MEDIATING AND MODERATING EFFECTS OF LOCUS OF CONTROL AND APPRAISALS OF CONTROL ON BURGLARY VICTIM COPING

by

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ABSTRACT

The purpose of this study was to examine control beliefs and their role in the different ways victims cope with burglary. Two studies were conducted. In the first study, participants were college students who had been burglarized within the previous year. The volunteers were men and women between the ages of 19 and 37 (N=61). The participants completed Levenson's (1981) locus of control scale. The following week, in order to assist recall, the participants viewed a 2-minute video that depicted a residential burglary in progress. Immediately following the video, they completed a coping measure, situational appraisals of control measure, and importance of outcome measure. The second study was a conceptual replication of the first study and therefore followed the same procedures. However, in order to assess locus of control prior to victimization, participants were male and female college students (N=102) who had never been burglarized (experimentally induced victims).

Zero-order correlations, discriminant analysis, and hierarchical multiple regression were used to examine the main, mediating, and moderating effects of locus of control, importance of outcome, situational appraisals of control, and gender on coping functions. Because previous research has found gender differences in reaction to criminal victimization, it was hypothesized that the influence that gender has on coping results from an individual's locus of control orientation. It was also expected that the direction or strength of the locus of control and coping relation would be influenced by an individual's gender and by how much importance he or she attached to the victimization experience. In both the victim group and experimentally induced victim group, emotion-focused coping was significantly predicted by gender, locus of control, importance of outcome, and situational appraisals of control. However, problem-focused coping was significantly predicted by gender, locus of control, importance of outcome, and situational appraisals of control for the victim group only. Locus of control did not influence the gender and coping relation. The results
indicated that in both groups men who held strong powerful others locus of control beliefs used less emotion-focused coping. In contrast, in the burglary victim group, women who held strong powerful others locus of control beliefs used more emotion-focused coping. However, there was no relationship between powerful others locus of control beliefs and emotion-focused coping for women in the experimentally induced victim group. For experimentally induced victims, both men and women with high chance locus of control beliefs used more emotion-focused coping. In both groups, importance of outcome did not moderate the locus of control and coping relation. Implications of these results and suggestions for future research are discussed.
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INTRODUCTION

Residential burglary (breaking and entering a dwelling house with intent to commit a criminal offense, usually theft) is a common offense in Canada (827 burglaries per 100,000 population; Canadian Crime Statistics, 1989). Although burglary occurs frequently, victims of burglary have not received as much research attention as victims of violence and sex offenses (Maguire, 1980). Yet, the way victims cope with the burglary experience differs considerably from other victim groups (Fischer, 1984; Maguire, 1980; Papp, 1981; Waller & Okihiro, 1978; Wirtz & Harrell, 1987). Furthermore, there is some evidence to suggest that men and women cope differently with burglary victimization (Maguire, 1980). Burglary victims report a variety of coping strategies, some of these strategies are behaviourally focused and some are emotionally focused (i.e., change locks, denial of vulnerability) (Agnew, 1985; Maguire, 1980; Paap, 1981). Theory suggests that in an effort to regain a sense of control the coping strategies selected by victims are likely to be consonant with their general beliefs about control, beliefs about control that are specific to the situation, and the importance of the situation (Lazarus & Folkman, 1984; Rotter, 1975; Wallston, Wallston, Smith, & Dobbins, 1987). Because coping is connected with psychological functioning, the systematic examination of locus of control, importance of the outcome of the burglary, and situational appraisals of control may contribute to the development of counselling interventions for burglary victims. Thus the purpose of this study was to determine the extent to which control beliefs account for individual differences in burglary victims' short-term use of coping strategies.

Coping Theory

Coping has been addressed from a variety of theoretical perspectives, all of which have limitations and serious flaws (Lazarus & Folkman, 1984). Lazarus and Folkman present a useful theoretical framework of coping that attempts to rectify the shortcomings of
previous approaches. Furthermore, Lazarus and Folkman (1984) describe coping as a process rather than a trait, which suggests that coping should be studied in light of a particular event. They define coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). From this framework, problem-focused coping and emotion-focused coping are considered the two main functions of coping. A coping function is the purpose a coping strategy serves. Problem-focused coping is directed at managing the problem causing the distress. Emotion-focused coping is directed at dealing with the individual's emotions that arise from the problem event (Lazarus & Folkman, 1984).

The distinction between problem-focused and emotion-focused coping is widely recognized and accepted within the stress and coping literature (Endler & Parker, 1990). In response to criticisms of existing measures of coping processes, Carver, Scheier, and Weintraub (1989) developed a multidimensional coping inventory in which problem-focused coping includes the subscales active coping, planning, suppression of competing activities, restraint coping, and seeking of instrumental social support. Emotion-focused coping is represented by subscales that include seeking of emotional support, positive reinterpretation, acceptance, denial, and turning to religion. This multi-dimensional approach provides detail and clarity to emotion- and problem-focused coping and was employed in this study to examine individual differences in the way burglary victims cope.

Based on theory, Lazarus and Folkman (1984) suggested that generalized beliefs about control (particularly locus of control) and situational appraisals of control would influence an individual's choice of coping functions. However, in their 1980 study of a middle-aged community sample and their 1985 study of college exam taking, they found that locus of control did not relate to coping, whereas situational
appraisals of control did influence coping (Folkman & Lazarus, 1980, 1985). In general, individuals who believed they could control the stressor used more problem-focused than emotion-focused coping. However, other researchers have found that internal locus of control is positively associated with problem-focused coping (Anderson, 1977; Carver et al., 1989; Parkes, 1984; Solomon, Mikulincer, & Benbenishty, 1989). An explanation for these inconsistent results may be that the locus of control construct was intended to be used in conjunction with specific control expectancies as a predictor of human behaviour (Rotter, 1975, 1990). Thus, the influence of both situational appraisals of control and locus of control are important in understanding the coping strategies of burglary victims.

**Generalized Beliefs About Control**

The best known conceptualization of generalized belief about control is Rotter's (1966) construct of locus of control. When a person believes that a reinforcement is contingent upon his or her own behaviour or action, then this belief is referred to as an internal control of reinforcement or internal locus of control (Rotter, 1966). When a person believes that a reinforcement is not contingent upon his or her own behaviour or action, but is subject to luck, chance, or fate, then this belief is referred to as an external control of reinforcement or external locus of control (Rotter, 1966). From a theoretical basis locus of control has its greatest influence on behaviour in novel and/or ambiguous situations (Rotter, 1966, 1975). Thus, when a person has not been previously burglarized, then in relative terms, the burglary experience is novel and ambiguous, and locus of control would be expected to significantly influence the victim's coping behaviour.

Levenson (1981), although retaining the internal orientation, has further developed the external locus of control orientation to include the dimensions of chance and powerful others. Levenson (1981) describes chance and powerful others as "belief in the basic unordered and random
nature of the world and belief in the basic order and predictability of the world, coupled with the expectancy that powerful others are in control" (p. 15). Although the dimension of powerful others is considered an external orientation, it does have the potential for control. The powerful others orientation is particularly pertinent to burglary victims because it allows the victim to hold the expectancy that the authorities (i.e., Police) may be able to help achieve the desired reinforcement. Therefore, differentiating between powerful others and chance appears important for understanding the expectancy beliefs of people when authorities may be involved in the psychological event (Levenson, 1981). Hence, Levenson's (1981) modification further refines the external orientation of Rotter's (1966) conceptualization and in doing so makes it relevant to the study of victims of burglary.

Evidence supports the position that an individual's locus of control may account for differential coping in stressful situations (Lefcourt, 1976, 1983; Phares, 1976; Rotter, 1966; Strickland, 1978, 1989). Several researchers studying events different from crime victimization (e.g., health-related issues, natural disasters, and war) have found relationships between locus of control and coping. In general, individuals holding an internal locus of control orientation use more coping considered problem-focused, compared with emotion-focused coping, whereas individuals who hold an external locus of control use more emotion-focused than problem-focused coping (Anderson, 1977; Carver et al., 1989; Parkes, 1984; Solomon et al., 1989; Strickland, 1978).

The relation between powerful others and coping functions has not received much attention. Blanchard-Fields and Irion (1988) found that college age students who hold a powerful others orientation use less problem-focused coping than older adults who hold the same locus of control orientation. From a theoretical basis, one would expect that an individual holding a high powerful others orientation would use more
emotion-focused coping than problem-focused coping, unless the situational appraisals of control indicated that the actions of the powerful others were predictable and possible to manipulate.

