender (583 missing); VAR245, victim's evaluation of Victim Services (419 missing); VAR220, victim's opinion about police effort to apprehend offender (297 missing); and VAR243, type of crime when re-victimized (558 missing).

VAR197, the first part of a question dealing with household income was also not included in later analyses. More complete information on income was obtained from VAR198 and therefore it was decided to retain this variable instead. Don't knows and refusals (N = 53) were recoded as the median for the group.

Two other variables were deleted because they were deemed logically ambiguous. The question of whether victims would contact the police in the future (VAR222) was excluded because the responses may have had more to do with victims believing it was necessary to contact the police in order to file an insurance claim rather than, as intended, an indication of how effective victims believed the police services were. Victim ratings of the justice system (VAR221) was deleted because victims may have been giving their opinions of everything from law enforcement officer response to the parole process and not solely their opinions on Victim Assistance programs, as was originally intended.

In sum, the working model for TRAUMA1 was operationalized into 57 individual variables. TRAUMA2, in the final analysis, contained 68 variables. The 11 additional variables not included in TRAUMA1 were ones that potentially affected the long-term

outcomes of victims but could not be included in the short-term model. They were all questions asked of victims on the Follow-up Interview and thus we were not confident that their responses applied to the period between the residential break-in and the initial interview. For example, victims were asked on the Follow-up if they had purchased new or more insurance since the break-in five months earlier (VAR229). This variable may theoretically predict long-term short-term outcomes following victimization but we could not claim with confidence that the insurance, if it was purchased, was bought before we conducted the Initial Assessment Schedule. Therefore, VAR229 was removed from the operationalized TRAUMA1 model but retained in TRAUMA2. The other 10 variables not included in the TRAUMA2 model were: VAR223, moved residence; VAR232, installation of security alarm system; VAR210, amount of time spent on incident; VAR211, time taken off work; VAR212, amount of time taken off work; VAR206, victim overall evaluation of police case management; VAR219, police provision of case progress information; VAR244, victim contacted by Victim Services; VAR241, re-victimization since Break and Enter; and VAR242, number of times re-victimized since break-in.

Table 19 presents the mean, standard deviation, and range of the variables in the working models for both time frames. For the sake of clarity, where necessary, variables were recoded so that higher values represented a greater tendency towards the behaviors, emotions or cognitions being measured. For example, we asked victims during the Follow-up Interview if they owned a guard dog prior to the break and entry. In the questionnaire, a "yes" response was originally coded as 1 and "no" as 2. This variables was recoded such that a "yes" response would received the greater value.

Table 19

Mean, Standard Deviation, and Range of the Variables in the Working Models

Variables	N	Mean	S.D.	Min.	Max.
Pre-Victimization Factors					
Demographics					
- Employment status	633	1.65	0.48	1	2
- Educational achievement	633	5.86	2.11	2	10
- Household income	633	4.87	2.55	1	8
- Age	633	38.69	13.97	16	85
- Gender	645	1.50	0.50	1	2
Psychosocial variables					
- Perceived stress	626	9.39	3.20	4	20
- Recent family death	633	1.39	0.49	1	2
- Prior victimization	644	1.61	0.49	1	2
- No. of Prior victimizations	644	1.51	1.88	1	30
- Prior criminal activity	504	1.53	0.50	1	2
- Physical health (self-assessment)	634	3.87	0.86	1	5
- No. of physician visitations	634	3.59	2.12	0	6
- Alcohol consumption	633	1.29	1.41	0	6
- Trait anxiety	500	33.97	10.10	17	72
- Somatization	632	1.87	0.58	1	4
- Obsessive-compulsiveness	634	1.79	0.51	1	4
- Depression	628	1.83	0.57	1	4
- Social support network	633	14.61	4.67	0	22
- Own residence	633	1.61	0.49	1	2
- Permanency of residency	633	3.96	1.89	1	7
- No. of times moved in past 5 years	633	1.56	1.89	0	8
- Sense of community	505	2.81	1.19	1	5
- Importance of sense of community	505	3.53	1.22	1	5
Cognitions					
- Belief in a just world	476	2.49	0.33	1.3	3.6

Table 19 (continued)

Mean, Standard Deviation, and Range of Variables in the Working Models

Variables	N	Mean	S.D.	Min.	Max.
Crime Characteristics					
Severity of offense					
- Victim home during offense	645	1.12	0.32	1	2
- Value of money stolen	645	92	207	0	3000
- Value of property stolen	645	2491	3224	0	25000
- Sentimental value of stolen property	645	2.15	0.78	1	3
- Psychological significance of property loss	645	1.13	0.33	1	2
- Damaged property	645	1.71	0.45	1	2
- Value of damaged property	645	273	684	0	14000
- Vandalism in premises	645	1.97	0.81	1	3
- Insurance coverage	505	1.79	0.41	1	2
- Insurance payoff[a]	505	1.60	0.49	1	2
Location of incident					
- Perception of neighbourhood crime rate	645	3.01	0.92	1	5
- Own guard dog	505	1.17	0.38	1	2
- Member of neighbourhood watch	505	1.19	0.39	1	2
- Psychological significance of intrusion	504	1.46	0.50	1	2
- Know perpetrator's identity	505	1.12	0.33	1	2

[a] Variable not included in short-term model

Table 19 (continued)

Mean, Standard Deviation, and Range of Variables in the Working Models

Variables	N	Mean	S.D.	Min.	Max.
Post-Victimization Factors					
Cognitions					
- Unique vulnerability	504	1.90	0.70	1	3
- Universal vulnerability	504	23.80	20.17	0	100
- Locus of control attribution	633	2.90	1.54	1	9
- Stability attribution	633	4.70	1.74	1	9
- Controllability attribution	633	5.78	1.62	1	9
Behavioral responses					
- Perception of personal control	504	2.99	1.05	1	4
- Amount of time spent on incident[a]	505	3.87	1.87	1	7
- Time off from work[a]	505	1.27	0.44	1	2
- Amount of time off from work[a]	505	0.61	1.18	0	5
- More care locking doors	505	1.82	0.38	1	2
- Install bars on windows	505	1.26	0.44	1	2
- Replace locks	505	1.50	0.50	1	2
- Care leaving lights on	505	1.76	0.43	1	2
- Purchase new/more insurance[a]	505	1.16	0.36	1	2
- Install alarm system[a]	505	1.16	0.36	1	2
- Change residence[a]	505	1.33	0.34	1	2
- Social withdrawal	505	1.33	0.47	1	2
Social support					
- Informal social support	633	9.78	5.17	0	26
- Police response time	645	4.02	1.51	1	7
- Satisfaction with response time	645	2.44	0.69	1	3
- Police demonstrated empathy	644	1.79	0.41	1	2
- Provision of crime prevention info.	644	1.34	0.48	1	2
- Satisfaction with police treatment	644	3.44	0.77	1	4
- Satisfaction with case management[a]	505	2.99	0.90	1	4
- Provision of case progress info.	505	1.91	0.99	1	2
- Informed of Victim Services	644	1.27	0.44	1	2
- Contacted by Victim Services[a]	504	1.51	0.38	1	2
Re-victimization					
- Victimized again since first interview[a]	504	1.17	0.38	1	2
- No. of re-victimizations	504	0.26	0.68	1	4

[a] Variable not included in short-term model

Correlational Relationships among the Variables

A correlation matrix was generated to inspect for multicollinearity among the primary (independent) variables in the working model. Tabachnick and Fidell (1989, p. 87) state that multicollinearity probably exists when two variables in a matrix are very highly correlated (i.e., .90 and above). In the absence of a factor analysis, to avoid both logical and statistical problems, they do not recommend including variables with a bivariate correlation of .70 or more in the same analysis. The correlation between VAR186 (permanency of residence) and VAR187 (number of moves within the last five years) exceeded this level ($r = -.74$). Given that VAR186 was a filter for VAR187 and, as a result, 262 "not applicable" responses were recorded on VAR187, the latter variable was removed from further analyses. The correlation between VAR211 (time taken off work) and VAR212 (amount of time taken off work) was .89. VAR212 had 369 "not applicable" responses so it was decided to delete this variable from further analysis and retain VAR211. Multicollinearity was also present between VAR241 (victimized again since Initial Interview) and VAR242 (number of time re-victimized since Initial Interview) ($r = .81$). Again, given that there were a large number of "not applicable" responses to VAR242 ($N = 416$), it was decided to keep VAR241 instead. No other bivariate correlations reached the .70 level. Additional multicollinearity diagnostics were conducted in conjunction with regression analyses and will be discussed in a later section.

Pearson product-moment correlations were also calculated to test the strength of hypothesized relationships between the variables in the working model and TRAUMA for both time-frames. The results of these analyses are presented in the order they were hypothesized.

Pre-Victimization Factors

Table 20 presents the results of the Pearson product-moment correlations between pre-victimization factors (victim demographics, psychosocial variables & cognitions) and both short and long-term victim psychological distress as measured on TRAUMA1 and TRAUMA2, respectively. Although the hypotheses are directional, given the exploratory nature of this research, probability values of two-tailed tests of significance are reported.

Demographics

Results show that, with the exception of age (VAR196), victim demographic variables were all significantly correlated with psychological distress. As predicted, both short and long-term TRAUMA were negatively associated with employment status (VAR193), educational achievement (VAR192), and household income (VAR198). In addition, female victims suffered more than males (VAR003). Hypotheses 1, 2, 3, and 5 were, therefore, confirmed, whereas Hypothesis 4 was not.

Psychosocial Variables

Among the predictions associated with the psychosocial variables, Hypotheses 6, 10, and 11 were confirmed. Perceived stress (STRES), poor physical and mental health[10] (VAR135, VAR134, VAR149, TAIT, SOM, OBCOM, DEPR), and the lack of an existing social support network (PRESOC) were significantly correlated with both short and long-term psychological distress in the predicted direction.

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[10] One of the seven variables used to assess prior physical and mental health, the quantity of alcohol consumed during a typical week prior to the break and enter (VAR149), was significantly related to short or long-term psychological distress in the opposite direction than was predicted.

Contrary to Hypothesis 7, recent death of a family member (VAR191) was significantly associated with negative, not positive, post-crime short and long-term reactions.

Table 20

Intercorrelations Between Pre-Victimization Variables and Psychological Distress for the Short-Term (TRAUMA1) and the Long-Term (TRAUMA2)

Pre-Victimization Variables	Variable Code	TRAUMA1	TRAUMA2
Demographics			
- Employment status	VAR193	-.19***	-.18***
- Educational achievement	VAR192	-.25***	-.23***
- Household income	VAR198	-.27***	-.23***
- Age	VAR196	-.06	.00
- Gender	VAR003	.30***	.17***
Psychosocial Variables			
- Perceived stress	STRES	.49***	.38***
- Recent family death	VAR191	.16***[a]	.14**[a]
- Prior victimization	VAR068	.07	.05
- No. of Prior victimizations	VAR069	.10**	.13**
- Prior criminal activity	VAR362	-.07	-.05
- Physical health (self-assessment)	VAR135	-.32***	-.33***
- No. of physician visitations	VAR134	.26***	.30***
- Quantity of alcohol consumption	VAR149	-.11**[a]	-.10*[a]
- Trait anxiety	TAIT	.52***	.72***
- Somatization	SOM	.41***	.37***
- Obsessive-compulsiveness	OBCOM	.41***	.25***
- Depression	DEPR	.53***	.38***
- Social support network	PRESOC	-.12**	-.12**
- Own residence	VAR185	-.19***	-.10*
- Permanency of residency	VAR186	-.13***	-.06
- Sense of community	VAR217	-.11**	-.07
- Importance of sense of community	VAR218	.10**[a]	.17***[a]
Cognitions			
- Belief in a just world	BJW	-.19***[a]	-.22***[a]

[a] significant in the opposite direction than hypothesized
* $p < .05$; ** $p < .01$; *** $p < .001$

Hypothesis 8 was partially supported. Prior victimization (VAR068) was not related to subsequent short and long-term negative outcomes, however, the number of prior victimizations (VAR069) was.

Hypothesis 9 was not confirmed. Prior criminal activity (VAR362) was not inversely associated with either short or long-term distress.

Hypothesis 12 was partially confirmed, but only for short-term outcomes. As predicted, sense of community, as operationalized by VAR185, VAR186, and VAR217, was inversely related to post-crime psychological distress soon after the break and enter. However, the importance of victims' sense of community (VAR218) was significantly correlated with TRAUMA in the opposite direction than was hypothesized.

Cognitions

Hypothesis 13 predicted that victim belief in a just world (BJW) would be directly related to short and long-term post-crime negative reactions. This hypothesis was not supported. The relationship was significant in the opposite direction than was hypothesized.

Crime Characteristics

Table 21 shows the intercorrelations between the measures of psychological distress in both time frames and crime characteristics, specifically the "severity of offense" and "location of incident"[11]. Again, the p values of two-tailed tests of significance are reported.

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[11] As was mentioned in the Hypotheses section of this thesis, Hypothesis 14, regarding "type of crime", was not tested using correlational analyses. This hypothesis will be discussed in a later section. Hypothesis 20 concerned the issue of "elapsed time", another crime characteristic variable. The results of the analysis of this hypothesis were presented earlier.

Severity of Offense

Hypothesis 15 was tentatively confirmed. Although victim presence in the home at the time of the break and enter (VAR019) was significantly associated with both short and long-term psychological distress, degree of violence was originally operationalized into five additional variables. As previously discussed, victim confrontation with the offender, weapon use, injury, threat of personal violence, and threat of violence to

Table 21

Intercorrelations Between Crime Characteristic Variables and Psychological Distress for the Short-Term (TRAUMA1) and the Long-Term (TRAUMA2)

Crime Characteristic Variables	Variable Code	TRAUMA1	TRAUMA2
Severity of Offense			
- Victim home during offense	VAR019	.11**	.16***
- Value of money stolen	VAR027	.10**	-.04
- Value of property stolen	VAR033	.03	.03
- Sentimental value of stolen property	VAR034	.16***	.07
- Psychological significance of property loss	LOSS (VAR237)	-.05	-.06
- Damaged property	VAR035	.03	-.09
- Value of damaged property	VAR038	.08*	.01
- Vandalism in premises	VAR040	.05	-.05
- Insurance coverage	VAR208	-.21***	-.11*
- Insurance payoff	VAR209	n/a	-.11*
Location of Incident			
- Perception of neighbourhood crime rate	VAR016	.14***[a]	.11*[a]
- Own guard dog	VAR235	.00	-.02
- Member of neighbourhood watch	VAR231	-.07	-.10
- Psychological significance of intrusion	INTRUDE (VAR237)	.02	-.08
- Knowledge of perpetrator's identity	VAR214	.09*	.06

Note: n/a = not applicable; variable not included in short-term model
[a] significant in the opposite direction than expected
* $p < .05$; ** $p < .01$; *** $p < .001$

family were not included due to the lack of response variability. Given that only one of the six original variables was retained to test Hypothesis 15, only tentative confirmation seems warranted.

Hypothesis 16 posited that the significance of the loss experienced by victims would be positively associated with adverse reactions following the break and enter. Four out of eight relationships testing this hypothesis for short-term outcomes were significant in the expected direction. The value of money stolen (VAR027), the sentimental value of property stolen (VAR034), the value of damaged property (VAR038), and the lack of household insurance (VAR208) were all significantly associated with psychological distress shortly after the break-in. Thus, for the short-term, Hypothesis 16 was partially confirmed. For the long-term, however, only the lack of household insurance (VAR208) and compensation from insurance (VAR209) were significantly related to negative outcomes. Seven other variables were not. Therefore, Hypothesis 16, was not supported for the long-term.

Location of Incident

Of the three hypotheses pertaining to the location of the incident, two, Hypotheses 17 and 18, were not supported. Victim perceptions of a "safe" environment (VAR016) and the measures they took to ensure it was safe (i.e., owning a guard dog (VAR235) and belonging to Neighbourhood Watch (VAR231)) were unrelated to both short and long-term post-crime psychological well-being. A general measure of the psychological significance of the intrusion (INTRUDE) was also unrelated to outcomes.

As predicted by Hypothesis 19, victim knowledge of the perpetrator's identity was positively associated with distress, but only for the short-term. Thus, Hypothesis 19 was partially confirmed.

Post-Victimization Factors

The intercorrelations between post-victimization factors (cognitions, behavioral responses, social support & re-victimization) and TRAUMA are presented in Table 22. The p values of two-tailed tested of significance are reported.

Cognitions

Victims' perceptions of "unique vulnerability to future victimization (VAR359) were significantly related to negative post-crime outcomes, but only long-term reactions. Thus, Hypothesis 21 was partially supported.

Contrary to Hypothesis 22, universal vulnerability (VAR358) was not inversely associated with either short or long-term outcomes. Rather, significance was found in the opposite direction than was predicted. Hypothesis 22, therefore, was not confirmed.

Hypotheses 23 through 25 pertained to victim attributions for the break and enter. Hypothesis 23 was partially confirmed. Internal attributions of causality for the crime (LOCUS) were significantly correlated with short-term psychological distress. However, they were not significantly associated with long-term distress. Neither stability (STABLE) nor controllability (CONTROL) were significantly related to either short or long-term outcomes. Thus, Hypotheses 24 and 25 were not supported.

Hypothesis 26 predicted that victims' perceptions of personal control over the probability of future victimization (VAR360) would be related to negative reactions following victimization. The hypothisis was not confirmed.

Behavioral Responses

Regarding their behavioral responses, victims reported that they engaged in a variety of crime prevention activities following the break and enter. However, contrary to Hypothesis 27, none were inversely associated with distress reactions. The variables

Table 22

Intercorrelations Between Post-Victimization Variables and Psychological Distress for the Short-Term (TRAUMA1) and the Long-Term (TRAUMA2)

Post-Victimization Variables	Variable Code	TRAUMA1	TRAUMA2
Cognitions			
- Unique vulnerability	VAR359	.05	.12**
- Universal vulnerability	VAR358	.17***[a]	.16***[a]
- Locus of causality attribution	LOCUS	.11**	.07
- Stability attribution	STABLE	-.03	-.03
- Controllability attribution	CONTROL	.03	.06
- Perception of personal control	VAR360	.01	.03
Behavioral Responses			
- More care locking doors	VAR225	.18***[a]	.18***[a]
- Install bars on windows	VAR226	.10*[a]	.10*[a]
- Replace locks	VAR227	.07	.08
- Care leaving lights on	VAR228	.13**[a]	.18***[a]
- Purchase new/more insurance	VAR229	n/a	.02
- Install alarm system	VAR232	n/a	-.06
- Change residence	VAR223	n/a	.02
- Social withdrawal	VAR224	.31***	.31***
- Amount of time spent on incident	VAR210	n/a	.05
- Time off from work	VAR211	n/a	.04
Social Support			
- Informal social support	POSTSOC	.10*[a]	.05
- Police response time	VAR055	.04	.01
- Satisfaction with response time	VAR056	-.12**	-.05
- Police demonstrated empathy	VAR063	-.12**	-.15***
- Provision of crime prevention info.	VAR065	-.05	-.06
- Satisfaction with police treatment	VAR067	-.19***	-.18***
- Satisfaction with case management	VAR206	n/a	-.17***
- Provision of case progress info.	VAR219	-.11*	-.10*
- Informed of Victim Services	VAR066	-.06	-.04
- Contacted by Victim Services	VAR244	n/a	.04
Re-victimization			
- Re-victimization since 1st interview	VAR241	n/a	.11*

Note: n/a = not applicable; variable not included in short-term model
[a] significant in the opposite direction than expected
* $p < .05$; ** $p < .01$; *** $p < .001$

"care locking doors when going out" (VAR225), "installing better or new bars on windows" (VAR226), "replacing locks on doors" (VAR227), "care leaving lights on when leaving the residence" (VAR228), "purchasing more or new household insurance" (VAR229), and "installing a security system" (VAR232) were all not significantly associated with negative reactions; at least not in the predicted direction.

Hypothesis 28 was partially confirmed. Social avoidance behavior such as spending more time at home after the break and enter (VAR224) was significantly correlated with both short and long-term psychological distress. However, contrary to prediction, changing residences (VAR223) was not related to distress.

Hypothesis 29 was not supported. Time victims spent on matters related to the break and enter (VAR210) nor time taken off work (VAR211) were associated with long-term distress.

Social Support

Overall, the social support received by victims after the break and enter appeared to be moderately related to their post-crime reactions. Hypothesis 30 was not confirmed. Post-victimization informal support (POSTSOC) was significantly correlated with short-term reactions, but in the opposite direction than was hypothesized. The relationship was not significant for long-term outcomes.

Hypothesis 31 predicted that negative psychological reactions following victimization would be inversely related to the support and assistance victims received from law enforcement officers. Although police response time (VAR055) and the provision of crime prevention information (VAR065) were not associated with outcomes, victim satisfaction with police response time (VAR056), demonstrated empathy and concern by police officers (VAR063), satisfaction with police treatment (VAR067), and overall satisfaction with police management of the case (VAR206) were

all significantly correlated with positive short and long-term post-crime reactions.[12] Thus, Hypothesis 31 was partially confirmed.

Police provision of information to victims about the existence of the Department's Victims Services program (VAR219) and having contact with the program's staff (VAR244) were both not associated with either short or long-term reactions. Therefore, Hypothesis 32 was not supported.

Re-victimization

Finally, Hypothesis 33 predicted that re-victimization between the time of the Initial Assessment and the Follow-up Interview (VAR241) would be directly associated with victim psychological distress. The hypothesis was confirmed.

Analysis of the Overall Model

Regression analyses were used to evaluate the unique and interactive contributions of the independent variables to the criterion variable of TRAUMA, and to select the "best" model of factors predictive of victims' post-crime reactions to crime. The SAS statistical package was used to perform these analyses. Regression analyses were carried out using TRAUMA1 as the dependent variable for short-term victim reactions and TRAUMA2 for long-term reactions.

In order to assess the unique and combined predictiveness of variables in the working model a series of standard regression analyses were conducted. The independent variables were first regressed individually on TRAUMA and then in combinations or "blocks". Within blocks, variables were allowed to "compete" among themselves. Blocks of variables then competed in increasingly complex levels. In total, this analysis involved five levels.

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[12] Victim satisfaction with response time was significantly associated with short-term reactions only.

In the first level, independent variables were entered as separate predictors of victim distress. For short-term distress, this involved conducting 50 separate regression analyses. Fifty-nine regressions were conducted with long-term victim distress as the criterion variable.

In the second level, where appropriate, the variables involved in Level 1 were combined into blocks under category headings and regressed together on TRAUMA. For example, employment status, educational achievement, and income were analysed as a single block in the same regression equation under the heading socioeconomic status. In Level 2, 16 variables or blocks were regressed against TRAUMA1 and 17 were regressed against TRAUMA2.

In the third level, the variables run in Level 2 were further combined under more general headings. For example, socioeconomic status, gender, and age were run together as a block under the heading victim demographics. Eight regressions were conducted for TRAUMA1 during Level 3 and nine were run for TRAUMA2.

In the fourth level, the variables were grouped into three major blocks; pre-victimization factors, crime characteristics, and post-victimization factors. This procedure applied two both short and long-term TRAUMA.

Finally, in the fifth level, regressions were conducted to test the predictiveness of the overall working model. This involved conducting two standard multiple regression analyses, one for TRAUMA1, and a second for TRAUMA2.

In order to select the optimal set of variables predictive of post-crime distress following residential break and enter, a stepwise statistical regression was also conducted. Based solely on statistics computed on the sample, stepwise regression aids in the development of a subset of variables useful in predicting outcomes while eliminating those factors that do not provide additional predictive information (Tabachnick & Fidell, 1989). The general linear equation started out empty and independent variables were added one at a time if they met the 0.1500 significance

level for entry into the model. Variables were also deleted if they later failed to contribute significantly to regression. All variables left in the model were significant at the 0.05 level. Although Tabachnick and Fidell (1989) caution that the results may be unique to the sample and not generalize well to the population, this procedure is considered appropriate for model-building and eliminating variables that are clearly superfluous for future research. Compared to either strict forward or backward regression procedure, stepwise regression is considered "... the surest path to the best prediction equation" (p. 147).

Multivariate Outliers

Before conducting these analyses, plots of the residuals against predicted values were requested on initial regression runs in order to graphically identify multivariate outliers. In addition, the studentized residual, which is the residual divided by its standard error, was printed and plotted, and Cook's distance, a measure of individual case influence, was requested. Outliers were deleted when identified as extreme cases by visually inspecting the residual plot, recording if the studentized residual was in excess of $\pm$ 2.5, and Cook's distance >1.00. In no regression analysis did the number of deleted outliers exceed 3% of the sample size.

Multicollinearity and Singularity

In addition to assessing the pairwise correlations (presented in an earlier section), further diagnostics were calculated to resolve any doubts about whether multicollinearity or singularity were problematic for the multiple regression analyses. The initial regression runs described earlier were also submitted with requests to print tolerance values for the estimates, variance inflation factors (VIF), eigenvalues, condition numbers, and variance proportions for the predictor variables. Tolerance was considered problematic if it was too low ($<$ .01) (Tabachnick & Fidell, 1989, p.

88). However, it never approached this level. A VIF in excess of 10 was also considered indicative of multicollinearity (Kleinbaum, Kupper, & Muller, 1988). Again, on no occasion did it approach this number. When eigenvalues approached zero, corresponding with high condition numbers (> 30), and two or more variance proportion values of .90 or higher were present, there was additional reason to suspect multicollinearity (Kleinbaum et al., 1988). However, these diagnostic criteria did not arise.

The Assumptions of Normality, Linearity, and Homoscedasticity

An examination of residuals scatterplots was undertaken to evaluate the assumptions of normality, linearity, and homoscedasticity of residuals for each multiple regression. When the assumptions are met, the residuals (differences between obtained and predicted dependent variable scores) are normally distributed about the predicted dependent variable scores, the residuals have a straight line relationship with predicted dependent variable scores, and the variance of the residuals about predicted dependent variable scores is the same for all predicted scores (Tabachnick & Fidell, 1989). In other words, the scatter plot is roughly rectangular with a concentration of scores along the center. In all cases, the results satisfied these assumptions.

Results of the regression analyses are reported next. Tables 23 through 32 located in Appendix J present the details of the standard regression analyses, including the standard regression coefficients (β), the squared semipartial correlations (sr^2), the significance test for sr^2 (T), the squared multiple correlation (R^2), and the test of significance for R^2 (F). Figures 6 through 11, show diagrammatically a summary of these results. Squared multiple correlations are reported as well as the test of statistical significance.

Factors Predictive of Short-Term Victim Distress

Pre-victimization Variables

Figure 5 presents a summary of the regression analyses of pre-victimization variables on short-term reactions. In level 1, with the exception of prior victimization, prior criminal activity, and importance of sense of community, which were non-significant, the remaining variables predicted between 1% and 32% of the variance in victim distress scores (all $p < .05$). The squared multiple correlations were notably higher among four measures of pre-crime physical and mental health; trait anxiety ($R^2 = .29$), somatization ($R^2 = .20$), obsessive-compulsiveness ($R^2 = .21$), and depression ($R^2 = .32$).

Level 2 analyses confirmed the importance of prior health as a predictor of short-term post-crime reactions to victimization. Physical and mental health variables predicted 46% of the variance in TRAUMA1 scores. With the exception of age, the other Level 2 variables also proved to be significant predictors. The squared multiple correlations ranged from .01 to .28 (all $p < .01$). In addition to the prior health variables, a notable predictor was the perceived stress in victims' lives, which account for 28% of the variability in distress scores.

In Level 3, the combined contribution of psychosocial variables accounted for the largest percentage of variance in TRAUMA1 scores ($R^2 = .53$). Victim demographics and pre-crime cognitions (as assessed by belief in a just world) also proved to be significant predictors ($p < .001$) of distress, $R^2 = .19$ and $R^2 = .03$, respectively.

Partially confirming Hypothesis 35, as a group, the pre-victimization factors significantly predicted short-term victim distress accounting for 57% of the variance scores ($p < .001$).

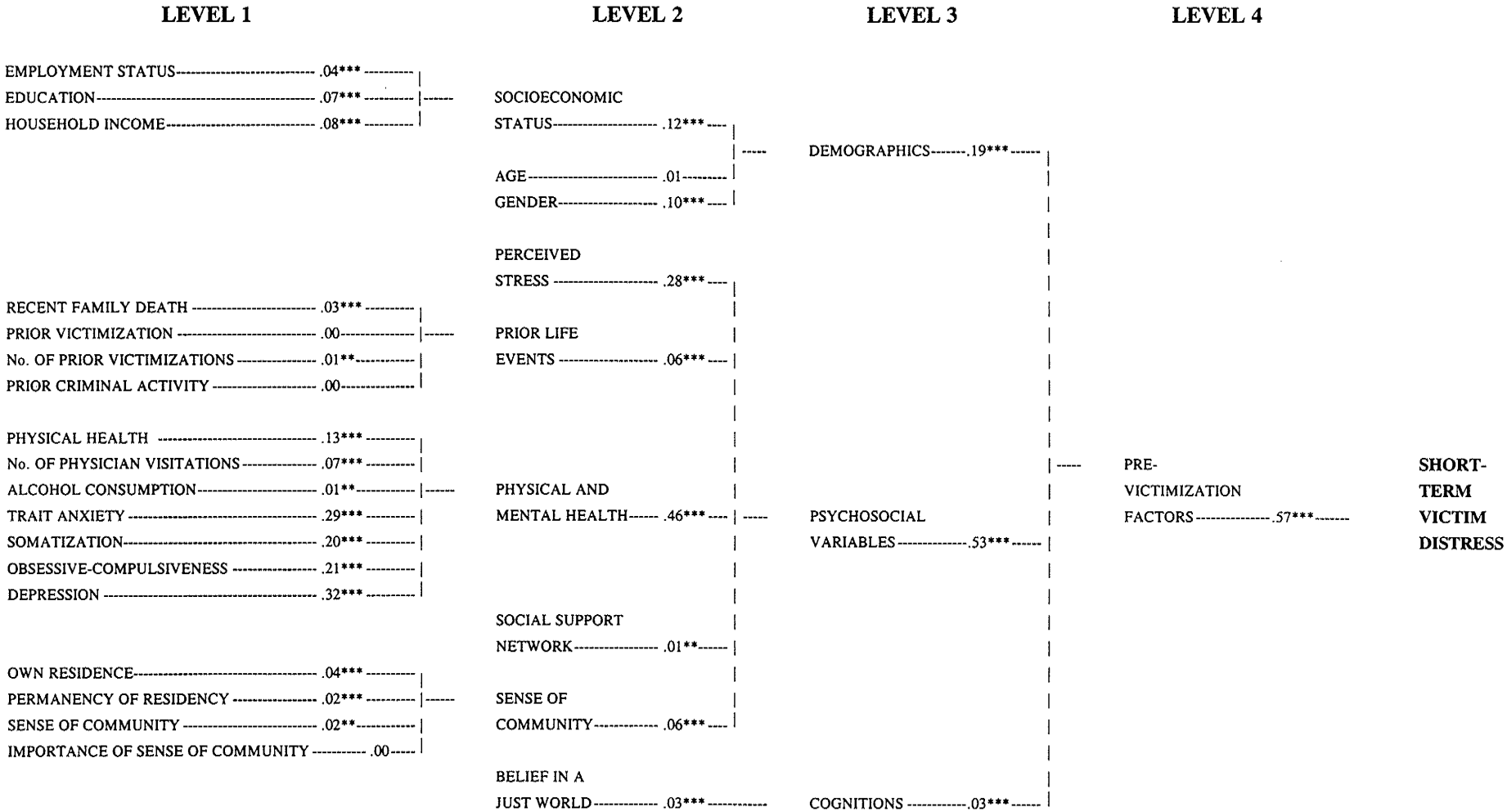

Figure 5. Squared multiple correlations (R^2) between pre-victimization variables, in Levels 1 through 4, and short-term victim distress, TRAUMA1, following residential break and enter. (* $p < .05$; ** $p < .01$; *** $p < .001$).

Crime Characteristics

The results of the regression of crime characteristics on short-term victim distress are diagrammatically summarized in Figure 6. In Level 1, eight of the 14 variables in the model proved to be significant predictors of post-crime reactions (all at $p < .05$). The squared multiple correlations ranged from .01 to .05. Possession of household insurance accounted for the largest percentage of variance in scores ($R^2 = .05$).

In Level 2, "significance of loss" variables significantly predicted distress accounting for 10% of the variance in victims' scores ($p < .001$). "Degree of violence" as assessed by the variable "victim home during incident" was also significant, but accounted for only 1% of the variability in TRAUMA1 scores. In Level 3, "severity of offense" and "location of incident" variables predicted outcomes (both $p < .05$), $R^2 = .12$ and $R^2 = .02$, respectively.

As partially confirmation of Hypothesis 35, the crime characteristics associated with the residential break and enter significantly predicted short-term victim distress accounting for 12% of the variance in scores ($p < .001$).

Post-victimization Variables

Figure 7 presents a summary of the regression analyses of post-victimization variables on short-term post-crime distress. In Level 1, ten of the 18 variables significantly predicted victims' reactions (all $p < .01$). Multiple squared correlations ranged between .01 and .11. Notable among these predictors was social withdrawal which accounted for 11% of the variance in distress scores, and double that accounted for by any other single post-victimization variable.