**Importance of Outcome**

Although there is evidence of a relationship between locus of control and coping functions, much of the research has been flawed by failing to account for the moderating effect of outcome value (Rotter, 1975; Strickland, 1989; Wallston et al., 1987). Rotter (1966) argues that a person's behaviour or actions in a novel or ambiguous situation are a function of that individual's locus of control, as well as the degree of the importance of the outcome (outcome value) that the individual attaches to the situation. Thus, unlike locus of control, which is a generalized expectancy belief that is held antecedent to the event, outcome value is a belief that must be considered in light of a specific encounter. For example, those who hold an internal locus of control and who value their health, gather more information about health maintenance than those who do not value their health (Strickland, 1978; Wallston et al., 1987). In this example, the behaviour is gathering information and the degree to which a person values his or her health is considered the outcome value. In keeping with locus of control theory, outcome value should be considered in conjunction with the locus of control construct, and the failure to do so is characteristic of many studies (Levenson, 1981; Rotter, 1975; Strickland, 1989; Wallston et al., 1987).

Parkes (1984) found that internal and external female student nurses used significantly higher levels of suppression (similar to emotion-focused coping) when a situation was rated as low in importance (i.e., outcome value). This finding supports the argument that emotion-focused coping may be a more acceptable coping function during an event in which the individual perceives the event as low in outcome value. Hence, based on theory and supported with empirical evidence, outcome
value is expected to moderate the locus of control-coping functions relationship. That is, it is expected that the relationship between all three dimensions of locus of control and emotion-focused coping will be stronger among individuals holding low outcome value than among individuals holding high outcome value. Conversely, it is expected that the relation between locus of control and problem-focused coping will be stronger among individuals holding high outcome value than among individuals holding low outcome value.

Situational Appraisals of Control

Rotter (1966, 1990) and Folkman (1984) contend that to predict individual differences in coping one should consider, in conjunction with locus of control and outcome value, specific control expectancies as they apply to the psychological situation (in this study the psychological situation is coping with burglary). Within Lazarus and Folkman's (1984) theoretical framework, specific control expectancies are referred to as situational appraisals of control. Situational appraisals of control result from the individual's consideration of the demands of a specific situation and the degree to which the individual believes he/she can alter that specific situation. Yet, situational appraisals of control may not only act as a predictor variable of coping functions, but may further serve to mediate the effect of locus of control on coping functions (Parkes, 1984).

Researchers who studied coping in a middle-age community sample as well as coping during three stages of a college midterm examination, found a relationship between situational appraisals of control and coping functions (Folkman, Aldwin, & Lazarus, 1981; Folkman & Lazarus, 1980, 1985). In general, individuals who perceived a specific stressor as amenable to change (the individual believed he/she could control the situation) used more problem-focused coping than emotion-focused coping. Individuals who believed a stressor was beyond their control, and hence had to be accepted, used more emotion-focused coping than problem-
focused coping. Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986) found similar results in a sample of 85 married couples. Moreover, Parkes (1984) found significant interactions between locus of control and situational appraisals of control in relation to coping behaviour for female student nurses. Specifically, internals who appraised a stressor as 'could change' (thus could control the situation) used greater general coping than suppression coping. However, internals who appraised a stressor as 'must accept' (could not control the situation) used greater general coping than suppression coping. Thus, based on theory and research it is expected that situational appraisals of control influence the coping functions used by burglary victims and mediate the locus of control-coping functions relationships (Carver et al., 1989; Folkman et al., 1981; Folkman & Lazarus, 1980, 1985; Parkes, 1984).

**Gender Differences**

Little is known about gender differences in reaction to crime victimization (Janoff-Bulman & Frieze-Hanson, 1987). Maguire (1980), in his study of 322 burglary victims, found that a disproportionate number of female burglary victims experienced greater distress and changed behaviours in a more dramatic way than their male counterparts. Considering that some females experienced greater distress than the males, one could infer that gender differences in response to burglary are attributable to beliefs associated with gender role that are learned or culturally assigned (Greenglass, 1982; Vaughter, 1979). There are likely several underlying reasons explaining why there are gender differences in the way burglary victims cope.

In the literature on stress and coping there is support for coping differences based on the male and female distinction (Blanchard-Fields & Irion, 1988; Carver et al., 1989; Vingerhoets & Van Heck, 1990). For example, Vingerhoets and Van Heck (1990), in their community sample of 997 people, found that men used more problem-focused than emotion-
focused coping and that women used more emotion-focused than problem-focused coping. Therefore, given evidence that women experience greater distress than men, I expected that female burglary victims would use more emotion-focused than problem-focused coping and the opposite would be true for male victims.

Janoff-Bulman and Frieze-Hanson (1987) suggest that gender differences in reaction to crime may be a result of differences in world-view beliefs and self-schemas. Self-schemas are defined as "cognitive generalizations about the self that guide the processing of self-related information and provided a framework for summarizing, evaluating, and describing one's experiences and behaviour" (Miller, 1984, p. 1223). Several beliefs likely comprise an individual's self-schema, and on a rational basis, locus of control would appear to be one of those beliefs. Locus of control is similar to a person's world view (Hersch & Scheibe, 1967) and is partly developed through gender via societal influence (Levenson, 1981). Accordingly, locus of control should mediate the gender-coping functions relation for victims of burglary. Moreover, Hoyenga and Hoyenga (1979) in their review of the literature on sex differences and attribution, reported that several studies found that women frequently hold an external locus of control and men hold an internal locus of control. Therefore, gender should moderate the locus of control and coping relation.

Summary

In summary, it was expected that gender would influence coping functions, with females using more emotion-focused than problem-focused coping and males using more problem-focused than emotion-focused coping (Blanchard-Fields & Irion, 1988; Carver et al., 1989; Vingerhoets & Van Heck, 1990). Moreover, it was expected that there would be a positive relationship between internal locus of control and problem-focused coping and a positive relationship between chance locus of control/powerful others locus of control and emotion-focused coping.
However, it was also expected that locus of control and situational appraisals of control would mediate the gender and coping relation, in that locus of control and situational appraisals of control would account for the relation between gender and coping (Folkman, 1984; Levenson, 1981). Finally, gender and outcome value were expected to affect the direction and/or strength of the locus of control and coping function relation (Parkes, 1984; Rotter, 1975, 1990).

**Methodological Issues**

In order to test the proposed relationships it was necessary to design two studies. The first study examined actual victims of burglary (Study 1) and the second study used non-victims who imagined themselves being victimized (Study 2). This was done because Rotter's (1966) theory suggests that an individual's locus of control may change following a significant event and there is evidence to support this contention. For example, in a study of the treatment of drug addiction, Berger and Koocher (1972) found that when the participants entered treatment they held an external locus of control orientation, but upon treatment termination their locus of control orientation had changed to internal. Furthermore, Collins, Taylor, and Skokan (1990) found that the process of coping with victimization (cancer) resulted in changes in self-view, with some of the participants feeling more in control of their life and some of the participants feeling less in control of their life. Moreover, it has been suggested that victimization may give rise to a negative self-trust schema that makes a victim vulnerable to powerful others, thus increasing the victim's powerful others locus of control belief (McCann, Sakheim, & Abrahamson, 1988). Therefore, a burglary victim's locus of control may be altered by the burglary experience, confounding the role of locus of control as a predictor variable of coping efforts. That is, following the burglary experience an individual's locus of control orientation may change from internal to external, external to internal, or an individual's locus of control may
not change. Consequently, measuring locus of control after a burglary experience would make it difficult to determine whether locus of control was a predictor of burglary coping. Therefore, it was of theoretical interest to examine locus of control as an antecedent variable that serves as a predictor of coping.

In order to treat locus of control as an antecedent variable, Study 2 incorporated a passive-interpretive design (Crano & Brewer, 1986). Rather than actual victims of burglary, college student volunteers (experimentally induced victims) viewed a video of a burglary and were asked to vicariously experience the victimization experience. Passive-interpretive design is considered appropriate when the use of deception is unethical and for the purpose of theory development and refinement (Crano & Brewer, 1986). It would have been unethical to deceive participants into believing that they had been burglarized because of the great distress that such a deception could cause. Combining a passive interpretive design with experimental conditions may provide information for theory building (Crano & Brewer, 1986).

However, evidence suggests that recall-memory involves greater sensory and contextual detail than imagined-memory and that imagined-memory events are more complex and reflect information idiosyncratic to the individual (Johnson, Foley, Suengas, & Raye, 1988). Therefore, it is expected that those who recall the burglary experience and those who imagine burglary victimization would differ on coping because experimentally induced victims' coping may reflect how they believe they cope in general, as opposed to how they would actually cope with the burglary experience.

Thus with Study 2, I attempted to replicate Study 1 using different procedures for measuring the variables of concern (Cozby, 1981; Hendrick, 1991). Although I expected victimization to affect an individual's locus of control, if the hypothesized relationships were supported for both studies, these results would challenge the
theoretical proposition that locus of control is affected by a victimization event. Passive interpretive design was used in an effort to "unconfound" (Amir & Sharon, 1991, p. 58) the role of locus of control as an antecedent variable that influences burglary victim coping. Therefore, the purpose of Study 2 was to contribute to the theoretical understanding of the locus of control and coping relation.
REVIEW OF THE LITERATURE

Canadians are at a far greater risk of being victims of crimes against property, such as burglary, than crimes against person, such as rape and assault (Fattah, 1991; Sacco, 1990). Moreover, victims of burglary may experience severe psychological distress (Clarke & Hope, 1984; Frieze, Hymer, & Greenberg, 1987; Maguire, 1980). Despite this, burglary victims have not received as much research attention as victims of violence and sex offenses (Janoff-Bulman & Frieze, 1987; Maguire, 1980).

Although there are individual differences in the way burglary victims cope with the victimization experience (Fischer, 1984; Maguire, 1980; Paap, 1981; Waller & Okihiro, 1978), there is a dearth of information explaining why there is individual variation in burglary victim coping. From the broader literature on stress and coping, there is both a theoretical and an empirical basis to suggest that locus of control, outcome value, situational appraisals of control, and gender may have main, mediating, or moderating effects that account, in part, for individual differences in the way burglary victims cope with the burglary experience (Anderson, 1977; Brown & Harris, 1989; Lazarus & Folkman, 1984; Levenson, 1981; Parkes, 1984; Solomon et al., 1989; Vingerhoets & Van Heck, 1990).

What follows is a review of what is known about how crime victims cope. A summary of relevant aspects of Lazarus and Folkman's (1984) theory of stress and coping is presented. Next the role of locus of control and situational appraisals of control are related to the burglary experience and relevant research is critiqued. An explanation for gender differences is put forward and finally, expected mediated and moderated effects are explained.

Crime Victim Coping

Criminal victimization can create short- and long-term psychological distress for the victim (American Psychological
Association, 1985; Fattah, 1991; Gottfredson, Reiser, & Tsegaye-Spates, 1987; Norris, Kaniasty, & Scheer, 1990). It is not uncommon for crime victims to experience a host of aversive emotions including anger, depression, fear, guilt, confusion, distrust, dismay, and sadness (Bard & Sangrey, 1986; Cook, Smith, & Harrell, 1987; Fattah, 1991; Randle, 1985). Although the counselling of victims falls directly within the mandate of counselling psychology (Douce, 1988), crime victim coping has received little research attention from counselling and clinical psychologists (Herrington, 1985). The psychological and criminological literature has revealed a great deal about socio-demographic characteristics of victims, yet there is a dearth of information on personality and psychological aspects of victim functioning (Fattah, 1991).

Stage theorists have figured prominently in the area of crime victim coping. Bard and Sangrey (1986) contend that victim reactions develop through impact, recoil, and reorganization stages. The impact stage is characterized by the victim experiencing psychological disturbances. During the recoil stage the victim begins to adapt to the new situation and begins to modify or neutralize the emotions causing the psychological disturbances. The reorganization stage follows the recoil stage and is characterized by the subsiding of intense emotions. Emotionally and behaviourally the crime is no longer a central feature of the victim's life. The victim oscillates between stages following no predictable timetable.

Bard and Sangrey's (1986) stage approach is, in general terms, descriptive of the past-victimization experience, but fails to account for individual differences in coping. Furthermore, it does not provide an avenue (i.e., personality characteristics, situational variables) to explain why some individuals may not follow the prescribed stages.

Several researchers have suggested that victims of crime use a variety of different cognitive, affective, and behavioral strategies to
achieve reorganization or previctimization functioning (Agnew, 1985; Cohn, 1974; Taylor, Wood, & Lichtman, 1983). For example, Taylor et al. (1983) argue that victims use five cognitive processes to neutralize the impact of crime and achieve reorganization. Victims may make social comparisons with less fortunate others, focus selectively on attributes that make one appear advantaged, create hypothetical worse worlds, construe benefits from victimization event, and/or manufacture normative standards of adjustment. In essence, these processes allow the victim an illusion of control over his/her behaviour and/or emotions. These cognitive processes are similar to Bard and Sangrey's (1986) stages in that they describe victim coping but they do not account for or explain differential responses to victimization. Furthermore, there is empirical evidence that suggests that not only are there individual differences in the way crime victims cope with victimization, but that crime victims cope differently in response to different types of crime (American Psychological Association, 1985; Wirtz & Harrell, 1987).

Wirtz and Harrell (1987) in their study of 236 victims of five different crimes found victims of different crimes appear to use different coping responses according to the crime experience. For example, victims of sexual assault stay home more often following victimization than do any other crime victims. Burglary victims more than other crime victims are careful to lock doors and install locks and bars. Therefore, it may not be prudent to apply research findings of crime victim coping from one type of crime to another different type crime. As such, coping with burglary may be distinct from other types of crime victimization coping, therefore, the following review of crime victim coping is primarily concerned with burglary victims.

Papp (1981) documented his own reactions of falling victim to residential burglary. He identified three stages of reaction to being a victim. The initial stage lasted several days and was chiefly characterized by aversive emotional responses, such as fear, disgust,
violation, and anger. The middle stage was characterized by behavioral activities predominately geared towards reducing the risk of future victimization. Activities in the middle stage included changing locks and installing a burglar alarm. The strong aversive reactions experienced during the initial stage subsided during the middle stage. The final stage was characterized by a state of normalcy, with mild emotions of resentment and cynicism.

Papp's (1981) study was limited by its subjectiveness and case study methodology that allows the experience to be placed only within an idiographic context. However, the study did provide descriptive information about the emotional and developmental issues experienced by one victim of burglary. Within Papp's description of the burglary experience, it was possible to tease out salient features that may provide insight into why there is individual coping variation in response to victimization. For example, Papp argued that behavioral activities geared towards reducing the risk of future victimization provided a sense of personal control. Hence, Papp's world view about control (i.e., locus of control) coupled with his beliefs about control specific to the situation (i.e., situational appraisals of control) influenced his choice of coping strategies employed to manage the victimization experience. Papp's (1981) perspective on how control beliefs' influence coping is in keeping with the broader literature on stress and coping as discussed by Lazarus and Folkman (1984).

Fischer (1984) used a phenomenological methodology to study the experience of those who have fallen victim to either robbery, assault, theft, vandalism, attempted rape, harassment, and burglary. The 50 participants ranged in age from 18 to 90 years and were from varying educational and socio-economic backgrounds. Fischer (1984) argued that burglary victims' reactions are quite similar to rape victims' reactions as described by Burgess and Holmstrom (1974). "Burglary victims speak of their homes as having been penetrated, desecrated and dirtied" (Fischer,
1984, p. 168). However, there is a qualitative difference between describing one's home and describing one's person in such terms. Yet one factor apparent was that victim's control over his/her life had been suspended.

Fischers' (1984) study provided an overview of crime victims' experience and provided further support for the argument that victims of burglary may experience a great deal of psychological distress. Yet, the study has limitations. The participants were interviewed on the telephone, perhaps limiting or distorting the information obtained. All the participants in the study had reported the crime to police, therefore the sample may not be representative of crime victims who do not report to police. Furthermore, Fischer (1984) did not explain or account for individual differences in reaction to criminal victimization. However, the apparent central role that control plays is similar to Papp's (1981) study. Both studies suggest the more control an individual perceives he or she has, the greater number of behavioral strategies one is able to incorporate into his/her coping behaviour.