In Level 2, with the exception of "victim assistance", all the variables or blocks of variables reached significance ($p < .01$). The proportion of variance accounted for ranged from .02 to .14. Most notable among these, the "adaptive and maladaptive

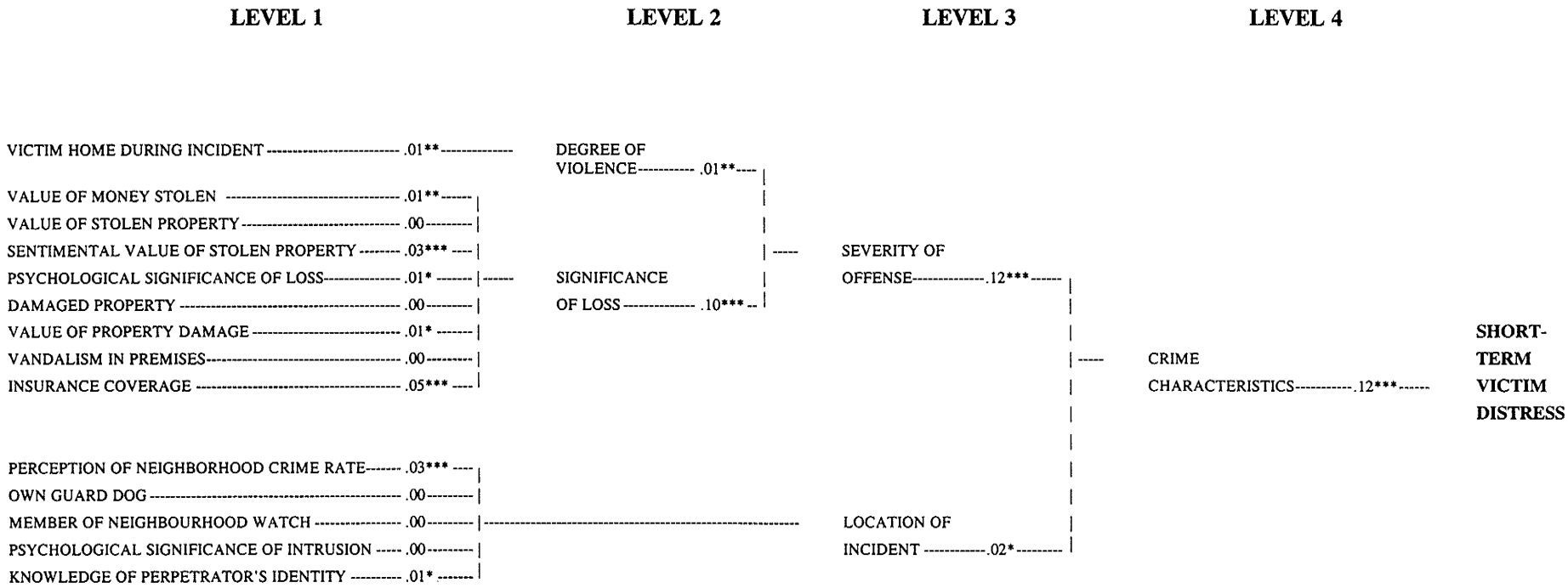

Figure 6. Squared multiple correlations (R^2) between crime characteristic variables, in Levels 1 through 4, and short-term victim distress, TRAUMA1, following residential break and enter. (* $p < .05$; ** $p < .01$; *** $p < .001$)

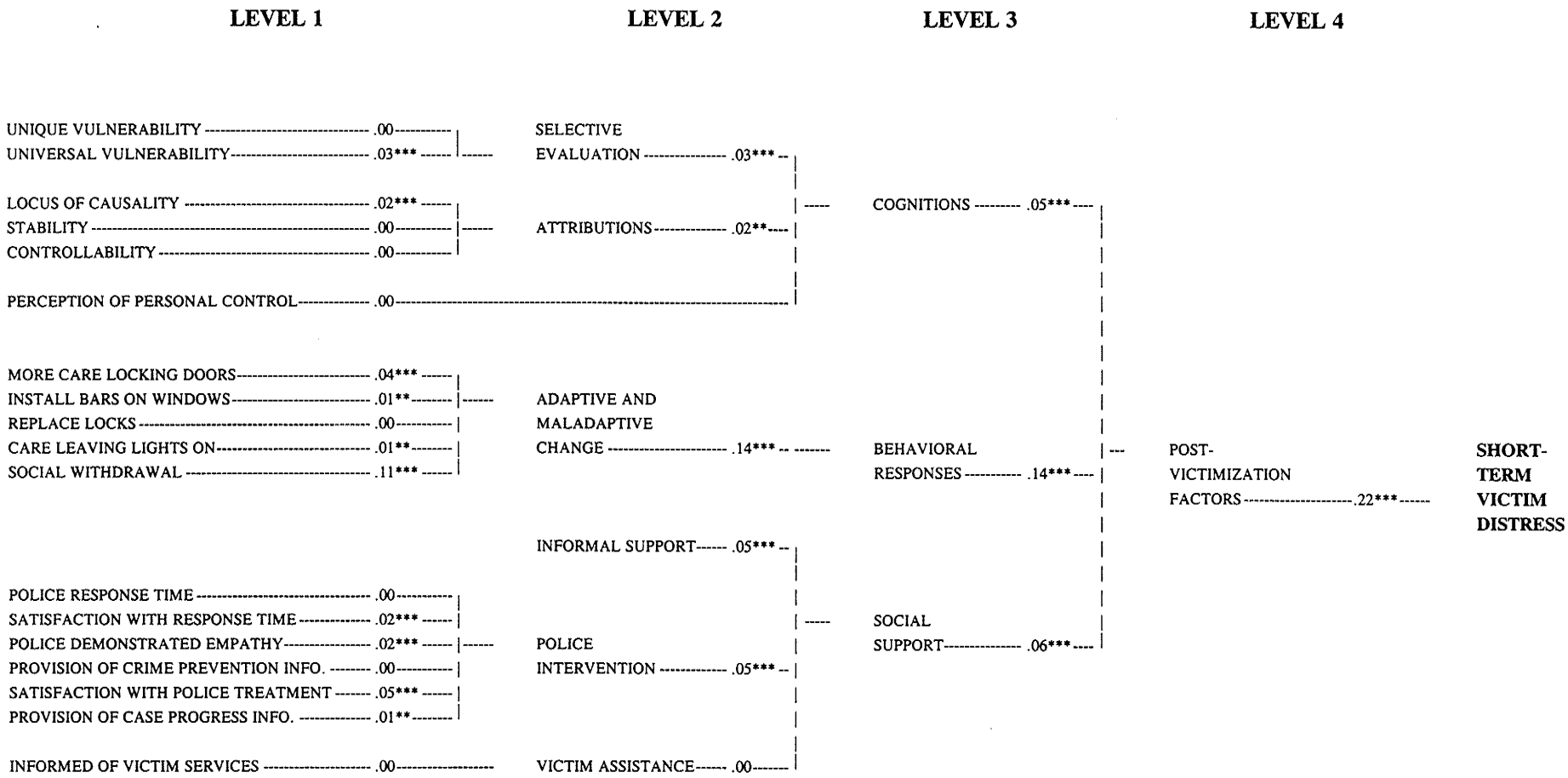

Figure 9. Squared multiple correlations (R^2) between post-victimization variables, in Levels 1 through 4, and short-term victim distress, TRAUMA1, following residential break and enter. (* $p < .05$; ** $p < .01$; *** $p < .001$)

change" variables explained 14% of the variance in post-crime distress scores. Level 3 analyses confirmed the importance of these behavioral responses and their ability to predict short-term post-crime reactions to victimization. The other Level 3 variables, post-crime cognitions and social support, also proved to be significant predictors. The squared multiple correlations were .05 and .06, respectively (both $p < .001$).

Partially confirming Hypothesis 35, as a group, the post-victimization factors significantly predicted short-term victim distress accounting for 22% of the variance in scores ($p < .001$).

The Overall Short-Term Model

As predicted in Hypothesis 34, results of the Level 5 standard regression analysis revealed that all of the predictors together explained 64% of the variance in short-term distress scores, $F(56, 398) = 12.77$, $p < .001$.

As previously discussed, in order to select the optimal set of variables predictive of post-crime distress, a stepwise statistical regression was also conducted. Results of this analysis are presented in Table 33. The best linear combination of predictors consisted of a set of 20 variables, $F(20, 434) = 34.32$, $p < .001$.

The amount of variance added to R^2 by each independent variable in the model at the point that it entered the regression equation is displayed in Table 33 as Partial R**2. The highest priority variable, accounting for the greatest proportion of variance in distress shortly after the break and enter, was victims' pre-victimization levels of depression ($R^2 = .28$).[13] Pre-crime levels of trait anxiety entered the model second and predicted an additional 11% of the variance. Together, pre-crime depression and trait anxiety constituted the best two-variable model, $F(2, 452) = 147.92$, $p < .001$.

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[13] This result was confirmed by the running the SAS maximum R-square improvement procedure or, in other words, a setwise multiple regression.

Table 33

Stepwise Multiple Regression of Model Variables on Short-term Psychological Distress (TRAUMA1)

Variables	β	Partial R**2	T	R^2	F
Final Model (Step 24)				.61	34.32***
Educational achievement	-.09	.01	-2.75**		
Gender	.14	.04	4.06***		
Perceived stress	.20	.05	5.66***		
Prior victimization	.08	.00	2.61**		
Prior criminal activity	-.09	.01	-2.85**		
Quantity of alcohol consumption	-.07	.00	-2.12*		
Trait anxiety	.19	.11	5.37***		
Somatization	.13	.02	3.69***		
Obsessive-compulsiveness	.14	.01	3.74***		
Depression	.17	.28	4.13***		
Social support network	-.10	.01	-3.04**		
Value of property stolen	.09	.00	2.73**		
Sentimental value of stolen property	.08	.01	2.40*		
Value of damaged property	.09	.01	2.75**		
Insurance coverage	-.10	.00	-2.86**		
Psychological significance of intrusion	.07	.01	2.22*		
Universal vulnerability	.07	.00	2.39*		
Install bars on windows	.09	.01	2.88**		
Social withdrawal	.10	.01	2.96**		
Informal social support	.07	.00	2.36*		

* $p < .05$; ** $p < .01$; *** $p < .001$

The stress victims perceived existed in their lives entered the model third, accounting for 5% of the variance in TRAUMA1. Victim gender was the fourth independent variable to enter. It predicted an additional 4% of the variability in scores. The best 4-variable model consisting of depression, trait anxiety, perceived stress, and gender explained almost half of the model's variance ($R^2 = .48$), $F(4, 450) = 104.62$, $p < .001$. The remaining 16 model variables individually contributed 2% or less of the overall variance. In sum, the 20 predictors in the final model selected by stepwise regression accounted for 61% of the variance in victim short-term distress scores.

Factors Predictive of Long-Term Victim Distress

Pre-victimization Variables

Figure 8 presents a summary of the regression analyses of pre-victimization variables on long-term post-crime distress. In level 1, with the exception of prior victimization, prior criminal activity, alcohol consumption, and sense of community, which were non-significant, the variables in the model predicted between 1% and 58% of the variance in victim distress scores (all $p < .05$). The squared multiple correlations were notably higher among three measures of pre-crime physical and mental health; trait anxiety ($R^2 = .58$), somatization ($R^2 = .18$), and depression ($R^2 = .20$).

Level 2 analyses affirmed the importance of prior health variables as predictors of long-term post-crime reactions. These variables predicted 62% of the variance in TRAUMA2 scores. With the exception of age, the remaining Level 2 variables also proved to be significant predictors. The squared multiple correlations ranged from .02 to .15 (all $p < .01$).

In Level 3, the combined contribution of psychosocial variables accounted for the largest percentage of variance in TRAUMA2 scores ($R^2 = .65$). Victim demographics and pre-crime cognitions (as assessed by belief in a just world) also proved to be significant predictors ($p < .001$) of distress, $R^2 = .10$ and $R^2 = .05$, respectively.

Partially confirming Hypothesis 35, as a group, the pre-victimization factors significantly predicted long-term victim distress accounting for 65% of the variance in scores ($p < .001$).

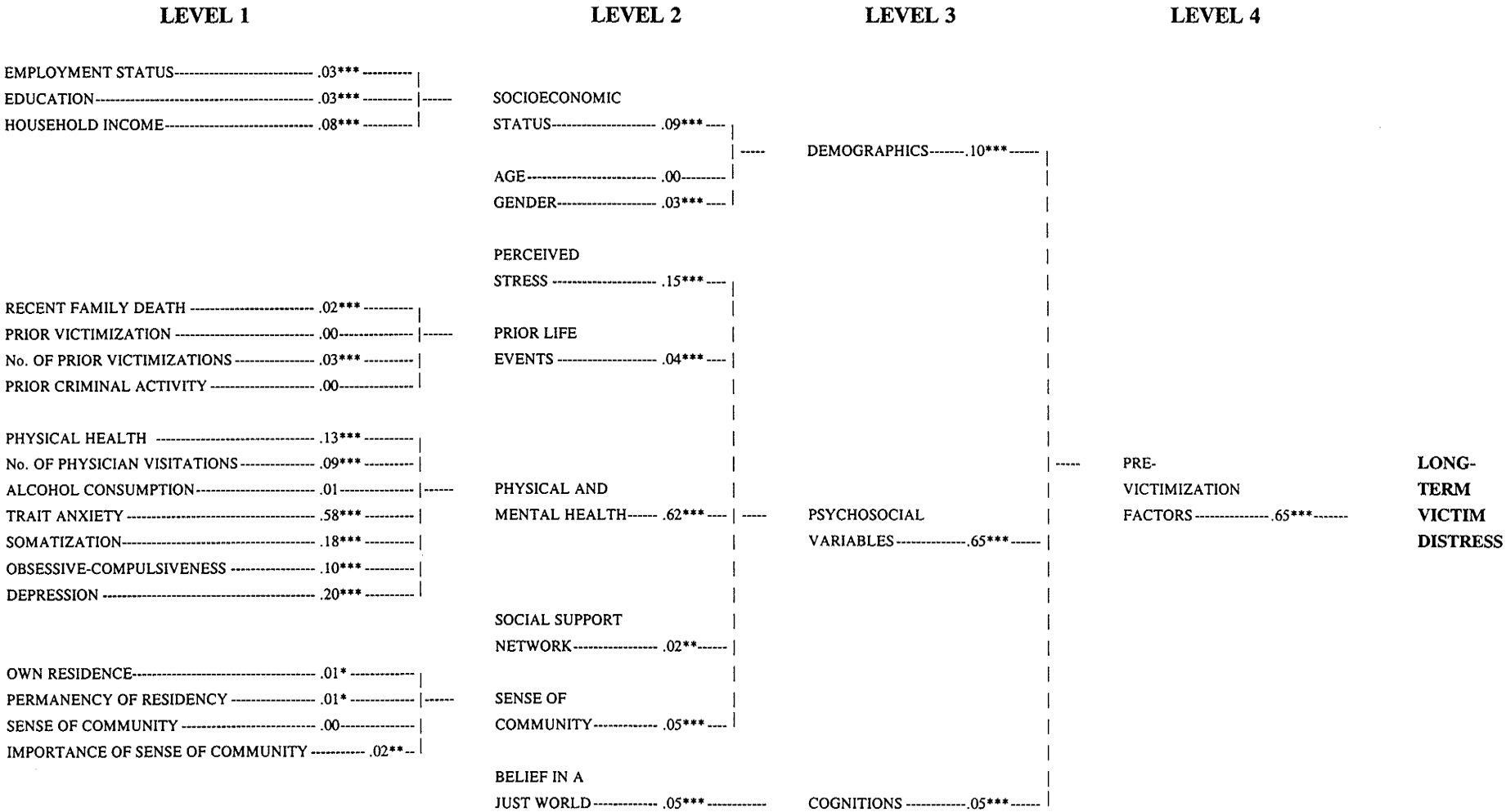

Figure 8. Squared multiple correlations (R^2) between pre-victimization variables, in Levels 1 through 4, and long-term victim distress, TRAUMA2, following residential break and enter. (* $p < .05$; ** $p < .01$; *** $p < .001$).

Crime Characteristics

The results of the regression analyses of crime characteristics on long-term victim distress are diagrammatically summarized in Figure 9. In Level 1, seven of the 15 variables in the model proved to be significant predictors of outcomes (all at $p < .05$). The squared multiple correlations ranged from .01 to .02.

In Level 2, "significance of loss" variables significantly predicted post-crime distress accounting for 5% of the variance in scores ($p < .01$). "Degree of violence" consisted of a single variable "victim home during offense" and, therefore, predicted the same proportion of variance in Level 2 as in Level 1 ($R^2 = .02$). In Level 3, both "severity of offense" and "location of incident" variables predicted outcomes ($p < .001$), $R^2 = .07$ and $R^2 = .04$, respectively.

As partially confirmation of Hypothesis 35, the crime characteristics associated with the residential break and enter significantly predicted long-term victim distress accounting for 10% of the variance in scores ($p < .001$).

Post-victimization Variables

Figure 10 presents a summary of the regression analyses of post-victimization variables on long-term post-crime distress. In Level 1, 13 of the 26 variables significantly predicted victims' reactions (all $p < .05$). Multiple squared correlations ranged between .01 and .12. Notable among these predictors was social withdrawal which accounted for 12% of the variance in distress scores, four times the amount of any other Level 1 post-victimization variable.

In Level 2, four of seven variables reached significance (all $p < .05$). The proportion of variance accounted for the significant predictors ranged from .02 to .16. Most notable among these, the "adaptive and maladaptive change" variables explained 16% of the variance in post-crime distress scores.

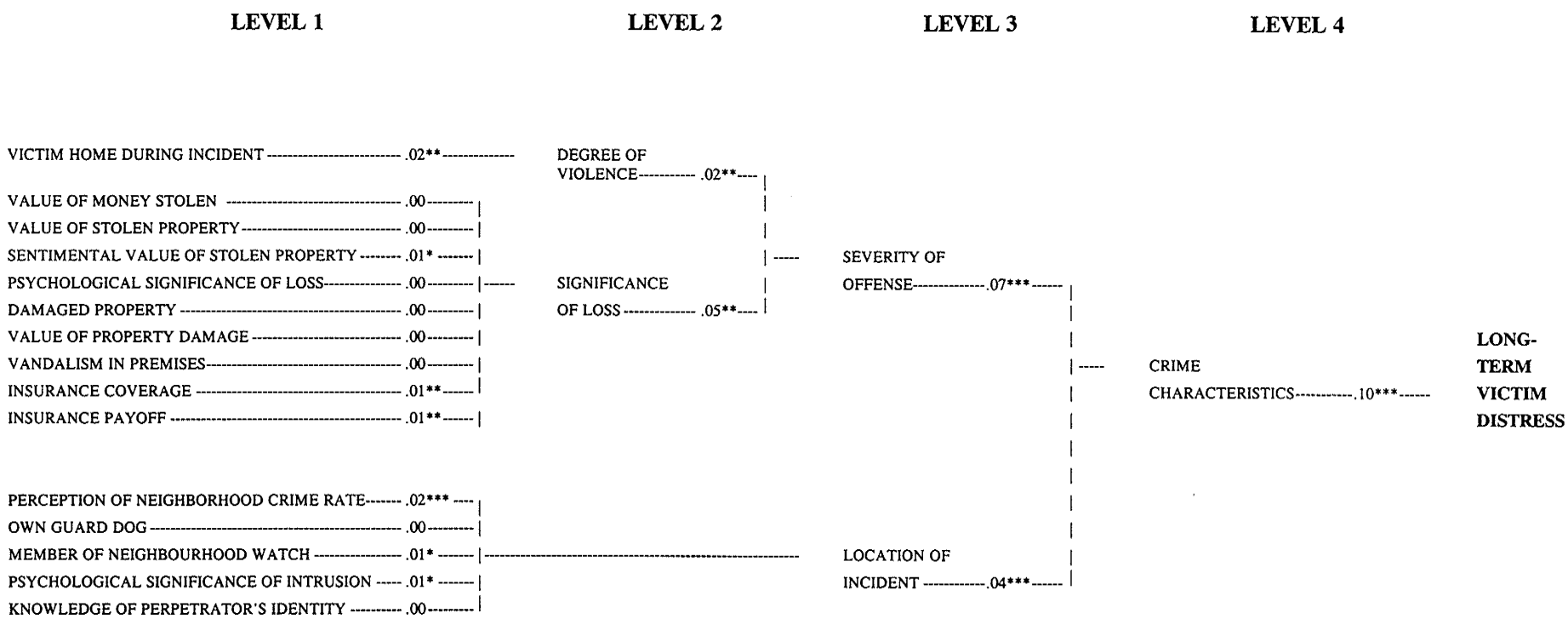

Figure 9. Squared multiple correlations (R^2) between crime characteristic variables, in Levels 1 through 4, and long-term victim distress, TRAUMA2, following residential break and enter. (* $p < .05$; ** $p < .01$; *** $p < .001$)

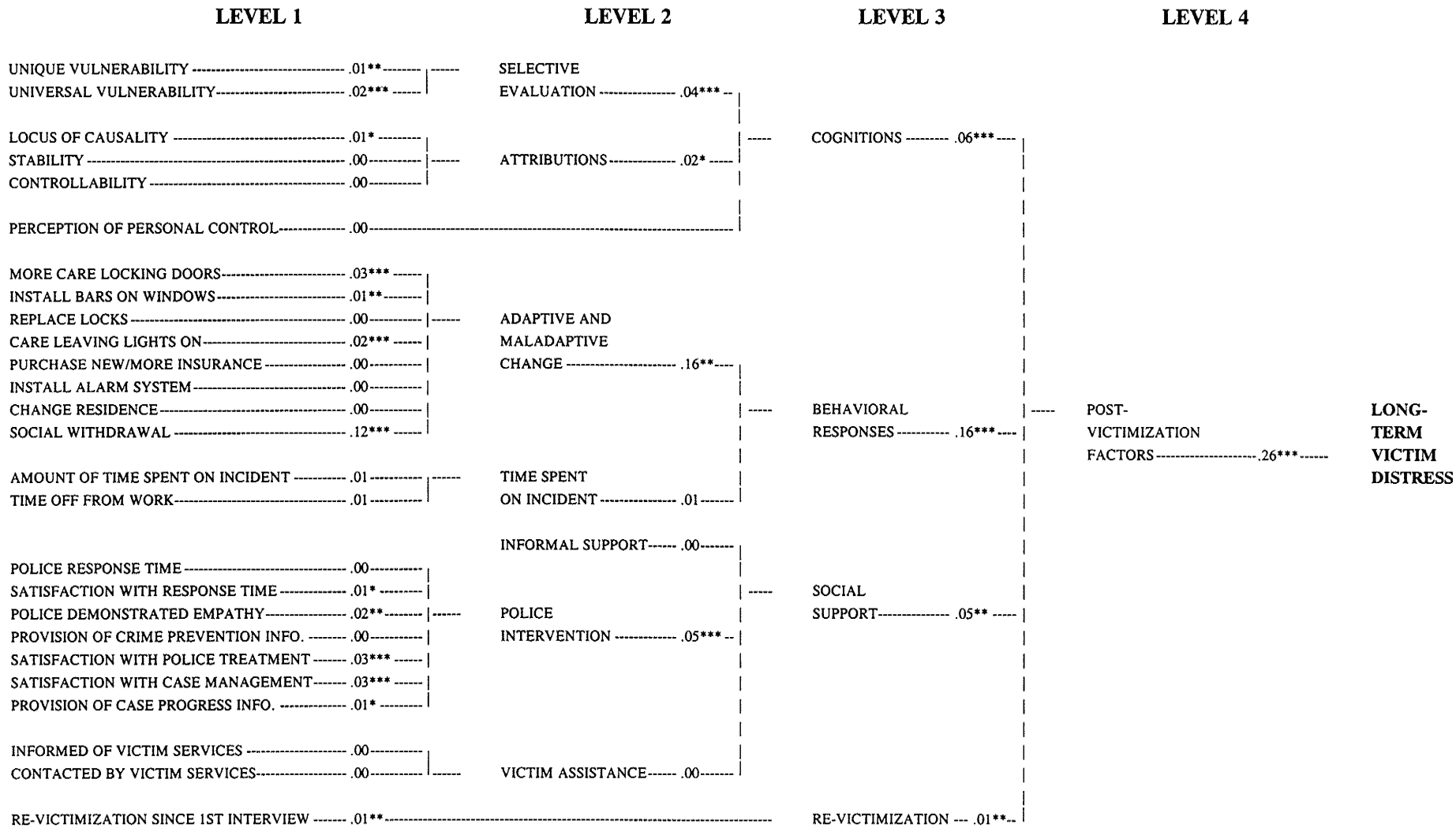

Figure 10. Squared multiple correlations (R^2) between post-victimization variables, in Levels 1 through 4, and long-term victim distress, TRAUMA2, following residential break and enter. (* $p < .05$; ** $p < .01$; *** $p < .001$)

Level 3 analyses confirmed the ability of the variables associated with "behavioral responses" to predict long-term post-crime reactions ($R^2 = .16$). The remaining Level 3 variables, post-crime cognitions, social support, and re-victimization, were also significant predictors ($p < .01$). The squared multiple correlations were .06,.05, and .01, respectively.

As final confirmation Hypothesis 35, considered collectively, the post-victimization factors significantly predicted long-term victim distress accounting for 26% of the variance in scores ($p < .001$).

The Overall Long-Term Model

As predicted in Hypothesis 34, results of the Level 5 standard regression analysis revealed that all of the predictors together explained 70% of the variance in long-term distress scores, F (65, 392) = 14.49, $p < .001$.

Results of a stepwise statistical regression to select the optimal set of variables predictive of post-crime distress are presented in Table 34. The best linear combination of predictors consisted of a set of 12 variables, F (12, 445) = 71.48, $p < .001$.

Partial R**2, the amount of variance added to R^2 by each independent variable in the model at the point it entered the model, is displayed in Table 34. The highest priority variable, accounting for the largest proportion of variance in long-term distress following break and enter, was pre-crime trait anxiety ($R^2 = .56$).[14] Somatization entered the model second, but only contributed an additional 3% of the variance. Pre-crime somatization and trait anxiety constituted the best two-variable model, F (2, 455) = 321.82, $p < .001$. Social withdrawal from others entered the model third, accounting for 1% of the variance. Another behavioral response measure, "install bars

[14] This result was confirmed by the running a setwise regression.

on windows" entered fourth predicting another 1% of the variability.[15] The best 4-variable model consisting of trait anxiety, somatization, social withdrawal, and install bars on windows, explained 61% of the variability in TRAUMA2 scores, F (4, 453) = 180.74, $p < .001$. The remaining eight variables in the model each contributed 1% or less of the overall variance. In sum, the 12 predictors in the final model selected by stepwise regression accounted for 66% of the variance in victim long-term distress scores.

Table 34

Stepwise Multiple Regression of Model Variables on Long-term Psychological Distress (TRAUMA2)

Variables	β	Partial R**2	T	R^2	F
Final Model (Step 12)				.66	71.48***
Age	.09	.01	3.27***		
Trait anxiety	.62	.56	19.31***		
Somatization	.15	.03	4.63***		
Depression	.07	.00	2.25*		
Importance of sense of community	.06	.01	2.06*		
Victim home during offense	.07	.00	2.48**		
Universal vulnerability	.07	.01	2.54**		
Time off from work	.07	.00	2.46**		
Install bars on windows	.10	.01	3.64***		
Social withdrawal	.12	.01	4.23***		
Satisfaction with case management	-.10	.01	-3.53***		
Re-victimization since 1st interview	.06	.00	2.24*		

* $p < .05$; ** $p < .01$; *** $p < .001$

[15] The intercorrelation between this variable and TRAUMA2 was significant, but in the opposite direction than hypothesized. Victims who installed bars on the windows of their residence suffered more, rather than less, long-term distress.

DISCUSSION

Study Participants

The break and enter victims who participated in this research were more likely to be single, and young, than other members of the population. Other researchers have confirmed that some individuals are more at risk of becoming victims of residential burglary than others (see Van den Bogaard & Wiegman, 1991). It has been suggested that households headed by young, single people are more frequently targeted than those headed by those who are older and married because of lifestyle differences (Blumberg & Ranton, 1978). Compared to their elders, the young are less likely to occupy their residences during the day and evening. They are also less likely to be married and if they are married, less likely to have children. Employment obligations, enrollment in classes, fewer child-care responsibilities, and a generally more active lifestyle are all possible reasons why young, single people are less likely to be home during the day. During the evening, they are also more likely to go out for entertainment.

Lower income households are also at greater risk for break and enter. Offenders tend to reside in lower income neighbourhoods and most frequently victimize readily accessible targets (i.e., their low income neighbours). Supporting this assumption and corroborating the data we collected are survey data from seven major Canadian cities (including Winnipeg) that show low income neighbourhoods experience the highest rates of break and enter (Solicitor General, 1986, Bull. #7).

In addition to being younger, poorer, and single, the break and enter victims who participated in this research were more likely to reside in a single family dwelling and side by side (double) than other Winnipeg residents. Conversely they were less likely

to live in a high-rise apartment building. Similar risk patterns have been observed in Edmonton, Alberta (Solicitor General, 1986, Bull. #7). The suggestion has been made that the risk of break and enter is, in part, determined by the physical structure of the target dwelling. Certain residences provide greater opportunity to determine whether or not they are occupied. For example, even though apartment dwellers are more likely to be away during the day, high-rise apartments traditionally have lower rates of break and enter because it is difficult to determine if they are vacant. Most high-rises also have controlled entrances which adds to the possibility of detection.

Finally, contrary to the findings of others (Blumberg and Ranton, 1978; Sacco & Johnson, 1990), we found householders who rent their residences did not face a greater risk of burglary victimization than did home owners.

The Victimization Event

Results regarding the temporal pattern of residential break and enter lend support to the notion that it is a "crime of opportunity". Only one in ten victims we interviewed reported that the break-in occurred between midnight and 8 a.m. - a time when the occupant is most likely to be at home. It is clear from this study and the results of at least one national survey that the risk of break and entry is closely related to the amount of time a residence is left unoccupied. A survey of seven urban centers in Canada including Winnipeg revealed that households which are usually left unoccupied during the day had victimization rates of 113 per 1,000 households compared to only 79 per 1,000 in households in which someone was home all day or even part of the day (96 per 1,000) (Solicitor General, 1986, Bull. #7). However, statistics vary concerning how many residential break-ins occur during the night. Waller & Okihiro (1978), for example, found that 38% of residential burglaries in Toronto took place when it was dark (i.e., between 10 p.m. and 7 a.m.). Results from the British Crime Survey put

the incident of break-ins occurring between midnight and 6 a.m. at approximately 17% (Hough, 1984). Chimbos (1973) estimates that 70% occur at night. These disparate findings may, in part, be attributed to the fact that researchers and the police use different methods of categorizing data (e.g., defining what constitutes a crime). In addition, victims are frequently depended on to convey this information even though the offense was committed without the victim's immediate knowledge because he or she was absent from the residence at the time of the break-in. Pope (1977) summarized much of the research and concluded that residential break and enters are generally a daytime phenomena, whereas non-residential burglaries occur most often during hours of darkness.

Given that the data we gathered were obtained from residents who had their homes burglarized during the summer months, seasonal variations in break and enters were not possible to determine in this study. However, Chimbos (1973) studied seasonal patterns of break and enters in Thunder Bay, a city with a similar climate to Winnipeg, and reported that the highest rate of break and enter occurred during the summer months (i.e., June, July, and August). He attributed the seasonal variations to the practice of many city dwellers leaving the city for summer cabins and "camps", a practice also commonly engaged in by Winnipeggers. A slight increase in Canada-wide summer break and enter incidents was also recorded by Sacco & Johnson (1990). In Toronto, Waller and Okihiro (1978) also noted a marginally higher concentration of residential burglary in the summer months. Of note, seasonal variations in residential break and enter are not commonly reported in areas with more temperate seasonal weather like California (Pope, 1977).

The majority of break and enter victims we surveyed reported that entry into their homes was completed with the use of force. This finding is similar to those gathered on means of entry in surveys of residential burglary victims conducted in other major North American cities (see Pope, 1977). It has been suggested, however, that the

number of unforced entries may actually be higher than is usually reported as many victims erroneously believe that insurance policies require signs of forced entry before giving compensation for losses incurred as a result of residential theft (Waller & Okihiro, 1978). Supporting this notion, a survey of 60,000 households across the United States revealed that the majority of break-ins were completed without force (Blumberg & Ranton, 1978). Waller & Okihiro (1978) reported that only one in four of the door entries in their study were accomplished by forcing or breaking the door open. Other population surveys, however, have shown data indicating that most residential break and enters involve the use of force to gain entry (Solicitor General, 1986, Bull. #7; 1988, Bull. #10). In Canada, at least, the bulk of the evidence is that the majority of household break and enters are achieved with the use of force.

When given the option, perpetrators of break and entry will usually avoid confrontation and violence. Research in the United States and Canada based on interviews with incarcerated burglars has determined that the primary concern of perpetrators is whether or not the target premises is occupied (e.g., Reppetto, 1974; Waller & Okihiro, 1978). Therefore, we were not surprised when only one in seven victims (14%) we interviewed responded that someone was home at the time of the incident. Of these, less than one quarter said that they had some sort of contact with the perpetrator(s) while the break-in was in progress.[16] Other research suggests there is variability in the amount of contact break and enter victims have with perpetrators. In a study conducted in Toronto, Waller and Okihiro (1978) reported that 44% of the victims they surveyed were home at the time of the break-in. Twenty-one percent of these victims said a confrontation took place. Maguire (1980), on the other hand,

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[16] Reppeto found that at least 1 of every 100 residential break and enters ends up as a robbery. In the current study, even though contact between the victim and burglar occurred, the police did not consider it serious enough to record it as a robbery and, therefore, the case remained part of the sample.

studied breaking and entering in England and reported that 22% of the victims in his sample were at home during the offense. Only 4% came face to face with the intruder. In 8% of the cases studied by Reppetto (1974) in Boston the victims' premises were occupied when the break-in occurred. Approximately 10% of residential break and enters in Edmonton took place while the residents were home (Solicitor General, 1986, Bull. #7).

In sum, it seems that direct confrontations between victims and burglars are the exception, not the rule. However, this does not dismiss the potentially violent nature of burglary. As Waller (1984) suggests, it is the potential for violence that is the root of much of victims' concerns and fears. Moreover, even though only 3% of the victims we interviewed had some sort of contact with the offender, in real terms this represents a substantial number of people when one considers the high frequency of residential break and enters that occur annually in Canada and elsewhere.

One-quarter of the American perpetrators interviewed by Reppetto (1974) admitted to carrying a weapon (e.g., a knife, gun, mace) while committing residential burglary. In Canada, however, results of the current study and the research of Waller and Okihiro (1978) suggest that few burglars arm themselves. Only three (2.6%) of the victims interviewed in Toronto said that, to the best of their knowledge, the perpetrator was carrying a weapon and, as previously reported, only 5 (1%) of the break and enter we spoke to in Winnipeg responded similarly. Of course, many more offenders may have been armed without the victims' knowledge. Relatively few break and enter victims have direct contact with offenders. Nonetheless, one can speculate that if burglars perceive that the risk of personal injury is high because their victims are armed they, in turn, will arm themselves for protection. In other words, the increased availability of firearms in the United States may contribute to the fact that more burglars in that country arm themselves - perhaps they do so for personal protection.

Canadian statistics show that, overall, approximately two-thirds of all break and enter incidents are reported to the police (Sacco & Johnson, 1990; Solicitor General, 1984, Bull. #2). The reasons most frequently given for failure to report are "the incident was too minor", "the police couldn't do anything about it", and "nothing was taken". Given these reasons for non-reporting, not surprisingly, estimates of property loss based on police records are usually higher than those based on population surveys. Virtually all of the break and enter victims we interviewed reported losses due to theft of property. By comparison, in England, results of the British Crime Survey were that 82% of residential break-ins (both reported and unreported) resulted in the loss of property (Hough, 1985). Similarly, in Canada, the results of two national surveys revealed that property was stolen in approximately 56% of households victimized by break and enter. (Sacco & Johnson, 1990; Solicitor General, 1986, Bull. #7).

The items victims reported stolen in the current study correspond closely with those reported in other burglary research. That is, hard saleable items such as electronic entertainment equipment and currency were most frequently targeted by burglars (Pope, 1977; Reppetto, 1974). Waller & Okihiro (1978) also found that cash was the most frequent target of burglars, followed by jewelry. Conklin and Bittner (1973), in contrast, reported that jewelry, furs, and silver were most frequently stolen, followed by the theft of money and electronics. Although we did not ask victims specifically about the loss of furs, the theft of clothing and jewelry, when combined, equaled the losses of electronic equipment reported by Conklin and Bittner. Clearly, when deciding what to target, the ability to transfer stolen goods into cash is a priority among burglars. Market conditions may cause regional variations but, in general terms, items in demand and consequently relatively easy to sell are the targets of choice.

The direct economic costs of residential break and enter to individuals can be measured in terms of 1) the financial value of the stolen property, 2) the value of the damage that may have been done to the dwelling, 3) the time taken off from work to

attend to matters related to the break-in, and 4) the insurance related costs such as increased deductibles and net reimbursement value. As Hough and Mayhew (1985) correctly point out, calculating the financial costs to *society* is a more complex matter.

The financial impact of the property losses reported by the victims we surveyed was substantial. As expected, they were in excess of those reported by researchers who have studied the consequences of both "reported and unreported" break and enter (e.g., Blumberg & Ranton, 1978, Hough & Mayhew, 1985; Solicitor General, 1986, Bull. #7; Waller & Okihiro, 1978). The losses were more similar to those found by Harris and his associates (1984) who also studied burglary incidents reported to the police.

Waller and Okihiro (1978) reported that approximately one-third of the break and enter victims they interviewed in Toronto mentioned some damage was done to their dwelling during the burglary. Thirteen percent said their possessions were "extensively disarranged" and scattered. Another 18% had a few things scattered about. They concluded, therefore, that only rarely do burglars thoroughly comb a target looking for valuables. Maguire (1980) reported that the word "ransacking" could be used to describe no more than 12% of the burglaries he studied in England. The results of the current study suggest that, in contrast, residential break and enter in Winnipeg involves significantly more damage and disarrangement of property. Approximately three-quarters of the break and enter victims we interviewed reported that property damage was sustained during the break and enter. One-third reported that they experienced "extensive disarrangement" of their possessions during the incident. Another third said the mess caused during the break-in was "minor". In general then, the majority of the break and enters were associated with some damage to property and, more often than not, victims were faced with the task of cleaning up the contents of their homes after the offense.

The total economic cost of break and enter has seldom been measured with factors such as the time spent on the incident cleaning up, making repairs, and replacing

property included in the calculations (Young-Rifai, 1979). Approximately half of the victims we surveyed said that they spent at least one day on matters directly related to the crime. One in six (17%) employed respondents reported they took one day or less off work. Twelve percent took more than one day off. Compared to data gathered elsewhere, these costs are relatively high. Results of the British Crime Survey were that 6% of burglary victims took one day or less off work and 7% took more than one day off (Hough & Mayhew, 1985).

The percentage of victims in the current study who received either full or partial compensation through insurance agencies for their losses was similar to the percentage of break and enter victims surveyed in Canada as part of the General Social Survey (see Sacco & Johnson, 1990). In both studies approximately three-quarters of the victims were able to successfully file insurance claims. Waller & Okihiro (1978) also reported that three-quarters of the burglary victims they surveyed who reported the incident to an insurance company received some compensation. In contrast, results of the Canadian Urban Victimization Survey were that only 62% of burglarized households were able to recover some portion of their losses (Solicitor General, 1986, Bull. #7).

Police Response

Even though law enforcement agencies are the frequent targets of criticism, research has shown there is general public approval of their performance in several areas. The current data show victim evaluations of police response times are generally favourable, although lower than the evaluations that have been offered by break and enter victims in other Canadian cities. Sixty percent of the victims we interviewed responded that they thought the police did a "good job" of responding promptly. The same question was asked by researchers during the Canadian Urban Victimization Survey. By comparison, 75% of the break and enter victims from the seven urban centers surveyed

(including Winnipeg) rated the promptness of the police in the respective cities as "good" (Solicitor General, 1986, Bull. #7). Interestingly, the ratings of police response times provided by the break and enter victims we interviewed in Winnipeg were more positive than those provided crime victims interviewed during the 1989 WAS, but less favourable than those provided by the 1992 WAS respondents. Sixty-one percent of the 1989 WAS respondents were "satisfied" with the time taken by the patrol unit to arrive, whereas 79% of the 1992 respondents gave the police a positive evaluation.[17] It seems reasonable to speculate that although police response times in Winnipeg have been evaluated as inferior to those elsewhere in Canada by victims in the past, they have improved in recent years. Future research may bear this out.

Victim ratings of other aspects of Winnipeg Police behavior must be discussed in context. Winnipeg police statistics show that annually only 10% of reported break and enters (both residential and business[18]) are cleared (solved). In addition, earlier it was reported that fewer than one in ten of the victims we spoke to indicated they were aware whether a person had been charged in connection with the break and enter five month after it occurred.[19] Of the victims we surveyed who said that property was stolen, only one in ten indicated that all or some of their possessions had been recovered.[20] Given these statistics and the fact that the Winnipeg Police Department

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[17] These comparisons between the 1989 WAS, the 1992 WAS, and the current study must be interpreted with caution. The questions asking respondents to rate police response time were not phrased identically and the response categories also differed.

[18] Research conducted in California of 8,137 break and enters over the span of one year revealed that both residential and nonresidential burglaries were about equally likely to be cleared (Pope, 1977). Across Canada, the clearance rate for break and enter in 1990 was 13.3% (Statistics Canada, 1990).

[19] Other research has shown that about 20% of victims of household offenses in Canada (including break and enter) who report the incident to the police do not know whether anyone has been charged when later interviewed (Solicitor General, 1986, Bull. #7).

[20] Results of the Canadian Urban Victimization Survey were that an equivalent percentage of respondents reported their stolen property was returned within the survey year (Solicitor General, 1986, Bull. #7).

was involved in several controversies during the data collection period, including the premature retirement of the Chief of Police and the highly publicized involvement of some police officers in a number of commercial break and enters, the *overall* ratings of the police were surprisingly high.

The burglary victims we spoke to were very positive in their evaluations of how the police treated them. In addition, most of the respondents said the attending officer displayed an interest in their feeling and concerns. Positive victim ratings of the police by victims in terms of how officers "treat" them have been reported elsewhere. Seventy-four percent of the break and enter victims surveyed as part of the Canadian Urban Victimization Survey rated the courtesy shown by the police as "good" (Solicitor General, 1986, Bull. #7). As Waller (1984) points out, case studies suggest that one of the most harmful things a police officer can do when responding to a victim's needs is to somehow make the person feel responsible for what happened. The vast majority of burglary victims we surveyed stated that this did not occur. Fewer than one in twelve said the attending officer made them feel somehow responsible for the break-in or engaged in any form of victim-blaming.

In addition, most of the burglary victims we interviewed were quite satisfied with the police response in terms of the extensiveness of the follow-up investigation. Similar findings were reported by Waller and Okihiro (1978) in their survey results of break and enter victims in Toronto. Two-thirds of the respondents were satisfied with the police actions taken in response to the crime. Fifty-five percent of the burglary victims surveyed in the Canadian Urban Victimization Survey also perceived the overall police handling to be "good" (Solicitor General, 1986, Bull. #7). The literature suggests that, because victims seldom receive follow-up information about the results of the investigation, satisfaction decreases over time (Van den Bogaard & Wiegman, 1991). The results of the current study suggest that, although we don't have data directly assessing changes in victim satisfaction over time, positive evaluations of the

police remain high months after the break-in, even though few victims are kept informed about the progress of the investigation.

Although most victims of break and enter rated the police highly, particularly on being courteous and responding promptly to their call, they were less positive in their evaluations of "keeping them informed" and "effort to locate the criminal". Only one-quarter of the sample agreed the police kept them informed about the investigation and fewer than half agreed the police did all they could to locate the criminal. By comparison, less than half of the break and enter victims surveyed across Canada during the Urban Victimization Survey rated the police performance in keeping them informed as "good" (Solicitor General, 1986, Bull. #7). Lack of follow-up was also mentioned by Waller (1984) as the source of much victim dissatisfaction.

An overwhelming majority of victims we surveyed rejected the notion that after this experience, they "would be less likely to contact the police again". Results of the 1988 General Social Survey were that the desire to "catch and punish the offender", "stop the incident or prevent a recurrence", and "to receive protection" are leading reasons why the majority of break and enter victims contact the police in Canada. The need to "file a report" for the purpose of claiming insurance or compensation was cited by only 46% of victims (Sacco & Johnson, 1990). Research by Smith and Maness (1976) confirms that, contrary to popular belief, the reason most burglary victims contact the police is not to make good their insurance claims but rather "out of obligation", to catch the criminal", and "for personal protection" (also see Waller & Okihiro, 1978). Thus, the fact that the majority of victims we interviewed would *not* be less likely to contact the police again can be attributed to their sense of civic duty.

Victim Services and the Criminal Justice System

Within police-based victim services units across Canada, statistics show break and enter victims account for between one-third and one-half of all requests for assistance

(Solicitor General, 1986, Bull. #7). Unfortunately, the percentage of total calls made by burglary victims to the Winnipeg Police Department's Victim Services Unit could not be determined. If a call was made the initiative would most probably have come from the victim as the data we gathered shows that fewer than one in three break and enter victims are specifically told of the existence of the Unit by attending officer(s). Rather than wait for burglary victims to initiate contact, the Victim Services Unit has since 1990 made it a practice to regularly contact residential break and enter victims by telephone and offer their help. Their records indicate that they successfully contacted 83% during the year of the data collection for the current study. Seeking confirmation that this many victims were offered help, during the follow-up interview five months after the break-in, we asked victims if they had been contacted by the Winnipeg Police Department Victim Services Unit. Surprisingly, only 44% responded affirmatively. Slightly more than half the break and enter victims said that they were not contacted by Victim Services. This discrepancy between our statistics and those collected by the police could not be explained.

The quality of service provided by the police-run program was also lower than expected. Fewer than half the break and enter victims we spoke to gave the quality of the service they received a positive review. Approximately one-third said it was merely fair and as many as one in seven rated the service received as either "poor" or "terrible". Clearly, the quality of service provided to break and enter victims could be improved. Unlike other large Canadian police forces (e.g., Edmonton, Calgary) the Winnipeg Police Department assigns only one constable to the Victim Services Unit. The officer is assisted by volunteers, a volunteer coordinator and a social worker. Given the demands on the Unit, perhaps it is not surprising that break and enter victims receive relatively low priority. However, the results of the current study suggest that this situation needs to be addressed. To begin, the staff and volunteers should receive more extensive, accredited training in the counseling of crime victims.

The crime victim has long been perceived as the forgotten element of the criminal justice system. Victims often complain that they are ignored and even abused. The results of the current research confirm that, in Winnipeg at least, a substantial number of break and enter victims feel the criminal justice system does not seem to care about them. These findings are consistent with prior research conducted in Winnipeg. More than half of the respondents in the 1989 WAS who came in contact with the criminal justice system as a victim reported that the police and the courts were ineffective in meeting their needs. Only 20% gave them a positive evaluation.

Crime Prevention Measures

It has been suggested that in order to reduce feeling of personal vulnerability, many burglary victims increase home security (Conklin and Bittner, 1973). The victims we interviewed engaged in a variety of crime prevention behaviors.

Interestingly, the prevention strategies were undertaken even though fewer than half the victims were provided with information on the subject by the police officers who attended the scene. This finding has particular significance in light of research showing that willingness to take preventative action against burglary is significantly greater when police information is correctly provided to victims (Winkel, 1991b).

The specific crime prevention measures taken by victims following residential break and enter have been well researched. The results of the current study are similar to those of Maguire and Corbett (1987) in Britain and Waller and Okihiro (1978) in Toronto in that "more care locking up" was the most common response taken following a break-in. "Spending more time at home" was another response frequently reported by the victims we interviewed. This crime prevention measure was also mentioned by a large percentage of burglary victims studied by Wirtz and Harrell (1987b) in Arizona as well as by victims studied in Britain by Maguire and Corbett (1987). Other than

these similarities, common crime prevention measures undertaken by break and enter victims appear to vary across studies.

Neighbourhood Watch

As reported in Table 12, less than 5% of the victims we interviewed decided to become a member of Neighbourhood Watch following the break and enter into their home. Fewer than one in five were members before the burglary. Given the demonstrated success of Neighbourhood Watch programs in reducing localized crime, including break and enter (Roy, 1985), and the favourable publicity these programs have received in Winnipeg, it was surprising that more victims did not join after the break-in. To assess whether the respondents considered the *concept* of a Neighbourhood Watch program worthwhile, we asked the question "Do you think that the idea of neighbours looking after each other's homes needs to be organized, or should people be left to make their own arrangements?" The majority (53%) of respondents thought it needed to be organized, 41% felt people should be left to make their own arrangements, and 6% either did not have an opinion or refused to answer the question. In fact, many said they already looked after their neighbours' homes. Almost fifty percent said they "always" ask their neighbours to keep an eye on their house when it is going to be empty for more than a couple of days. An additional 18% said they ask their neighbours to watch their residence "some of the time". Nor does it appear that the lack of participation in Neighbourhood Watch is a result of people being physically unable to observe their neighbours. Two-thirds of the victims reported that it was either "very easy" or "fairly easy" for their neighbours to keep a watch on their house when no one is home. Only 10% said it would be "very difficult".

Part of the reason so few victims joined Neighbourhood Watch may be that they do not feel a strong sense of community with others in their neighbourhood. When asked the question "In general terms, do you feel a sense of community with other people in

your neighbourhood?" almost 40% of the respondents replied with either "not at all" or "a little bit". Of note, however, is that more than half of the victims said that it was either "very important" or "quite important" for them to feel a sense of community with others in their neighbourhood. In short, the desire to be part of the neighbourhood was, therefore, present but the feeling of belonging was lacking. It is also possible that more people, especially crime victims, would join Neighbourhood Watch if they were more aware of its effectiveness and existence in their area of the city. Less than one in five respondents mentioned Neighbourhood Watch when they were asked what they thought the police should do to prevent more residential break and enters from occurring in Winnipeg.

The Victimization Experience

A major objective of the research was to assess the psychological impact of residential break and enter on victims. Although the probability per year of becoming a burglary victim in Canada are approximately one in ten (Solicitor General, 1986, Bull. #7), a literature search revealed that comparatively little research has been conducted on the emotional consequences of this crime.

Several researchers (e.g., Bard & Sangrey, 1986; Bourque et al., 1978; Hough, 1984; Maguire, 1980; Maguire & Corbett, 1987; Waller & Okihiro, 1978, Wirtz & Harrell, 1987c) reported that many residential burglary victims and their families subsequently suffer heightened problems of fear, anger, deceit, nausea, shock, insomnia, and guilt. Some data suggested one in twenty break and enter victims experience significant post-traumatic stress disorder (PTSD) (see Waller, 1989), while others concluded that over one-quarter had ever developed or were currently experiencing the disorder (Kilpatrick et al., 1987). For example, in their study of 43 burglary victims selected from police files in New York, Texas and Alabama, Bourque

et al. (1978) found more than 70% experienced crying, shaking, and fear. An additional 20% recorded physical upset and memory loss, and 5% reported a full range of emotional and psycho-social difficulties as well as long-term residual effects indicative of PTSD. Maguire (1980) interviewed 322 victims of burglary living in England and found at least twenty (6%) suffered acute distress immediately following the crime which included severe shock, trembling, panic, and uncontrolled weeping. A further 19% were assessed as having experienced "considerable impact". They reported feelings of personal violation, shock, nausea, and vulnerability. Maguire concluded there is little doubt that a "burglary is a significant event in the lives of a considerable proportion of victims" (p. 269). Although sparse, prior research indicates that even months after the event, many burglary victims continue to suffer effects, heightened suspiciousness, general disillusionment with humanity, and a variety of emotional problems (e.g., Hough, 1984, Kilpatrick et al., 1987).

The results of the current research corroborate and advance these findings. The data concur that the consequences of residential break and enter are traumatic for a significant number of victims. As a group, the victims we spoke to reported elevated psychological distress on all of the appropriate standardized tests administered to them shortly after the break-in. For a significant minority, much of the distress persisted months after the break and enter. In addition, the levels of distress experienced by the victims we interviewed were approaching those reported by researchers studying the outcomes of victims of other crimes (e.g., Davis, 1987; Mullen et al., 1988; Resick, 1987a; Rothbaum et al., 1992; Wirtz and Harrell, 1987b).

The fear and anxiety experienced by the break and enter victims shortly after the offense were extremely high. Their average short-term anxiety scores on the State-Anxiety Inventory placed them at or above the 90th percentile in the general population. According to the scale's authors, this level is roughly equivalent to the degree of anxiety experienced by hospitalized neuropsychiatric patients suffering from

anxiety reactions (Spielberger et al., 1983). By comparison, Rothbaum et al. (1992) administered the State-Anxiety Inventory to a sample of rape victim within two weeks of the offense and found that their mean STAI scores were only slightly higher than the burglary victims we interviewed shortly after the break-in. Although the victims in our study were undoubtedly experiencing elevated short-term anxiety, other studies have reported even higher burglary victim scores on the STAI. Wirtz and Harrell (1987b) compared the anxiety scores of five crime types; rape, domestic assault, nondomestic assault, robbery, and burglary victims. At one month post-crime all the victims, regardless of type, were displaying anxiety levels higher than the victims in the current study.

Five months after the break-in victims' anxiety scores had reduced significantly and returned to comparatively normal levels. However, their transitory feelings of fear or worry were still elevated above their more stable, pre-victimization (i.e., trait) anxiety scores. Compared to the STAI scores obtained by Wirtz and Harrell (1987b) six months post-crime, the victims in the current study displayed similar levels of long-term anxiety.

The Impact of Event Scale aided in the assessment of the number of burglary victims experiencing the central features of post-traumatic stress disorder. The cutoff scores used were those suggested by the authors of the scale to enable the classification of victims into groups having mild, moderate and severe symptomology (Horowitz et al., 1979). It was determined that 28% of the victims were displaying severe PTSD symptoms within 14 days of the break and enter. At five months post-crime scores on the Impact of Event Scale had reduced significantly. However, 15% of the victims still fell into the severe range. To place these scores into perspective, Resick (1987a) studied the reactions of female rape and male and female robbery victims selected from police records in the southern United States and reported that at one month post-crime, 66% of rape victims scored in the severe range of PTSD symptomology on the Impact

of Event Scale, compared to 34% of female robbery victims, and 17% of male robbery victims. At six months post-crime, 35% of the rape victims and approximately 5% of both the male and female robbery victims remained in the severe range. Thus, compared to the Resick sample of female burglary victims, a roughly equivalent percentage break and enter victims reported severe PTSD symptoms soon after the crime. Five months later, approximately three times as many break and enter victims than robbery victims were still experiencing serious problems indicative of PTSD. Compared to the rape victims studied by Resick, however, the break and enter victims in the current study were displaying less severe short and long-term symptomology.

The break and enter victims' Avoidance and Intrusion subscale scores on the Impact of Event Scale were similar to those obtained by Davis (1987) in a study of a sample composed of 39% burglary victims, 34% robbery victims, 24% assault victims, and 2% rape victims. Three months after the offense, the average Avoidance subscale score measured by Davis was 1.97. The average Intrusion subscale score was 1.80. Included in these numbers were the scores of many victims (73%) who had received crisis counseling or other forms of assistance after they were victimized. Recall that the break and enter victims we spoke to within two weeks of the burglary obtained an average Avoidance score of 2.02, which decreased significantly to 1.81 five months after the offense. Intrusion subscale scores were 2.47 two weeks after the offense and 2.12 five months later. Furthermore, only 5% of the victims we spoke to reported that they had received some form of professional help following the break and enter. Higher Impact of Events Scale subscores of Intrusion and Avoidance have been found for battered women in shelters (Kemp et al., 1991), although lower scores have been reported for community and University samples of women with a history of victimization experiences (Murphy et al., 1988, Roth et al., 1990).

In terms of general mental health soon after the break-in, many victims again had elevated scores on the General Health Questionnaire that were symptomatic of severe

problems. Using the GHQ scoring method and the appropriate cutting score 1/2 for the 12-items scale (Goldberg, 1972), it was determined that 52% percent of the break and enter victims were exhibiting symptoms indicative of a current diagnosable psychological disorder within two weeks of the burglary. Moreover, although their scores had decreased significantly five months after the burglary, 31% were still exhibiting similar symptomology. In contrast, Maguire & Corbett (1987) administered the 60-item version of the GHQ to a sample of victims of burglary and assault/robbery in England and detected that, among the break and enter victims, 16% of the males and 45% of the females were exhibiting a possible psychiatric disturbance three to six weeks after the offense. This compared to 18% of the male and 48% of the female victims of robbery/assault. A random community survey of Manchester conducted by Goldberg (1978), also reported by Maguire and Corbett (1987), placed the probable percentage in the population with a psychological disturbance at 11% for males and 23% for females. Thus, the burglary victims we studied were much more likely to be exhibiting psychological distress than the British break and enter victims.[1]

The percentage of burglary victims exhibiting severe distress on the GHQ were similar to those reported by Mullen et al. (1988). Mullen et al. (1988) determined that 55% of the women they interviewed in New Zealand who identified themselves as having experienced sexual abuse as adults were exhibiting symptoms diagnostic of a current disorder on the 28-item GHQ. Thirty-one percent of those sexually abused as children and 33% of their sample who were physically abused as adults were also identified as potential psychiatric cases. This compared to 20% in the general population. Unfortunately, the time that had elapsed since these offenses occurred to

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[21] Of course, the use of different versions of the GHQ and cut-off scores make comparisons of different studies difficult. More will be written about the limitations of the current study later.

assessment was not reported. The authors did report, however, higher GHQ scores among the women more recently abused.

Burglary victims' scores of the three abridged subscales of the Hopkins Symptom Checklist were also elevated. On the standardized tests measuring depression, somatization, obsessive-compulsiveness, soon after the break-in, many victims obtained scores symptomatic of serious problems. The Hopkins Symptom Checklist was not administered in its standard form, and thus comparisons between the means of available normative data are not made.

In addition to the standardized measures of psychological well-being, the break and enter victims were asked to describe in their own words how they felt immediately after discovering their homes were burglarized. The most frequent free-recall response was they felt angry or mad (52%), followed by fearful, scared or nervous (34%), violated (27%), surprised or shocked (27%), or tearful or upset (17%). Fourteen percent said they experienced difficulties with short-term memory loss after the offense and 6% reported feeling physically sick or nauseous. Only 3.4% said they were neither upset nor bothered by the break-in into their home. The victims who participated in the current research articulated similar emotional reactions as those studied in Britain by Maguire and Corbett (1987). These researchers also posed a free-recall question to break and enter victims asking them to describe their first reaction to the event and found that shock, panic, and confusion together was mentioned by slightly more than one-third of the victims, and anger and general "upset" were mentioned by a third. In addition, fear or nervousness was the reaction of almost one-quarter of the burglary victims they interviewed and one in six said they felt surprised or felt physically sick. Other researchers who have asked break and enter victims to freely recall their immediate reactions have also reported similar reactions to those discussed here (e.g., Maguire, 1980; Waller & Okihiro, 1978).

Very little data are available on the free-recall, long-term impact of break and enter. Maguire (1980) reported that 65% of the burglary victims he studied in England indicated that four to ten weeks later the incident was still having some effect on their lives. The most common persisting effects were a general feeling of unease or insecurity and a tendency to keep thinking about the burglary. Five months after the break and enter, 44% (N = 221) of the victims we interviewed said they were still not over the effects of the crime. Without being prompted with response options, 26% of these victims indicated they remained hypervigilant and extremely security conscious, 24% reported that they were still afraid and generally more nervous than they were before the break-in, 21% reported feeling helpless and vulnerable, and 18% were afraid to stay in their home alone, enter the house by themselves, go out at night, or be alone. Sixteen percent indicated they felt generalized paranoia or suspiciousness about others and 8% said that after five months they were still unable to get the event "out of their mind". Of the 283 victims who reported they had returned to "normal" (i.e., how they were before the break-in), roughly one-quarter (22%) said it took them between two and four months to recover.

Another indication of the seriousness of residential break and enter is the finding that approximately nine of every ten persons we interviewed felt that psychological counseling should be made available to them as victims of residential break and enter. This number is considerably larger than has been reported elsewhere. Results of the Canadian Urban Victimization Survey were that only 30% of the break and enter victims interviewed indicated that emotional or psychological counseling should be available to others like them (Solicitor General, 1986, Bull. #7). The percentage of break and enter victims who expressed this opinion was lower than the proportion of victims of violent crimes (49%), but higher than the victims of other property offenses such as theft (14%). The fact that the current study was a survey of reported crime only may, in part, account for the larger percent of break and enter victims suggesting

that counseling should be made available to them. Recall from an earlier discussion that the perception the offense was "too minor" is one of the most frequent reasons why break and enters are not reported to the authorities.

As a group, break and enter victims have traditionally displayed high levels of fear of crime. National statistics show that 25% percent describe their neighbourhoods as areas of "high" crime (Solicitor General, 1986, Bull. #7). Compared to the national average, a greater proportion (34%) of break and enter victims in Winnipeg rated the crime in their neighbourhood as "high". When asked to compare their neighbourhood with others in Winnipeg, over one-quarter (27%) of the respondents answered that they perceive their neighbourhood as having more crime. Nationally, 23% of break and enter victims perceive their neighbourhood crime as higher than other areas (Sacco & Johnson, 1990). Only 6% of non-victims describe their neighbourhoods in the same way. Compared to other crime victims, national statistics show a greater percentage of recent break and enter victims perceive local crime as increasing and report feeling unsafe walking alone in their neighbourhood after dark (Sacco & Johnson, 1990). Thirty percent of the victims we interviewed expressed "a lot" of fear about becoming a victim and another 30% said they were "somewhat" fearful. Less than 10% said that they did not fear becoming a crime victim in their neighbourhood.

Thus, in sum, the cumulative evidence is that having one's residence broken into seems to produce quite severe psychological effects in some victims. These adverse reactions can persist months after the offense. Furthermore, break and enter victims experience many of the same reactions as victims of other crimes. Burglary victims' reactions are not only qualitatively similar to those experienced by other crime victims. Compared to other victims (robbery and personal assault victims, in particular), the level or degree of psychological distress experienced by residential break and enter victims is also similar. To understand why this event potentially results in so much distress, it has been suggested that one should perceive residential break and enter as a

violation of what is usually perceived as one of the most intimate places - the home (Meredith, 1984). One's home, can be regarded as an extension one's self. On the significance of the violation experienced by burglary victims Bard and Sangrey (1986) wrote: "Most people feel their homes to be places of refuge and safety, shelters from the dangerous outside. We breathe easier behind our own familiar doors. And our homes are our nests, filled with the people and the things we love. The burglar intrudes on this security and privacy. Burglars quite literally threaten us where we live." (p. 20). Thus, even though residential break and enter victims usually escape direct personal violence and may receive insurance compensation for material losses, we should not be surprised when there is considerable psychological impact following this violation. In gross numbers, burglary in Canada accounts for nearly as many seriously traumatized victims as sexual assault (Waller, 1989). Residential break and enter may seem minor when compared to more direct and violent assaults, but the data presented here suggest it is a very real personal concern for a significant portion of the population.

Evaluation of the Model

The primary objective of this research was to determine the ability of the variables previously identified in the victimology literature to predict the psychological reactions of crime victims. The task involved ascertaining which variables in the working model (Figure 1) were associated with distress reactions following residential break and enter and determining strength of their predictiveness. Previous research tended to focus on limited aspects of the victimization experience and, hence, not take into account the full range of factors associated with events that potentially influence post-crime psychological reactions.

Overall, the results of the current study support the utilization of the major components in the working model. Pre-victimization variables, in particular, those pertaining to certain features of the victims' physical and mental health, were most strongly related to both short and long-term post-crime distress. Post-victimization factors were also predictive of reactions, however, not as strongly as pre-victimization variables. Among the post-victimization factors, social withdrawal was a particularly strong predictor of both short and long-term negative psychological reactions. Finally, characteristics related to the crime itself proved to be significant, although less so than the pre-victimization or post-victimization variables. Among the crime characteristics, the lack of insurance coverage and the sentimental value of the stolen property were important predictors of short-term distress. Long-term distress was most strongly related with the victim being home during the commission of the break and enter.

Short-term Outcomes

The results revealed that the proposed working model, operationalized into 57 variables, was capable of predicting 64% of the variability in victim scores on the standardized measures of distress within two weeks of the break and enter. However, the "best" linear model consisted of 20 variables and predicted only slightly less variance in short-term outcomes (61%). As a group, the pre-victimization factors proved to be the best predictors of short-term post-crime psychological well-being, in total, accounting for 57% of the variance in scores. Indeed, pre-victimization variables constituted the best four-variable model. Pre-crime depression, trait anxiety, perceived stress in the victims' lives and their gender, explained almost half the model's variance (48%). Moreover, pre-crime depression uniquely accounted for more than one-quarter of the overall variance. In comparison, as a group, the post-victimization factors were able to predict less than one-quarter of the variability in victim distress scores,

followed by the characteristics associated with the break and enter which possessed the least predictive ability.

Long-term Outcomes

The long-term working model, consisting of 68 variables, predicted 70% of the variability in victim distress scores five months after the break and enter. The best 12-variable linear model predicted 66% of the variance in scores. As was the case with the short-term model, pre-victimization factors proved to be the best predictors of outcomes. Combined, they accounted for 65% of the variance in long-term distress scores. Trait anxiety, a pre-crime measure of mental health, alone, accounted for 58% of the variance. Post-victimization factors predicted approximately one-quarter of the variance in long-term distress scores, while characteristics associated with the offense possessed the least predictive ability. The best 4-variable model consisted of pre-crime trait anxiety and somatization, post-crime social withdrawal, and installing bars on windows. These four variables explained 61% of the variability in victim distress five months, on average, after the break and enter.

Pre-Victimization Factors

Within the domain of pre-victimization factors, as expected, every victim demographic, with the exception of age, was found to be associated with post-crime distress reactions. The data reported here corroborate the empirical evidence suggesting that a relationship exists between the effects of criminal victimization and the victim's gender as well as their socioeconomic status (S.E.S.) as measured by employment status, educational achievement, and household income.

As hypothesized, female gender was significantly associated with both short and long-term psychological distress following the break and enter. Indeed, gender emerged as a component of the best 4-factor model of short-term reactions to

victimization. Bourque et al. (1978), Hough (1985), Maguire (1980), and Waller and Okihiro (1978) have reported similar results with other samples of burglary victims. The current data also show that as the post-victimization time increased the association between gender and psychological distress declined. Although females appeared to experience more severe short and long-term reactions to the break-in, the difference between genders diminished from the Initial Assessment to the Follow-up Interview. At five months post-burglary, not only did the intercorrelation between gender and distress decrease (from .30 to .17), but the amount of variance in TRAUMA scores accounted for uniquely by gender deceased by more than one-third, and gender was not selected as part of the final model by the stepwise multiple regression procedure. Evidence that gender differences in crime victim reactions wane with time has been previously reported by Cook et al. (1987), Resick (1987a, 1987b) and Shepherd et al. (1990).

All three indicators of S.E.S. were associated with post-crime reactions in the hypothesized direction. In line with the findings of others (e.g., Burnam et al., 1988; Frank & Stewart, 1984), victims with higher incomes, more education, and jobs appeared to suffer less short and long-term distress following the break and enter. Socioeconomic status accounted for 12% of the variance in short-term distress scores and 9% in long-term scores. However, educational achievement was the only S.E.S. indicator selected for inclusion in the final short-term model and none were selected as part of the long-term model. Contrary to the findings of researchers who have reported that low S.E.S. is more predictive of long-term outcomes than short-term reactions (Atkeson et al., 1982; Burgess & Holmstrom, 1978a; Cook et al., 1987), the current findings suggest that S.E.S. is more predictive of short-term reactions. The intercorrelations between all three S.E.S. indictors and psychological distress decreased over time and the amount of variance in TRAUMA accounted for by S.E.S. also declined.

Unexpectedly, victim age was unrelated to short-term psychological distress. Contrary to the hypothesis, the elderly did not suffer more severe psychological consequences soon after the break and enter. The finding that age is not related to post-crime reactions had been reported by others (e.g., Bourque et al., 1978; Kilpatrick et al., 1985; Skogan, 1987), although the weight of the evidence supported the existence of a relationship. Perhaps as Cook et al. (1978) suggest, chronology alone is less important than other factors associated with being an elderly member of society such as their relative economic impoverishment. Surprisingly, even though the intercorrelation of age with long-term distress was not significant and its unique ability to account for variability in long-term distress scores was also not significant, age did emerge as a significant component in the best 12-variable model of long-term psychological distress. Perhaps, as these data suggest, age is associated with post-crime distress, but only when considered along with other variables and when the concern is with long-term outcomes. Additional research is necessary, in order to unravel the complex relationship between a victim's age and their reaction to victimization.

Of the 18 pre-victimization psychosocial variables in the working model, only two, prior criminal activity engaged in by the victim and prior victimization, were not significantly associated with either short or long-term distress reactions following the break and enter.[1] Prior criminal activity and prior victimization were two of four variables used to measure the influence of prior life events on outcomes. The other two, recent family death and number of prior victimizations were both predictive of (and associated with) distress reactions, however, recent family death was significant in the opposite direction than was hypothesized. Thus, the suggestion made by Burgess

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[22] Setwise regression, however, selected prior victimization and prior criminal activity as components of the final 20-variable model predictive of short-term distress (see Table 33).

and Holmstrom (1978a; 1978b) and supported by others (e.g, Bard & Sangrey, 1986; Sales et al., 1984; Silver & Wortman, 1980) that the death of a relative may bolster a persons ability to cope with subsequent stressors like victimization was not confirmed. In fact, the recent death of a relative was associated with worse subsequent coping, both short and long-term. Interestingly, having a prior victimization experience was unrelated to psychological distress following the break and enter, whereas the number of prior victimizations was associated with negative outcomes. The results of the standard regression analyses confirmed the importance of the combined impact of prior victimization experiences relative to having been previously victimized or not. The bulk of prior research suggested that a victim's prior experience with crime compounds the negative effects of subsequent victimization (e.g., Ellis et al., 1982; Ruch et al., 1991; Santiago et al., 1985). The current study indicates that a record of prior victimization has less impact on the psychological consequences of crime than the term of that record. In short, the cumulative effects of prior victimization experiences appear more significant.

The amount of perceived stress victims' indicated existed in their lives prior to the break and enter proved to be an important predictor of post-crime psychological distress, particularly short-term outcomes. It emerged as a component in the best 4-factor model predictive of short-term psychological distress and a better predictor of both short and long-term outcomes than prior life events. The correlation between perceived stress and post-crime distress soon after the burglary and months later were also strong. The Perceived Stress Scale developed by Cohen et al. (1983) proved to be a useful and reliable tool in victimization research. The results of this study support the position that it is most useful to evaluate pre-victimization stress produced by life events by appraising their perceived threat in terms of personal coping ability (Lazarus, 1966).

The present study has corroborated the research of others showing an association between the effects of victimization and pre-crime victim physical and mental health (e.g., Atkeson et al., 1982; Burgess & Holmstrom, 1978a; Ruch & Chandler, 1983). Poor pre-victimization physical and mental health were related to both short and long-term distress reactions following the residential break and enter. Indeed, of all the predictor variables examined, overall, pre-burglary levels of psychological and physical functioning were the most predictive of later functioning. Short-term outcomes were most strongly correlated with victims' trait anxiety and depression and both were selected as components of the best 4-factor model predictive of reactions to victimization. As Silver and Wortman (1980) have previously suggested, it appears that for many people, chronic health, and psychological problems strain their coping abilities, deplete reserve energies and ultimately leave them more vulnerable to the adverse effects of negative life events such as criminal victimization.

Victims who had an established social support network prior to the break and enter were less likely to experience either short or long-term psychological distress reactions. Thus, to victims, the knowledge that they have access to a personal support network, independent of whether or not it is utilized, appears to be associated with an ability to better endure the impact of a negative, stressful event like residential burglary. These results corroborate other data showing a relation between pre-crime support and the long-term recovery from rape (Sales et al., 1984).

Community psychologists have shown that people who possess strong neighbourhood bonds are less afraid of crime (e.g., Cohn, 1978; Riger et al., 1981). The current data suggest that strong community ties among residential break and enter victims, as indicated by owning versus renting ones residence, living in the same residence for years, and possessing a sense of community, are also inversely related with short-term post-crime psychological distress. Although these correlational effects did not generalize to long-term outcomes, the sense of community variables, combined,

predicted a significant proportion of the variance among both short and long-term psychological distress after the burglary. The variable "importance of sense of community" was also significantly related to outcomes, but in the opposite direction than expected such that valuing community bonds was associated with more post-crime distress. This variable was also selected for inclusion in the final 20-variable model predictive of long-term reactions. One can speculate that this variable may have tapped victims' unfulfilled desires to have stronger community bonds. They valued community bonds very highly, were dissatisfied with the current ties they had with their neighbours, and consequently this led to feeling of alienation associated with higher post-crime psychological distress. Further research is necessary to clarify this relationship.

According to the social psychological theory of Janoff-Bulman and others, negative reactions to crime can be considered a reaction to the shattering of commonly held assumptions and beliefs we all hold about ourselves and the world we live in (Janoff-Bulman, 1985; Janoff-Bulman & Frieze, 1983; Janoff-Bulman et al., 1983). Unlike personal perceptions of invulnerability and positive self-perceptions which change following criminal victimization, personal belief in a just world was believed to be a more stable cognition. Victims, it was hypothesized, in order to maintain the world view that people get what they deserve, would self-derogate. The results, contrary to expectation, showed belief in a just world was inversely correlated with both short and long-term post-crime distress. The negative impact of criminal victimization was associated with the conviction that we don't live in an orderly, fair, and just society. In addition, the belief that bad things can happen to good people was predictive of psychological distress soon after the burglary as well as months later. The BJW scale was administered five months, on average, after the burglary in order to minimize the possibility that it was reflecting a short-lived change in beliefs. Lerner (1971) postulated that just world beliefs are enduring, not subject to short-term fluctuations.

The scale, it was hoped, was assessing victims' stable beliefs about the way the world operates. It appears as though this was not the case. As with other pre-crime cognitions, just world beliefs are possibly subject to change following a sudden, distressful event like criminal victimization. Thus, the finding that BJW scores and post-crime distress are inversely related may reflect a change in victims' convictions about the existence of a just society that came about as a result of the break and enter. A paired pre-crime and post-crime assessment of just world beliefs would help to resolve this issue.

Characteristics of the Criminal Offense

Overall, compared with pre-victimization and post-victimization factors, characteristics of the break and enter offense were weakly associated with post-crime outcomes. With regard to the "severity of the offense", previous research suggested a positive relationship would exist between the *overall* degree of violence associated with a criminal offense and the severity of later distress reactions (e.g., Cook et al., 1987; Ellis et al., 1981; Kilpatrick et al., 1989; Norris & Feldman-Summers, 1981; Sales et al., 1984). Unfortunately, due to a lack of response variability, only one of the six variables intended to measure "degree of violence" (i.e., "victim home during offense") was retained in the statistical analyses. Results were that this variable was significantly correlated with both short and long-term outcomes. The victim's presence in the residence during the break and enter also accounted for a significant proportion of the variance in psychological distress scores. In addition, it was selected by stepwise regression as a component of the final 12-variable model predictive of long-term outcomes. These findings suggest the importance of retaining "degree of violence" in the model of factors predictive of crime victim outcomes. By definition, given the non-violent nature of residential break and enter, the relevance of "degree of violence" variables such as victim confrontation with the offender, weapon use, injury, the threat

of personal violence and violence to others may be lost. Ultimately they may prove particularly germane when crimes perpetrated against persons such as sexual assault are considered.

Specifically relevant to a discussion of the "severity" of residential break and enter is the "significance of loss" incurred by victims. Prior research showed, for example, that the impact of break and enter is particularly intense when burglars ransack victims' homes (Brown & Harris, 1989). We asked questions about the value of property that may have been stolen, its sentimental worth and psychological significance, the occurrence and value of any property damage and vandalism that happened, and insurance coverage and compensation. Overall, these variables seem to impact on short-term psychological reactions more so than on long-term reactions. The value of money stolen, the sentimental value of property stolen, the value of damaged property, and the lack of household insurance were all correlated with increased psychological distress shortly after the break-in. For the long-term, however, only the lack of household insurance and compensation from insurance were associated with negative outcomes.[1] As a group, the "significance of loss" variables predicted 10% of the variance in short-term victim distress scores, compared to 5% of the variance in long-term scores. Furthermore, four "significance of loss" variables were selected by stepwise regression procedures as comprising components of the final model predictive of short-term distress (see Table 33). None were selected as components of the final long-term model.

Another group of crime characteristic variables hypothesized to be associated with victim psychological reactions were those associated with the location of the incident.

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[23] Insurance compensation (or as referred to in Table 21 and Figures 7 and 10, "insurance payoff") was not included in the short-term working model because, a priori, it was judged unlikely that many, if any, insurance claims would be settled within two weeks of the offense.