Maguire (1980) investigated the impact of burglary through interviewing 322 burglary victims at their homes 4 to 10 weeks after the discovery of the offense. Ten independent judges classified the victims' responses. Six categories of initial reactions were determined by the judges. Approximately 30% of the participants felt anger and annoyance, 19% were shocked, 17% experienced confusion, 9% experienced disbelief, 9% felt fear, and 17% had no strong reaction. To gain a sense of control, several victims exhibited security behaviour such as changing locks, installing alarms, updating or purchasing insurance (42% - 80% depending on the type of security behaviour). Maguire (1980) found that the time of day when the burglary occurred, the property stolen, or whether the victim was at home at the time of the burglary did not account for individual variation in victim coping. However, he did find that female burglary victims expressed stronger emotional distress than
their male counterparts. Gender differences in reaction to criminal victimization have also been reported by Janoff-Bulman and Frieze (1987) and Wirtz and Harrell (1987).

There are difficulties in verifying the accuracy of Maguire's findings because of under/overreporting that is characteristic of research that relies exclusively on self-reports (Maguire, 1980). Furthermore, although Maguire found individual and gender differences in burglary victim coping, he failed to account for these differences. However, his research reaffirmed the observation that burglary victims use emotional and/or behavioral efforts to cope and that situational appraisals of control may figure prominently in influencing the coping used by burglary victims.

Brown and Harris (1989) argue that burglary is more than a simple property crime because the offense involves an intrusion into what is normally considered a safe territory by the victim. Burglary may create extreme psychological distress in victims partly because it is a violation of primary territory, which is characterized by psychological centrality. Violation of primary territory threatens the victims' sense of control. Brown and Harris (1989) suggest that in response to the psychological distress associated with burglary victimization, victims use behavioural and emotional coping efforts. For example, a behavioural response may be to install locks to prevent future victimization, whereas an emotional response may be to consult powerful others, such as the police, in an effort to reduce feelings of distress. To explore a variety of aspects about the burglary experience, Brown and Harris (1989) conducted 30-minute interviews with 44 female burglary victims. They found that on the average, participants reported that burglary victimization caused seven stressful emotions. Furthermore, unlike Maguire's (1980) finding, Brown and Harris (1989) found that severe damage to the inside of the residence correlated with greater victim distress ($r = .43; p < .01$). This discrepancy between Maguire's (1980)
finding and Brown and Harris' (1989) may result from the latter studying only women—women reported greater levels of distress in Maguire's (1980) study. Brown and Harris (1989) also found that participants used a variety of coping strategies following the burglary, including talking to friends for social support, talking to police for information, purchasing firearms, and installing alarms. These coping strategies are similar to problem- and emotion-focused coping and may be strongly influenced by control beliefs (Lazarus & Folkman, 1984).

Generalization of Brown and Harris' (1989) results are limited to female victims of burglary. Furthermore, they did not measure control, which might have provided support for their argument that violation of primary territory threatens the victims' sense of control.

Tyler (1981), in his study of 244 crime victims, found support for the argument that perceived control influences crime victim coping. The participants were interviewed for 45 minutes in an effort to establish how their control beliefs relate to the victimization process. Tyler (1981) found a significant relationship between perceived control and behavioural responses to burglary ($r = .21, p < .001$). Thus, the greater the perceived control, the greater the emphasis on active coping employed following victimization (i.e., locking doors, installing alarms, buying a guard dog).

Tyler's (1981) data were correlational and did not show causal order. In addition, a third variable may mediate or moderate the relationship between perceived control and coping behaviour. Furthermore, active coping may result in high levels of control, thus confusing the direction of the relationship. Tyler failed to recognize a distinction between generalized beliefs about control (i.e., locus of control) and situational control beliefs (i.e., situational appraisals of control) and how they may differentially influence coping. Both generalized beliefs about control and situational control beliefs are believed to influence coping behaviour (Compas & Orosan, in press;
Folkman, 1984; Parkes, 1984; Thoits, 1991). Finally it would have added clarity if Tyler had placed his discussion of victim coping strategies within a theoretical model of coping.

In summary, several researchers have found individual and gender differences in the way individuals cope with criminal victimization, in general, and burglary victimization, specifically (Agnew, 1985; Fattah, 1991; Janoff-Bulman & Frieze, 1987; Maguire, 1980; Wirtz & Harrell, 1987). Victims cope with victimization through managing emotions (i.e., denial, comparison with others less fortunate) and/or managing the problem (i.e., changing locks, installing an alarm, purchasing a firearm). Some researchers have found tangential and direct evidence that gender, general beliefs about control, and situational beliefs about control influence coping (Brown & Harris, 1989; Compas & Orosan, in press; Folkman, 1984; Maguire, 1980; Papp, 1981; Parkes, 1984; Tyler, 1981).

Coping Theory

Coping has been addressed from a variety of theoretical perspectives, all of which have limiting and/or serious flaws (Lazarus & Folkman, 1984). Lazarus and Folkman (1984) present a theoretical framework of coping that attempts to rectify the deficiencies of previous approaches. Their transactional theory of stress and coping has considerably changed the way in which coping is conceptualized (Stone, Greenberg, Kennedy-Moore, & Newman, 1991).

Lazarus and Folkman (1984) define the coping process as "constantly changing cognitive and behavioral efforts to manage specific external an/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Coping is what the person actually does or thinks in response to a specific situation. Coping changes as the person's cognitive appraisals change and/or as the environment changes. Compas, Forsythe, and Wagner (1988) in their study of 65 undergraduates found low consistency in patterns of coping across
two types of ongoing stressors. Findings by Compas et al. (1988) support
the position that coping is situationally specific and not a trait.
Moreover, Bolger (1990) argues that in many studies individual
differences in coping strategies result from differences in the types of
stressors people encounter and not from personality factors or other
factors that were postulated as accounting for such differences.

Lazarus and Folkman (1984) consider problem-focused coping and
emotion-focused coping as the two main functions of coping. A coping
function is the purpose a coping strategy serves. Problem-focused coping
is directed at managing the problem causing the distress. Emotion-
focused coping is directed at dealing with the individual's emotions
that arise from the problem event (Lazarus & Folkman, 1984). However,
the important distinction between problem- and emotion-focused functions
often lacks clarity. For example, seeking social support may be problem-
focused or emotion-focused depending on whether it is for instrumental
or emotional reasons (Carver et al., 1989; Endler & Parker, 1990; Tobin,
Holroyd, Reynolds, & Wigal, 1989).

There is conflicting evidence regarding whether in any one event an
individual will use one function of coping to the total exclusion of
another coping function. Folkman and Lazarus (1980) developed the Ways
of Coping Checklist (WCC) to measure the coping of a middle-age
community sample comprised of 52 women and 48 men. They found in 98% of
the 1,332 coping episodes reported that the participants used varying
amounts of emotion-focused and problem-focused, or one function of
coping was more dominant depending on the situation. For example, in
work-related situations, the participants used problem-focused coping
more frequently than emotion-focused coping, whereas in health related
episodes the participants used emotion-focused coping more frequently
than problem-focused coping. Folkman and Lazarus (1980) concluded that
cognitive appraisal (an evaluative process concerned with the meaning or
significance of an event) and how amenable to change a situation is
perceived as being (i.e., how controllable a situation is perceived) determines the use of emotion-focused and problem-focused coping during any episode. Specifically, situational appraisals of control influence the coping functions used by an individual (Lazarus & Folkman, 1980).

Folkman and Lazarus (1985), in a study of college students, administered the WCC (modified) during three stages of an examination. The three stages were identified as the anticipatory stage, waiting stage (waiting for marks), and the outcome stage (after receiving the marks). They found that during the anticipatory stage 99% of the participants used problem-focused coping as the predominate coping function. During the waiting stage and outcome stage varying amounts of emotion-focused and problem-focused coping were used by 95% and 94% of the participants, respectively. The changes in coping indicated that situational appraisals of control affect coping. Yet it was not clear whether this was a direct effect, mediating effect, or moderating effect. In the anticipatory stage (where one can actively manage the situation) problem-focused coping was at its peak, whereas in the waiting stage, problem-focused coping subsided and emotion-focused coping increased. During the outcome stage the coping function was influenced by the grade the participant received. Those participants who received lower grades used more emotion-focused coping than those participants who received higher grades. Though coping functions significantly shifted from the anticipation stage to the waiting stage, participants throughout the exam used varying degrees of both problem-focused and emotion-focused coping. However, in a more stressful encounter (i.e., burglary) an individual may use more of one coping function than another.

Anderson (1977) studied 102 randomly selected business owner-managers after their businesses had been damaged by a hurricane. Coping functions (Class I and II) were measured according to Kahn, Wolfer, Quinn, Snoek, and Rosenthal's (1964) classification system. Class I and
II coping are similar to Lazarus and Folkman's (1984) problem-focused coping and emotion-focused coping, respectively. Contrary to Folkman and Lazarus' (1980, 1985) findings, Anderson (1977) found that participants in his study did not use a combination of coping functions but used either problem-focused coping or emotion-focused coping. His findings may be attributable, in part, to the extreme nature of the situation and to the type of scale used to measure coping.

Further research is required to clarify if and how appraisal influences coping (Peacock & Wong, 1990). Peacock and Wong (1990) used linear structural modelling analysis to test the relations between appraisal, emotion-oriented, and psychological distress during an university examination. In their sample of 143 undergraduates, they found no significant relationship between appraisal and emotion-oriented coping. However, they did find that greater levels of emotion-oriented coping were associated with higher levels of distress. Although Peacock and Wong acknowledge that other researchers have found that lower levels of distress were associated with higher levels of emotion-oriented coping, they suggest that coping is antecedent to distress. Moreover, they posit that the coping function must be congruent with the nature of the stress in order to decrease the distress. They also argue that situational control may act as a mediating variable where emotion-focused coping is concerned. Yet, both theoretically and empirically there is support for the position that generalized beliefs about control and situational control beliefs influence the coping functions employed by an individual during a stressful encounter (Anderson, 1977; Carver et al., 1989; Lazarus & Folkman, 1984; Parkes, 1984; Solomon et al., 1989).

Aside from the difficulty in distinguishing between problem- and emotion-focused coping on some of the coping subscales, recently, self-report, situation-specific coping questionnaires (e.g., WCC) have been criticized for numerous reasons (Endler & Parker, 1990; Stone et al., 1991). Specifically, Endler and Parker (1990) argue that the
psychometric properties of the WCC are questionable. They contend that the empirical support for the validity and internal consistency reliabilities of many of the coping subscales are very modest. Endler and Parker (1990) suggest that the psychometric problems of the WCC are further exasperated by researchers who add or drop items according to hypotheses being studied or according to the population under investigation. Stone et al. (1991) criticized self-report, situation-oriented coping questionnaires (e.g., WCC Revised, Folkman & Lazarus, 1985) regarding the applicability of coping items to specific problems (domain), the stage of the stressful event for which coping was reported (coping period), and the meaning extent in the response key used with coping items (response key).

To examine these criticisms empirically, Stone et al. (1991) interviewed 49 female and 42 male college students about the most stressful event that they had experienced in the past week. During the interview the participants answered the Ways of Coping Questionnaire (WOC) and specific questions designed to investigate the criticisms of domain, coping period, and response key. Using two-way ANOVA, findings indicated that a higher number of not applicable responses were endorsed for the noninterpersonal than interpersonal domains. Further analysis with a repeated measures ANOVA indicated higher proportions of "not applicable" responses were reported for problem-focused than emotion-focused coping. Stone et al. (1991) concluded that the WOC items that comprised emotion-focused strategies were endorsed across problem types, whereas problem-focused coping items were situation-specific.

Stone et al. (1991) found that approximately 70% of the respondents reported that they considered the acute stage as their definition of the coping period. The remaining participants reported that their definition of the coping period involved the preparatory stage only, the recovery stage only, or a combination of the preparatory and recovery stage. Finally, Stone et al. (1991) examined what the participants meant by
their responses. Participants were asked if they judged 'extent' in the response key in terms of "duration," "frequency," "effort," or "usefulness". The results indicated that there was a great deal of variation among the participants in the ways they conceptualized the term extent. Stone et al. (1991) concluded that participants interpreted the meaning of extent in the response key in different ways.

In summary, Lazarus and Folkman (1984) offer a transactional theory of stress and coping in which problem- and emotion-focused coping are the two main functions of coping. The instrument developed by Folkman and Lazarus to measure coping have been criticized for several reasons, especially in the area of stressor domain, coping period, and response key (Stone et al., 1991). The coping strategies selected by burglary victims are likely to be those that are consonant with their general beliefs about control and their beliefs about control specific to the situation (Lazarus & Folkman, 1984; Wallston et al., 1987). Furthermore, victims who value the outcome of the burglary and who believe that the stressor is subject to control will use problem-focused coping more than victims who do not value the outcome and do not believe the stressor is subject to control (Lazarus & Folkman, 1980, 1984). Previous research found that women respond more emotionally to burglary victimization than men; therefore it is expected that women victims would use more emotion-focused coping than men and that men would use more problem-focused coping than women (Maguire, 1980).

Generalized Beliefs About Control

Generalized beliefs about control are expected to influence an individual's choice of coping functions (Lazarus & Folkman, 1984). The best known conceptualization of generalized belief about control is Rotter's (1966) construct of locus of control. Locus of control, as defined by Rotter (1966, 1975), is a generalized expectancy construct that arises out of social learning theory. Generalized expectancies are similar to a person's world view and are largely determined by an
individual's past experiences (Hersch & Scheibe, 1967). When a person believes that a reinforcement is contingent upon his or her own behaviour or action, then this belief is referred to as an internal control (Rotter, 1966). When a person believes that a reinforcement is not contingent upon his or her own behaviour or action, but is subject to luck, chance or fate, then this belief is referred to as an external control of reinforcement or external locus of control (Rotter, 1966).

Rotter's (1966) construct of locus of control has been criticized for being unidimensional. Subsequently, several researchers have put forth multidimensional variations of Rotter's original conceptualization of locus of control. In particular, Levenson (1981), although retaining the internal orientation, has further developed the external locus of control orientation to include the dimensions of chance and powerful others. The powerful others orientation is particularly pertinent for burglary victims because it allows the victim to hold the expectancy that the authorities (i.e., police) may be able to help achieve the desired reinforcement. Therefore, differentiating between powerful others and chance appears important in order to understand the expectancy beliefs of people when there are potentially powerful others involved in the psychological event (Levenson, 1981). Furthermore, Levenson's (1981) modification further refines the external orientation of Rotter's (1966) conceptualization and in doing so makes it relevant for the study of burglary victims.

From a theoretical basis, locus of control has its greatest influence on behaviour in novel and/or ambiguous situations (Rotter, 1966, 1975). The significance of locus of control's influence on behaviour diminishes as the individual's experience in a situation increases (Rotter, 1975). When the situation is known to the individual, specific expectancies of control as opposed to a generalized expectancy will act to determine behaviour (Rotter, 1966, 1975, 1990; Strickland, 1978).
Lazarus and Folkman (1984) define ambiguity as "lack of clarity in the environment, situational cues regarding the nature of the outcome and/or extent to which it can be controlled are minimal" (p.66). They contend that the greater the ambiguity the more the individual relies on generalized expectancies (i.e., locus of control) in determining his/her behaviour. A situation is novel when a person has not experienced the situation before (Lazarus & Folkman, 1984). Few situations are completely novel, in most situations a person will be able to make some connection, no matter how weak, between the situation at hand and some other group of situations. Hence, the novelty of a situation is relative rather than absolute (Lazarus & Folkman, 1984). Furthermore, a novel situation is also ambiguous in that the individual is unclear about the significance or meaning of the event (Lazarus & Folkman, 1984). In a study of the interaction between trait anxiety and control in a shock avoidance task, Archer (1979) provides empirical evidence that personality dispositions have the strongest influence on behaviour under ambiguous conditions. Moreover, Solomon et al. (1989), in their study of locus of control and combat-related post-traumatic stress disorder in soldiers, found that the greater the ambiguity of the battle intensity, the more locus of control influenced the coping functions used by the soldiers to deal with the post-traumatic stress.

Folkman and Lazarus (1980, 1985), in their studies of coping in a middle-age community sample and college examination taking, found there was no significant relationship between locus of control and coping function. However, in order for an individual's locus of control to influence his/her coping, it is necessary for the stressor to be novel. College students participating in an examination is not a novel or ambiguous situation and it is not known if the coping behaviours of a middle-age sample involved novel or ambiguous stressors.

Solomon et al. (1989), in their study of post-traumatic stress disorder, examined the relationship between locus of control and coping
functions. The 104 male participants who ranged in age from 18 to 32 with a median age of 30, a year prior to data collection had fought on the front line for Israel during the 1982 Lebanon war. A shortened version of Rotter's locus of control scale was administered to establish the locus of control of the participants. Threat appraisal was ascertained through having the participants rate on a 5-point Likert type scale how threatening they found the battle. Raw scores from the WCC (Folkman & Lazarus, 1980) were used to measure problem- and emotion-focused coping. Through the interview, the participant's perception of low and high battle intensity was determined.