Contrary to expectations, precautions that had been taken by victims to ensure their residences were "safe" before the break-in, such as owning a guard dog and belonging to a neighbourhood watch program, were unrelated to post-crime negative reactions. Indeed, victim perceptions that they resided in a low crime rate "safe" environment were significantly correlated with low, not high, subsequent distress scores. Scheppele and Bart's (1983) contention that individuals who are victimized in situations where they thought they would be safe are more likely to be adversely affected was, therefore, not substantiated. Moreover, the perception of personal control over the ability to avoid future victimization, an important component of Scheppele and Bart's theory, was also not associated with psychological reactions.

Related to the concept of "safe" versus "unsafe" environments is the notion that victims suffer more adverse consequences when the offender is known to the victim prior to the event than when the offender is a complete stranger. Results of the current study corroborated those of Maguire and Corbett (1987) and Smale and Spickenheuer (1979) who also reported that victims who knew the people who broke into their residences suffered more than those who were unaware of their identity. However, the current findings were that the association was not strong and it diminished with time.

Post-Victimization Factors

Lazarus and Launier (1978), among others (e.g., Janoff-Bulman & Frieze, 1983; Weiner, 1985), have presented compelling postulates about the function cognitions play in the coping process following the advent of negative life events such as criminal victimization. Results of the current study, however, question the importance of victims' cognitions to the coping process. In sum, little evidence was produced to suggest that post-crime psychological well-being is strongly related to post-crime beliefs.

Supporting Perloff's (1983) original hypothesis, the findings of the current research were that victim perceptions of "unique vulnerability" to future victimization are significantly related to distress reactions. However, this applied only to long-term reactions. Short-term perceptions were unrelated to outcomes. In addition, contrary to the suggestions of Perloff, perceptions of "universal vulnerability" did not provide victims with an "ego-defense function" (p. 56) to shield them from adverse effects. Universal vulnerability was positively, not negatively, correlated with both short and long-term distress scores. These findings suggest that feeling vulnerable to future victimization, regardless of whether the perception is one of unique or universal vulnerability, is negative. Of the cognition variables, universal vulnerability accounted for the largest percentage of variability in both short and long-term victim distress scores. In addition, it emerged as the only cognition variable selected by stepwise regression as a component of both final models.

With regard to the causal attributions victims made for the break and enter, only locus of control proved to be significantly associated with post-crime outcomes. Specifically, attributing the cause of the break and enter to internal factors, was related with short-term, but not long-term distress reactions. In addition, the locus of control dimension predicted 2% of the variance in short-term distress scores, but only 1% of the variance in long-term distress scores. Although the other attribution dimensions, stability and controllability, were not significantly associated with outcomes, given the low internal consistency of these subscale (see Table 16), judgment is reserved about their overall contribution to the model. The Causal Dimension Scale was modified for administration over the telephone in the current study and its reliability may have been compromised in the process.

Prior research demonstrated that behavioral reactions following criminal victimization aimed at changing the environmental conditions that may have led up to the offense can combat feelings of helplessness and improve the victim's self image

(e.g., Burgess & Holmstrom, 1979b; Janoff-Bulman & Frieze, 1983). Behavioral responses that are "avoidance-oriented", however, were shown to be associated with psychological symptomology (e.g., Cohn, 1978; Wirtz & Harrell, 1987b). The results of the current study show that the behavioral crime prevention actions undertaken by the residential break and enter victims were either unrelated to later psychological well-being, or the measures were associated with increased post-crime distress. Contrary to expectations, taking more care to lock the door when leaving, installing bars on the windows, and taking care leaving the lights on when leaving were significantly correlated with short and long-term negative, not positive, psychological outcomes. As predicted, however, social withdrawal, an avoidance-oriented behavior, was directly related to later short and long-term psychological distress. Indeed, social withdrawal from others, measured by asking victims if they spend more time at home, accounted for the largest proportion of variance in post-crime distress scores among the Level 1 post-victimization variables (see Figures 8 and 11). As a group, the "adaptive and maladaptive change" variables predicted 14% of the variance in short-term distress scores and 16% of the variance in long-term scores.

It seems unlikely that engaging in behavioral responses aimed at crime prevention following victimization caused the psychological distress. Rather, these findings more probably reflect the fact that victims who are suffering the most undertake crime prevention behaviors to alleviate their distress. Unfortunately these efforts proved unsuccessful as months later the relationships between behavior and distress did not diminish in strength. Perhaps the reason why undertaking crime preventative behavior did not boost self-esteem, as expected, is that the behaviors were unrelated to perceptions of personal control. Tyler (1980, 1981) postulated that the positive psychological effects of behavioral strategies were related to perceptions of personal control. By taking action to reduce the threat of crime, he suggested victims were, in effect, demonstrating some measure of control over their environment which would

reduce feelings of vulnerability, inequity, and helplessness. Additional analyses were conducted that showed, other than installing an alarm system (r (504) = .13, p < .01), crime preventative behaviors were not significantly correlated with perceptions of personal control. Earlier analyses showed perceptions of personal control were also unrelated to short and long-term post-crime psychological reactions (see Table 22).

As previously discussed, the existence of an established social support network prior to the break and enter was related to lower short and long-term psychological distress scores. However, post-crime "informal" support victims received from others was not correlated with long-term psychological outcomes. In addition, the provision of informal support was associated with elevated short-term distress scores. Perhaps as Bard and Sangrey (1986) and Coates et al. (1979) suggested might occur, the well-intentioned efforts on the part of the victims' friends, relatives, and co-workers unwittingly contributed to the victims' distress by being critical of their reactions, unaccepting of their emotions, over-pathologizing, or by making moral judgments. The victims reported that the support they most commonly received from others was conversational (i.e., someone talked to them about the break-in). A minority reported that they received some form of material assistance such as help cleaning-up or replacing broken or stolen property. Perhaps tangible support would have been more helpful.

The support victims obtained from law enforcement personnel receives special consideration because often the police are the first and only criminal justice officials with whom the victim will have contact. Bard & Sangrey (1986) argue that early intervention is crucial to prevent the onset of psychological disturbances. The results of the current study were that victim dissatisfaction with police response time, lack of empathy and concern demonstrated by the police, victim dissatisfaction with police treatment, and the non-provision of case progress information were significantly correlated with short-term post-crime distress reactions. Long-term reactions were

correlated with all of these variables except victim evaluations of police response time. Overall victim dissatisfaction with how the police managed the case, evaluated months after the offense, was also related with psychological distress. This variable was the only police intervention variable selected as part of the final models by stepwise regression. Although police response time and provision of crime prevention information were not associated with outcomes, these findings suggest that the attitudes and behaviors of law enforcement personnel are important in determining the extent of post-crime distress. Their actions impact not only on the short-term reactions following victimization but also influence outcomes months after the offense has occurred. These results generally support the earlier findings of Brown (1984) and Brown and Harris (1989).

With regard to the Victim Services support offered by the Winnipeg Police Department, no association was found between post-crime reactions and whether victims were informed of the Victim Services Unit by the police. Contact ultimately made by the Unit's personnel was also not related to subsequent long-term outcomes. In addition, the provision of information about Victim Services and contact with Victim Services failed to predict any of the variance in victim distress scores.

The possibility exists that some law enforcement officers, when confronted by victims in need, will rely exclusively on internal Victim Assistance programs to provide support. There is evidence that suggests these programs are particularly effective for disadvantaged victims who are not as successful as others in finding help with their problems (Friedman et al., 1982; Mawby, 1988). Thus, Victim Assistance programs may help some crime victims cope with the effects of victimization. However, the results of this research raise the possibility that, in Winnipeg at least, the support provided by Victim Services may not be particularly effective for a majority of break and enter victims. In light of this evidence, the direct assistance provided by the police to crime victims becomes even more indispensable.

Finally, the results of the current study suggest that the negative effects of criminal victimization are cumulative. As discussed earlier, the number of prior victimization experiences victims had prior to the break and enter was associated with increased post-crime distress. We also found that re-victimization between the initial interview and the follow-up months later was correlated with psychological distress. Repeat victimization predicted 1% of the variance in long-term distress scores. This finding has special significance in light of Polvi, Looman, Humphries and Pease's (1991) research showing there is an elevated risk of repeat burglary for victims of break and enter up to six months after the offense.

Limitations and Directions for Future Research

In the course of this research project, a large body of literature has been reviewed and a sizable amount of data gathered and analyzed. The results appear to provide support for some of the hypotheses made and paint a picture of residential break and enter victimization and police response that is both complex and, at times, surprising. However, it is necessary to consider several limitations of the study, some of which can be addressed in future research.

First, the victims interviewed in this study had come to the attention of the police. They were not randomly selected from the general population. It has been well documented that many crime victims do not report to the police. The implications of this sampling procedure were addressed earlier, but it bears repeating that, although the problem of not reporting is not as great with residential break and enter as is the case with other crimes (e.g., sexual assault) and the selected sample of victims compares favourably with the demographic profile of Winnipeggers, the results should be considered in reference to the population of break and enter victims who report to the police.

Second, no control group was used in this study against which to compare the results gathered from the break and enter victims. Unquestionably, a comparison group of nonvictims or different crime victims would have been useful, perhaps imperative. However, given budgetary constraints, the expense of selecting a control group was prohibitive. In order to evaluate the relative predictiveness of the many variables in the working model over time, data had to be gathered from a large number of crime victims which was an expensive undertaking.[1] In the absense of a formal control group, the current findings were compared with those obtained from victims in prior victimization research. It is recognized that, because these studies have different methodologies, comparisons must be made with caution. Future research, money permitting, would greatly benefit from the inclusion of a control group of nonvictims as well as a comparison sample of victims of an criminal offense other than break and enter.

Third, this research is essentially exploratory and, therefore, the conclusions made regarding the predictors of post-crime trauma must be considered tentative. The model that was developed for this study had not previously been tested. The results show that its predictiveness is relatively good and because it was developed out of the larger victimization literature, it holds promise as a *general* model of factors relevant to victim trauma. At this time, however, it has only been tested with victims of residential break and enter. Additional research is necessary to test the generalizability of these findings with victims of robbery, assault, rape, etc..

In addition, although the model tested the predictiveness of more than 50 variables, the ones that entered into the multiple regression analyses were not inclusive. In other words, some variables were hypothesized as being important predictors of victim

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[24] A research grant for $17,000 was awarded by the provincial Victim's Assistance Committee, the Attorney General, and the Government of Manitoba to fund the study.

distress but for various reasons (e.g., missing data, unacceptable variability, poor interpretability) were not included in the data analyses. The implication of this limitation is that although one can have some confidence in the applicability of the tested model with the subject population, it may be possible to enter other variables into multiple regression analyses in future studies of different populations of crime victims and consequently obtain different results. To illustrate, weapon use was not tested because 99% of the break and enter victims we interviewed responded that to the best of their knowledge none was used (i.e., there was poor response variability). More variability would undoubtedly occur if the question was put to robbery victims. Ultimately the question of weapon use may prove to be predictive of psychological distress following robbery even though it did not enter into the model we tested.

Another limitation relates to the design of the study and consequently the nature of the statistical procedures employed to analyze the data. The research was retrospective and used correlation and regression analyses. While these statistics are appropriate for a retrospective study such as this, they do not necessarily provide evidence of causal relationships among variables. Causal modeling procedures such as EQS or LISREL may have provided some additional insights, but they are not sufficient to determine causality and are more appropriate when testing a well established theory. Ideally, a prospective study should be conducted assessing a very large group of individuals over time following them if they are victimized and after the crime. The victims could then be compared with individuals who were not victimized. Employing this design, the post-crime distress experienced by victims could be assessed controlling for pre-crime morbidity and one could make statements about causal relationships.

Even with these limitations, it could be said that this study has helped to advance the understanding of the plight of crime victims and how they might be better assisted. Hopefully, the information contained in this thesis will prove useful to service providers who come into direct contact with victims of residential break and enter.

Specifically, the data suggest that the psychological consequences of residential break and enter can be severe for a significant number of victims and the effects may persist for months following the offense. Indeed, burglary victim reactions are qualitatively and quantitatively similar to the reactions of victims of other crimes traditionally considered more serious.

In addition, general support for the use of a working model that arose out of victimology literature and was designed to predict the psychological consequences of criminal victimization has been found. Pre-victimization factors, particularly a burglary victim's physical and mental health, account for the largest proportion of variance in both short and long-term psychological distress scores. People who are predisposed to illness, perhaps depression, stress, or anxiety and have their homes broken into suffer most. Indeed, pre-crime depression is the best single predictor of short-term negative reactions within two weeks of the offense and long-term distress reactions are best predicted by pre-crime victim trait anxiety. Post-victimization factors, most noteably social withdrawal, are also predictive of reactions, however, not as strongly as pre-victimization variables. Finally, characteristics associated with the break-in itself, such as the severity of the crime and the location of the incident, are least predictive of subsequent distress reactions.

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APPENDIX A

Initial Interview Contact Letter

THIS LETTER WAS TYPED ON OFFICIAL WINNIPEG POLICE DEPARTMENT LETTERHEAD

Date:

Mr./Ms. John Doe
100 Anywhere Street
Winnipeg, Manitoba
Postal Code

Dear Mr./Ms. Doe:

Recently you were a victim of a break-in. The Winnipeg Police Victim Services Unit was established to help victims like yourself cope with the effects of crime. A study of 1,000 households throughout Winnipeg is being conducted so that we can examine existing services to victims of crime and we are asking for your assistance with the project

The project is supervised by Mr. Trevor Markesteyn, from the University of Manitoba. Your participation in this study will help to improve our understanding of break and enter, its prevention, as well as its initial and long-term impact on the public.

Any information provided by you is entirely voluntary and will be kept strictly confidential. All individual responses will remain anonymous. You are under no obligation to participate in this study and if you do participate, you may choose not to answer any individual question. However, we emphasize that the information you can provide will be valuable to Victim Service Agencies so that they can provide the best help possible to victims of all crime. If you wish, when the study is completed, a summary of the study's results will be sent to you.

Within the next few days you will be contacted by telephone and asked a number of questions. The interview should take approximately 30 minutes. If the call comes at an inconvenient time, just tell the interviewer and they will be glad to call back later.

Should you have any further questions about this study feel free to contact Trevor Markesteyn at 474-9528 or Constable Richard Jones at Victim Services, 986-6350.

Yours truly

Sergeant Paul Johnson,
Victim Services Unit,
Community Relations Division

PJ/ce

APPENDIX B

Initial Assessment Schedule

SUBJECT # ___ ___ ___ ___

CITY OF WINNIPEG CRIME SURVEY:
A STUDY OF VICTIMS OF RESIDENTIAL BREAKING AND ENTERING

A JOINT RESEARCH PROJECT OF THE
UNIVERSITY OF MANITOBA AND THE PROVINCE OF MANITOBA

-- INITIAL ASSESSMENT SCHEDULE --

Principal Investigator: Trevor Markesteyn M.A.
Department of Psychology

Research Advisor: Stephen Brickey Ph.D.
Department of Sociology

NAME: _____
(LAST) (FIRST)

STREET: _____

POSTAL CODE: _____

CRIME INCIDENT NUMBER: ___ ___ - ___ - ___ ___ ___ ___ ___ ___

GENDER: 1 ..... Male 2 ..... Female 8 ..... Unknown

DATE OF OFFENSE: A) calendar day: ___ ___ (01-31, Enter latest day if unknown)

B) month: ___ ___ (01-12, Enter latest month if unknown)

C) day of the week:
Monday 1
Tuesday 2
Wednesday 3
Thursday 4
Friday 5
Saturday 6
Sunday 7

APPROXIMATE TIME OF DAY OFFENSE OCCURRED:
Midnight - 8 AM 1
8 AM - 4 PM 2
4 PM - Midnight 3
Unknown 8
Unable to categorize..... 9

PHONE NUMBER: ___ ___ ___ - ___ ___ ___ ___ (No phone # available: code 0's)

OFFICE USE ONLY

NEIGHBOURHOOD CODE (W.A.S.): ___ ___ ___

No. OF DAYS FROM DATE OF OFFENSE TO INTERVIEW: ___ ___ (99-Unable to Complete)

Computer Codes:: Var / Card / Col
002 / 1 / 5-13
003 / 1 / 14
004 / 1 / 15-16
005 / 1 / 17-18
006 / 1 / 19
007 / 1 / 20
008 / 1 / 21-27
009 / 1 / 28-30
010 / 1 / 31-32

RECORD OF CALLS

VAR011 VAR012 VAR013 VAR014

Call No.:	Date: (day/mon)	Interviewer: (use codes)	Time: (24-hr.)	Result: (use codes)	Comments and Appointments
0		6		9	
1					
2					
3					
4					
5					
6					
7					
8					

FINAL RESULT CODES:

0..... phone not in service
1..... unable to interview within 14 days of offense
2..... no answer
3..... communication problems
4..... no phone
5..... household refusal
6..... respondent refusal
7.....interview completed
8.....partial interview completed
9.....does not meet inclusion criteria

INTRODUCTION

Hello. Is this the _____ residence? May I speak with _____ ?
(LAST NAME) (FIRST AND LAST NAME)

IF NO. The number I was calling is _____ and it was for _____ .
(FIRST AND LAST NAME)

IF WRONG NUMBER, TERMINATE WITH; I am sorry to have bothered you.

I'm _____ from the University of Manitoba. We are conducting a study of recent victims of Breaking and Entering. A letter was recently sent to you by the Winnipeg Police Department explaining the study. Did you receive it?

IF YES: PROCEED TO NEXT SECTION

IF NO: I'm sorry yours didn't reach you. It was a brief letter sent so people would know we would be calling them. If you prefer I can call back later in the week. You should have received the letter by then.

IF RESPONDENT WISHES TO RECEIVE LETTER BEFORE INTERVIEW, ARRANGE A CONVENIENT TIME AND TERMINATE WITH ....

.... Thank you. I will speak with you again soon.

The questions I need to ask should take about 30 minutes. You don't have to answer any questions you feel are too personal and if you don't know an answer, that's O.K. also. Before starting I want to mention that I would be happy to answer any questions you might have about the study either now or later. Okay? (ANSWER ANY QUESTIONS)

First of all, I would like to ask you a few questions about your opinions on crime in general.

	Computer Codes: Var / Card / Col
Q1) Do you think your neighbourhood is in an area with a high amount of crime, an average amount of crime, or a low amount of crime? HIGH..... 1 AVERAGE..... 2 LOW..... 3 DON'T KNOW..... 8	015 / 1 / 40
Q2) How do you think your neighbourhood compares with the rest of Winnipeg in terms of the amount of crime? Would you say that your neighbourhood has .... much more crime..... 1 more crime..... 2 about the same amount of crime ..... 3 less crime..... 4 or, much less crime..... 5 DON'T KNOW?..... 8	016 / 1 / 41
Q3) In general terms, how much do you fear becoming a victim of crime in your neighbourhood? Would you say . . . . . . a lot..... 1 somewhat..... 2 a little..... 3 or, not at al..... 4 DON'T KNOW..... 8	017 / 1 / 42

The next questions are about the recent break and enter into your home.

Q4) How was entry gained into your home? (PROBE: Was the entry forced?)

DOOR -	BROKE LOCK, FORCED, SCREEN	1	
-	UNLOCKED	2	
-	PERP PUSHED WAY IN ONCE OPENED	3	
WINDOW -	BROKE, FORCED	4	018 / 1 / 43
-	UNLOCKED	5	
	HAD KEY	6	
OTHER (SPECIFY)	_____	7	
	DON'T KNOW	8	

Q5) Was anyone at home at the time of the incident?

YES -	(PROBE: Who was at home?)		
-	RESPONDENT	1	
-	OTHERS	2	
-	RESPONDENT & OTHERS	3	019 / 1 / 44
NO		4	Go to Q11
	DON'T KNOW	8	

Q6) Did you see or have any contact with the perpetrator(s) while the break-in was in progress?

	YES	1	
	NO	2	Go to Q11
	DON'T KNOW	8	Go to Q11
	N/A	9	

020 / 1 / 45

Q7) As far as you could tell, did the perpetrator(s) have a weapon such as a gun or knife or something he was using as a weapon, such as a rock or a bottle?

YES -	(PROBE: What type of weapon was it?)	
-	FIREARM	1
-	KNIFE	2
-	BAT	3
-	CROWBAR	4
-	OTHER (SPECIFY) _____	5
-	COMBINATION OF THE ABOVE	6
	NO	7
	DON'T KNOW	8
	N/A	9

021 / 1 / 46

Q8) An attack can be anything from being hit, slapped, grabbed, or knocked down to being shot or being beaten up. Were you or was anyone else attacked in any way during the incident?

YES -	(PROBE: Who was attacked?)		
-	RESPONDENT	1	Go to Q11
-	OTHERS	2	Go to Q10
-	RESPONDENT & OTHERS	3	Go to Q10
	NO	4	
	DON'T KNOW	8	
	N/A	9	

022 / 1 / 47

Q9) Did the perpetrator(s) threaten to harm you or anyone else in any way?

YES -	(PROBE: Who was threatened?)		
-	RESPONDENT	1	Go to Q11
-	OTHERS	2	
-	RESPONDENT & OTHERS	3	
	NO	4	Go to Q11
	DON'T KNOW	8	Go to Q11
	N/A	9	

023 / 1 / 48

Q10) Were any of these persons who were harmed or threatened members of your household?

YES	1	
NO	2	024 / 1 / 49
DON'T KNOW	8	
N/A	9	

Q11) Was anything stolen during the Break and Enter?

YES	1	
NO	2 Go to Q17	025 / 1 / 50
DON'T KNOW	8	

Q12) Was money stolen?

YES	1	
NO	2 Go to Q14	026 / 1 / 51
DON'T KNOW	8 Go to Q14	
N/A	9	

Q13) In total, approximately how much money was taken?

$ |__|__|__|__|__|		027 / 1 / 52-56
DON'T KNOW	88888	
N/A	99999	

Q14) What property was stolen? (PROBE: Anything else?)

. . . clothing?	YES	1	
	NO	2	028 / 1 / 57
	DON'T KNOW	8	
	N/A	9	
. . . jewellery?	YES	1	
	NO	2	029 / 1 / 58
	DON'T KNOW	8	
	N/A	9	
. . . liquor, booze?	YES	1	
	NO	2	030 / 1 / 59
	DON'T KNOW	8	
	N/A	9	
. . . electronic products?	YES	1	
(e.g., T.V., V.C.R., stereo)	NO	2	031 / 1 / 60
	DON'T KNOW	8	
	N/A	9	
. . . other household property?	YES	1	
(e.g., paintings, silverware)	NO	2	032 / 1 / 61
	DON'T KNOW	8	
	N/A	9	

Q15) What do you estimate was the total value of the property taken, not counting any cash?

$ |__|__|__|__|__|		033 / 1 / 62-66
DON'T KNOW	88888	
N/A	99999	
ONLY MONEY WAS STOLEN	00000	

Q16) Referring to the stolen property would you say it had no sentimental value, a little sentimental value, or a lot?

NONE..... 1
A LITTLE (SOME DID, SOME DIDN'T)..... 2 | 034 / 1 / 67
A LOT..... 3
DON'T KNOW..... 8
N/A..... 9

Q17) Apart from stolen property, was there any damage done to your house or its contents during incident, including any damage that may have been done by the burglar while getting in or out?

YES..... 1
NO..... 2 Go to Q21 | 035 / 1 / 68
DON'T KNOW..... 8 Go to Q21

Q18) What was damaged? (PROBE: Anything else?)

. . . your house?
(e.g., doors or widows) YES..... 1
NO..... 2 | 036 / 1 / 69
DON'T KNOW..... 8
N/A..... 9

. . . items in your house?
(e.g., furniture, clothing, carpet) YES..... 1
NO..... 2 | 037 / 1 / 70
DON'T KNOW..... 8
N/A..... 9

Q19) What was the total approximate value of the damage done?

$ |___|___|___|___|___|
038 / 2 / 1-5
DON'T KNOW..... 88888
N/A..... 99999

Q20) Did any of the damaged articles have any sentimental value?

NO..... 1

IF YES, PROBE: Would you say they had little sentimental value or a lot? | 039 / 2 / 6

A LITTLE (SOME DID, SOME DIDN'T)..... 2
A LOT..... 3
DON'T KNOW..... 8
N/A..... 9

Q21) Were any of your possessions disarranged or otherwise scattered about during this incident? (PROBE: How badly?)

YES- (extensive disarrangement, possessions scattered everywhere)..... 1
YES- (a little disarrangement, a few possessions scattered about)..... 2 | 040 / 2 / 7
NO..... 3
DON'T KNOW..... 8

Q22) People tell us a lot of different things about how they feel as a result of being a victim of crime. Would you please tell me how you felt "immediately after" you found your home was burglarized? (PROBE: Anything else?)

	YES	N/R	
ANGRY / MAD	1	2	041 / 2 / 8
ANNOYANCE / INCONVENIENCED	1	2	042 / 2 / 9
CRYING / UPSET	1	2	043 / 2 / 10
FEARFUL / SCARED / NERVOUS	1	2	044 / 2 / 11
GUILTY / SOMEHOW RESPONSIBLE	1	2	045 / 2 / 12
PHYSICALLY SICK / NAUSEOUS	1	2	046 / 2 / 13
SURPRISED / SHOCKED	1	2	047 / 2 / 14
VIOLATED	1	2	048 / 2 / 15
NOT UPSET / NOT BOTHERED	1	2	049 / 2 / 16
SAD / DEPRESSED	1	2	050 / 2 / 17
OTHER (specify) _____	1	2	051 / 2 / 18
OTHER (specify) _____	1	2	052 / 2 / 19

Q23) Do you know where the person or persons who broke into your house live?

YES	1	Go to Q25
MAYBE; NOT SURE	2	053 / 2 / 20
NO	3	

Q24) What do you think the chances are that they live in your neighbourhood? Do you think they are . . .

. . . very likely	1	
somewhat likely	2	
somewhat unlikely	3	054 / 2 / 21
or, very unlikely	4	
DON'T KNOW	8	
N/A	9	

The next few questions concern the Winnipeg Police. Again, I want to remind you that all your answers will remain anonymous.

Q25) Approximately how long did it take for the police to arrive at your home after they were notified of the break and enter?

RIGHT AWAY (within 5 min)	1		
AFTER A FEW MINUTES (6 - 15 min)	2		
15 MINUTES TO HALF AN HOUR	3		
HALF AN HOUR TO 1 HOUR	4		055 / 2 / 22
ONE HOUR TO 6 HOURS	5		
6 HOURS TO 24 HOURS	6		
MORE THAN 24 HOURS	7		
DON'T KNOW	8	Go to Q27	
THEY DID NOT COME AT ALL	9	Go to Q29	

Q26) Given the circumstances of the incident, did the police come as quickly as you thought they should have? That is, do you think they did a good job, an average job, or a poor job of responding promptly?

GOOD JOB	1	
AVERAGE JOB	2	
POOR JOB	3	056 / 2 / 23
DON'T KNOW	8	
N/A	9	

Q27) We are interested in some of the things the police did after they arrived . . .

a) Did the police take notes in a notebook?
YES..... 1
NO..... 2 | 057 / 2 / 24
DON'T KNOW..... 8
N/A..... 9

b) Did they take any fingerprints?
YES..... 1
NO..... 2 | 058 / 2 / 25
DON'T KNOW..... 8
N/A..... 9

c) Did they ask you any questions?
YES..... 1
NO..... 2 | 059 / 2 / 26
DON'T KNOW..... 8
N/A..... 9

d) Did you have any trouble remembering any of the details?
YES..... 1
NO..... 2 | 060 / 2 / 27
DON'T KNOW..... 8

e) Did the police give you enough time to tell your story?
YES..... 1
NO..... 2 | 061 / 2 / 28
DON'T KNOW..... 8
N/A..... 9

f) Did the police indicate you were at fault or make you feel in any way responsible for the Break and Enter?
YES..... 1
NO..... 2 | 062 / 2 / 29
DON'T KNOW..... 8
N/A..... 9

g) Did they take an interest in your feelings and concerns?
YES..... 1
NO..... 2 | 063 / 2 / 30
DON'T KNOW..... 8
N/A..... 9

h) Did they give you a number where they could be reached?
YES..... 1
NO..... 2 | 064 / 2 / 31
DON'T KNOW..... 8
N/A..... 9

i) Did they give you any information on crime prevention?
YES..... 1
NO..... 2 | 065 / 2 / 32
DON'T KNOW..... 8
N/A..... 9

j) Did they tell you about the Winnipeg Police Department's Victim Services Unit?
YES..... 1
NO..... 2 | 066 / 2 / 33
DON'T KNOW..... 8
N/A..... 9

Q28) Overall, how satisfied are you with the way the Police treated you as a person? Would you say that you are . . .
. . . very satisfied?..... 1
somewhat satisfied?..... 2
somewhat dissatisfied?..... 3 | 067 / 2 / 34
or, very dissatisfied?..... 4
DON'T KNOW..... 8
N/A..... 9

Q29) Other than the recent Break and Enter into your home, have you ever previously been the victim of a crime?

YES..... 1
NO..... 2 | Go to next section | 068 / 2 / 35
DON'T KNOW..... 8

Q30) Approximately how many times have you been victimized excluding the recent Break and Enter?

|__|__|

DON'T KNOW.....88
N/A.....99

069 / 2 / 36-37

Q31) Of all these incidents which one do you consider to be the most serious?
(IF VICTIMIZED ONLY ONCE PREVIOUSLY ASK: What happened?)

TRAFFIC ACCIDENT.....01
THEFT UNDER $1,000.....02
VANDALISM.....03
THEFT OVER $1,000.....04
FRAUD.....05
BREAK AND ENTER.....06
BREAK AND ENTER AND THEFT.....07
ROBBERY.....08
PURSESNATCH.....09
COMMON ASSAULT.....10
ASSAULT CAUSING BODILY HARM.....11
ABDUCTION (FORCEFUL CONFINEMENT).....12
SEXUAL ASSAULT (RAPE).....13
ATTEMPT MURDER.....14

OTHER (specify) _____ 15

DON'T KNOW.....88
N/A.....99

070 / 2 / 38-39

Q32) How long ago did the _____ occur?
(FILL IN PREVIOUS ANSWER)

LESS THAN 1 MONTH.....01
1 TO 3 MONTHS.....02
3 TO 6 MONTHS.....03
6 MONTHS TO 1 YEAR.....04
1 TO 2 YEARS.....05
2 TO 5 YEARS.....06
5 TO 10 YEARS.....07
10 TO 20 YEARS.....08
20 TO 40 YEARS.....09
MORE THAN 40 YEARS.....10
DON'T KNOW.....88
N/A.....99

071 / 2 / 40-41

THE IMPACT OF EVENT SCALE

I would like to discuss your reaction to having your home broken into. I am going to read a list of comments made by people after stressful life-events. After each comment, I would like you to indicate how frequently it has been true for you SINCE THE BREAK AND ENTER. You can answer with either "often", "sometimes", "rarely" or, "not at all".

The first comment is:

1) "I have thought about the break-in when I didn't mean to". Has this been true for you "often", "sometimes", "rarely", or "not at all"?

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 072 / 2 / 42
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

2) What about this comment: "I have avoided letting myself get upset when I thought about the Break-in or I was reminded of it." Has it been true for you "often", "sometimes", "rarely", or "not at all"?

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5 | 073 / 2 / 43
DON'T KNOW..... 8
REFUSAL..... 9

3) And this one: "I have tried to remove the burglary from memory."

(IF NECESSARY READ RESPONSE CATEGORIES FOR REMAINING QUESTIONS)

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 074 / 2 / 44
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

4) This one: "I have had trouble falling asleep or staying asleep."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 075 / 2 / 45
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

5) "I have had waves of strong feelings about the burglary."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 076 / 2 / 46
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

6) "I have had dreams about it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 077 / 2 / 47
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

7) "I have stayed away from reminders of it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 078 / 2 / 48
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

8) "I have felt as if the burglary hadn't happened or it wasn't real."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 079 / 2 / 49
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

9) "I have tried not to talk about the Break-in."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 080 / 2 / 50
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

10) "Pictures about it have popped into my mind."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 081 / 2 / 51
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

11) "Other things have kept me thinking about it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 082 / 2 / 52
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

12) "I am aware that I still have a lot of feelings about the burglary, but I haven't dealt with them yet".

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 083 / 2 / 53
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

13) "I have tried not to think about the burglary."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 084 / 2 / 54
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

14) "Any reminder has brought back feelings about it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 085 / 2 / 55
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

15) "My feelings about it have been kind of numb."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3 | 086 / 2 / 56
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

THE STATE ANXIETY INVENTORY

Next, I am going to read a number of statements which people have used to describe themselves. We would like to know whether the statements reflect how you have felt SINCE THE BREAK AND ENTER into your home. There are no right or wrong answers. Simply answer with either "not at all", "a little bit", "moderately so", or "very much so" depending on how accurately you think each statement reflects how you have felt since the Break-in.

1) The first statement is: "I have felt calm". How accurately do you think this reflects how you have felt since the break-in?

. . . not at all	4
a little bit	3
moderately so	2
or, very much so	1
DON'T KNOW	8
REFUSAL	9

087 / 2 / 57

2) What about this statement: "I have felt secure". Would you say . . .

. . . not at all	4
a little bit	3
moderately so	2
or, very much so	1
DON'T KNOW	8
REFUSAL	9

088 / 2 / 58

	NOT AT ALL	A LITTLE BIT	MODER-ATELY	VERY MUCH	D/K	REF-USAL	
3)" I have been tense"	1	2	3	4	8	9	089 / 2 / 59

IF NECESSARY READ RESPONSE CATEGORIES FOR REMAINING QUESTIONS

4)	"I have felt strained"	1	2	3	4	8	9	090 / 2 / 60
5)	"I have felt at ease"	4	3	2	1	8	9	091 / 2 / 61
6)	"I have felt upset"	1	2	3	4	8	9	092 / 2 / 62
7)	"I have felt satisfied"	4	3	2	1	8	9	093 / 2 / 63
8)	"I have felt frightened"	1	2	3	4	8	9	094 / 2 / 64
9)	"I have felt comfortable"	4	3	2	1	8	9	095 / 2 / 65
10)	"I have felt self-confident"	4	3	2	1	8	9	096 / 2 / 66
11)	"I have felt nervous"	1	2	3	4	8	9	097 / 2 / 67
12)	"I have been jittery"	1	2	3	4	8	9	098 / 2 / 68
13)	"I have felt indecisive"	1	2	3	4	8	9	099 / 2 / 69
14)	"I have felt relaxed"	4	3	2	1	8	9	100 / 3 / 1
15)	"I have felt content"	4	3	2	1	8	9	101 / 3 / 2
16)	"I have been worried"	1	2	3	4	8	9	102 / 3 / 3
17)	"I have felt confused"	1	2	3	4	8	9	103 / 3 / 4
18)	"I have felt steady"	1	2	3	4	8	9	104 / 3 / 5
19)	"I have felt pleasant"	4	3	2	1	8	9	105 / 3 / 6

THE PERCEIVED STRESS SCALE

The next few questions ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you have felt or thought a certain way. Don't try to count up the number of times you felt a particular way, but rather indicate the answer that seems a reasonable estimate. For each question choose from the following alternatives; "never", "almost never", "sometimes", "fairly often" or "very often".

1) In the last month, how often have you felt that you were unable to control the important things in your life? Would you say . . .

. . . never	1	
almost never	2	
sometimes	3	
fairly often	4	106 / 3 / 7
or, very often	5	
DON'T KNOW	8	
REFUSAL	9	

2) In the last month, how often have you felt confident about your ability to handle your personal problems? Would you say . . .

. . . never	5	
almost never	4	
sometimes	3	
fairly often	2	107 / 3 / 8
or, very often	1	
DON'T KNOW	8	
REFUSAL	9	

3) In the last month, how often have you felt that things were going your way?

. . . never	5	
almost never	4	
sometimes	3	
fairly often	2	108 / 3 / 9
or, very often	1	
DON'T KNOW	8	
REFUSAL	9	

4) In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

. . . never	1	
almost never	2	
sometimes	3	
fairly often	4	109 / 3 / 10
or, very often	5	
DON'T KNOW	8	
REFUSAL	9	

THE HOPKINS SYMPTOM CHECKLIST

Next, I am going to read a short list of problems and complaints that people sometimes have. First, I would like you to think about how much discomfort that problem has caused you in the past year and second how much discomfort that problem has caused since the break-in, including today. Please indicate whether you have experienced a little bit of discomfort, quite a bit, an extreme amount, or none at all.

1) First, in the past year, how much discomfort have headaches caused you? Would you say "a little bit", "quite a bit", "an extreme amount, or "none at all"?

	NOT AT ALL	LITTLE BIT	QUITE A BIT	EXTREME AMOUNT	D/K	REF-USAL	
PAST YEAR	1	2	3	4	8	9	110 / 3 / 11
. . and since the Break and Enter?	1	2	3	4	8	9	111 / 3 / 12

NOTE: IF NECESSARY READ RESPONSE CATEGORIES FOR REMAINING QUESTIONS

	NOT AT ALL	LITTLE BIT	QUITE A BIT	EXTREME AMOUNT	D/K	REF-USAL	
2) In the past year, how much trouble have you had remembering things?							
PAST YEAR	1	2	3	4	8	9	112 / 3 / 13
. . and since the Break and Enter?	1	2	3	4	8	9	113 / 3 / 14
3) In the past year, how much have you worried about sloppiness or carelessness?							
PAST YEAR	1	2	3	4	8	9	114 / 3 / 15
. . and since the B & E?	1	2	3	4	8	9	115 / 3 / 16
4) In the past year, how often have you felt low in energy or slowed down?							
PAST YEAR	1	2	3	4	8	9	116 / 3 / 17
. . and since the B & E?	1	2	3	4	8	9	117 / 3 / 18
5) In the past year, how often have you been blaming yourself for things?							
PAST YEAR	1	2	3	4	8	9	118 / 3 / 19
. . and since the B & E?	1	2	3	4	8	9	119 / 3 / 20
6) In the past year, how much discomfort have pains in your lower back caused you?							
PAST YEAR	1	2	3	4	8	9	120 / 3 / 21
. . and since the B & E?	1	2	3	4	8	9	121 / 3 / 22
7) In the past year, how blocked have you felt in getting things done?							
PAST YEAR	1	2	3	4	8	9	122 / 3 / 23
. . and since the B & E?	1	2	3	4	8	9	123 / 3 / 24
8) In the past year, how lonely have you felt?							
PAST YEAR	1	2	3	4	8	9	124 / 3 / 25
. . and since the B & E?	1	2	3	4	8	9	125 / 3 / 26
9) In the past year, how often have you been feeling blue?							
PAST YEAR	1	2	3	4	8	9	126 / 3 / 27
. . and since the B & E?	1	2	3	4	8	9	127 / 3 / 28
10) In the past year, how much discomfort has worrying about things caused you?							
PAST YEAR	1	2	3	4	8	9	128 / 3 / 29
. . and since the B & E	1	2	3	4	8	9	129 / 3 / 30
11) In the past year, how much discomfort has soreness of your muscles caused you?							
PAST YEAR	1	2	3	4	8	9	130 / 3 / 31
. . and since the B & E?	1	2	3	4	8	9	131 / 3 / 32
12) In the past year, how often have you had trouble concentrating?							
PAST YEAR	1	2	3	4	8	9	132 / 3 / 33
. . and since the B & E?	1	2	3	4	8	9	133 / 3 / 34

1) In the past year, approximately how many times have you seen a medical doctor to receive health care?

NEVER..... 1
ONCE..... 2
TWICE..... 3
THREE TIMES..... 4 | 134 / 3 / 35
FOUR OR FIVE TIMES..... 5
FIVE OR SIX TIMES..... 6
MORE THAN SIX TIMES..... 7
DON'T KNOW..... 8
REFUSAL..... 9

2) Would you describe your physical health during the past year as ...

. . . excellent..... 1
very good..... 2
fair..... 3
poor..... 4 | 135 / 3 / 36
or terrible..... 5
DON'T KNOW..... 8
REFUSAL..... 9

THE GENERAL HEALTH QUESTIONNAIRE

We would like to know if you have had any medical complaints, and how your health has been in general, SINCE THE BREAK AND ENTRY. To obtain this information I will ask you a number of questions. After every question, I will supply you with four possible answers. Listen carefully to the answers and simply tell me which one most nearly applies to you. Remember, we want to know about present and recent complaints, not those you have had in the past.

The first question is:

1) Have you recently been able to concentrate on whatever you're doing? Would you say that you have been able to concentrate . . .

. . . better than usual..... 0
same as usual..... 1
less than usual..... 2 | 136 / 3 / 37
or, much less than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

2) Have you recently lost much sleep over worry? Would you say . . .

. . . not at all..... 0
no more than usual..... 1
rather more than usual..... 2 | 137 / 3 / 38
or, much more than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

3) Have you recently felt you are playing a useful part in things? Would you say . . .

. . . more so than usual..... 0
same as usual..... 1
less useful than usual..... 2 | 138 / 3 / 39
or, much less useful..... 3
DON'T KNOW..... 8
REFUSAL..... 9

4) Have you recently been feeling unhappy and depressed? Would you say . . .

. . . not at all..... 0
no more than usual..... 1
rather more than usual..... 2 | 139 / 3 / 40
or, much more than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

5) Have you recently felt constantly under strain?
Would you say . . .

. . . not at all	0
no more than usual	1
rather more than usual	2
or, much more than usual	3
DON'T KNOW	8
REFUSAL	9

140 / 3 / 41

6) Have you recently been losing confidence in yourself?
Would you say . . .

. . . not at all	0
no more than usual	1
rather more than usual	2
or, much more than usual	3
DON'T KNOW	8
REFUSAL	9

141 / 3 / 42

7) Have you recently been thinking of yourself as a worthless person?
Would you say . . .

. . . not at all	0
no more than usual	1
rather more than usual	2
or, much more than usual	3
DON'T KNOW	8
REFUSAL	9

142 / 3 / 43

8) Have you recently felt that you couldn't overcome your difficulties?
Would you say . . .

. . . not at all	0
no more than usual	1
rather more than usual	2
or, much more than usual	3
DON'T KNOW	8
REFUSAL	9

143 / 3 / 44

9) Have you recently been able to enjoy your normal day to day activities?
Would you say . . .

. . . more so than usual	0
same as usual	1
less so than usual	2
or, much less than usual	3
DON'T KNOW	8
REFUSAL	9

144 / 3 / 45

10) Have you recently been able to face up to your problems?
Would you say . .

. . . more so than usual	0
same as usual	1
less able than usual	2
or, much less able	3
DON'T KNOW	8
REFUSAL	9

145 / 3 / 46

11) Have you recently been feeling reasonably happy, all things considered?
Would you say . . .

. . . more so than usual	0
same as usual	1
less so than usual	2
or, much less than usual	3
DON'T KNOW	8
REFUSAL	9

146 / 3 / 47

12) Have you recently felt capable of making decisions about things?
Would you say . . .

. . . more so than usual	0
same as usual	1
less capable than usual	2
or, much less capable	3
DON'T KNOW	8
REFUSAL	9

147 / 3 / 48

13) Since the Break and Enter how much alcohol have you consumed compared to usual? Would you say . . .

. . . a little less than usual	1	
no more than usual	2	
a little more than usual	3	148 / 3 / 49
or, much more than usual	4	
DON'T KNOW	8	
REFUSAL	9	

14) On average, how many drinks containing alcohol would you normally have in a typical week? Would you say . . .

	. . . 75 or more	8	
	50 or more	7	
Stop me when I am close	30 or more	6	
	20 or more	5	149 / 3 / 50
	15 or more	4	
	10 or more	3	
	5 or more	2	
	less than 5	1	
	none	0	
	REFUSAL	9	

THE CAUSAL DIMENSION SCALE

I would like you to think about the reason or reasons why the Break and Enter occurred. In your own words, why do you think it occurred? What was the major reason? WRITE IN RESPONSE _____

_____

Next I am going to ask you some questions about what you have just told me. The questions concern your impression or opinions of this cause of the Break and Enter. There are no right or wrong answers. We are only interested in your opinion. However, if you feel you can't answer a question just let me know.

To begin: In your opinion . . .

1) Is this cause something that reflects an aspect of yourself or an aspect of the situation? (WAIT FOR RESPONSE)

How much do you think it reflects an aspect of _____?
(FILL IN RESPONSE)

Would you say "a little bit", "somewhat", "quite a bit" or "a lot"?

	A LOT	9	
ASPECT OF YOURSELF	QUITE A BIT	8	
	SOMEWHAT	7	
	A LITTLE BIT	6	
DON'T KNOW / REFUSAL		5	150 / 3 / 51
	A LITTLE BIT	4	
	SOMEWHAT	3	
ASPECT OF THE SITUATION	QUITE A BIT	2	
	A LOT	1	

2) Is this cause controllable by you or other people OR is it uncontrollable by you or other people? (WAIT FOR RESPONSE)

How _____ do you think it is?
(FILL IN RESPONSE)

Would you say "a little", "somewhat", "quite" or "very" _____?
(FILL IN RESPONSE)

	VERY	9	
CONTROLLABLE	QUITE	8	
	SOMEWHAT	7	
	A LITTLE	6	
DON'T KNOW / REFUSAL		5	151 / 3 / 52
	A LITTLE	4	
	SOMEWHAT	3	
UNCONTROLLABLE	QUITE	2	
	VERY	1	

3) Is this cause something that is permanent or temporary? (WAIT FOR RESPONSE)

How _____ do you think it is?
(FILL IN RESPONSE)

Would you say "a little", "somewhat", "quite a bit" or "very" _____?
(FILL IN RESPONSE)

	VERY	9
PERMANENT	QUITE A BIT	8
	SOMEWHAT	7
	A LITTLE	6
DON'T KNOW / REFUSAL		5
	A LITTLE	4
	SOMEWHAT	3
TEMPORARY	QUITE A BIT	2
	VERY	1

152 / 3 / 53

4) Is the cause something intended by you or other people OR is it unintended by you or other people? (WAIT FOR RESPONSE)

How much do you think it is _____ by you or other people?
(FILL IN RESPONSE)

Would you say "a little bit", "somewhat", "quite a bit" or "very much"?

	VERY MUCH	9
INTENDED	QUITE A BIT	8
	SOMEWHAT	7
	A LITTLE BIT	6
DON'T KNOW / REFUSAL		5
	A LITTLE BIT	4
	SOMEWHAT	3
UNINTENDED	QUITE A BIT	2
	VERY MUCH	1

153 / 3 / 54

5) Is the cause something that is outside of you or inside of you? (WAIT FOR RESPONSE)

How _____ of you do you think the cause is?
(FILL IN RESPONSE)

Would you say "a little bit", "somewhat", "quite a bit" or "very much"?

	VERY MUCH	1
OUTSIDE	QUITE A BIT	2
	SOMEWHAT	3
	A LITTLE BIT	4
DON'T KNOW / REFUSAL		5
	A LITTLE BIT	6
	SOMEWHAT	7
INSIDE	QUITE A BIT	8
	VERY MUCH	9

154 / 3 / 55

6) Is the cause something that is variable over time or stable over time? (WAIT FOR RESPONSE)

How _____ over time do you think it is?
(FILL IN RESPONSE)

Would you say "a little", "somewhat", "quite a bit" or "very" _____?
(FILL IN RESPONSE)

	VERY	1
VARIABLE	QUITE A BIT	2
	SOMEWHAT	3
	A LITTLE	4
DON'T KNOW / REFUSAL		5
	A LITTLE	6
	SOMEWHAT	7
STABLE	QUITE A BIT	8
	VERY	9

155 / 3 / 56

7) Is the cause something about you or something about others? (WAIT FOR RESPONSE)

How much do you think it is something about _____?
(FILL IN RESPONSE)

Would you say "a little bit", "somewhat", "quite a bit" or "very much"?

ABOUT YOU	VERY MUCH	9
	QUITE A BIT	8
	SOMEWHAT	7
	A LITTLE BIT	6
DON'T KNOW / REFUSAL		5
ABOUT OTHERS	A LITTLE BIT	4
	SOMEWHAT	3
	QUITE A BIT	2
	VERY MUCH	1

156 / 3 / 57

8) Is the cause something that is changeable or unchangeable? (WAIT FOR RESPONSE)

How _____ do you think it is?
(FILL IN RESPONSE)

Would you say "a little", "somewhat", "quite a bit" or "very" _____?
(FILL IN RESPONSE)

CHANGEABLE	VERY	1
	QUITE A BIT	2
	SOMEWHAT	3
	A LITTLE	4
DON'T KNOW / REFUSAL		5
UNCHANGEABLE	A LITTLE	6
	SOMEWHAT	7
	QUITE A BIT	8
	VERY	9

157 / 3 / 58

9) Is the cause something for which no one is responsible or someone is responsible? (WAIT FOR RESPONSE)

How strongly do you think _____ is responsible?
(FILL IN RESPONSE)

Would you say "a little", "somewhat", "quite" or "very" strongly?

NO ONE	VERY	1
	QUITE	2
	SOMEWHAT	3
	A LITTLE	4
DON'T KNOW / REFUSAL		5
SOMEONE	A LITTLE	6
	SOMEWHAT	7
	QUITE	8
	VERY	9

158 / 3 / 59

SOCIAL SUPPORT QUESTIONS

Sometimes victims of burglary tell us they found it reassuring to have friends, neighbours, or someone else whom they could to talk or ask for help after their home was broken into.

Q1) Did anyone offer you help of any kind or perhaps just listen to you after the Break and Enter?

YES	1	
NO	2	Go to Q4
DON'T KNOW	8	Go to Q4

159 / 3 / 60

Q2) Who gave you the support or help? (PROBE: Did anyone else help you?)

	YES	N/R	N/A	
PROFESSIONALS (mental, legal, etc.)	1	0	9	160 / 3 / 61
FAMILY MEMBER(S)	1	0	9	161 / 3 / 62
RELATIVE(S)	1	0	9	162 / 3 / 63
BOY/GIRL FRIEND	1	0	9	163 / 3 / 64
CHURCH MEMBER(S)	1	0	9	164 / 3 / 65
NEIGHBOUR(S)	1	0	9	165 / 3 / 66
POLICE	1	0	9	166 / 3 / 67
OTHER FRIEND(S)	1	0	9	167 / 3 / 68
CO-WORKER(S)	1	0	9	168 / 3 / 69
OTHER (SPECIFY) _____	1	0	9	169 / 4 / 1

Q3) Specifically, how did they help you? (PROBE: Did anyone help you in any other way?)

	YES	N/R	N/A	
CALLED POLICE	1	0	9	170 / 4 / 2
CLEANED-UP	1	0	9	171 / 4 / 3
FIXED DOOR/WINDOW	1	0	9	172 / 4 / 4
REPLACED STOLEN ITEMS	1	0	9	173 / 4 / 5
LOANED MONEY	1	0	9	174 / 4 / 6
TALKED WITH ME	1	0	9	175 / 4 / 7
STAYED OVERNIGHT	1	0	9	176 / 4 / 8
SUPPLIED TEMPORARY ACCOMMODATIONS	1	0	9	177 / 4 / 9
OTHER (SPECIFY) _____	1	0	9	178 / 4 / 10
OTHER (SPECIFY) _____	1	0	9	179 / 4 / 11

Q4) If you needed help, was there someone (else) you could have talked to or asked for assistance?

YES 1
NO ..... 2 — 180 / 4 / 12
DON'T KNOW 8

Q5) In general terms, how satisfied are you with the amount of support you receive from your friends and family when you need it? Would you say you are . . .

. . . very dissatisfied 1
somewhat dissatisfied 2
somewhat satisfied ..... 3 — 181 / 4 / 13
or, very satisfied 4
DON'T KNOW 8

Q6) Do you think that emotional or psychological counselling should be available for victims of Breaking and Entering?

YES 1
NO ..... 2 — 182 / 4 / 14
DON'T KNOW 8

Q7) Do you think that emotional or psychological counselling should be available for other crime victims?

YES 1
NO ..... 2 — 183 / 4 / 15
DON'T KNOW 8

To finish I have a few general questions which will help us learn a little more about the background of Break and Enter victims.

Q8) What type of dwelling are you living in? (IF NO RESPONSE, ASK; Would you describe it as a ...)

. . . single house	1	184 / 4 / 16
semi detached, double or side by side	2	
town house or row house	3	
duplex	4	
lowrise apartment building	5	
or a highrise apartment building	6	
OTHER (specify) _____	7	
DON'T KNOW	8	

Q9) Do you rent or own your residence?

RENT	1	185 / 4 / 17
OWN	2	
OTHER	3	
DON'T KNOW	8	

Q10) How long have you lived at your present address?

LESS THAN SIX MONTHS	1		186 / 4 / 18
SIX MONTHS TO ONE YEAR	2		
ONE YEAR TO TWO YEARS	3		
TWO TO FIVE YEARS	4		
FIVE TO TEN YEARS	5	Go to Q12	
TEN TO TWENTY YEARS	6	Go to Q12	
MORE THAN TWENTY YEARS	7	Go to Q12	
DON'T KNOW	8		

Q11) And, how many times have you moved in the past 5 years?

ONCE	1	187 / 4 / 19
TWICE	2	
THREE TIMES	3	
FOUR TIMES	4	
FIVE TIMES	5	
SIX TIMES	6	
SEVEN OR MORE TIMES	7	
DON'T KNOW	8	
N/A	9	

Q12) Excluding yourself, how many people live at your residence? |__|__| 188 / 4 / 20-21

DON'T KNOW 88

Q13) Which of the following statements best describes your current living situation?

I live alone	1	189 / 4 / 22
I live with a friend or friends	2	
... with my boyfriend/girlfriend or partner	3	
... with my spouse	4	
... with my family	5	
... or, I live in some other situation	6	
DON'T KNOW	8	
REFUSAL	9	

Q14) Do you have any immediate family living in Winnipeg other than those people who may be living in your household?

YES..... 1
NO..... 2 | 190 / 4 / 23
DON'T KNOW..... 8

Q15) Have you experienced the loss, separation, or death of a family member within the past two years?

YES..... 1
NO..... 2 | 191 / 4 / 24
DON'T KNOW..... 8

Q16) What is the highest grade or level of education you have completed?
(MARK ONLY ONE)

NO SCHOOLING.....01

GRADES 1-9
SOME ELEMENTARY SCHOOL.....02
COMPLETED ELEMENTARY SCHOOL.....03

GRADES 10-12
SOME SECONDARY SCHOOL.....04
COMPLETED SECONDARY SCHOOL.....05 | 192 / 4 / 25-26

SOME POST SECONDARY NON UNIVERSITY.....06
COMPLETED POST SECONDARY NON UNIVERSITY.....07

SOME UNIVERSITY.....08
COMPLETED UNIVERSITY.....09

POST-GRADUATE UNIVERSITY.....10

DON'T KNOW.....88
REFUSAL.....99

Q17) Which of the following best describes your main activity during the past year?
Were you mainly . . .

. . . working at a job or business?..... 1
looking for work?..... 2
a student?..... 3 | 193 / 4 / 27
retired?..... 4
or, a homemaker?..... 5

Other (specify) _____ 6
DON'T KNOW..... 8

Q18) How satisfied have you been with this lifestyle over the past year?
Would you say that you have been . . .

. . . very satisfied..... 1
somewhat satisfied..... 2
somewhat dissatisfied..... 3 | 194 / 4 / 28
or, very dissatisfied..... 4
DON'T KNOW..... 8

Q19) What is your current marital status?

SINGLE..... 1
COMMON-LAW..... 2
MARRIED..... 3 | 195 / 4 / 29
SEPARATED..... 4
DIVORCED..... 5
WIDOWED..... 6

OTHER (SPECIFY) _____ 7
DON'T KNOW..... 8
REFUSAL..... 9

Q20) What is your age? (IF HESITANT: Are you in your 20s, 30s, 40s, 50s, 60s, 70s, or 80s?)

TEENS	18	60s	65
20s	25	70s	75
30s	35	80s	85
40s	45	90s	95
50s	55	REFUSAL	00

196 / 4 / 30-31

RECORD EXACT NUMBER: |__|__|

Q21) Is the total gross yearly income of all the members of your household under or over $30,000.00?

DON'T KNOW OR REFUSAL..... 9

1..... UNDER		7.....OVER	
(IF UNDER 30 ASK)		**(IF 30 AND OVER ASK)**	
. . . is it under or over 20?		. . . is it under or over 40?	
2.....UNDER	3.....OVER	5.....UNDER	6.....OVER
(IF UNDER 20 ASK)	**(IF OVER 20 ASK)**	**(IF UNDER 40 ASK)**	**(IF OVER 40 ASK)**
. . . is it under or over 15 thousand ?	. . . is it under or over 25 thousand ?	. . . is it under or over 35 thousand ?	. . . is it under or over 45 thousand ?
(CIRCLE)	**(CIRCLE)**	**(CIRCLE)**	**(CIRCLE)**
1.....UNDER 15	3.....20-25	5.....30-35	7.....40-45
2.....15-20	4.....25-30	6.....35-40	8.....OVER 45

197 / 4 / 32

198 / 4 / 33

DON'T KNOW OR REFUSAL..... 9

Thank you for your cooperation and the time you have spent talking with me. We will be contacting you again in about 4 months to find out how the police investigation is going. It is important that we are able to keep track of all the Break and Enter victims we have interviewed. In the event we are not able to contact you, could you give us the name and phone number of a relative or friend who would know how to reach you?

_____ (NAME) _____ (PHONE #)

IF RESPONDENT REFUSES, ASK **Do you have a business or work number where we could reach you?**

_____ (PHONE #)

It is standard procedure for the Winnipeg Police Department Victim Services Unit to contact all Break and Enter victims, so you can expect to receive a telephone call from a volunteer within the next few weeks. They will be able to supply you information or assistance should you require it. At this point we would like to give you the opportunity to include any comments you may have concerning your recent victimization that you feel may be important. In general terms, do you have remarks on any adverse effects you may have felt as a result of your misfortune that I have failed to address?

(RECORD COMMENTS ON THE REVERSE OF THIS PAGE)
(IF RESPONDENT HAS NOTHING TO ADD, CONTINUE)

If you have any questions, I would be happy to answer them for you. (ANSWER QUESTIONS)

Thank you again for your assistance. Good-bye.

START TIME: _____ END TIME: _____ LENGTH OF INTERVIEW: _____ _____ _____ (IN MINUTES)

199 / 4 / 34-36

APPENDIX C

Follow-up Interview Contact Letter

THIS LETTER WAS TYPED ON OFFICIAL WINNIPEG POLICE DEPARTMENT LETTERHEAD

Date:

Mr./Ms. John Doe
100 Anywhere Street
Winnipeg, Manitoba
Postal Code

Dear Mr./Ms. Doe:

Approximately five months ago you were the victim of a Break and Enter into your home. Since that time literally hundreds of Break and Enter victims have been interviewed in Winnipeg. When we last spoke to you we indicated that researchers from the University of Manitoba would be contacting you again to ask a number of questions about the police investigation and the long-term effects of having your home broken into.

Within the next two weeks you will be getting a phone call asking for your participation in this stage of the study. The interview will take less than half an hour of your time. If the call should come at an inconvenient time or if you are not at home, the interviewer will call back later.

Once again, I stress that any information provided by you will be kept completely confidential and you are under no obligation to participate in this study. However, the information you can provide will be valuable to the police and other agencies that help victims such as yourself. Your assistance will assure the success of this study. In addition, if you would like to receive a summary of the results, they will be mailed to you when the study is completed.

If you have any questions about this study please feel free to contact Trevor Markesteyn, Principal Investigator of the research project, at 474-9528 or Constable Russ Heslop at Victim Services, at 986-6350.

Yours truly,

Sergeant Paul Johnson
Victim Services Unit
Community Relation Division

PJ/ce

APPENDIX D

Follow-up Interview 2nd Contact Letter

THIS LETTER WAS TYPED ON OFFICIAL WINNIPEG POLICE DEPARTMENT LETTERHEAD

Date:

Mr./Ms. John Doe
100 Anywhere Street
Winnipeg, Manitoba
Postal Code

Dear Mr./Ms. Doe:

Recently you should have received a letter from us concerning the Break and Enter into your home approximately five months ago. In that letter we indicated that researchers from the University of Manitoba would soon be calling you on the telephone to ask a number of questions concerning the break-in. Unfortunately they have been unable to reach you by telephone because your previous number is no longer in service. Thus, we are sending you this letter with the hope that you are receiving mail that is sent to you at the above address.

The purpose of sending this letter is to emphasize how important it is that we speak to you concerning the Break and Enter into your home five months ago. Your participation in this study will help to improve our understanding of break and enter, its prevention and its initial and long-term impact on the public. The information you can provide will be valuable to the police and other Victim Service Agencies so that they can provide the best help possible to victims of all crime. In addition, I want to ensure you that any information provided by you is entirely voluntary and will be kept strictly confidential. Furthermore, if you wish, when the study is completed, a summary of the study's results will be sent to you.

Thus, with this in mind, we are requesting that you contact either Trevor Markesteyn, the principal investigator of this study, at 474-9528 or 452-8077, or Constable Russ Heslop at Victim Services (ph. 986-6350) to arrange a time when we could speak to you.

Yours truly,

Sergeant Paul Johnson,
Victim Services Unit
Community Relations Division

PJ/hw

APPENDIX E

Follow-up Interview

SUBJECT # ___ ___ ___ ___

CITY OF WINNIPEG CRIME SURVEY:
A STUDY OF VICTIMS OF RESIDENTIAL BREAKING AND ENTERING

A JOINT RESEARCH PROJECT OF THE
UNIVERSITY OF MANITOBA AND THE PROVINCE OF MANITOBA

-- FOLLOW-UP INTERVIEW --

Principal Investigator: Trevor Markesteyn M.A.
Department of Psychology

Research Advisor: Stephen Brickey Ph.D.
Department of Sociology

NAME: _____
(LAST) (FIRST)

ADDRESS: _____

HOME NUMBER: ___ ___ ___ - ___ ___ ___ ___ WORK: ___ ___ ___ - ___ ___ ___ ___

CONTACT: _____ RELATIONSHIP: _____

CONTACT PHONE NUMBER: ___ ___ ___ - ___ ___ ___ ___

DATE OF OFFENSE (day/month): ___ ___ / ___ ___

No. OF DAYS FROM DATE OF OFFENSE TO FOLLOW-UP INTERVIEW: ___ ___ ___

Computer Codes::
Var / Card / Col
201 / 5 / 5-7

RECORD OF CALLS

VAR202 (8-9) VAR203 (10-11) VAR204 (12-15) VAR205 (16)

Call No.:	Date: (day/mon)	Interviewer: (use codes)	Time: (24-hr.)	Result: (use codes)	Comments and Appointments
01					
02					
03					
04					
05					
06					
07					
08					
01					
11					
12					
13					
14					

FINAL RESULT CODES:

0 ..... phone not in service / no new listing
1 ..... unable to interview despite 14 attempts
2 ..... no answer
3 ..... communication problems / respondent deceased
5 ..... household refusal
4 ..... respondent refusal
7 ..... interview completed
8 ..... respondent refusal
9 ..... lost contact sheet

INTRODUCTION

Hello. Is this the _____ residence? May I speak with _____ ?
(LAST NAME) (FIRST AND LAST NAME)

IF NO. The number I was calling is _____ and it was for _____ .
(FIRST AND LAST NAME)

IF WRONG NUMBER, CHECK YOU DIALED CORRECTLY. IF YES TERMINATE WITH; I am sorry to bother you.

(THEN CALL 411, CONTACT PERSON AND/OR WORK NUMBER LISTED ON PAGE 2 OF THIS QUESTIONNAIRE. OBTAIN NEW LISTING AND/OR SET UP INTERVIEW TIME. WRITE THIS INFORMATION ON THE FRONT PAGE.)

I am _____ from the University of Manitoba. We are conducting a study of Breaking and Entering. We spoke with you about five months ago about the Break and Entry into your home. A letter was recently sent to you indicating that we would be calling. Did you receive it?

IF YES: PROCEED TO NEXT SECTION

IF NO: I'm sorry yours didn't reach you. Have you moved since we last spoke? (IF YES OBTAIN NEW ADDRESS AND POSTAL CODE). If you like I can have the office send out another letter and call you back later in the week?

IF RESPONDENT WISHES TO RECEIVE LETTER BEFORE INTERVIEW, ARRANGE A CONVENIENT TIME TO CALL BACK AND TERMINATE THE CALL WITH ....

.... Thank you. I will speak with you again soon.

(INFORM TREVOR)

As was explained in the letter, we are interested in finding out some follow-up information about the Break and Enter five months ago. The questions I need to ask should take less than 30 minutes. Before starting I would like to mention that you don't have to answer any question you feel is too personal and if you don't know an answer just let me know, O.K.?

The first few questions have to do with the police and their investigation.

		Computer Codes: Var / Card / Col
Q1) In general terms, how satisfied are you with the way the police have handled your case? Would you describe yourself as . . .		
. . . very satisfied	1	
somewhat satisfied	2	
somewhat dissatisfied	3	206 / 5 / 17
or, very dissatisfied	4	
DON'T KNOW	8	
REFUSAL	9	
Q2) Has any of the property which was stolen from your home been recovered? (IF YES PROBE: All or some of it?)		
YES - ALL OF IT	1	
- SOME OF IT	2	207 / 5 / 18
NO	3	
NONE WAS STOLEN	4	
DON'T KNOW	8	
REFUSAL	9	
Q3) Did you have household insurance when your home was broken into?		
YES	1	
NO	2 Go to Q5	208 / 5 / 19
DON'T KNOW	8 Go to Q5	
REFUSAL	9	

Q4) Did the insurance company give you all the money you claimed, some of it or none of it? (EXCLUDING THE DEDUCTIBLE AND DEPRECIATION)

ALL	1	
SOME	2	
NONE	3	209 / 5 / 20
STILL WAITING FOR A SETTLEMENT	4	
AN INSURANCE CLAIM WASN'T FILED	5	
REFUSAL	7	
DON'T KNOW	8	
N/A	9	

Q5) As a result of the Break and Enter you or another household member might have spent some time filing an insurance claim, repairing a broken window, signing a complaint, or perhaps even testifying in court. Overall, how much time do you estimate has been spent on matters related to the Break and Enter. (IF UNSURE: Well, take a guess.)

NONE	1	
A COUPLE OF HOURS (1-2)	2	
HALF A DAY (3-5 HOURS)	3	
1 DAY (+ 6 HOURS)	4	210 / 5 / 21
1 - 2 DAYS	5	
3 - 7 DAYS	6	
OVER ONE WEEK	7	
DON'T KNOW	8	
N/A	9	

Q6) As a result of the Break and Enter, did you or any other member of your household take time off from work?

YES	1		
NO	2	Go to Q8	211 / 5 / 22
NO - WAS UNEMPLOYED	3	Go to Q8	
DON'T KNOW	8	Go to Q8	
REFUSAL	9		

Q7) How many days were taken off?

HALF DAY OR LESS	1	
HALF DAY - 1 DAY	2	
1 - 2 DAYS	3	
3 - 6 DAYS	4	212 / 5 / 23
1 WEEK - 4 WEEKS	5	
OVER ONE MONTH	6	
REFUSAL	7	
DON'T KNOW	8	
N/A	9	

Q8) To the best of your knowledge, has anyone been arrested or charged in connection with the Break and Enter?

YES	1	
NO	2	213 / 5 / 24
DON'T KNOW	8	
REFUSAL	9	

Q9) Do you know the person who broke into your house?

YES	1	Go to Q11	
NO	2		214 / 5 / 25
DON'T KNOW	8		
REFUSAL	9		

Q10) What do you think the chances are that they live in your neighbourhood? Do you think they are . . .

very likely	1	Go to Q12
somewhat likely	2	Go to Q12
somewhat unlikely	3	Go to Q12
or, very unlikely	4	Go to Q12
DON'T KNOW	8	Go to Q12
N/A	9	

215 / 5 / 26

Q11) How do you know them? What is their relationship to you?

SPOUSE OR EX-SPOUSE	1
FRIEND(S) OF RELATIVE OR FRIEND	2
RELATIVE(S)	3
HOUSEHOLD MEMBER(S) OR ROOMMATE(S)	4
FRIEND(S)	5
NEIGHBOUR(S)	6
CO-WORKER(S)	7
OTHER (SPECIFY) _____	8
N/A	9

216 / 5 / 27

Q12) In general terms, do you feel a sense of community with other people in your neighbourhood? Would you say . . .

. . . not at all	1
a little bit	2
moderately	3
quite a bit	4
or, a great deal	5
DON'T KNOW	8

217 / 5 / 28

Q13) How important is it for you to feel a sense of community with other people in your neighbourhood? Would you say it is . . .

. . . not at all important	1
a little important	2
moderately important	3
quite important	4
or, very important	5
DON'T KNOW	8

218 / 5 / 29

Q14) Next, I am going to read you a few statements about being a victim of crime Some crime victims agree with the statements, others disagree. There are no right or wrong answers. On the basis of your experience since the Break and Enter, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each of the following statements.

a) The police kept me informed about what was happening during their investigation of the Break and Enter. Do you . . .

strongly agree	1
somewhat agree	2
somewhat disagree	3
or, strongly disagree	4
DON'T KNOW	8
REFUSAL	9

219 / 5 / 30

b) The police did all they could to locate the criminal. Do you . . .

strongly agree	1
somewhat agree	2
somewhat disagree	3
or, strongly disagree	4
DON'T KNOW	8
REFUSAL	9

220 / 5 / 31

c) The criminal justice system, in general, does not seem to care about the victim?
Do you . . .

. . . strongly agree	1	
somewhat agree	2	
somewhat disagree	3	221 / 5 / 32
or, strongly disagree	4	
DON'T KNOW	8	
REFUSAL	9	

d) After this experience I would be less likely to contact the police again.
Do you . . .

. . . strongly agree	1	
somewhat agree	2	
somewhat disagree	3	222 / 5 / 33
or, strongly disagree	4	
DON'T KNOW	8	
REFUSAL	9	

Q15) Have you taken any of the following actions in direct response to the Break and Enter into your home?

A) Have you moved?	YES	1	
	NO	2	223 / 5 / 34
	DON'T KNOW	8	
B) Do you spend more time at home?	YES	1	
	NO	2	224 / 5 / 35
	DON'T KNOW	8	
C) Are you more careful to lock windows and doors when you go out?	YES	1	
	NO	2	225 / 5 / 36
	DON'T KNOW	8	
D) Have you put bars on your windows or doors?	YES	1	
	NO	2	226 / 5 / 37
	DON'T KNOW	8	
E) Have you changed the locks on your windows or doors?	YES	1	
	NO	2	227 / 5 / 38
	DON'T KNOW	8	
F) Are you more careful to leave the lights on when going out at night?	YES	1	
	NO	2	228 / 5 / 39
	DON'T KNOW	8	
G) Have you purchased more or new house insurance?	YES	1	
	NO	2	229 / 5 / 40
	DON'T KNOW	8	
H) Since the Break & Enter have you joined neighbourhood watch?	YES	1	
	NO	2	230 / 5 / 41
	DON'T KNOW	8	
I) Were you a member of neighbourhood watch before the Break & Enter?	YES	1	
	NO	2	231 / 5 / 42
	DON'T KNOW	8	
J) Have you installed a burglar alarm?	YES	1	
	NO	2	232 / 5 / 43
	DON'T KNOW	8	
K) Did you have a burglar alarm before the Break & Enter?	YES	1	
	NO	2	233 / 5 / 44
	DON'T KNOW	8	
L) Have you purchased a dog to guard the house?	YES	1	
	NO	2	234 / 5 / 45
	DON'T KNOW	8	

M) Did you own one before the Break and Enter?

YES 1
NO 2
DON'T KNOW 8

235 / 5 / 46

N) Have you purchased a weapon in order to protect yourself?

YES 1
NO 2
DON'T KNOW 8

236 / 5 / 47

Q16) Looking back, in your opinion what was the worst thing about having your house broken into?

INTRUSION ON PRIVACY (PERSONAL / PHYSICAL) 1
EMOTIONAL UPSET 2
DISILLUSIONMENT WITH SOCIETY / VIOLATION OF TRUST IN OTHERS 3
LOSS OF PROPERTY 4
DAMAGE OF PROPERTY 5
DISARRANGEMENT OF PROPERTY 6

OTHER (specify) _____

_____ 7

DON'T KNOW 8

237 / 5 / 48

Q17) Do you feel back to normal; that is, back to the way you felt prior to the Break and Enter?

YES ..... 1 Go to Q19
NO 2
DON'T KNOW 8

238 / 5 / 49

Q18) In what way are you still affected by what happened? (PROBE: Any other way?

WRITE IN RESPONSE: _____

_____

_____ Go to Q20

239 / 5 / 50-51

DON'T KNOW ..... 88 Go to Q20
N/A 99

Q19) How long did it take to get over the affects of having your house broken into?

IMMEDIATELY AFTER THE B & E 01
SOON AFTER (WITHIN A FEW HOURS) 02
WITHIN A DAY 03
A COUPLE OF DAYS (1-2) 04
A FEW DAYS (3-4) 05
ABOUT A WEEK (5-8 DAYS) 06
A FEW WEEKS (2-3) 07
ABOUT A MONTH 08
A FEW MONTHS (2-4) 09
NEVER FELT ABNORMAL 77
DON'T KNOW 88
N/A 99

240 / 5 / 52-53

Q20) Have you been the victim of another crime since the Break and Enter five months ago?

YES 1
NO ..... 2 Go to Q23

241 / 5 / 54

Q21) How many times?

ONCE 1
TWICE 2
THREE 3
FOUR 4
FIVE OR MORE 5
DON'T KNOW 8
N/A 9

242 / 5 / 55

Q22) Of all these incidents which one do you consider to be the most serious?
(IF VICTIMIZED ONLY ONCE PREVIOUSLY ASK: What happened?)