Solomon et al. (1989) found that under low battle intensity the greater the internal locus of control the more the participants used problem-focused coping, $r(52)=.20$, $p<.05$, as well, under high battle intensity the greater the internal locus of control of the participants the more the participants used problem-focused coping following combat stress reaction, $r(48)=.40$, $p<.01$. Furthermore, under low battle intensity the participants reported using more emotion-focused coping when they experienced strong negative emotions, $r(52)=.29$, $p<.05$, as well, under high battle intensity participants reported using more emotion-focused coping when they experienced strong negative emotions, $r(48)=.27$, $p<.05$. Therefore, battle intensity was related to emotion-focused coping.

Findings by Solomon et al. (1989) are in contrast to their contention that high battle intensity provided an unambiguous situation cue of how to react. Accordingly, locus of control would be expected to have a significant relationship with coping under the ambiguous event of low-battle intensity.

Although Solomon et al. (1989) found a significant relationship between locus of control and coping functions regardless of battle intensity, further analyses complicate these previous findings. These researchers conducted simultaneous multiple regression analyses to
assess direct contribution of locus of control, threat appraisal, negative emotions, and coping functions to post-traumatic stress in both high- and low-battle intensity. The contribution of locus of control to post-traumatic stress reactions did not reach significance under either condition. However, Solomon et al., using path analysis, examined the indirect effects of locus of control on post-traumatic stress. Under high battle intensity no direct path between locus of control and post-traumatic stress via the other variables reached significance. However, under low battle intensity the indirect path from control expectancy to post-traumatic stress through threat appraisal was significant. Therefore, participants who held internal locus of control and who reported low battle intensity were associated with lower threat appraisal, which was then related to fewer post-traumatic stress symptoms. Solomon et al. (1989) argued that these findings support the position that locus of control has its strongest influence on behaviour under ambiguous conditions. Under the ambiguous condition of low-battle intensity, locus of control influenced post-traumatic stress through the mediating effect of threat appraisal, whereas, under the unambiguous condition of high-battle intensity locus of control was not a factor influencing post-traumatic stress behaviour.

Findings by Solomon et al. (1989) further illustrate the complex relationship between locus of control, coping functions, and other aspects of human behaviour (i.e., post-traumatic stress). Clearly there is a relationship between locus of control and coping functions. However, Solomon et al. failed to address the inconsistent moderating effect of ambiguity as displayed through battle intensity. Moreover, their findings also suggest that locus of control has a stronger relationship with problem-focused coping than emotion-focused coping. From their study it appears that problem-focused coping is positively related to locus of control and high levels of emotional distress are positively related to emotion-focused coping. This finding is consistent
with more recent research (Compas & Orosan, in press; Peacock & Wong, 1990). The study by Solomon et al. (1989) has several limitations. First, as Solomon et al. suggest, causal inference is not possible because of the fact that all variables were measured one year retrospectively and because of the cross-sectional design of the study. Second, although there was a positive moderate correlation between internal locus of control and problem-focused coping, their interpretation of this is incomplete without ascertaining whether outcome value moderated the locus of control and coping function relationship. Rotter (1975, 1990) argues that research using locus of control is flawed if it does not take into consideration outcome value. Third, Solomon et al. did not provide a convincing argument, nor did their contradictory results support the position that battle intensity level represents ambiguity of the events. Conceivably, low-battle intensity corresponds with low outcome value, in that the outcome is not as important as high-battle intensity, where the outcome is exceptionally important. Fourth, many aspects of battle may not be novel and/or ambiguous to experienced soldiers, therefore it would have been prudent to establish whether situational appraisals of control predict coping functions and/or mediate the locus of control and coping function relationship. Finally, locus of control was measured after the event and not antecedent to the event. Research supports that a person's locus of control may be altered by life events (i.e., war) and subsequent coping efforts and is not a fixed personality trait (Berger & Koocher, 1972; Collins et al., 1990). Therefore, locus of control as a predictor variable may have been inappropriate and may have created difficulty in interpreting the effects of locus of control on coping functions.

Anderson (1977), in his study of 102 business people who survived a hurricane, found a relationship between an individual's locus of control and coping functions used to cope with the aftermath of the hurricane. In general, Anderson (1977) found that individuals with an external
locus of control used more emotion-focused coping than problem-focused coping. Those with an internal locus of control used more coping similar to problem-focused coping than coping similar to emotion-focused coping.

Anderson's (1977) findings did not provide a clear understanding of the relationship between locus of control and coping functions. First, the analysis was correlational, therefore, determination of a causal relationship between locus of control and coping was not possible. Second, he failed to account for the requisite information on outcome value. For example, a person with an internal locus of control who holds a low-outcome value regarding the event, may not have used problem-focused coping. Based on theory, the locus of control-coping function relationship may be moderated by outcome value (Rotter, 1966, 1975, 1990). Third, Anderson (1977) treats locus of control as bimodal thus making the scale ipsative. Failure to treat locus of control as occurring on a continuum limits the findings and interpretations of the study. Finally, more information regarding individual differences in coping may have been provided by taking into account situational appraisals of control. Locus of control is optimally predictive in novel and/or ambiguous situations (Rotter, 1966, 1975, 1990). It is not known if the participants in Anderson's (1977) study were coping with novel and/or ambiguous events. Therefore, information about situational control beliefs, may have been helpful in the prediction of coping functions and/or in understanding the possible mediating role that situational appraisals of control has between the locus of control and coping function relationship.

Carver et al. (1989) administered their multidimensional coping inventory (COPE) and several other questionnaires including Rotter's (1966) locus of control scale to a group of 162 university undergraduates. Internality reached significance with 2 of the 13 COPE scales. Internal locus of control had a significant correlation ($r =$
.17, p < .05) with Active Coping and a significant negative correlation
\( r = -.16, p < .05 \) with Focus On and Ventilation of Emotions. Due to the
ipsative nature of Rotter's scale, the same magnitude but with the
opposite direction would have occurred for externality. These findings
lend weak support that there is a relationship between internal locus of
control and problem-focused coping. Moreover, it is not clear from the
study by Carver et al. (1989) whether the participants were coping with
novel and/or ambiguous events. Situational control beliefs were
significantly related to coping (7 of the 13 subscales) more frequently
than locus of control (2 of the 13 subscales), therefore it was likely
that the participants were not coping with novel and/or ambiguous
events. Under unambiguous conditions, a strong relationship between
locus of control and coping would not be expected.

Blanchard-Fields and Irion (1989) examined the relationship between
locus of control and coping as moderated by age and context. The 96
participants completed several questionnaires including Levenson's
(1981) Internal, Powerful Others, and Chance Scales, and Folkman and
Lazarus's (1985) WCC (revised). The male and female participants were
divided equally into four age groups: adolescents, young adults, middle-
aged adults, and older adults.

In general, younger individuals with an internal locus of control
used coping strategies that were emotion-focused, such as self-blame and
hostile reaction. However, adults with an internal locus of control used
more problem-focused coping than emotion-focused coping. Blanchard-
Fields and Irion (1988) argue that internality may represent a
multidimensional construct with different attributions made according to
age. For example, young individuals with an internal locus of control
orientation may believe that they are responsible for a stressful
situation and react immaturely. They avoid or react in a hostile manner
towards the event. However, older adults react maturely and often take
responsibility for the stressor. Therefore, they use problem-focused
coping to manage the stressor.

Furthermore, older adults who held a powerful others locus of control orientation endorsed coping strategies that were problem-focused, whereas with younger groups powerful others were negatively related to coping strategies that comprise problem-focused coping. Participants with a chance orientation, the second dimension of externality on Levenson's locus of control scale, used different coping strategies than those with a powerful others orientation. Both younger and older participants holding chance locus of control orientation used emotion-focused coping. However, older adults endorsed a hostile reaction. Blanchard-Fields and Irion (1988) suggested that chance has a different meaning for older adults than younger adults.

Blanchard-Field's and Irion's (1988) findings support the position that locus of control has at least three dimensions. Moreover, in the case of older adults internal and powerful others locus of control were related to problem-focused coping, whereas chance locus of control affected emotion-focused coping. Yet in younger adults all three dimensions of locus of control were related to coping strategies that were considered emotion-focused strategies. This evidence provided some support for the hypothesis that age moderated the locus of control and coping function relation. However, Blanchard-Fields and Irion did not measure outcome value. Therefore, it may be that their findings do not reflect the moderating effect of age, rather the moderating effect of outcome value. Perhaps younger adults did not place an emphasis on the outcome value and therefore did not engage in problem-focused coping strategies. However, older adults may have placed greater emphasis on outcome value than younger cohorts and thus engaged in problem-focused coping.