TRAFFIC ACCIDENT 01
THEFT UNDER $1,000 02
VANDALISM 03
THEFT OVER $1,000 04
FRAUD 05
BREAK AND ENTER 06
BREAK AND ENTER AND THEFT ..... 07 | 243 / 5 / 56-57
ROBBERY 08
PURSESNATCH 09
COMMON ASSAULT 10
ASSAULT CAUSING BODILY HARM 11
ABDUCTION (FORCEFUL CONFINEMENT) 12
SEXUAL ASSAULT (RAPE) 13
ATTEMPT MURDER 14

OTHER (specify) _____ 15

DON'T KNOW 88
N/A 99

Q23) Since the Break and Enter into your home 5 months ago have you been contacted by the Winnipeg Police Department Victim Services Unit?

YES 1
NO ..... 2 Go to Q25 | 244 / 5 / 58
I CONTACTED THEM 3
DON'T KNOW ..... 8 Go to Q25

Q24) Overall, how would you rate the quality of service they provided?
Would you describe it as . . .

terrible 1
poor 2
fair ..... 3 | 245 / 5 / 59
very good 4
or, excellent 5
DON'T KNOW 8
N/A 9

Q25) Have you obtained any type of psychological, medical, legal, or other professional help since the Break-in?

YES - (PROBE: What type?)
- PSYCH CRISIS INTERVENTION (acute; > 6 weeks) 1
- PSYCH COUNSELLING HELP (long term) ..... 2 | 246 / 5 / 60
- LEGAL ASSISTANCE 3
- MEDICAL 4

- OTHER (SPECIFY) _____ 5

NO 6
DON'T KNOW 8
REFUSAL 9

Q26) During the year prior to the Break and Enter 5 months ago, had you been to see a mental health professional to receive help?

YES 1
NO ..... 2 | 247 / 5 / 61
NO - BUT WANTED TO, NEEDED TO, ETC 3
DON'T KNOW 8
REFUSAL 9

THE IMPACT OF EVENT SCALE

I would like to discuss your reactions to having your home broken into. I am going to read a list of comments made by people after stressful life-events. After each comment, I would like you to indicate how frequently it has been true for you SINCE THE BREAK AND ENTER. You can answer with either "often", "sometimes", "rarely" or, "not at all".

The first comment is:

1) "I have thought about the break-in when I didn't mean to". Has this been true for you "often", "sometimes", "rarely", or "not at all"?

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

248 / 5 / 62

2) What about this comment: "I have avoided letting myself get upset when I thought about the Break-in or I was reminded of it." Has it been true for you "often", "sometimes", "rarely", or "not at all"?

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

249 / 5 / 63

3) And this one: "I have tried to remove the burglary from memory."

(IF NECESSARY READ RESPONSE CATEGORIES FOR REMAINING QUESTIONS)

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

250 / 5 / 64

4) This one: "I have had trouble falling asleep or staying asleep."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

251 / 5 / 65

5) "I have had waves of strong feelings about the burglary."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

252 / 5 / 66

6) "I have had dreams about it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

253 / 5 / 67

7) "I have stayed away from reminders of it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

254 / 5 / 68

8) "I have felt as if the burglary hadn't happened or it wasn't real."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

255 / 5 / 69

9) "I have tried not to talk about the Break-in."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

256 / 5 / 70

10) "Pictures about it have popped into my mind."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

257 / 6 / 1

11) "Other things have kept me thinking about it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

258 / 6 / 2

12) "I am aware that I still have a lot of feelings about the burglary, but I haven't dealt with them yet".

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

259 / 6 / 3

13) "I have tried not to think about the burglary."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

260 / 6 / 4

14) "Any reminder has brought back feelings about it."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

261 / 6 / 5

15) "My feelings about it have been kind of numb."

NOT AT ALL..... 0
RARELY..... 1
SOMETIMES..... 3
OFTEN..... 5
DON'T KNOW..... 8
REFUSAL..... 9

262 / 6 / 6

THE STATE ANXIETY INVENTORY

Next, I am going to read a number of statements which people have used to describe themselves. We would like to know whether the statements reflect how you feel right now, that is, at this moment. There are no right or wrong answers. Simply answer with either "not at all", "a little bit", moderately so", or "very much so" depending on how accurately you think each statement reflects your present feelings.

1) The first statement is: "I feel calm". Would you say . . .

. . . not at all	4
a little bit	3
moderately so	2
or, very much so	1
DON'T KNOW	8
REFUSAL	9

263 / 6 / 7

2) What about this statement: "I feel secure". Would you say . . .

. . . not at all	4
a little bit	3
moderately so	2
or, very much so	1
DON'T KNOW	8
REFUSAL	9

264 / 6 / 8

		NOT AT ALL	A LITTLE BIT	MODER-ATELY	VERY MUCH	D/K	REF-USAL	
3)	"I am tense"	1	2	3	4	8	9	265 / 6 / 9

IF NECESSARY READ RESPONSE CATEGORIES FOR REMAINING QUESTIONS

4)	"I feel strained"	1	2	3	4	8	9	266 / 6 / 10
5)	"I feel at ease"	4	3	2	1	8	9	267 / 6 / 11
6)	"I feel upset"	1	2	3	4	8	9	268 / 6 / 12
7)	"I feel satisfied"	4	3	2	1	8	9	269 / 6 / 13
8)	"I feel frightened"	1	2	3	4	8	9	270 / 6 / 14
9)	"I feel comfortable"	4	3	2	1	8	9	271 / 6 / 15
10)	"I feel self-confident"	4	3	2	1	8	9	272 / 6 / 16
11)	"I feel nervous"	1	2	3	4	8	9	273 / 6 / 17
12)	"I am jittery"	1	2	3	4	8	9	274 / 6 / 18
13)	"I feel indecisive"	1	2	3	4	8	9	275 / 6 / 19
14)	"I feel relaxed"	4	3	2	1	8	9	276 / 6 / 20
15)	"I feel content"	4	3	2	1	8	9	277 / 6 / 21
16)	"I am worried"	1	2	3	4	8	9	278 / 6 / 22
17)	"I feel confused"	1	2	3	4	8	9	279 / 6 / 23
18)	"I feel steady"	1	2	3	4	8	9	280 / 6 / 24
19)	"I feel pleasant"	4	3	2	1	8	9	281 / 6 / 25

THE BELIEF IN A JUST WORLD SCALE

Next, I am going to read some statements that have to do with peoples' beliefs about the world. Some people may strongly agree with some of the statements, some may strongly disagree, while others will fall somewhere in between. There are no right or wrong answers. We are only interested in your opinion. Please tell me if you "strongly agree", "somewhat agree", "somewhat disagree", or if you "strongly disagree" with each of the following statements.

1)	The first statement is: "I've found that a person rarely deserves the reputation they have". Do you . . .	. . . strongly agree .....1 somewhat agree .....2 somewhat disagree .....3 or, strongly disagree .....4 DON'T KNOW .....8 REFUSAL 9	282 / 6 / 26
	(CODE NEITHER AGREE NOR DISAGREE AS D/K)		
2)	What about this statement? "Basically, the world is a fair and just place". Do you . . .	. . . strongly agree .....4 somewhat agree .....3 somewhat disagree .....2 or, strongly disagree .....1 DON'T KNOW .....8 REFUSAL 9	283 / 6 / 27
3)	"People who get 'lucky breaks' have usually earned their good fortune".	STRONGLY AGREE .....4 SOMEWHAT AGREE .....3 SOMEWHAT DISAGREE .....2 STRONGLY DISAGREE .....1 DON'T KNOW .....8 REFUSAL 9	284 / 6 / 28
	(IF NECESSARY READ THE RESPONSE CATEGORIES FOR THE REMAINING QUESTIONS)		
4)	"Careful drivers are just as likely to get hurt in traffic accidents as careless ones".	STRONGLY AGREE .....1 SOMEWHAT AGREE .....2 SOMEWHAT DISAGREE .....3 STRONGLY DISAGREE .....4 DON'T KNOW .....8 REFUSAL 9	285 / 6 / 29
5)	"It is a common occurrence for a guilty person to get off free in Canadian courts".	STRONGLY AGREE .....1 SOMEWHAT AGREE .....2 SOMEWHAT DISAGREE .....3 STRONGLY DISAGREE .....4 REFUSAL 9	286 / 6 / 30
6)	"Students almost always deserve the grades they receive in school".	STRONGLY AGREE .....4 SOMEWHAT AGREE .....3 SOMEWHAT DISAGREE .....2 STRONGLY DISAGREE .....1 DON'T KNOW .....8 REFUSAL 9	287 / 6 / 31
7)	"People who keep in shape have little chance of suffering a heart attack".	STRONGLY AGREE .....4 SOMEWHAT AGREE .....3 SOMEWHAT DISAGREE .....2 STRONGLY DISAGREE .....1 DON'T KNOW .....8 REFUSAL 9	288 / 6 / 32
8)	"The political candidate who sticks up for his principles rarely gets elected".	STRONGLY AGREE .....1 SOMEWHAT AGREE .....2 SOMEWHAT DISAGREE .....3 STRONGLY DISAGREE .....4 DON'T KNOW .....8 REFUSAL 9	289 / 6 / 33

9) "It is rare for an innocent man to be sent to jail".

STRONGLY AGREE.....4
SOMEWHAT AGREE.....3
SOMEWHAT DISAGREE.....2
STRONGLY DISAGREE.....1
DON'T KNOW.....8
REFUSAL.....9

290 / 6 / 34

10) "In professional sports, many fouls and infractions never get called by the referee".

STRONGLY AGREE 1
SOMEWHAT AGREE.....2
SOMEWHAT DISAGREE.....3
STRONGLY DISAGREE.....4
DON'T KNOW.....8
REFUSAL.....9

291 / 6 / 35

11) "By and large, people deserve what they get".

STRONGLY AGREE.....4
SOMEWHAT AGREE.....3
SOMEWHAT DISAGREE.....2
STRONGLY DISAGREE.....1
DON'T KNOW.....8
REFUSAL.....9

292 / 6 / 36

12) "When parents punish their children, it is almost always for good reasons".

STRONGLY AGREE.....4
SOMEWHAT AGREE.....3
SOMEWHAT DISAGREE.....2
STRONGLY DISAGREE.....1
DON'T KNOW.....8
REFUSAL.....9

293 / 6 / 37

13) "Good deeds often go unnoticed and unrewarded".

STRONGLY AGREE.....1
SOMEWHAT AGREE.....2
SOMEWHAT DISAGREE.....3
STRONGLY DISAGREE.....4
DON'T KNOW.....8
REFUSAL.....9

294 / 6 / 38

14) "Although evil people may hold political power for awhile, in the general course of history good wins out".

STRONGLY AGREE.....4
SOMEWHAT AGREE.....3
SOMEWHAT DISAGREE.....2
STRONGLY DISAGREE.....1
DON'T KNOW.....8
REFUSAL.....9

295 / 6 / 39

15) "In almost any business or profession, people who do their job well rise to the top".

STRONGLY AGREE.....4
SOMEWHAT AGREE.....3
SOMEWHAT DISAGREE.....2
STRONGLY DISAGREE.....1
DON'T KNOW.....8
REFUSAL.....9

296 / 6 / 40

16) "Canadian parents tend to overlook the things most to be admired in their children".

STRONGLY AGREE.....1
SOMEWHAT AGREE.....2
SOMEWHAT DISAGREE.....3
STRONGLY DISAGREE.....4
DON'T KNOW.....8
REFUSAL.....9

297 / 6 / 41

17) "It is often impossible for a person to receive a fair trial in Canada".

STRONGLY AGREE.....1
SOMEWHAT AGREE.....2
SOMEWHAT DISAGREE.....3
STRONGLY DISAGREE.....4
DON'T KNOW.....8
REFUSAL.....9

298 / 6 / 42

18) "People who meet with misfortune have often brought it upon themselves".

STRONGLY AGREE.....4
SOMEWHAT AGREE.....3
SOMEWHAT DISAGREE.....2
STRONGLY DISAGREE.....1
DON'T KNOW.....8
REFUSAL.....9

299 / 6 / 43

19) "Crime doesn't pay".

STRONGLY AGREE.....4
SOMEWHAT AGREE.....3
SOMEWHAT DISAGREE.....2
STRONGLY DISAGREE.....1
DON'T KNOW.....8
REFUSAL.....9

300 / 6 / 44

20) "Many people suffer through absolutely no fault of their own".

STRONGLY AGREE.....1
SOMEWHAT AGREE.....2
SOMEWHAT DISAGREE.....3
STRONGLY DISAGREE.....4
DON'T KNOW.....8
REFUSAL.....9

301 / 6 / 45

THE HOPKINS SYMPTOM CHECKLIST

Next, I am going to read a short list of problems and complaints that people sometimes have. I would like you to think about how much discomfort that problem has caused you in the past seven days, including today. Please indicate whether you have experienced a "little bit of discomfort", "quite a bit", "an extreme amount", or "none at all".

---

1) First, in the past seven days how much discomfort have headaches caused you? Would you say a little bit, quite a bit, an extreme amount, or none at all"?

NONE AT ALL	LITTLE BIT	QUITE A BIT	EXTREME AMOUNT	D/K	REF-USAL
1	2	3	4	8	9

302 / 6 / 46

(IF NECESSARY READ RESPONSE CATEGORIES FOR REMAINING QUESTIONS)

2) In the past seven days, how much trouble have you had remembering things?

1.....2.....3.....4.....8.....9

303 / 6 / 47

3) How much have you worried about sloppiness or carelessness?

1.....2.....3.....4.....8.....9

304 / 6 / 48

4) How often have you felt low in energy or slowed down? 1.....2.....3.....4.....8.....9

305 / 6 / 49

5) How often have you been blaming yourself for things? 1.....2.....3.....4.....8.....9

306 / 6 / 50

6) How much discomfort have pains in your lower back caused you? 1.....2.....3.....4.....8.....9

307 / 6 / 51

7) How blocked have you felt in getting things done? 1.....2.....3.....4.....8.....9

308 / 6 / 52

8) How lonely have you felt? 1.....2.....3.....4.....8.....9

309 / 6 / 53

9) How often have you been feeling blue? 1.....2.....3.....4.....8.....9

310 / 6 / 54

10) How much discomfort has worrying about things caused you?

1.....2.....3.....4.....8.....9

311 / 6 / 55

11	How much discomfort has soreness of your muscles caused you? 1.....2..... 3 .....4.....8..... 9	312 / 6 / 56
12)	How often have you had trouble concentrating? 1.....2..... 3 .....4.....8..... 9	313 / 6 / 57

THE GENERAL HEALTH QUESTIONNAIRE

We would like to know if you have had any medical complaints, and how your health has been in general over the last few weeks. To obtain this information I will ask you a number of questions. After each question I will supply you with four possible answers. Listen carefully to the answers and simply tell me which one most nearly applies to you. Remember, we want to know about present and recent complaints, not those you have had in the past.

The first question is:

1) Have you recently been able to concentrate on whatever you're doing?
Would you say that you have been able to concentrate . . .

. . . better than usual..... 0
same as usual..... 1
less than usual..... 2 — 314 / 6 / 58
or, much less than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

2) Have you recently lost much sleep over worry?
Would you say . . .

. . . not at all..... 0
no more than usual..... 1
rather more than usual..... 2 — 315 / 6 / 59
or, much more than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

3) Have you recently felt you are playing a useful part in things?
Would you say . . .

. . . more so than usual..... 0
same as usual..... 1
less useful than usual..... 2 — 316 / 6 / 60
or, much less useful..... 3
DON'T KNOW..... 8
REFUSAL..... 9

4) Have you recently been feeling unhappy and depressed?
Would you say . . .

. . . not at all..... 0
no more than usual..... 1
rather more than usual..... 2 — 317 / 6 / 61
or, much more than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

5) Have you recently felt constantly under strain?
Would you say . . .

. . . not at all..... 0
no more than usual..... 1
rather more than usual..... 2 — 318 / 6 / 62
or, much more than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

6) Have you recently been losing confidence in yourself?
Would you say . . .

. . . not at all..... 0
no more than usual..... 1
rather more than usual..... 2 — 319 / 6 / 63
or, much more than usual..... 3
DON'T KNOW..... 8
REFUSAL..... 9

7) Have you recently been thinking of yourself as a worthless person?
Would you say . . .

. . . not at all	0
no more than usual	1
rather more than usual	2
or, much more than usual	3
DON'T KNOW	8
REFUSAL	9

320 / 6 / 64

8) Have you recently felt that you couldn't overcome your difficulties?
Would you say . . .

. . . not at all	0
no more than usual	1
rather more than usual	2
or, much more than usual	3
DON'T KNOW	8
REFUSAL	9

321 / 6 / 65

9) Have you recently been able to enjoy your normal day to day activities?
Would you say . . .

. . . more so than usual	0
same as usual	1
less so than usual	2
or, much less than usual	3
DON'T KNOW	8
REFUSAL	9

322 / 6 / 66

10) Have you recently been able to face up to your problems?
Would you say . .

. . . more so than usual	0
same as usual	1
less able than usual	2
or, much less able	3
DON'T KNOW	8
REFUSAL	9

323 / 6 / 67

11) Have you recently been feeling reasonably happy, all things considered?
Would you say . . .

. . . more so than usual	0
same as usual	1
less so than usual	2
or, much less than usual	3
DON'T KNOW	8
REFUSAL	9

324 / 6 / 68

12) Have you recently felt capable of making decisions about things?
Would you say . . .

. . . more so than usual	0
same as usual	1
less capable than usual	2
or, much less capable	3
DON'T KNOW	8
REFUSAL	9

325 / 6 / 69

13) Have you recently been drinking more alcohol than usual?
Would you say . . .

. . . much more than usual	4
a little more than usual	3
no more than usual	2
or, a little less than usual	1
DON'T KNOW	8
REFUSAL	9

326 / 7 / 1

THE TRAIT ANXIETY INVENTORY

I am going to read another list of statements which people have used to describe themselves. This time we would like to know whether the statements reflect how you generally feel. Again, there are no right or wrong answers. Simply answer with either "almost never", "sometimes", "often", or "almost always" depending on how accurately you think each statement reflects how you generally feel.

1)	The first statement is "I feel pleasant". Would you say that you feel pleasant . . . . . . almost never ..... 4 sometimes ..... 3 often ..... 2 or, almost always ..... 1 DON'T KNOW ..... 8 REFUSAL 9	327 / 7 / 2
2)	What about this statement: "I feel nervous and restless". Would you say that you feel this way . . . . . . almost never ..... 1 sometimes ..... 2 often ..... 3 or, almost always ..... 4 DON'T KNOW ..... 8 REFUSAL 9	328 / 7 / 3
3)	"I feel satisfied with myself" **(IF NECESSARY READ RESPONSE CATEGORIES FOR REMAINING QUESTIONS)** ALMOST NEVER ..... 4 SOMETIMES ..... 3 OFTEN ..... 2 ALMOST ALWAYS ..... 1 DON'T KNOW ..... 8 REFUSAL 9	329 / 7 / 4
4)	"I wish I could be as happy as others seem to be" ALMOST NEVER ..... 1 SOMETIMES ..... 2 OFTEN ..... 3 ALMOST ALWAYS ..... 4 DON'T KNOW ..... 8 REFUSAL 9	330 / 7 / 5
5)	"I feel like a failure" ALMOST NEVER ..... 1 SOMETIMES ..... 2 OFTEN ..... 3 ALMOST ALWAYS ..... 4 DON'T KNOW ..... 8 REFUSAL 9	331 / 7 / 6
6)	"I feel rested" ALMOST NEVER ..... 4 SOMETIMES ..... 3 OFTEN ..... 2 ALMOST ALWAYS ..... 1 DON'T KNOW ..... 8 REFUSAL 9	332 / 7 / 7
7)	"I am calm, cool, and collected" ALMOST NEVER ..... 4 SOMETIMES ..... 3 OFTEN ..... 2 ALMOST ALWAYS ..... 1 DON'T KNOW ..... 8 REFUSAL 9	333 / 7 / 8

8) "I feel that difficulties are piling up so high that I cannot overcome them"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 334 / 7 / 9
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

9) "I worry too much over something that really doesn't matter"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 335 / 7 / 10
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

10) "I am happy"

ALMOST NEVER..... 4
SOMETIMES..... 3
OFTEN..... 2 | 336 / 7 / 11
ALMOST ALWAYS..... 1
DON'T KNOW..... 8
REFUSAL..... 9

11) "I have disturbing thoughts"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 337 / 7 / 12
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

12) "I lack self-confidence"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 338 / 7 / 13
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

13) "I feel secure"

ALMOST NEVER..... 4
SOMETIMES..... 3
OFTEN..... 2 | 339 / 7 / 14
ALMOST ALWAYS..... 1
DON'T KNOW..... 8
REFUSAL..... 9

14) "I make decisions easily"

ALMOST NEVER..... 4
SOMETIMES..... 3
OFTEN..... 2 | 340 / 7 / 15
ALMOST ALWAYS..... 1
DON'T KNOW..... 8
REFUSAL..... 9

15) "I feel inadequate"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 341 / 7 / 16
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

16) "I am content"

ALMOST NEVER..... 4
SOMETIMES..... 3
OFTEN..... 2 | 342 / 7 / 17
ALMOST ALWAYS..... 1
DON'T KNOW..... 8
REFUSAL..... 9

17) "Some unimportant thought runs through my mind and it bothers me"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 343 / 7 / 18
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

18) "I take disappointments so keenly that I can't put them out of my mind"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 344 / 7 / 19
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

19) "I am a steady person"

ALMOST NEVER..... 4
SOMETIMES..... 3
OFTEN..... 2 | 345 / 7 / 20
ALMOST ALWAYS..... 1
DON'T KNOW..... 8
REFUSAL..... 9

20) "I get in a state of tension or turmoil as I think over my recent concerns and interests"

ALMOST NEVER..... 1
SOMETIMES..... 2
OFTEN..... 3 | 346 / 7 / 21
ALMOST ALWAYS..... 4
DON'T KNOW..... 8
REFUSAL..... 9

To finish, I have a few short questions about your opinion on how we can prevent burglary in Winnipeg.

Q1) First, in your opinion, what do you think the police should do to prevent more residential burglaries from occurring in Winnipeg? (PROBE: Anything else?)

	YES	N/R	
NOTHING THEY CAN DO ABOUT IT	1	2	347 / 7 / 22
MORE POLICE (UNSPECIFIC)	1	2	348 / 7 / 23
MORE CRUSIER PATROLS	1	2	349 / 7 / 24
MORE FOOT PATROLS	1	2	350 / 7 / 25
IMPROVE NEIGHBOURHOOD WATCH PROGRAMS	1	2	351 / 7 / 26
DEVOTE MORE TIME TO SOLVING THEM	1	2	352 / 7 / 27
DON'T KNOW	1	2	353 / 7 / 28
OTHER (SPECIFY) _____			
_____	1	2	354 / 7 / 29

Q2) How easy is it for your neighbours to keep a watch on your house when no one is home? Would you say it is . . .

. . . very easy..... 1
fairly easy 2
fairly difficult..... 3 | 355 / 7 / 30
or, very difficult..... 4
DON'T KNOW..... 8
REFUSAL..... 9

Q3) How often do you ask neighbours to keep an eye on your house when it is going to be empty for more than a couple of days? Would you say . . .

. . . all the time 1
some of the time 2
rarely 3
or, never 4
DON'T KNOW 8
REFUSAL 9

356 / 7 / 31

Q4) Do you think that the idea of neighbours looking after each other's homes needs to be organized, or should people be left to make their own arrangements?

NEEDS TO BE ORGANIZED 1
MAKE OWN ARRANGEMENTS 2
DON'T KNOW 8
REFUSAL 9

357 / 7 / 32

Q5) I would like you to think of a hundred houses in your neighbourhood. If you had to guess, approximately how many of these houses do you think will be broken into during the next year? (IF D/K PROMPT; Well how many would you guess?)

|__|__|__|

NO IDEA 888

358 / 7 / 33-35

Q6) Compared to others in your neighbourhood do you think your chances of being broken into during the next year are about the same, more, or less than other's chances?

LESS THAN 1
THE SAME 2
MORE THAN 3
DON'T KNOW 8

359 / 7 / 36

Q7) In your opinion how much do you think your chances of becoming a victim depend upon what you do to try to protect yourself? Would you say . . .

. . . a great deal 1
somewhat 2
a little 3
or, not much at all 4
DON'T KNOW 8

360 / 7 / 37

Q8) What priority do you think the police should give to household Break and Enters? Compared with other crimes, do you think it should be . . .

. . . very low priority 1
low priority 2
about the same priority 3
high priority 4
or, very high priority 5
DON'T KNOW 8

361 / 7 / 38

Q9) Many people, at some time in their lives, have done things which are illegal, particularly as a teenager. Have you ever been involved either alone or with a group, in any form of activity which could be considered illegal, even if you weren't caught?

YES..... 1
NO..... 2
DON'T KNOW..... 8
REFUSAL..... 9

362 / 7 / 39

Thank you for your cooperation and the time you have spent talking to me. The information you have provided is appreciated. If you would like to receive a summary of the study's results I will make a note of it and see that you get a copy as soon as possible.

Would you like us to mail you a summary?

YES..... 1
NO..... 2

363 / 7 / 40

We don't know whether we will be conducting a follow-up to this study in the future but if we do, would you mind if we contacted you?

YES..... 1
NO..... 2

364 / 7 / 41

Thank you again for the help you have given us. If you have any questions I would be happy to answer them for you?

(ANSWER QUESTIONS)

Good-bye. **(TERMINATE CALL)**

START TIME: _____ END TIME: _____ LENGTH OF INTERVIEW: _____ _____ _____

(IN MINUTES)

365 / 7 / 42-44

APPENDIX F

Training Manual for Interviewers

-- TRAINING MANUAL FOR INTERVIEWERS --

CITY OF WINNIPEG CRIME SURVEY:

A STUDY OF THE INITIAL AND LONG-TERM PSYCHOLOGICAL AND PRACTICAL PROBLEMS ARISING FROM RESIDENTIAL BREAKING AND ENTERING

A JOINT RESEARCH PROJECT OF THE UNIVERSITY OF MANITOBA AND THE PROVINCE OF MANITOBA

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A BRIEF DESCRIPTION OF THE RESEARCH PROJECT

Statement of Need

The number of victims who face the prospect of serious physical and psychological difficulties that require medical and mental health care and other services will undoubtedly increase as greater numbers of people fall victim to crime each year in Canada. The experience of being criminally victimized may have profound psychological consequences, both immediate and long term (Burgess & Holmstrom, 1979; Fischer & Wertz, 1979; Silver et al., 1983).

However, the nature of the trauma caused by crime is still the subject of some debate. Some social psychologists studying reactions to stress and victimization have focused primarily on assumptions, attributions, and other cognitions that may influence or be influenced by reactions to a stressful outcome. Relatively less attention has been paid to emotional reactions to distress and their role in the coping process. There is some evidence to suggest that emotional reactions are highly variable. Depending on the individual involved and the circumstances, the consequences of victimization produce personal disruptions of feeling and behavior that can range from relatively short-term discomfort to a disabling long-term post traumatic stress disorder (Frederick, 1980; Markesteyn, 1986).

To date, most victimization research has limited its focus to the attributions made for the victimizing incident itself. For example, researchers have studied spinal cord injured persons' attributions of causality for their accident, or rape victims' attributions for sexual assault. However, this line of research negates that most life events are preceded by, comprised of, and followed by a whole series of interlinked events which do exist in isolation. Weiler & Desgagne (1984) report that the consequences of a crime are dependent on factors which include the type and severity of the crime, the victim's age and physical health, the reactions of significant others, subsequent involvement of the victim with the criminal justice system, and the immediate effects of the crime on the victim's mental health. Everstine & Everstine (1983) reported that the psychological trauma following victimization is associated with five factors: physical injury incurred, coping ability arising from prior experiences, fear of being killed during the crime, knowledge of the offender's identity, and the location of the incident. On the other hand Bard & Sangrey (1986) identified the following variables as important predictors of subsequent victim psychological well-being: the degree of violation (crime seriousness), the capacity to deal with stress resulting from past experiences, and the availability and effectiveness of support systems.

Most investigators in this area would probably concur that the degree of perceived personal violation, the availability and reaction of significant others as support, and the ability to cope based on past experiences are essential components of a model designed to predict victimization outcomes. However, they would probably just as likely

disagree on the relative importance of these predictors in the model and whether other variables should be included.

In recent years there has been an increasing trend among researchers disillusioned with the laboratory paradigm as a vehicle for providing useful information about how people react to stressful life events, to study these effects in the "real world" (see Wortman et al., 1980 for a more detailed discussion). Conducting theory based studies of reactions to victimization in field settings has the potential to enrich social psychological theory by bringing it to bear on the real-life problems surrounding a victimization experience. The proposed study continues this tradition, takes into account previously suggested variables found in the literature and incorporates social psychological theory to build a model designed to predict crime victims' subsequent physiological and psychological health.

By far the most common crimes are property crimes. Every year in Canada there are well over 1,000,000 reported incidents of theft, break and enter, car theft, fraud and possession of stolen goods. In 1988 there were 49,000 reported crimes against property in Winnipeg alone (Winnipeg Police Department Statistical Report, 1988). Each incident created one or more victims. Although property crime victims may escape direct personal violence and may receive insurance compensation for their material losses, there may still be considerable psychological impact to the violation of one's property.

In particular, having one's house broken into can produce severe psychological effects in some victims. Burglary has been described as a violation of what is usually perceived as one of the most intimate places; the home (Meredith, 1984). Several authors (Waller & Okihiro, 1978; Bourque et al., 1978; Bard & Sangrey, 1986; Maguire, 1980) have shown that many burglary victims and their families suffer heightened feelings of fear, anger, deceit, shock, and guilt. For example, in their study of burglary victims located from police files, Bourque et al. (1978) found more than 70 percent of victims experienced crying, shaking, and fear. In addition, 20 percent recorded physical upset and memory loss, while five percent reported a full range of emotional and psycho-social difficulties as well as longer term residual effects. Although sparse, the available research indicates that even months after the event, many burglary victims continue to suffer effects, including suspiciousness of neighbors, general disillusionment with humanity, and other emotional problems.

Maguire (1980) interviewed 322 victims of burglary between 1977 and 1979 living in England. He concluded that based on the available evidence there is little doubt "burglary is a significant event in the lives of a considerable proportion of victims (p. 269). At least twenty of the victims he surveyed had suffered acute distress immediately following the crime which included severe shock, trembling, panic, and uncontrolled weeping. A further 63 victims were assessed as having experienced considerable impact. They reported feelings of personal violation, shock, nausea, and vulnerability.

Considering that property crime victimization is not infrequent and that it can have significant psychological consequences, it is disconcerting that there is little discussion of its impact in the literature. Burglary may seem minor compared to more direct and violent assaults, but it is a very real personal concern for a significant portion of our population annually and therefore deserving of careful study.

The Victim Recovery Model

Since there has been limited previous research on the factors affecting victim reaction, in particular the reactions of burglary victims, the current study will operate from a model of predictors which have been derived from the assumptions and work of other researchers and service providers. Sales et al. (1984) have outlined a model of factors relevant to sexual assault victim recovery which will serve as a framework for the recovery process of burglary victims. The present study will explore three categories of variables which are ordered in time and may contribute to a victim's reaction to burglary at some stage in the recovery process. The proposed model predicts that the severity and persistence of symptoms depends on 1) factors which influence the victim's state prior to victimization 2) characteristics of the actual offense and 3) factors related to experiences following the burglary.

The first set of variables, the Pre-burglary or background factors, are relatively stable aspects of victim's lives that affect their ability to deal with the criminal event. They include demographic variables (e.g. gender, age, etc.) and psychosocial factors such as a victim's attributional style, their mental health history, and social support systems.

The second class of variables, the Burglary factors, relate to specific characteristics of the crime event such as the time of day it occurred, the amount stolen, and whether the victim was at home at the time of the break and enter.

Finally, variables associated with the Post-burglary experience will be assessed. Previous research has demonstrated the important role police officers play in victim readjustment. Police intervention, the victim's subsequent involvement in the criminal justice system, victim use of behavioral coping strategies such as installing burglar alarms and the services provided by victim agencies will be evaluated as factors associated with post-victimization adjustment.

The Figure summarizes the variables and illustrates how each set of factors, spanning the pre to post-burglary periods, may influence later variables, as well as contribute to how a victim reacts to the experience.

Objectives

In examining the host of factors related to the nature and degree of trauma associated with the experience of being a victim of burglary, the following objectives are set for this study.

1) To develop a diagnostic instrument which can be used by victim service agencies to identify at an early stage individuals who are likely to experience prolonged effects arising from being a victim of residential breaking and entering. *

2) To identify the immediate and long-term needs and concerns of burglary victims in Winnipeg.

3) To contribute to the victimization literature by determining the initial and subsequent psychological and behavioral reactions of burglary victims to their misfortune.

4) To assist the Winnipeg Police Department by assessing burglary victims' perceptions of the police with the aim of identifying those areas where victim assistance police training may be improved.

Target Group

The research will be conducted in the City of Winnipeg, Manitoba where in 1989, 7,205 residential break-ins were reported to the police (Winnipeg Police Department Statistical Report, 1989). A representative sample of more than 1,000 victims of break and enter selected from the six Winnipeg police districts will be chosen for participation in the study. Ideally, the number of subjects by police district to be selected will be as follows:

Respondent Selection by Police District

District #	Total No.	Percent of Sample	Sample Size
1	2,076	28.8	288
2	391	5.4	54 (+1)
3	2,034	28.2	282
4	1,127	15.6	156
5	613	8.5	85
6	964	13.4	134
City	7,205		1000

* Letters of support from over 20 Winnipeg Victim Service Agencies endorsing this objective of the study have been received.

Procedure

Data will be gathered via the administration of two separate telephone interviews - one given five to seven days following the burglary, and the other approximately five months later. On a daily basis, through the use of police crime incident reports, the names, addresses and telephone numbers of victims of residential breaking and entering reported to the Winnipeg Police Department will be recorded. An initial contact letter will be sent to the victims the following day describing the research and asking the victims if they would be willing to participate in the study (see Appendix). The letter will be addressed to the individual who filed the incident report with the police. Respondents will be guaranteed confidentiality and told that they are under no obligation to participate in the study. In addition, they will be promised a copy of the research findings upon request subsequent to the completion of the research.

Five to 7 days after the letters are mailed the victims will be contacted by telephone by trained experienced interviewers who will administer the Initial Assessment Schedule (see Appendix). Pilot testing has indicated that the interview will take about 30 minutes to complete. At the conclusion of the interview respondents will be told that they will be contacted within the next few weeks by the Winnipeg Police Victim Services Unit.

Five months after the break and enter is reported to the police, the burglary victims who participated in the initial stage of the study will be sent another letter informing them that they can expect to receive another telephone call within the next week (see Appendix). Soon after the letter is sent out the victims will be interviewed. As frequently as possible the victims will be contacted by the same interviewer who spoke to them four months earlier. The interviewer will then administer the Follow-up Interview (see Appendix) to assess the long-term effects of being victimized. At the end of the interview the respondents will be reminded that a summary of the results will be mailed out to them if they desire.

Previous research estimates are that we should be able to obtain follow-up data on approximately 75 percent of the respondents (Wirtz & Harrell, 1987). This number will allow for sufficient statistical power to test the model of factors relevant to victim recovery (Tabachnick & Fidell, 1989).

Assessment Measures

As previously explained, the two telephone interviews will assess factors associated with the victim's pre-burglarized state, post-burglary adjustment, and details about the burglary incident itself (see Figure). In part, the questions have been adapted from previous victimization surveys conducted by Maguire (1980), Hough (1987), Waller & Okihiro (1978), Woytowich (1986) and Markesteyn & de Paiva (1988). In keeping with the objectives of this research, additional questions deemed as appropriate have been constructed and incorporated into the interviewing instrument. Victim

physiological and psychological health, attributional style, and belief systems are assessed by standardized tests designed for these purposes.

In developing the questionnaires, careful attention was paid to both the phrasing and order of the questions. In addition, each item was designed to answer a specific question (see Appendix). The answer choices are restricted (closed) to facilitate data entry and the reduce coding errors. The response options are also precoded. In general terms, the questionnaires were constructed according to the guidelines recommended by Backstrom & Hursh-Cesar (1981), Dillman (1978) and Sudman & Bradburn (1983).

Both questionnaires have been reviewed by a panel of five graduate students who have had extensive experience with implementing surveys and questionnaire construction. Their suggestions have been considered and the final version of the questionnaires is ready to be pilot tested with a sample of burglary victims (n=25). The questionnaires have also be subject to review by the Winnipeg Police Department.

The majority of the questions asked have been used by other victimology researchers. Pilot questions were used only where necessary. The reactions of burglary victims are assessed by four standardized tests; the Impact of Event Scale, the state subtest of the State-Trait Anxiety Inventory, the General Health Questionnaire, and a shortened version of the Hopkins Symptom Checklist. These tests are included in both the Initial Assessment Schedule and the Follow-up Interview.