In summary, several studies showed a complex relationship between locus of control and coping (Anderson, 1977; Blanchard-Fields & Irion, 1988; Carver et al., 1989; Lazarus & Folkman, 1984, 1985; Parkes, 1984;
Solomon et al., 1989). The direct effect of locus of control on coping was equivocal. In the case of burglary victimization, the locus of control and coping relationship may be moderated or mediated by outcome value, gender, and situational appraisals of control. Furthermore, Levenson's (1981) powerful others scale may be pertinent to burglary victims because it may depict the victim to hold the expectancy that the authorities (i.e., police) may be able to help achieve desired results (i.e., home security). Both the mediating and moderating effects of outcome value and situational appraisals of control on the locus of control and coping relationship must be examined to understand the locus of control and coping function relation for burglary victims.

**Importance of Outcome**

Rotter (1966, 1990) argues that a person's behaviour or actions in a novel or ambiguous situation are a function of that individual's locus of control, as well as the degree of outcome value that the individual attaches to the situation. In the context of locus of control the term reinforcement value is used interchangeably with outcome value (Rosolack & Hampson, 1991; Rotter, 1966, 1990). Thus, unlike locus of control, which is a generalized expectancy belief that is held antecedent to the event, outcome value is a belief that must be considered in light of a specific event at a particular time (Rosolack & Hampson, 1991). For example, those who hold an internal locus of control and who value their health, gather more information about health maintenance than those who do not value their health (Strickland, 1978; Wallston et al., 1987). In this example, the behaviour is gathering information and the degree to which a person values his or her health is considered outcome value. Outcome value should be considered in conjunction with the locus of control construct, and failure to do so is characteristic of many studies (Levenson, 1981; Rotter, 1975, 1990; Strickland, 1989; Wallston et al., 1987). H. Lefcourt (personal communication, June 18, 1990) suggests that outcome value is frequently not measured because in most
research the outcome value is accepted as high due to the seriousness of the encounters being studied. Yet, in the case of burglary, there may be variance in outcome value held by the victims and this may, in part, account for individual differences in the way burglary victims cope (H. Lefcourt, personal communication, June 18, 1990). Furthermore, Rosolack and Hampson (1991) argue that outcome value must reach some minimum level before it interacts with locus of control and has predictive power of behaviour.

One of the few studies to consider a similar construct to outcome value was conducted by Parkes (1984). Parkes asked participants to indicate the importance of the situation that they were coping with. This was similar to outcome value, except that with outcome value the emphasis is on the importance of the outcome of the event. Coping was measured with the WCC. Parkes conducted Very Simple Structure (Revelle & Rocklin, 1979) factor analysis on the WCC data and distinguished three factors of coping. The first factor represented General Coping that included cognitive and behavioral strategies in response to a stressful event; the second factor represented Direct Coping, which is similar to problem-focused coping; the third factor represented Suppression and included items such as suppressing thoughts of the stressful situation, coping strategies generally considered emotion-focused coping. Parkes reported acceptable internal consistency values for General and Direct Coping (.89 and .71) and less than acceptable reliability value for Suppression Coping (.56). Hence, any finding with regard to Suppression Coping must be considered in light of a low internal consistency value.

Parkes (1984) found that female student nurses who held either an internal or external locus of control used significantly higher levels of Suppression coping when a situation was rated as low in outcome value. This relationship was not found for General or Direct Coping. The main effect of outcome value for Suppression coping illustrates the importance of outcome value as it pertains to coping strategies.
encompassed by emotion-focused coping. Furthermore, at the conceptual level, outcome value may moderate the locus of control and coping relationship. Parkes argues that emotion-focused coping may be a more parsimonious coping function for events that the participant holds as unimportant (low outcome value) because there is little motivation to change the stressor under such circumstances.

Solomon et al. (1989) in their study of 104 males experiencing post-traumatic stress disorder, did not measure outcome value. However, the variable, low and high battle intensity, conceivably corresponds with low and high outcome value. That is, under low battle intensity the importance of the situation is less than under high battle intensity. As such, under low outcome value there was a significant positive correlation ($r = .32, p < .001$) between locus of control and emotion-focused coping. However, under high outcome value the relationship between locus of control and emotion-focused coping was not significant, whereas between locus of control and problem-focused coping there was a significant relationship ($r = .40, p < .05$). Although not conclusive, these findings suggest that outcome value moderates the locus of control and coping function relation.

Carver et al. (1989) measured outcome value with two items. The greater the outcome value the more the participants reported using strategies compatible with emotion-focused coping (i.e., denial). Although there was a restricted range in assessing outcome value (participants holding low outcome value were not included), these findings are not consistent with those of Parkes' (1984). This contradiction may be resolved, in part, by considering that emotional arousal/distress may be linked to the use of emotion-focused coping (Compas & Orosan, in press; Peacock & Wong, 1990). Conceivably, the greater the outcome value the greater the emotional arousal and thus the need for emotion-focused coping increases.

In summary, there is a dearth of information about the role of
outcome value as a moderator between locus of control and coping functions. Numerous researchers contend that when locus of control is assessed outcome value should also be assessed (Levenson, 1981; Rotter, 1975, 1990; Strickland, 1989; Wallston et al., 1987). Moreover, based on theory and empirical research there is some evidence that outcome value moderates the locus of control and coping function relationship. That is, outcome value affects the direction and/or strength between locus of control and coping. The relationship between locus of control and emotion-focused coping will be stronger among victims holding high outcome value than among victims holding low outcome value. Conversely, the relationship between locus of control and problem-focused coping will be stronger among victims holding high outcome value than among victims holding low outcome value.

**Situational Appraisals of Control**

In order for locus of control to be a predictor of coping, specific control expectancies must also be considered (Folkman, 1984; Rotter, 1975). To address the issue of specific control expectancies, Lazarus and Folkman (1984) proposed situational appraisals of control. In general, situational appraisals of control refer to the degree to which an individual believes he or she can change or control a specific situation in light of the demands of that situation.

Folkman and Lazarus (1980) studied coping in a middle-aged community sample and found that individuals who believed a situation could be controlled used more problem-focused coping than emotion-focused coping. On the other hand, individuals who believed a situation could not be controlled used more emotion-focused coping than problem-focused coping. Folkman and Lazarus (1985) in their study of coping during three stages of examination taking found that participants who perceived that they could control their examination performance used more problem-focused than emotion-focused coping during the preparatory stage of examination taking. Furthermore, Folkman et al. (1986), in a
study that examined the relation between appraisal and coping in a sample of 85 married couples, again found that individuals with higher levels of situational appraisals of control used more problem-focused than emotion-focused coping in dealing with stressors. However, because in these studies the situational appraisals of control questions were vague, it was unclear as to what participants were suggesting they controlled or failed to control. Moreover, in some encounters situational appraisals of control not only predict coping but may also mediate the locus of control and coping relation (Parkes, 1984). Yet, Folkman (1984) argues that assessment of situational appraisals of control is plagued by the difficulty of determining what the participant perceives as being controlled. Folkman and Lazarus (1985) suggest that future research specify what the individual perceives he or she is controlling. To date few researchers have acted on Folkman and Lazarus's (1985) suggestion.

Carver et al. (1989), in a study of college students' coping, used a single item to measure perceived control ("When you are under stress, do you usually..." followed by four choices ranging from "you definitely can do something about the situation" to "you definitely can do nothing about the situation"). Perceived control reached significance with more scales (3 scales) that comprise problem-focused coping than did Rotter's (1966) internal locus of control (1 scale) and was positively related to problem-focused coping and negatively related to emotion-focused coping. Carver et al. (1989) did not test whether perceived control mediated the locus of control and coping relation. Furthermore, perceived control assessed with a single item does not adequately address Folkman's (1984) concern of what it is the participant perceives he or she is controlling.