The final version of the questionnaires has been reviewed and approved by the Human Ethical Review Committee of the Department of Psychology at the University of Manitoba, and a committee consisting of Dr. Stephen Brickey (Dept. of Sociology) and Dr.'s F.L. Marcuse, C. Huynh, and R. Hartsough of the Department of Psychology.

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WHEN TO CALL

Telephone survey research has shown that most people are at home and willing to answer questionnaires during the following times: (in descending order)

1) Weekday evenings between 6 p.m. and 9 p.m.

2) Saturday and Sunday afternoons and evenings

3) Weekday afternoons between 1 p.m. and 5 p.m.

4) Mornings after 9 a.m.

INTERVIEWERS: NAMES AND PHONE NUMBERS**

Karen Roth: ..... xxx-xxxx

Arlen Nimchuk: ..... xxx-xxxx

Gillian Manning: ..... xxx-xxxx

Eric Kruger: ..... xxx-xxxx

Su Bruce: ..... xxx-xxxx

Ron Bartmanovich ..... xxx-xxxx

Brenda Poersh ..... xxx-xxxx

Penny Cole ..... xxx-xxxx

Trevor Markesteyn: ..... xxx-xxxx
xxx-xxxx(home)
xxx-xxxx(messages)

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* This list of interviewers is incomplete. Phone numbers are intentionally missing.

ANSWERING QUESTIONS BREAKING AND ENTERING VICTIMS MAY HAVE

Familiarize yourself with the research project by reading pages 2 to 7 of this handout. In particular, know the objectives of the research and have on hand a copy of the letter of introduction which will have been sent to the break-in victims.

To ensure this research is successful it is important that you are able to address the concerns of victims and thus put them at ease about the study. Most frequently victims will ask you if the research is legitimate, if it is being conducted with the authorization of the Winnipeg Police Department, what type of questions you will be asking, and how long is the interview going to last. If he or she has a technical question about the study that you cannot answer refer them to me at the number provided.

Examples of question and answers that victims might have are provided below and on the next page. In general terms, keep your answers brief and avoid going into detail about the research. Try to answer questions naturally, not as though you are reading a text. Above all, do not tell victims how they should respond to the questions in the questionnaires.

SOME TYPICAL ANSWERS TO SOME TYPICAL QUESTIONS VICTIMS MAY HAVE ABOUT THIS STUDY

Q- Who is doing this study?

The study is being conducted by the Government of Manitoba and The University of Manitoba in cooperation with the Winnipeg Police Department. The research director is Trevor Markesteyn from the Department of Psychology at the University.

Q- May I talk to the person in charge of this research?

The person you should talk to is Trevor Markesteyn. He is from the Department of Psychology at the University of Manitoba. I am sure he would be happy to talk with you. I can have him call you, or if you prefer, you can call him at 474-9528.

Q- What is the purpose of the study? Why are you doing this?

The Government of Manitoba and the Winnipeg Police Department are concerned about the consequences of criminal victimization. The study is being conducted to help us understand what breaking and entering victims go through so that we can provide better services.

Q- Who is paying for this research?

It is sponsored by the Provincial Government. Directly and indirectly, monies have been provided by the Attorney General, the University of Manitoba, and the Winnipeg Police Department.

Q- Who else has been selected to participate in the study?

Approximately 1,000 victims of residential Breaking and Entering in Winnipeg will be interviewed this year.

Q- Do I have to participate in the study?

Absolutely not. Nobody has to take part in the study if they don't want to. We encourage people to participate in the study because it is important that we get a good cross-section of victims from all walks of life around Winnipeg.

Q- Is this confidential? What are you going to do with my answers?

Any information you provide will be kept strictly confidential. The data is being kept under lock and key and no body will be given access to your file except, of course, the researcher at the University of Manitoba. Furthermore, the research people are only interested in group responses . . . not any individual response. All responses will remain completely anonymous.

Q- Can I get a copy of the results to see how I compare with other victims?

In order to ensure that individual responses remain anonymous, the results will tabulated for groups only. If you would like to receive a copy of this final report please contact Trevor Markesteyn at 474-9528 and I am sure he would be glad to send you one after the study is completed.

POSSIBLE ANSWERS TO REASONS FOR REFUSALS

REASONS FOR REFUSING	. . . AND POSSIBLE RESPONSES
TOO BUSY	The interview should take less than one hour of your time. If they call you at a bad time, just let them know and I am sure they will work around your schedule.

WILL NOT BE IN TOWN	That doesn't present a problem. If you would care to give me your name and the date when you anticipate returning I will arrange to have someone speak to you then.
BAD HEALTH	I am sorry to hear that. Have you been sick long? I am sure the interviewer would be happy to call back when you are feeling better. Just let them know about your health when they call.
TOO OLD	Older people's opinions are just as important in this study as anyone else's. In order for the results to be representative for all victims of breaking and entering in Winnipeg, it is vital that senior citizens such as yourself are given the opportunity to express their opinions.
FEEL INADEQUATE: DON'T KNOW ENOUGH TO ANSWER	The questions are not at all difficult. They mostly concern how you feel as a result of being a victim of breaking and entering. If you don't understand a question or feel unsure of the answer just tell the interviewer and I am sure they will understand. Some of the people already interviewed had the same concern you have, but once they got started they had very little difficulty answering the questions.
NOT INTERESTED	Its is awfully important that the opinions of all breaking and entering victims are received otherwise the results won't be very useful. Even the fact that you are not interested in the study means that you represent an important point of view. Your opinion is valuable.
NO ONE ELSE'S BUSINESS WHAT I THINK	I can certainly understand how you feel. That's why all of our interviews are confidential. Protecting people's privacy is one of the primary concerns of the people conducting this research. No single individual's answers will ever be identified.
OBJECTS TO SURVEYS IN GENERAL	We think this particular study is very important because the questions are ones that people in government and service providers want to know the answers to. Your opinion is, therefore, vital.
OBJECTS TO TELEPHONE SURVEYS	We would like to come to your home to speak with you personally. However, because almost 1,000 people in Winnipeg are being interviewed it is much faster and it costs a lot less to speak to you on the telephone.

INTERVIEW CHECKLIST

A) Before you Start:

1. Read this manual and be prepared to answer any questions victims may have about the study.

2. Pick up a Questionnaire from the Research Room (P435B Duff Roblin).

   - Allocation is on a first come / first served basis.
   - Select earliest offense dates first.

3. Check the top of Page 2 of the Initial Assessment Schedule to ensure it is completed.

4. Record the Neighbourhood Code (manual in top drawer of desk). (Not necessary for the follow-up interview)

5. Practice pronouncing the name of the respondent if you are unsure.

6. Do not select anyone who you know.

7. Be sure you have two sharpened pencils with erasers on hand.

B) Whom to Talk to:

1. Only interview the person who reported the break and enter to the police (i.e. the person who's name appears at the top of pg. 2).

2. Do not allow other people to listen in on a shared line.

3. Dissuade respondents from asking another person in the room to answer questions.

C) The Interview:

1. Be sure to complete the call record.

2. Be sure to record the time the interview starts.

3. Read the questions precisely as written. As you know even a single word can drastically change the meaning of a question.

4. It is very easy for respondents to miss a word or two, that is crucial to the meaning of the question. Sometimes they are embarrassed to admit that they

didn't quite understand. If you suspect a question has been misunderstood do not tell the victim that you think he or she has misunderstood; these responses may be of some help:

- Could I reread the question and the answer I've written down just to be sure I have your response correct.
- I think I may not have read the question correctly, so, may I read it again to be sure.

5. Use neutral probes as needed. Before accepting an answer of "I don't know", be sure to probe. Many people use this response in a way that says, "I'm thinking". Some examples of probes you might use are:
   - Could you be a little more specific?
   - I'm not sure entirely by what you mean. Could you explain it a little more?
   - Yes, I see, (or) Uh-huh (stated in an expectant manner)

6. If the respondent becomes incensed, use abusive language, etc., be nice! Do not hang up! Keep your cool! This is not likely to happen but if it does, be patient - maybe they are just having a bad day. Some responses that might help are:
   - Yes, I understand you feel quite strongly about this matter, but we really need the information you can provide.
   - Yes, I understand that some people consider this matter to be quite personal but I can assure you that any information you are providing will remain completely confidential.

7. If the respondent becomes fatigued and impatient you might address their concerns with:
   - Other people have mentioned that the interview takes a long time. The interview is very thorough but then again human reactions to victimization are very complex as I am sure you are aware. We should be finished in ? minutes. (If still resistant: If you prefer I will call back at another time when you have more time.)

8. If the respondent insists they do not want to continue and your efforts have failed to keep them on the line or to set an alternative time for the interview:
   - I think I can understand your feelings, and your not wanting to complete the interview. But, thank you very much anyway. Good-bye.

D) After you Hang-up:

1. Immediately record the time and calculate the length of the interview.

2. Immediately go over every single answer to make sure it was done correctly and coded properly. Make sure every question has an answer. (THIS IS ESSENTIAL)

3. Return the completed questionnaire to the Research Room and place it on the appropriate shelf.

4. Pick up new questionnaire(s).

5. Record the number you take on the blackboard.

6. Make sure the door of the Research Room is securely locked.

E) In General:

We have an obligation to respondents to keep their interviews confidential. I feel strongly that this obligation should be honored. Therefore, please do not tell anyone the substance of any interview, no matter how fascinating or interesting it was. Also, please avoid giving a summary of your own findings. Just because 90% of the victims you speak to feel a certain way does not mean that 90% of everyone else's feel the same way. Confidentiality is essential. Please help me maintain the reputation this research project has established. I am available to talk to any of you at any time, so do not hesitate to call me if you have any concerns or questions.

F) How to get paid:

1. Keep a record of the number of COMPLETED interviews you have done. You are paid $10 per completed interview.

2. Prepare a formal typed invoice (see next page for an example) and bill Trevor Markesteyn c/o Victims of Burglary for contracted services (i.e. interviews) once a month. Be sure to include your social security number and sign the invoice.

3. Sit by your mailbox and convince yourself that "the check is in the mail". (Just kidding!)

INVOICE

Date:

To: Trevor Markesteyn
Department of Psychology
University of Manitoba

Re: City of Winnipeg Crime Survey:
A Study of Victims of Residential Breaking and Entering

TELEPHONE INTERVIEWS COMPLETED

DATE	**No. OF INTERVIEWS COMPLETED**

_____

TOTAL No. OF INTERVIEWS X $10.00 = _____

SOCIAL SECURITY NUMBER: _____

SIGNATURE: _____

APPENDIX G

Feedback Provided to Victims

Victims of Break and Enter:

A Study of the short and long-term psychological and practical impact of residential break and enter in Winnipeg.

Survey Feedback **The University of Manitoba** **October, 1992**

Dear Participant,

During the spring or early summer of 1991 you were the unfortunate victim of a break and enter into your residence. You were interviewed over the telephone shortly after the break-in and again approximately five months later by a research assistant from the University of Manitoba. As you recall, the interviewer asked you several questions about what happened during and after the crime and your reactions to those events.

Your participation in the research project was very important and I would like to take this opportunity to express my sincere gratitude for your cooperation during both stages of the study. The interviews were long and we understand that for some of you they may have been tiring. However, the information you provided is vital if we are to increase our understanding of the consequences of criminal victimization.

The research project had two primary objectives. First, we wanted to assess the psychological and behavioral problems that arise out of residential break and enter. Previous studies conducted in Toronto and Great Britain provided an indication that the psychological consequences of having one's home broken into could be traumatic. Second, we were interested in obtaining feedback from victims regarding the manner in which they were treated by the Winnipeg Police Department. Other research showed that the reactions of law enforcement personnel can impact on the recovery of crime victims. The Winnipeg Police Department was interested in how their officers were responding to break and enter calls.

Telephone interviews were conducted with 633 break and enter victims within 14 days of the offense. In total, 52.5% of those people who had their homes broken into within the time frame of the study and possessed a telephone were successfully interviewed. Approximately five months later we contacted the victims again and completed 504 interviews. This translates into a response rate of 80% for the follow-up part of the study.

The information that follows is a highlighted selection of findings we obtained from over 1000 hours of interviewing break and enter victims.

Psychological Impact

It has been widely acknowledged that crime victims suffer from psychological distress for weeks, and sometimes years, after the offense. The results of this study confirm that break and enter victims have serious and long lasting reactions to having their homes broken into. The levels of distress experienced

by burglary victims soon after the offense and months later approached those reported by researchers studying the effects of other crimes. We found that 29% of the victims we interviewed were displaying post-traumatic stress disorder symptoms within 14 days of the offense. Five months after the offense 16% of the break and enter victims were still exhibiting these symptoms. In addition, in each household one or more people may have been affected by what happened. Many people we spoke to who had children freely expressed their concern about the negative effects the break and enter had on their family.

Victims were asked how they felt immediately after discovering their homes were burglarized and most frequently replied that they felt angry or mad (52%), followed by fearful, scared or nervous (34%), violated (27%), surprised or shocked (27%), or tearful or upset (17%). Six percent reported feeling physically sick or nauseous. Only 3.4% said they were neither upset nor bothered by the break-in into their home.

Five months later 44% of the victims reported they still were not over the effects of the crime. One-quarter of these people said they remained extremely security conscious, about the same number reported that they were still afraid and generally more nervous than they were before the break-in, 21% reported they felt helpless and vulnerable, and 18% were afraid to stay in their home alone, enter the house by themselves, go out at night, or be alone. Sixteen percent indicated they felt generalized paranoia or suspiciousness about others and 7% said that after five months they still were unable to get the event "out of their mind". Of those victims who reported they had returned to normal (i.e., how they were before the break-in), roughly one-quarter (22%) said it took them between two and four months to recover.

Criminological Data

Compared to the sociodemographic profile of Winnipeggers, break and enter victims are younger, more frequently single and have lower household incomes. They are most likely to reside either in the City Centre (District 1) or Lord Selkirk/West Kildonan (District 3) and least likely to live in either St. Boniface/St. Vital (District 5) or Assiniboine Park/Fort Rouge/Fort Garry (District 6). So-called "cat" burglaries are rare in Winnipeg. Only one in ten residential break and enters occur between midnight and 8 a.m.. The majority occur during the day time, while people are usually at work. Almost 40% of break-ins take place on the weekend. Seasonal variations were not possible to determine.

Residents of single family dwellings and side by sides are disproportionately at risk for break and enter, whereas people living in highriseapartments and rowhousing are less frequently targets. Means of entry is usually through the door, followed by the window. One in five illegal entries are gained without the use of force. Rarely are break and enters committed while the home owner is present. Usually perpetrator(s) flee immediately upon being discovered.

The vast majority of break and enter victims report losses due to theft. Most frequently electronic products are taken. Victims report that money is taken in approximately half of all residential break-ins. The average amount taken is almost $200.00. The average value of

the property taken is over $2,500. Three-quarters of victims report that damage is done to their house or its contents. Rampant vandalism (as rated by the victims) requiring extensive clean-up is reported by one-third of victims. Eighty percent possess some form of household insurance.

The Winnipeg Police

In general, residential break and enter victims are pleased with the response of the Winnipeg Police Department. The police responded to most calls within one hour and as a result 60% of the victims thought that the police did a "good job" of responding promptly. When at the scene, the vast majority (94%) said that the police provided them with enough time to convey their story. The attending officer(s) frequently took an interest in their feelings and concerns, rarely made them feel responsible for the break-in, and as a result received very high satisfaction ratings regarding the manner in which they treated the victims. Overall, three-quarters of the respondents indicated they were "satisfied" with the way the police handled their case.

Surprisingly, only one in three officers provided information on crime prevention. Even fewer officers told the break and enter victims about the Police Department Victim Services Unit. Respondents thought the police could improve their services by keeping them better informed about the progress of the investigation. More than 90% of the victims did not know whether anyone had been arrested in connection with the break and enter into their home and roughly two-thirds did not feel that the policemade enough effort to keep them informed about what was happening. Perhaps as a result, almost two-thirds of the victims expressed some doubt about the effort made by the Winnipeg Police to apprehend the perpetrator.

Most victims engaged in crime prevention measures following the break and enter into their residence. They were much more likely to lock up and leave the lights on when leaving the house. Roughly 50% changed the locks on their windows or doors. One in six purchased an electronic security system. When asked what they thought the Winnipeg Police Department should do to prevent more break and enters from occurring, the most frequent response was that more cruiser patrols are needed in city neighbourhoods. Interestingly, one-quarter of the respondents thought that "nothing can be done" to prevent break and enters from occurring. Compared to other crimes, half the respondents thought break and enters should receive equal attention.

Again, thank you very much for participating in this research project. The information gathered for this study will comprise the contents of a report that will be submitted to the provincial Victims Assistance Committee. The research was supported by a grant by the Government of Manitoba. Points of view and opinions stated in this document are those of the author and do not necessarily represent the official position or policies of the government.

Sincerely, Trevor Markesteyn M.A.

For more information about the results of this research please feel free to contact me at the Department of Psychology, University of Manitoba, Winnipeg, Manitoba R3T 2N2. Phone: (204) 474-9528

APPENDIX H

Question Sources and Rationale for Inclusion in Survey

QUESTION SOURCES AND RATIONALE FOR INCLUSION IN SURVEY

A) The initial contact and follow-up letters were drafted according to Dillman's (1978) Total Design Method (see p.247). The two letters are variations of those sent by Woytowich (1986) and Waller & Okihiro (1978).

B) INITIAL ASSESSMENT SCHEDULE	MODEL VARIABLE
VAR001 - Subject identification number; assigned by Data Entry Person	
VAR002 - Crime Incident Number; Winnipeg Police Department Records	
VAR003 - Gender of Victim; Winnipeg Police Department Records	Demographics
VAR004 - Calender day offense occurred; Winnipeg Police Department Records	
VAR005 - Month offense occurred; Winnipeg Police Department Records	
VAR006 - Day of the week offense occurred; Winnipeg Police Department Records	
- Waller & Okihiro (1978, q.20)	
- Pope (1977, p.33)	
VAR007 - Time of day offense occurred; Winnipeg Police Department Records	
- Waller & Okihiro (1978, q.21-22)	
- British Crime Survey (B.C.S.) (Hough, 1987, q.7)	
- Pope (1977, p.33)	
- C.U.V.S. (Canadian Urban Victimization Survey, 1982) (q.7) (variation)	
VAR008 - Victim's Telephone Number;	
-.Winnipeg Police Department Records & Directory Assistance	
VAR009 - Neighbourhood Code; Winnipeg Area Study:	
- Provides access to information about non-respondents	
VAR010 - No. of days from offense to interview	
VAR011 - Number of calls made to contact victim	
VAR012 - Interviewer Codes (0-9)	
VAR013 - Time of day phone call was made (24 hour clock)	
VAR014 - Result of final call made to victim (final result codes)	
Q1) - C.U.V.S. (1982)	
- Young-Rifai (1979)	
- introductory question; non-threatening; high salience	
Q2) - C.U.V.S. (1982)	
- Young-Rifai (1979)	
- introductory question; non-threatening; high salience	Location of incident
Q3) - Young-Rifai (1979, p.190)	
- Markesteyn & de Paiva (1988) (variation)	
- introductory question; non-threatening; high salience	
Q4) - Waller & Okihiro (1978, q.23-25)	
- Pope (1977, p.32)	
- CUVS (1982, q.15) (variation)	
- criminological inquiry	
Q5) - Waller & Okihiro (1978, q.27) (variation)	
- BSC (Hough, 1987, q.13) (variation)	
- filter question; criminological inquiry	Severity of offense
Q6) - Markesteyn & de Paiva (1988, q.18)	
- filter question; criminological inquiry	Severity of offense
Q7) - Waller & Okihiro (1978, q.28b) (variation)	
- CUVS (1982, q.18) (variation)	
- criminological inquiry;	Severity of offense
Q8) - CUVS (1982, q.19) (variation)	
- criminological inquiry;	Severity of offense
Q9) - CUVS (1982, q.20) (variation)	
- criminological inquiry;	Severity of offense
Q10) - CUVS (1982, q.51)	
- criminological inquiry;	Severity of offense

Q11)	- CUVS (1982, q.52) (variation)	
	- BCS (Hough, 1987, q.23) (variation)	
	- Markesteyn & de Paiva (1988) (variation)	
	- criminological inquiry	Severity of offense
Q12)	- CUVS (1982, q.57)	
	- criminological inquiry	
Q13)	- CUVS (1982, q.57)	
	- criminological inquiry;	Severity of offense
Q14)	- CUVS (1982, q.58)	
	- Waller & Okihiro (1978) (variation)	
	- BCS (Hough, 1987) (variation)	
	- criminological inquiry	
Q15)	- CUVS (1982, q.59)	
	- criminological inquiry;	Severity of offense
Q16)	- BSC (Hough, 1987, q.26) (variation)	
	- criminological inquiry	Severity of offense
Q17)	- CUVS (1982, q.67) (variation)	
	- Waller & Okihiro (1978, q.38a) (variation)	
	- BCS (Hough, 1987, q.28) (variation)	
	- criminological inquiry	Severity of offense
Q18)	- CUVS (1982, q.68) (variation)	
	- criminological inquiry	
Q19)	- CUVS (1982, q.69) (variation)	
	- criminological inquiry	Severity of offense
Q20)	- BSC (Hough, 1987, q.26) (variation)	
	- filter question; criminological inquiry	Severity of offense
Q21)	- Waller & Okihiro (1978, q.38d)	
	- criminological inquiry	Severity of offense
Q22)	- Markesteyn (1986, q.29)	
	- Waller & Okihiro (1978, q.31a) (variation)	
	- Maguire (1980, p.262) (variation)	
	- Woytowich (1986) (variation)	Victim Distress
Q23)	- pilot question	
	- filter question	
Q24)	- Maguire (1980, p.264) (variation)	
	- suspiciousness	Victim Distress
	- see Follow-up Interview, Q.17	
Q25)	- Waller & Okihiro (1978, q.42a) (variation)	
	- Pope (1977, p.16, 18) (variation)	
	- filter question; criminological inquiry	Police intervention
Q26)	- CUVS (1982, q.81)	
	- Harris et al. (1984, p.20)	
	- criminological inquiry	Police intervention
Q27)	QA to QC	
	- Waller & Okihiro (1978, q.43-45)	
	- criminological inquiry	
	QD	
	- Young-Rifai (1979, p.196)	Victim Distress
	QE	
	- Wirtz & Harrell (1987, p.85)	Police intervention
	QF	
	- Pilot Question	Police intervention
	QG	
	- Wirtz & Harrell (1987, p.85)	Police intervention
	QH	
	- Pilot Question; criminological inquiry	Police intervention
	QI	
	- Markesteyn & de Paiva (1988, q.33)	
	- criminological inquiry	Police intervention

	QJ	
	- Markesteyn & de Paiva (1988, q.41)	
	- Wirtz & Harrell (1987, p.85)	
	- criminological inquiry	Victim assistance
Q28)	- Woytowich (1986) (variation)	
	- Markesteyn & de Paiva (1988, q.39) (variation)	Police intervention
Q29)	- Atkeson et al. (1982, p.97)	
	- Burgess & Holmstrom (1978)	
	- filter question; criminological inquiry	Psychosocial
Q30)	- Atkeson et al. (1982, p.97)	
	- Burgess & Holmstrom (1978)	Psychosocial
Q31)	- Atkeson et al. (1982, p.97)	
	- Burgess & Holmstrom (1978)	
	- Markesteyn & de Paiva (1988) (variation)	Psychosocial
Q32)	- Atkeson et al. (1982, p.97)	
	- Burgess & Holmstrom (1978)	
	- Markesteyn & de Paiva (1988) (variation)	Psychosocial

IMPACT OF EVENT SCALE — Horowitz, M., Wilner, N. & Alvarez, W. (1979)
A standardized instrument that measures the respondent's current degree of subjective impact experienced as a result of a specific event.

STATE ANXIETY INVENTORY — Spielberger, C., Gorsuch, R., Lushene, R., Vagg, P. & Jacobs, G. (1983)
A standardized self-evaluation measure of current transitory feelings of fear or worry. (NOTE: The response somewhat" was changed to "a little bit".)

PERCEIVED STRESS SCALE — Cohen, S., Kamarck, T. & Mermelstein, R. (1983)
A standardized four-item version (designed for telephone administration) of a 14-item measure of the degree to which situations in one's life are appraised as stressful.

HOPKINS SYMPTOM CHECKLIST — Derogatis, L., Lipman, R., Rickels, K., Uhlenhuth, E. & Covi, L. (1974)
A standardized self-report symptom inventory. Abridged versions of the HSCL subscales (i.e., obsessive-compulsive, depression, and somatization) are employed.

Note: The two questions following the Hopkins Symptom Checklist are designed as a measure of pre-victimization physical health (pilot questions; Psychosicial variables.

GENERAL HEALTH QUESTIONNAIRE — Goldberg, D.P. (1978)
A standardized self-administered screening instrument aimed at detecting those who are; a) inable to carry out normal 'healthy' functions and b) possessing symptoms of a distressing nature. - The best twelve items from the original 60-item questionnaire are asked.

Note: Questions 13 and 14 are not part of the GHQ. They are designed to assess levels of alcohol consumption (psychosocial variables). References: Atkeson et al. (1982, p.97) & Burgess and Holmstrom (1978, p.171)

THE CAUSAL DIMENSION SCALE — Russell (1982) & Weiner (1979)
A self-report instrument developed to assess how a Break and Enter victim perceives the causes of the burglary measured in terms of the locus of causality, stability, and controllability dimensions described by Weiner. The instrument is a original modification of Russell's Causal Dimension Scale for administration over the telephone.

MEASURE OF SOCIAL SUPPORT — Markesteyn & de Paiva (1988); Young-Rifai (1979); Burgess & Holmstrom (1978, p.170); Sarason, I.G., Levine, H.M., Basham, R.B. & Sarason, B.R. (1983); etc.

A self-report scale developed to measure the existence of, availability of, and satisfaction with the social support received by victims of Break and Enter; pre- and post-victimization. - The total score is obtained by summing the scores corresponding to responses given to questions No. 1,2,3,4,5,12,13,14 and 19 in the second half of the Initial Assessment Schedule, and question 21 in the Follow-up Interview (see Measures for scoring details).

Q1) to Q5)	- Pilot questions	Measures of informal support - Q1, Q2 & Q3 are post-crime - Q4 & Q5 are pre-crime
Q6)	- CUVS (1982, q.94) - criminological inquiry	
Q7)	- Pilot question - criminological inquiry	
Q8)	- CUVS (1982) - criminological inquiry	
Q9)	- Pilot question - measure of transience, mobility	Psychosocial
Q10)	- Atkeson et al. (1982) - measure of transience, mobility	Psychosocial
Q11)	- Atkeson et al. (1982, p.97) - Burgess & Holmstrom (1978, p.172) - measure of transience, mobility	Psychosocial
Q12)	- Markesteyn & de Paiva (1988, q.6)	Measure of informal support - pre-crime
Q13)	- Markesteyn & de Paiva (1988, q.7) (variation)	Measure of informal support - pre-crime
Q14)	- Pilot question	Measure of informal support - pre-crime
Q15)	- Burgess & Holmstrom (1978, p.171)	Psychosocial
Q16)	- CUVS (1982) - Waller & Okihiro (1978, q.108a)	Demographics
Q17)	- CUVS (1982, q.35) - Burgess & Holmstrom (1978, p.169)	Demographics
Q18)	- Atkeson et al. (1982, p.97) - Burgess & Holmstrom (1978, p.169)	Psychosocial
Q19)	- Pilot question	Measure of informal support - pre-crime
Q20)	- Backstrom & Hursh-Cesar (1981, p.182)	Demographics
Q21)	- Backstrom & Hursh-Cesar (1981, p.230) (variation) - Burgess & Holmstrom (1978, p.169) (variation)	Demographics

The closing section of the Initial Assessment Schedule serves three purposes: a) to thank the respondents for their participation, b) to obtain an alternate telephone number where they can be contacted in 4 months (S. Brickey, 1990, personal communication) and, c) to inform respondents that they can expect to receive a telephone call from the Winnipeg Police Victim Services Unit.

C) FOLLOW-UP INTERVIEW

VAR200 - Subject identification number
- Same as that assigned on initial assessment schedule

VAR201 - Number of days from date of offense to follow-up interview

VAR202 - Number of calls made to contact victim

VAR203 - Interviewer codes

VAR304 - Time call is made (24-hour clock)

VAR205 - Outcome of call (final result codes)

Q1)	- C.U.V.S. (1982, q.84) (CUVS) (variation)	
	- Harris et al. (1984, p.15)	
	- introductory question; non-threatening; criminological inquiry	Police intervention
Q2)	- Waller & Okihiro (1978, q.56a) (variation)	
	- Markesteyn & de Paiva (1988) (variation)	
	- criminological inquiry	Severity of offense
Q3)	- CUVS (1982, q.64) (variation)	
	- British Crime Survey (BCS) (Hough 1987, q.32)	
	- criminological inquiry	Severity of offense
Q4)	- BCS (Hough 1987, q.34)	
	- criminological inquiry	Severity of offense
Q5)	- Young-Rifai (1979, p.193)	
	- criminological inquiry	Behavioral response
Q6)	- BCS (Hough 1987, q.56)	
	- Young-Rifai (1979, p.193)	
	- criminological inquiry	Behavioral response
Q7)	- BCS (Hough 1987, q.57-58)	
	- Young-Rifai (1979, p.193)	
	- criminological inquiry	Behavioral response
Q8)	- CUVS (1982, q.85)	
	- Waller & Okihiro (1978, q.48a)	
	- Markesteyn & de Paiva (1988, q.36) (variation)	
	- criminological inquiry	Police intervention
Q9)	- CUVS (1982, q.46) (variation)	
	- filter question; criminological inquiry	Severity of offense
Q10)	- Maguire (1980, p.264)	
	- suspiciousness	Victim distress
	- see Initial Assessment Schedule, Q24.	
Q11)	- CUVS (1982, q.48) (variation)	
	- criminological inquiry	Severity of offense
Q12)	- Wandersman & Giamartino (1980)	Psychosocial
Q13)	- Wandersman & Giamartino (1980)	Psychosocial
Q14)	a)	
	- CUVS (1982, q.83) (variation)	
	- Harris et al (1984, p.20)	
	- criminological inquiry	Police intervention
	b)	
	- Bourque et al. (1978, p.27)	
	- Harris et al. (1984, p.20)	
	- criminological inquiry	Police intervention
	c)	
	- Harris et al. (1984, p.20) (variation)	
	- criminological inquiry	Victim assistance
	d)	
	- Harris et al. (1984, p.20) (variation)	
	- criminological inquiry	Police intervention
Q15)	QA to QH & QJ, QL	
	- Wirtz & Harrell (1987, p.868) (variation)	
	- CUVS (1982, q.21 & q.95) (variation)	
	- criminological inquiry	Behavioral response
	QI, QK & QM	
	- criminological inquiry	Location of incident
Q16)	- Maguire (1980, p.266)	Victim distress
Q17)	- Burgess & Holmstrom (1978, p.167)	Victim distress
Q18)	- Burgess & Holmstrom (1978, p.167)	Victim distress
Q19)	- Burgress & Holmstrom (1978, p.167) (variation)	Victim distress
Q20)	- Atkeson et al. (1982, p.97)	Re-victimization
Q21)	- Atkeson et al. (1982, p.97)	Re-victimization

Q22)	- Atkeson et al. (1982, p.97)	
	- Burgess & Holmstrom (1978)	
	- Markesteyn & de Paiva (1988) (variation)	Re-victimization
Q23)	- pilot question	Victim assistance
Q24)	- pilot question	Victim assistance
Q25)	- Wirtz & Harrell (1987, p.867) (variation)	Measure of informal support - post-crime
Q26)	- pilot question	Psychosocial

IMPACT OF EVENT SCALE — Horowitz, M., Wilner, N. & Alvarez, W. (1979)
A standardized instrument that measures the respondent's current degree of subjective impact experienced as a result of a specific event.

STATE ANXIETY INVENTORY — Spielberger, C., Gorsuch, R., Lushene, R., Vagg, P. & Jacobs, G. (1983)
A standardized self-evaluation instrument of current transitory feelings of fear or worry. (Note: The response category "somewhat" was changed to "a little bit".)

BELIEF IN A JUST WORLD SCALE — Rubin, Z. & Peplau, L.A. (1975)
A standardized self-report of the tendency to believe that the world is a place where good people are rewarded and bad people are punished. Questions 5,16, & 17 were modified to reflect Canadian rather than American content.

HOPKINS SYMPTOM CHECKLIST — Derogatis, L., Lipman, R., Rickels, K., Uhlenhuth, E. & Covi, L. (1974)
A standardized self-report symptom inventory. Abridged versions of the HSCL subscales (i.e. obsessive-compulsive, depression, and somatization) were used.

GENERAL HEALTH QUESTIONNAIRE — Goldberg, D.P. (1978)
A standardized self-administered screening instrument aimed at detecting those who are; a) inable to carry out normal 'healthy functions and b) possessing symptoms of a distressing nature. The best twelve items from the original 60-item questionnaire were used.

Note: Question #13 is not part of the GHQ. It is a Psychosocial variable.

TRAIT ANXIETY INVENTORY — Spielberger, C., Gorsuch, R., Lushene, R., Vagg, P. & Jacobs, G. (1983)
A standardized measure of the relatively stable tendency of an individual to respond anxiously to a stressful situation. The scale score is a Psychosocial variable.

Q1)	- BCS (Hough, 1987,q.27)	
	- criminological inquiry	
Q2)	- Waller & Okihiro (1978, q.7?)	
	- criminological inquiry	
Q3)	- Waller & Okihiro (1978, q.78)	
	- criminological inquiry	
Q4)	- BCS (Hough 1987, q.40)	
	- criminological inquiry	
Q5)	- Perloff (1983, pp.50,53,56)	
	- BCS (Hough 1987, q.9c) (variation)	Selective evaluation
Q6)	- Perloff (1983, pp.50,53,56)	
	- BCS (Hough 19 87, q.9b) (variation)	Selective evaluation
Q7)	- Tyler (1981)	Perceptions of personal control
Q8)	- BCS (Hough 1987, q.41)	
	- criminological inquiry	
Q9)	- Markesteyn & de Paiva (1988, q.48)	
	- Waller & Okihiro (1978, q.105)	Psychosocial

The closing section of the Follow-up Interview serves to thank subjects for their participation in the study, ascertain whether or nor they would like a copy of the summary results and be willing to participate in a longer-term follow-up study should one be conducted.

APPENDIX I

Social Support Items and Scoring Key

SOCIAL SUPPORT ITEMS AND SCORING KEY

(refer to Initial Assessment Schedule and Follow-up Interview)

Sometimes victims of burglary tell us they found it reassuring to have friends, neighbours, or someone else whom they could talk to or ask for help after their home was broken into.

			COMPUTER CODES
Q1) Did anyone offer you help of any kind or perhaps just listen to you after the Break and Enter?			
YES	3		
NO	0	Go to Q22	VAR159/3/60
DON'T KNOW	0	Go to Q22	

Who gave you the support or help? (PROBE: Did anyone else help you?)

	YES	N/R	N/A	
Q2) PROFESSIONALS (mental, legal, etc.)	3	0	0	VAR160/3/61
Q3) FAMILY MEMBER(S)	3	0	0	VAR161/3/62
Q4) RELATIVE(S)	2	0	0	VAR162/3/63
Q5) BOY/GIRL FRIEND	2	0	0	VAR163/3/64
Q6) CHURCH MEMBER(S)	2	0	0	VAR164/3/65
Q7) NEIGHBOUR(S)	2	0	0	VAR165/3/66
Q8) POLICE	1	0	0	VAR166/3/67
Q9) OTHER FRIEND(S)	1	0	0	VAR167/3/68
Q10) CO-WORKER(S)	1	0	0	VAR168/3/69
Q11) OTHER (SPECIFY) _____	*	0	0	VAR169/4/1

* Scored as 1 unless a higher score was warranted (e.g., caretaker=1, roommate=2)

Specifically, how did they help you? (PROBE: Did anyone help you in any other way?)

	YES	N/R	N/A	
Q12) CALLED POLICE	1	0	0	VAR170/4/2
Q13) CLEANED-UP	2	0	0	VAR171/4/3
Q14) FIXED DOOR/WINDOW	2	0	0	VAR172/4/4
Q15) REPLACED STOLEN ITEMS	2	0	0	VAR173/4/5
Q16) LOANED MONEY	2	0	0	VAR174/4/6
Q17) TALKED WITH ME	4	0	0	VAR175/4/7
Q18) STAYED OVERNIGHT	3	0	0	VAR176/4/8
Q19) SUPPLIED TEMPORARY ACCOMMODATIONS	3	0	0	VAR177/4/9
Q20) OTHER (SPECIFY) _____	*	0	0	VAR178/4/10
Q21) OTHER (SPECIFY) _____	*	0	0	VAR179/4/11

* Scored as 2 unless another score was warranted (e.g., gave time off work=1, cared for kids=3)

Q22)If you needed help, was there someone (else) you could have talked to or asked for assistance?

YES	3	VAR180/4/12
NO	0	
DON'T KNOW	0	

Q23) In general terms, how satisfied are you with the amount of support you receive from your friends and family when you need it? Would you say you are . . .

. . . very dissatisfied	0	
somewhat dissatisfied	1	VAR181/4/13
somewhat satisfied	3	
or, very satisfied	5	
DON'T KNOW	0	

Q24) Excluding yourself, how many people live at your residence?

0 0
1 1
2 ..... 2 VAR188/4/20-21
3 3
4+ 4

Q25) Which of the following statements best describes your current living situation?

I live alone 0
I live with a friend or friends 2
with my boyfriend/girlfriend or partner 3 VAR189/4/22
with my spouse 4
with my family 5
or, I live in some other situation 1
DON'T KNOW 0
REFUSAL 0

Q26) Do you have any immediate family living in Winnipeg other than those people who may be living in your household?

YES 2
NO 0 VAR190/4/23
DON'T KNOW 0

Q27) What is your current marital status?

SINGLE 0
COMMON-LAW 2
MARRIED 3
SEPARATED 1
DIVORCED 1 VAR195/4/29
WIDOWED 1
OTHER (SPECIFY) _____ ENGAGED _____ 2
DON'T KNOW 0
REFUSAL 0

Q28) Have you obtained any type of psychological, medical, legal, or other professional assistance since your victimization? (This question is found in the Follow-up Interview)

YES - (PROBE: What type?)
- PSYCH CRISIS INTERVENTION (acute) 3
- PSYCH COUNSELLING HELP (long term) 3
- LEGAL ASSISTANCE 1 VAR246/5/60
- MEDICAL 2
- OTHER (SPECIFY) _____ FINANCIAL _____ 1

NO 0
DON'T KNOW 0
REFUSAL 0

PRIOR SOCIAL SUPPORT SCORE_____
SUM QUESTIONS 22, 23, 24, 25, 26, 27
RANGE: 0 - 22

POST-VICTIMIZATION SOCIAL SUPPORT SCORE_____
SUM QUESTIONS 1 THROUGH 21 AND QUESTION 28
RANGE: 0 - 50

TOTAL SCORE_____
RANGE: 0 - 72

APPENDIX J

Standard Regression Tables

Table 23

Standard Regession of Level 1 Model Variables on Short-term Psychological Distress (TRAUMA1)

Variables	β	sr^2	T	R^2	F
Employment status	-.20	.04	-5.13***	.04	26.32***
Educational achievement	-.26	.07	-6.74***	.07	45.26***
Household income	-.28	.08	-7.12***	.08	51.81***
Recent family death	.16	.03	4.11***	.03	16.93***
Prior victimization	.06	.00	1.53	.00	2.35
No. of Prior victimizations	.11	.01	2.80**	.01	7.86**
Prior criminal activity	-.07	.00	-1.51	.00	2.28
Physical health	-.36	.13	-9.44	.13	89.13***
No. of physician visits	.27	.07	6.95***	.07	48.30***
Quantity of alcohol consumption	-.12	.01	-3.02**	.01	9.10**
Trait anxiety	.54	.29	14.10***	.29	198.85***
Somatization	.44	.20	12.23***	.20	149.47***
Obsessive-compulsiveness	.46	.21	12.70***	.21	161.29***
Depression	.57	.32	17.02***	.32	289.68***
Own residence	-.20	.04	-5.12***	.04	26.19***
Permanancy of residence	-.15	.02	-3.79***	.02	14.39***
Sense of community	-.13	.02	-2.97**	.02	8.83**
Importance of sense of community	.08	.00	1.81	.00	3.29
Victim home during offense	.12	.01	3.06**	.01	9.36**
Value of money stolen	.10	.01	2.46**	.01	6.07**
Value of property stolen	.04	.00	0.99	.00	0.98
Sentimental value of stolen property	.18	.03	4.62***	.03	21.34***
Psychological significance of property loss	-.08	.01	-2.11*	.01	4.45*
Damaged property	.07	.00	1.68	.00	2.82
Value of damaged property	.09	.01	2.25*	.01	5.08*
Vandalism in premises	.04	.00	1.12	.00	1.22
Insurance coverage	-.23	.05	-5.13***	.05	26.28***
Perception of neighborhood crime rate	.16	.03	4.04***	.03	16.36***
Own guard dog	.02	.00	0.54	.00	0.29
Member of neighbourhood watch	-.05	.00	-1.11	.00	1.23
Psychological significance of intrusion	.01	.00	0.33	.00	0.11
Knowledge of perpetrator's identity	.09	.01	1.97*	.01	3.90*

Table 23 (continued)

Variables	β	sr^2	T	R^2	F
Unique vulnerability	.04	.00	0.82	.00	0.68
Universal vulnerability	.16	.03	3.59***	.03	12.90***
Locus of causality	.14	.02	3.57***	.02	12.77***
Stability attribution	-.05	.00	-1.17	.00	1.37
Controllability attribution	.03	.00	0.85	.00	0.72
Perception of personal control	-.00	.00	-0.09	.00	0.01
More care locking doors	.19	.04	4.31***	.04	18.56***
Install bars on windows	.11	.01	2.58**	.01	6.64**
Replace locks	.05	.00	1.18	.00	1.40
Care leaving lights on	.12	.01	2.74**	.01	7.51**
Social withdrawl	.34	.11	7.85***	.11	61.61***
Police response time	.05	.00	1.22	.00	1.49
Satisfaction with response time	-.14	.02	-3.46***	.02	11.99***
Police demonstrated empathy	-.14	.02	-3.59***	.02	12.92***
Provision of crime prevention information	-.06	.00	-1.59	.00	2.54
Satisfaction with police treatment	-.22	.05	-5.43***	.05	29.44***
Provision of case progress information	-.11	.01	-2.46**	.01	6.03**
Informed of Victim Services	-.07	.00	-1.78	.00	3.15

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 24

Standard Regession of Level 2 Model Variables on Short-term Psychological Distress (TRAUMA1)

Variables	β	sr^2	T	R^2	F
S.E.S.				.12	27.81***
Employment status	-.17	.01	-1.98***		
Educational achievement	-.19	.03	-4.60***		
Household income	-.28	.02	-3.84***		
Age	-.07	.01	-1.86	.01	3.45
Gender	.31	.10	8.08***	.10	65.31***
Perceived Stress	.53	.28	15.40***	.28	237.20***
Prior Life Events				.06	7.32***
Recent family death	.19	.04	4.34***		
Prior victimization	-.07	.00	-1.16		
No. of Prior victimizations	.15	.01	2.57**		
Prior criminal activity	-.09	.01	-1.99*		
Physical & Mental Health				.46	56.78***
Physical health	-.08	.00	-2.06*		
No. of physician visits	.07	.00	1.83		
Quantity of alcohol consumption	-.07	.00	-2.11*		
Trait anxiety	.33	.08	8.59***		
Somatization	.10	.01	2.36*		
Obsessive-compulsiveness	.13	.01	3.09**		
Depression	.24	.03	5.67***		
Social Support Network	-.11	.01	-2.87**	.01	8.22**
Sense of Community				.06	8.26***
Own residence	-.16	.02	-2.99**		
Permanancy of residence	.01	.00	0.21		
Sense of community	-.17	.02	-3.36***		
Importance of sense of community	.19	.03	3.87***		
Belief in a Just World	-.18	.03	-4.02***	.03	16.13***
Significance of Loss				.10	6.64***
Value of money stolen	.02	.00	0.47		
Value of property stolen	.06	.00	1.34		
Sentimental value of stolen property	.10	.01	2.14*		
Psychological significance of property loss	-.15	.02	-3.32***		
Damaged property	-.05	.00	-1.04		
Value of damaged property	.11	.01	2.38*		
Vandalism in premises	-.02	.00	-0.36		
Insurance coverage	-.28	.07	-6.20***		

Table 24 (continued)

Variables	β	sr^2	T	R^2	F
Selective Evaluation				.03	7.73***
Unique vulnerability	.05	.00	1.22		
Universal vulnerability	.17	.03	3.74***		
Attributions				.02	4.89**
Locus of causality	.14	.02	3.60***		
Stability attribution	-.02	.00	-0.50		
Controllability attribution	.05	.00	1.18		
Adaptive & Maladaptive Change				.14	15.01***
More care locking doors	.11	.01	2.36*		
Install bars on windows	.08	.01	1.93*		
Replace locks	.02	.00	0.59		
Care leaving lights on	.00	.00	0.11		
Social withdrawl	.32	.10	7.29***		
Social Support	.10	.01	2.39*	.01	5.73*
Police Intervention				.05	4.60***
Police response time	-.06	.00	-1.25		
Satisfaction with response time	-.07	.00	-1.45		
Police demonstrated empathy	-.01	.00	-0.19		
Provision of crime prevention information	-.02	.00	-0.44		
Satisfaction with police treatment	-.16	.02	-2.87**		
Provision of case progress information	-.07	.00	-1.60		
Victim Assistance (see Level 1: Informed of victim services)	-.07	.00	-1.78	.00	3.15

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 25

Standard Regession of Level 3 Model Variables on Short-term Psychological Distress (TRAUMA1)

Variables	β	sr^2	T	R^2	F
Demographics				.19	27.85***
Employment status	-.04	.00	-0.93		
Educational achievement	-.20	.03	-4.97***		
Household income	-.14	.01	-3.06**		
Age	-.12	.01	-3.09**		
Gender	.27	.07	7.12***		
Psychosocial Variables				.53	30.37***
Perceived stress	.21	.03	5.46***		
Recent family death	.07	.00	2.21*		
Prior victimization	.05	.00	1.09		
No. of Prior victimizations	-.01	.00	-0.33		
Prior criminal activity	-.11	.01	-3.29***		
Physical health	-.06	.00	-1.60		
No. of physician visits	.06	.00	1.55		
Quantity of alcohol consumption	-.07	.00	-2.15*		
Trait anxiety	.25	.04	6.38***		
Somatization	.11	.01	2.77**		
Obsessive-compulsiveness	.09	.00	2.27*		
Depression	.19	.02	4.45***		
Social support network	-.05	.00	-1.36		
Own residence	-.08	.00	-1.95		
Permanancy of residence	.02	.00	0.55		
Sense of community	-.08	.00	-2.07*		
Importance of sense of community	.10	.01	2.86**		
Cognitions (see Level 2: B.J.W.)	-.18	.03	-4.02	.03	16.13***
Degree of Violence				.12	6.93***
Victim home during offense	.17	.02	3.61***		
Value of money stolen	.01	.00	0.32		
Value of property stolen	.06	.00	1.48		
Sentimental value of stolen property	.12	.01	2.62**		
Psychological significance of property loss	-.13	.01	-2.88**		
Damaged property	-.00	.00	-0.05		
Value of damaged property	.11	.01	2.39*		
Vandalism in premises	.03	.00	0.53		
Insurance coverage	-.25	.06	-5.52***		

Table 25 (continued)

Variables	β	sr^2	T	R^2	F
Location of Incident				.02	2.31*
Perception of neighborhood crime rate	.11	.01	2.50*		
Own guard dog	.02	.00	0.43		
Member of neighbourhood watch	-.04	.00	-0.08		
Psychological significance of intrusion	.02	.00	0.37		
Knowledge of perpetrator's identity	.08	.01	1.79		
Cognitions				.05	4.47***
Perception of personal control	.01	.00	0.34		
Unique vulnerability	.06	.00	1.41		
Universal vulnerability	.18	.03	3.99***		
Locus of causality	.14	.02	3.14**		
Stability attribution	-.02	.00	-0.53		
Controllability attribution	.03	.00	0.58		
Behavioral Responses				.14	15.01***
More care locking doors	.11	.01	2.36*		
Install bars on windows	.08	.01	1.93*		
Replace locks	.02	.00	0.59		
Care leaving lights on	.00	.00	0.11		
Social withdrawl	.32	.10	7.29***		
Social Support				.06	4.02***
Informal social support	.14	.02	3.07**		
Police response time	-.02	.00	-0.48		
Satisfaction with response time	-.05	.00	-0.91		
Police demonstrated empathy	-.02	.00	-0.37		
Provision of crime prevention information	-.04	.00	-0.86		
Satisfaction with police treatment	-.16	.01	-2.73**		
Provision of case progress information	-.06	.00	-1.34		
Informed of victim services	.00	.00	0.11		

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 26

Standard Regession of Level 4 Model Variables on Short-term Psychological Distress (TRAUMA1)

Variables	β	sr^2	T	R^2	F
Pre-Victimization Variables				.57	25.18***
Employment status	.04	.00	1.04		
Educational achievement	-.08	.00	-2.32*		
Household income	-.03	.00	-0.82		
Age	.01	.00	0.32		
Gender	.18	.02	5.09***		
Perceived stress	.20	.03	5.21***		
Recent family death	.06	.00	2.01*		
Prior victimization	.06	.00	1.35		
No. of Prior victimizations	.00	.00	0.05		
Prior criminal activity	-.07	.00	-1.94*		
Physical health	-.06	.00	-1.52		
No. of physician visits	.04	.00	1.17		
Quantity of alcohol consumption	-.05	.00	-1.42		
Trait anxiety	.21	.03	5.32***		
Somatization	.10	.01	2.49**		
Obsessive-compulsiveness	.12	.01	3.04**		
Depression	.16	.01	3.81***		
Social support network	-.06	.00	-1.64		
Own residence	-.09	.00	-1.90		
Permanancy of residence	.03	.00	0.67		
Sense of community	-.08	.00	-2.12*		
Importance of sense of community	.09	.01	2.58**		
Belief in a just world	-.06	.00	-1.77		
Crime Characteristic Variables				.12	4.76***
Victim home during offense	.17	.02	3.51***		
Value of money stolen	.03	.00	0.58		
Value of property stolen	.07	.00	1.39		
Sentimental value of stolen property	.01	.01	2.57**		
Psychological significance of property loss	-.13	.01	-2.77**		
Damaged property	-.01	.00	-0.15		
Value of damaged property	.11	.01	2.45**		
Vandalism in premises	.03	.00	0.66		
Insurance coverage	-.23	.05	-5.00***		

Table 26 (continued)

Variables	β	sr^2	T	R^2	F
Perception of neighborhood crime rate	.06	.00	1.36		
Own guard dog	.33	.00	0.76		
Member of neighbourhood watch	-.02	.00	-0.56		
Psychological significance of intrusion	-.01	.00	-0.16		
Knowledge of perpetrator's identity	.05	.00	1.10		
Post-Victimization Variables				.22	6.74***
Unique vulnerability	.05	.00	1.27		
Universal vulnerability	.13	.01	3.03**		
Locus of causality	.04	.00	0.89		
Stability attribution	-.02	.00	-0.39		
Controllability attribution	.05	.00	1.29		
Perception of personal control	.00	.00	0.00		
More care locking doors	.12	.01	2.55**		
Install bars on windows	.09	.01	2.18*		
Replace locks	.04	.00	0.88		
Care leaving lights on	.00	.00	0.07		
Social withdrawl	.29	.07	6.58***		
Informal social support	.12	.01	2.89**		
Police response time	-.03	.00	-0.61		
Satisfaction with response time	-.07	.00	-1.29		
Police demonstrated empathy	-.01	.00	-0.21		
Provision of crime prevention information	-.04	.00	-1.00		
Satisfaction with police treatment	-.12	.01	-2.28*		
Provision of case progress information	-.04	.00	-0.83		
Informed of Victim Services	-.01	.00	-0.28		

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 27

Standard Regession of Level 5 Model Variables on Short-term Psychological Distress (TRAUMA1)

Variables	β	sr^2	T	R^2	F
Overall Model				.64	12.77***
Employment status	.02	.00	-0.64		
Educational achievement	-.07	.00	-2.12*		
Household income	-.04	.00	-0.84		
Age	.03	.00	0.76		
Gender	.12	.01	3.39***		
Perceived stress	.18	.02	4.67***		
Recent family death	.03	.00	0.99		
Prior victimization	.08	.00	1.89		
No. of Prior victimizations	.00	.00	0.04		
Prior criminal activity	-.10	.01	-2.68**		
Physical health	-.03	.00	-0.91		
No. of physician visits	.03	.00	0.92		
Quantity of alcohol consumption	-.05	.00	-1.39		
Trait anxiety	.15	.01	3.85***		
Somatization	.11	.01	2.71**		
Obsessive-compulsiveness	.16	.01	3.96***		
Depression	.17	.01	3.99***		
Social support network	-.08	.00	-2.96*		
Own residence	.02	.00	0.40		
Permanancy of residence	.02	.00	0.52		
Sense of community	-.08	.00	-2.07*		
Importance of sense of community	.05	.00	1.42		
Belief in a just world	-.03	.00	-0.93		
Victim home during offense	.08	.00	2.39*		
Value of money stolen	.00	.00	0.16		
Value of property stolen	.09	.00	2.68**		
Sentimental value of stolen property	.07	.00	2.02*		
Psychological significance of property loss	-.05	.00	-1.26		
Damaged property	-.04	.00	-1.12		
Value of damaged property	.10	.01	3.01**		
Vandalism in premises	.04	.00	1.18		
Insurance coverage	-.11	.00	-2.43		
Perception of neighborhood crime rate	.01	.00	0.18		
Own guard dog	.05	.00	1.57		
Member of neighbourhood watch	-.00	.00	-0.05		
Psychological significance of intrusion	.04	.00	1.12		
Knowledge of perpetrator's identity	-.00	.00	-0.04		

Table 27 (continued)

Variables	β	sr^2	T	R^2	F
Unique vulnerability	-.01	.00	-0.33		
Universal vulnerability	.06	.00	1.84		
Locus of causality	.01	.00	0.29		
Stability attribution	.02	.00	0.59		
Controllability attribution	.01	.00	0.22		
Perception of personal control	.01	.00	0.24		
More care locking doors	-.03	.00	-0.84		
Install bars on windows	.09	.01	2.65**		
Replace locks	-.02	.00	-0.62		
Care leaving lights on	.05	.00	1.43		
Social withdrawl	.08	.00	2.37*		
Informal social support	.07	.00	2.04*		
Police response time	.00	.00	0.02		
Satisfaction with response time	-.03	.00	-0.65		
Police demonstrated empathy	.07	.00	1.78		
Provision of crime prevention information	.01	.00	0.19		
Satisfaction with police treatment	-.07	.00	-1.81		
Provision of case progress information	-.04	.00	-1.26		
Informed of Victim Services	-.01	.00	-0.35		

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 28

Standard Regession of Level 1 Model Variables on Long-term Psychological Distress (TRAUMA2)

Variables	β	sr^2	T	R^2	F
Employment status	-.18	.03	-4.05***	.03	16.42***
Educational achievement	-.18	.03	-4.18***	.03	17.36***
Household income	-.24	.06	-5.47***	.06	29.91***
Recent family death	.14	.02	3.23***	.02	10.41***
Prior victimization	.05	.00	1.02	.00	1.05
No. of Prior victimizations	.16	.03	3.64***	.03	13.23***
Prior criminal activity	-.03	.00	-0.62	.00	0.38
Physical health	-.36	.13	-8.49***	.13	72.03***
No. of physician visits	.30	.09	7.01***	.09	49.15***
Quantity of alcohol consumption	-.09	.01	-1.91	.01	3.65
Trait anxiety	.76	.58	25.82***	.58	666.93***
Somatization	.42	.18	10.24***	.18	104.85***
Obsessive-compulsiveness	.32	.10	7.44***	.10	55.41***
Depression	.44	.20	10.87***	.20	118.26***
Own residence	-.11	.01	-2.37*	.01	5.64*
Permanancy of residence	-.09	.01	-2.09*	.01	4.36*
Sense of community	-.07	.00	-1.65	.00	2.72
Importance of sense of community	.13	.02	3.00**	.02	9.00**
Victim home during offense	.14	.02	3.11**	.02	9.64**
Value of money stolen	-.03	.00	-0.65	.00	0.42
Value of property stolen	.03	.00	0.65	.00	0.42
Sentimental value of stolen property	.09	.01	2.05*	.01	4.22*
Psychological significance of property loss	-.06	.00	-1.25	.00	1.57
Damaged property	-.07	.00	-1.61	.00	2.60
Value of damaged property	-.04	.00	-0.90	.00	0.81
Vandalism in premises	-.02	.00	-0.41	.00	0.17
Insurance coverage	-.11	.01	-2.51**	.01	6.30**
Insurance payoff	-.12	.01	-2.64**	.01	6.98**
Perception of neighborhood crime rate	.16	.02	3.56***	.02	12.69***
Own guard dog	-.04	.00	-0.94	.00	0.88
Member of neighbourhood watch	-.10	.01	-2.15*	.01	4.62*
Psychological significance of intrusion	-.10	.01	-2.34*	.01	5.47*
Knowledge of perpetrator's identity	.05	.00	1.21	.00	1.47

Table 28 (continued)

Variables	β	sr^2	T	R^2	F
Unique vulnerability	.12	.01	2.63**	.01	6.93**
Universal vulnerability	.16	.02	3.47***	.02	12.03***
Locus of causality	.09	.01	2.07*	.01	4.31*
Stability attribution	-.02	.00	-0.46	.00	0.21
Controllability attribution	.07	.00	1.56	.00	2.43
Perception of personal control	.04	.00	0.92	.00	0.84
More care locking doors	.19	.03	4.22***	.03	17.81***
Install bars on windows	.11	.01	2.48**	.01	6.18**
Replace locks	.07	.00	1.59	.00	2.54
Care leaving lights on	.16	.02	3.68***	.02	13.58***
Purchase new/more insurance	.04	.00	0.91	.00	0.83
Install alarm system	-.04	.00	-0.84	.00	0.71
Change residence	-.01	.00	-0.12	.00	0.03
Social withdrawl	.35	.12	8.32***	.12	69.28***
Amount of time spent on incident	.08	.01	1.74	.01	3.03
Time off from work	.08	.01	1.82	.01	3.33
Police response time	.06	.00	1.36	.00	1.86
Satisfaction with response time	-.10	.01	-2.32*	.01	5.40*
Police demonstrated empathy	-.14	.02	-3.16**	.02	10.01**
Provision of crime prevention information	-.05	.00	-1.22	.00	1.48
Satisfaction with police treatment	-.17	.03	-3.87***	.03	14.94***
Satisfaction with case management	-.16	.03	-3.64***	.03	13.28***
Provision of case progress information	-.09	.01	-1.94*	.01	3.75*
Informed of Victim Services	-.07	.00	-1.56	.00	2.42
Contacted by victim services	.04	.00	0.89	.00	0.79
Re-victimization since 1st interview	.11	.01	2.57**	.01	6.61**

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 29

Standard Regession of Level 2 Model Variables on Long-term Psychological Distress (TRAUMA2)

Variables	β	sr^2	T	R^2	F
S.E.S.				.09	13.69***
Employment status	-.08	.00	-1.67		
Educational achievement	-.12	.01	-2.70**		
Household income	-.16	.02	-3.14**		
Age	-.01	.00	-0.20	.00	0.04
Gender	.18	.03	4.09***	.03	16.70***
Perceived Stress	.39	.15	9.35***	.15	87.51***
Prior Life Events				.04	5.74***
Recent family death	.13	.02	2.89**		
Prior victimization	-.08	.00	-1.40		
No. of Prior victimizations	.20	.02	3.51***		
Prior criminal activity	-.43	.00	-0.97		
Physical & Mental Health				.62	113.22***
Physical health	.01	.00	0.39		
No. of physician visits	.06	.00	1.99*		
Quantity of alcohol consumption	-.03	.00	-1.21		
Trait anxiety	.67	.36	21.43***		
Somatization	.15	.01	4.19***		
Obsessive-compulsiveness	-.04	.00	-1.21		
Depression	.10	.01	2.79**		
Social Support Network	-.13	.02	-2.82**	.02	7.98**
Sense of Community				.05	6.92***
Own residence	-.07	.00	-1.42		
Permanancy of residence	-.04	.00	-0.78		
Sense of community	-.15	.02	-3.02**		
Importance of sense of community	.21	.04	4.39***		
Belief in a Just World	-.22	.05	-4.99***	.05	24.92***
Significance of Loss				.05	2.64**
Value of money stolen	-.04	.00	-0.87		
Value of property stolen	.09	.00	1.67		
Sentimental value of stolen property	.11	.01	2.31*		
Psychological significance of property loss	-.11	.01	-2.34*		
Damaged property	-.08	.00	-1.67		
Value of damaged property	.02	.00	0.54		
Vandalism in premises	-.01	.00	-0.20		
Insurance coverage	-.08	.00	-1.40		
Insurance payoff	-.08	.00	-1.38		

Table 29 (continued)

Variables	β	sr^2	T	R^2	F
Selective Evaluation				.04	10.09***
Unique vulnerability	.12	.02	2.82**		
Universal vulnerability	.15	.02	3.47***		
Attributions				.02	2.97*
Locus of causality	.11	.01	2.48**		
Stability attribution	-.01	.00	-0.23		
Controllability attribution	.08	.01	1.80		
Adaptive & Maladaptive Change				.16	11.49***
More care locking doors	.09	.01	2.01*		
Install bars on windows	.10	.01	2.39*		
Replace locks	.03	.00	0.73		
Care leaving lights on	.06	.00	1.39		
Purchase new/more insurance	-.03	.00	-0.76		
Install alarm system	-.04	.00	-0.95		
Change residence	.03	.00	0.65		
Social withdrawl	.33	.10	7.70***		
Time Spent on Incident				.01	2.61
Amount of time spent on incident	.06	.00	1.37		
Time off from work	.07	.00	1.47		
Social Support	.06	.00	1.47	.00	2.16
Police Intervention				.05	3.55***
Police response time	-.02	.00	-0.33		
Satisfaction with response time	-.01	.00	-0.15		
Police demonstrated empathy	-.04	.00	-0.83		
Provision of crime prevention information	-.00	.00	-0.06		
Satisfaction with police treatment	-.11	.01	-1.98*		
Satisfaction with case management	-.10	.01	-2.01*		
Provision of case progress information	-.02	.00	-0.49		
Victim Assistance				.00	1.20
Informed of victim services	-.07	.00	-1.47		
Contacted by victim services	.03	.00	0.77		

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 30

Standard Regession of Level 3 Model Variables on Long-term Psychological Distress (TRAUMA2)

Variables	β	sr^2	T	R^2	F
Demographics				.10	11.27***
Employment status	-.08	.00	-1.72		
Educational achievement	-.13	.02	-2.94**		
Household income	-.13	.01	-2.67**		
Age	.15	.02	3.38***		
Gender	-.06	.00	-1.42		
Psychosocial Variables				.65	49.72***
Perceived stress	.03	.00	1.09		
Recent family death	.06	.00	2.20*		
Prior victimization	-.00	.00	-0.14		
No. of Prior victimizations	.06	.00	1.64		
Prior criminal activity	-.02	.00	-0.72		
Physical health	.00	.00	0.08		
No. of physician visits	.06	.00	2.08*		
Quantity of alcohol consumption	-.02	.00	-0.87		
Trait anxiety	.65	.29	19.60***		
Somatization	.14	.01	4.11***		
Obsessive-compulsiveness	-.05	.00	-1.44		
Depression	.08	.00	2.12*		
Social support network	-.05	.00	-1.72		
Own residence	.04	.00	1.19		
Permanancy of residence	.00	.00	0.17		
Sense of community	-.11	.00	-0.37		
Importance of sense of community	.09	.01	2.99**		
Cognitions (see Level 2: B.J.W.)	-.22	.05	-4.99***	.05	24.92***
Degree of Violence				.07	3.47***
Victim home during offense	.13	.01	2.79**		
Value of money stolen	-.05	.00	-1.17		
Value of property stolen	.08	.01	1.74		
Sentimental value of stolen property	.12	.01	2.57**		
Psychological significance of property loss	-.09	.01	-2.05*		
Damaged property	-.08	.00	-1.63		
Value of damaged property	.02	.00	0.54		
Vandalism in premises	.01	.00	0.12		
Insurance coverage	-.08	.00	-1.43		
Insurance payoff	-.07	.00	-1.12		

Table 30 (continued)

Variables	β	sr^2	T	R^2	F
Location of Incident				.04	4.59***
Perception of neighborhood crime rate	.16	.02	3.46***		
Own guard dog	-.03	.00	-0.64		
Member of neighbourhood watch	-.04	.00	-0.98		
Psychological significance of intrusion	-.11	.01	-2.52**		
Knowledge of perpetrator's identity	.06	.00	1.30		
Cognitions				.06	5.28***
Unique vulnerability	.14	.02	3.21***		
Universal vulnerability	.16	.02	3.58***		
Locus of causality	.10	.01	2.32*		
Stability attribution	-.03	.00	-0.62		
Controllability attribution	.07	.00	1.60		
Perception of personal control	.05	.00	1.22		
Behavioral Responses				.16	9.22***
More care locking doors	.09	.01	2.04*		
Install bars on windows	.10	.01	2.33*		
Replace locks	.02	.00	0.67		
Care leaving lights on	.06	.00	1.41		
Purchase new/more insurance	-.02	.00	-0.47		
Install alarm system	-.06	.00	-1.29		
Change residence	.03	.00	0.70		
Social withdrawl	.32	.09	7.35***		
Amount of time spent on incident	.03	.00	0.76		
Time off from work	.04	.00	0.86		
Social Support				.05	2.32**
Informal social support	.07	.00	1.46		
Police response time	-.02	.00	-0.31		
Satisfaction with response time	-.03	.00	-0.54		
Police demonstrated empathy	-.04	.00	-0.83		
Provision of crime prevention information	-.02	.00	-0.39		
Satisfaction with police treatment	-.11	.01	-1.82		

Table 30 (continued)

Variables	β	sr^2	T	R^2	F
Satisfaction with case management	-.06	.00	-1.13		
Provision of case progress information	-.03	.00	-0.68		
Informed of victim services	-.03	.00	-0.55		
Contacted by victim services	.05	.00	1.05		
Re-victimization (see Level 1: Re-victimization since 1st interview	.11	.01	2.57**	.01	6.61**

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 31

Standard Regession of Level 4 Model Variables on Long-term Psychological Distress (TRAUMA2)

Variables	β	sr^2	T	R^2	F
Pre-Victimization Variables				.65	34.97***
Employment status	.05	.00	1.35		
Educational achievement	-.05	.00	-1.53		
Household income	-.02	.00	-0.48		
Age	.05	.00	1.38		
Gender	.08	.00	2.43**		
Perceived stress	.02	.00	0.69		
Recent family death	.05	.00	1.61		
Prior victimization	-.03	.00	-0.68		
No. of Prior victimizations	.09	.00	2.47**		
Prior criminal activity	-.01	.00	-0.27		
Physical health	.03	.00	0.90		
No. of physician visits	.06	.00	1.77		
Quantity of alcohol consumption	-.01	.00	-0.24		
Trait anxiety	.63	.26	17.93***		
Somatization	.14	.01	3.68		
Obsessive-compulsiveness	-.04	.00	-1.19		
Depression	.08	.00	2.04		
Social support network	-.04	.00	-1.34		
Own residence	.04	.00	1.16		
Permanancy of residence	-.04	.00	-0.96		
Sense of community	-.02	.00	-0.57		
Importance of sense of community	.10	.01	3.26		
Belief in a just world	-.08	.01	-2.81		
Crime Characteristic Variables				.10	3.58***
Victim home during offense	.09	.01	1.96*		
Value of money stolen	-.03	.00	-0.74		
Value of property stolen	.07	.00	1.59		
Sentimental value of stolen property	.11	.01	2.47**		
Psychological significance of property loss	-.16	.02	-3.23***		
Damaged property	-.08	.00	-1.71		
Value of damaged property	.03	.00	0.69		
Vandalism in premises	-.00	.00	-0.04		
Insurance coverage	-.07	.00	-1.22		
Insurance payoff	-.04	.00	-0.60		

Table 31 (continued)

Variables	β	sr^2	T	R^2	F
Perception of neighborhood crime rate	.14	.01	3.14**		
Own guard dog	-.01	.00	-0.26		
Member of neighbourhood watch	-.05	.00	-1.22		
Psychological significance of intrusion	-.16	.02	-3.42***		
Knowledge of perpetrator's identity	.04	.00	0.87		
Post-Victimization Variables				.26	6.04***
Unique vulnerability	.10	.01	2.5**		
Universal vulnerability	.13	.02	3.31***		
Locus of causality	.03	.00	0.76		
Stability attribution	-.01	.00	-0.28		
Controllability attribution	.10	.01	2.45**		
Perception of personal control	.03	.00	0.72		
More care locking doors	.10	.01	2.30*		
Install bars on windows	.09	.01	2.22*		
Replace locks	.02	.00	0.52		
Care leaving lights on	.05	.00	1.22		
Purchase new/more insurance	-.04	.00	-0.87		
Install alarm system	-.03	.00	-0.66		
Change residence	-.03	.00	-0.69		
Social withdrawl	.31	.08	7.12***		
Amount of time spent on incident	.01	.00	0.34		
Time off from work	.02	.00	0.50		
Informal social support	.07	.00	1.72		
Police response time	-.03	.00	-0.72		
Satisfaction with response time	-.01	.00	-0.26		
Police demonstrated empathy	-.04	.00	-0.88		
Provision of crime prevention information	-.05	.00	-1.25		
Satisfaction with police treatment	-.08	.00	-1.54		

Table 31 (continued)

Variables	β	sr^2	T	R^2	F
Satisfaction with case management	-.06	.00	-1.33		
Provision of case progress information	-.02	.00	-0.47		
Informed of Victim Services	-.00	.00	-0.12		
Contacted by victim services	.07	.00	1.59		
Re-victimization since 1st interview	.08	.00	1.90		

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 32

Standard Regession of Level 5 Model Variables on long-term Psychological Distress (TRAUMA2)

Variables	β	sr^2	T	R^2	F
Overall Model				.71	14.49***
Employment status	.00	.00	0.11		
Educational achievement	-.06	.00	-1.85		
Household income	.01	.00	0.20		
Age	.08	.00	1.81		
Gender	.04	.00	1.29		
Perceived stress	-.00	.00	-0.11		
Recent family death	.02	.00	0.66		
Prior victimization	-.02	.00	-0.59		
No. of Prior victimizations	.04	.00	1.09		
Prior criminal activity	-.02	.00	-0.60		
Physical health	.02	.00	0.63		
No. of physician visits	.07	.00	1.99		
Quantity of alcohol consumption	.00	.00	0.13		
Trait anxiety	.58	.19	16.09***		
Somatization	.12	.01	3.35***		
Obsessive-compulsiveness	-.01	.00	-0.42		
Depression	.07	.00	1.77		
Social support network	-.04	.00	-1.14		
Own residence	.03	.00	0.71		
Permanancy of residence	-.03	.00	-0.64		
Sense of community	-.03	.00	-0.81		
Importance of sense of community	.06	.00	1.80		
Belief in a just world	-.04	.00	-1.28		
Victim home during offense	.05	.00	1.49		
Value of money stolen	-.02	.00	-0.54		
Value of property stolen	.01	.00	0.22		
Sentimental value of stolen property	.03	.00	1.02		
Psychological significance of property loss	-.05	.00	-1.44		
Damaged property	-.05	.00	-1.42		
Value of damaged property	.02	.00	0.76		
Vandalism in premises	-.02	.00	-0.69		
Insurance coverage	.04	.00	0.87		
Insurance payoff	-.06	.00	-1.52		
Perception of neighborhood crime rate	.05	.00	1.70		
Own guard dog	-.00	.00	-0.08		

Table 32 (continued)

Variables	β	sr^2	T	R^2	F
Member of neighbourhood watch	-.02	.00	-0.58		
Psychological significance of intrusion	-.05	.00	-1.55		
Knowledge of perpetrator's identity	-.02	.00	-0.60		
Unique vulnerability	.06	.00	2.09*		
Universal vulnerability	.04	.00	1.45		
Locus of causality	-.05	.00	-1.56		
Stability attribution	-.00	.00	-0.07		
Controllability attribution	.05	.00	1.65		
Perception of personal control	.02	.00	0.75		
More care locking doors	-.01	.00	-0.38		
Install bars on windows	.08	.00	2.62**		
Replace locks	-.02	.00	-0.78		
Care leaving lights on	.05	.00	1.49		
Purchase new/more insurance	.03	.00	1.10		
Install alarm system	-.02	.00	-0.80		
Change residence	-.06	.00	-1.81		
Social withdrawl	.09	.00	2.87**		
Amount of time spent on incident	.06	.00	1.56		
Time off from work	.05	.00	1.48		
Informal social support	.02	.00	0.51		
Police response time	-.06	.00	-1.89		
Satisfaction with response time	.03	.00	0.77		
Police demonstrated empathy	.02	.00	0.49		
Provision of crime prevention information	.01	.00	0.23		
Satisfaction with police treatment	-.09	.00	-2.25		
Satisfaction with case management	-.08	.00	-2.35		
Provision of case progress information	-.01	.00	-0.23		
Informed of Victim Services	-.02	.00	-0.57		
Contacted by victim services	.04	.00	1.31		
Re-victimization since 1st interview	.04	.00	1.41		

* $p < .05$; ** $p < .01$; *** $p < .001$