Parkes (1984) examined the relationship among locus of control, situational appraisals of control, importance of episode (similar to outcome value), and coping function of 171 first year female nursing
students. Rotter's (1966) locus of control scale was administered and, based on a median split, those who scored 0 to 12 were classified as internals and those who scored 13 to 22 were classified as externals. Six to 12 weeks after the administration of the locus of control scale, a modified WCC (Folkman & Lazarus, 1980) was administered. The participants were instructed to complete the WCC while recalling a demanding or troublesome event that had occurred within the previous month. Parkes obtained a close approximation of outcome value by asking each participant to rate the importance of the event as either low, medium, or high. Situational appraisals of control were obtained through the classification of the participants' appraisal of the event as (a) could change (control possible), (b) mixed (may or may not be able to have control), and (c) must accept (no control possible).

Parkes (1984) conducted a series of multiple regression analyses to determine main and mediating effects. She found a significant main effect for locus of control and Direct Coping, but not for General or Suppression Coping. Furthermore, Parkes examined the different interaction effects of locus of control by situational appraisals of control, and locus of control by outcome value. Although the main effect of outcome value was significant for Suppression Coping, the locus of control by outcome value interaction was not significant for all three types of coping. However, for each coping type the locus of control by situational appraisals of control interactions were significant. Parkes (1984) reported that the significant interaction demonstrated that situational appraisals of control mediated the locus of control and coping relationship. However, according to Baron and Kenny (1986) significant interactions indicate a moderating effect and not a mediating effect. Accordingly, testing for mediator effects with interaction terms may be inappropriate. Yet, considering that without the interaction term of locus of control by situational appraisals of control there was no significant relationship between locus of control
and coping, it is conceivable that the interaction has acted as a mediator between locus of control and coping. Therefore, the role of situational appraisals of control as a mediator and moderator of the locus of control and coping relationship remains unclear.

In general, Parkes (1984) found that internals used less General Coping than externals when they assessed the situation as one they could change or must accept. However, for those with an external locus of control, appraisals were not significantly related to levels of General coping. Participants with an internal locus of control used more Direct Coping than Suppression when the situation was appraised as one they could change. Participants with an external locus of control and an appraisal of could change used more Suppression than Direct Coping. Yet externals use of Direct Coping increased when making an appraisal of must accept. Internals and externals used greater levels of Suppression Coping during mixed appraisals. Moreover, both internals and externals used more Suppression when their situational appraisals of control were incongruent with their locus of control orientation. Yet, Parkes (1984) found that internals and externals used significantly higher levels of Suppression when the participants rated the stressor situation as low in outcome value. This latter finding may indicate that Suppression or emotion-focused coping is a more acceptable type of coping during a less significant event, whereas the former finding suggests that Suppression or emotion-focused coping is used when emotional distress increases as a result of an incongruity between situational appraisals of control and locus of control.

Hart and Cardozo (1986) examined the relationship between situational appraisals of control and coping. They studied 135 college students to determine, in part, how they cope with situations that cause anger, hostility, or irritation. Several questionnaires were administered including a questionnaire that contained 3 items that measured situational appraisals of control. These 3 items, unlike other
studies that have measured situational appraisals of control, determined whether the participants felt in control of their emotions, behaviour, and the situation. Hence, Hart and Cardozo's (1986) indicators of situational appraisals begin to address Folkman's concern regarding situational appraisals of control. Coping was measured with the WCC (Lazarus & Folkman, 1984). Hart and Cardozo (1986) found that situational appraisals of control were positively related to problem-focused coping and negatively related to emotion-focused coping efforts for both men and women. However, their study does not clarify the role of situational appraisals of control in a novel and/or ambiguous encounter.

In summary, the measurement of situational appraisals of control has been complicated by not knowing what aspect of an encounter an individual is attempting to control (Folkman, 1984). However, empirical evidence supports the position that situational appraisals of control are related to coping efforts. Specifically, there is a positive correlation between situational appraisals of control and problem-focused coping (Blanchard-Fields & Irion, 1986; Carver et al., 1989; Folkman et al., 1981; Folkman, 1984; Folkman & Lazarus, 1980, 1985; Hart & Cardozo, 1986). In the present research, I will examine how burglary victim's situational appraisals of control influence the way an individual copes with victimization. Based on theory, it is expected that situational appraisals of control would mediate the locus of control and coping function relationship (Folkman, 1984; Parkes, 1984; Rotter, 1966).

Gender Differences

Little is known about gender differences in reaction to crime victimization (Janoff-Bulman & Frieze, 1987), and in the stress and coping literature gender differences have been relatively neglected (Long, 1990; Long & Gessaroli, 1989). However, gender may account, in part, for individual differences in the way burglary victims cope. In
the broader literature there is support for coping differences based on gender differences.

Vingerhoets and Van Heck (1990) used the WCC (Folkman & Lazarus, 1980) to study coping behaviour of 465 males and 532 females from a community sample. The coping questionnaire was modified to measure how people cope with stressful encounters in general and not with a specific situation. They conducted a series of t tests that indicated that men used significantly \( p < .001 \) more problem-focused coping than women; and women use significantly \( p < .001 \) more emotion-focused coping than men. Although these findings support gender differences in coping there were three main problems with the study. First, multiple t tests increased the likelihood of Type I error (Rosenthal & Rosnow, 1984). Second, it was not clear what each participant was coping with; differences may be attributable to men and women responding to different stressors (i.e., threat, challenge, or benign-positive). Finally, the WCC was modified to measure coping as a personality trait, which is the antithesis to the transactional model of stress and coping (Folkman & Lazarus, 1980).

Carver et al. (1989) examined college students' coping with the most stressful event in their life of the past 2 months and found that men and women engaged in different coping strategies. Women more than men reported seeking social support for emotional reasons and men more than women reported use of alcohol in an effort to cope. Unfortunately, Carver et al. (1989) did not elaborate further regarding gender differences. Moreover, it is unclear whether the gender differences found by Carver et al. (1989) were of such a magnitude that combining the data of men and women for analyses detracted from the rest of their findings (Endler & Parker, 1990).

Blanchard-Fields and Irion (1988), in their study of age as a moderator of locus of control and coping, also found gender difference in coping. The participants identified the most threatening and challenging situation they had encountered in the last six months. Women
endorsed more forms of emotion-focused coping than did the male participants. However, this finding only held true for threat appraised situations. In challenge situations there were no gender differences in coping. Thus, if burglary victimization is considered predominantly a threat and not a challenge, gender differences would be expected.

Maguire (1980) examined 322 burglary victims' responses and found that a disproportionate number of female burglary victims experienced greater distress and changed behaviours in a more dramatic way than their male counterparts. Females, more frequently than males, reported reactions of severe and acute distress. Separated, widowed or divorced women were judged by 10 independent judges to have experienced the most severe psychological reactions. "The most striking long-term psychological effect was experienced almost exclusively by women. About 12 percent of all females used words such as 'pollution', 'violation' or 'a presence in the house'. Many made an explicit analogy with sexual assault..." (Maguire, 1980, p.285).

Maguire's (1980) study does not discuss victim reactions in terms of problem- and emotion-focused coping. However, in light of Peacock and Wong's (1990) findings and Compas and Oroson's (in press) review of the literature, women who experience such severe distress from being burglarized would be more inclined than men to use emotion-focused coping. Maguire (1980) does not explain why women in his study experienced greater distress than men. Maguire's findings are not unique. Waller and Okihiro (1978), in their study of burglary victims in the Toronto area, found that female victims of burglary experienced significantly more distress than male victims of burglary.

Janoff-Bulman and Frieze (1987) argued that male and female sexual abuse victims experienced similar emotions but differed on at least three behaviours. Men tended to non-report more than women, men experienced less social withdrawal than women, and male victims experienced a greater increase in aggressive behaviour than female
victims. Although Janoff-Bulman and Frieze maintain that these gender differences are behavioral and not emotional, it is unlikely that some of these behavioral differences are not accompanied by corresponding emotions. For example, an increase in aggressive behaviour would likely be associated with an increase in anger, whereas greater social withdrawal is likely associated with an increase in depression.

However, Janoff-Bulman and Frieze (1987) emphasized that there is a paucity of research regarding crime victim gender differences and therefore descriptions of such differences are tentative.

There are likely several underlying reasons explaining why there are gender differences in the way burglary victims cope. Janoff-Bulman and Frieze (1987) suggest that gender differences in reaction to crime may be a result of differences in world view beliefs and self-schemas. Self-schemas are defined as "cognitive generalizations about the self that guide the processing of self-related information and provide a framework for summarizing, evaluation, and describing one's experiences and behaviour" (Miller, 1984, p. 1223).

Several beliefs likely comprise an individual's self-schema, and, on a rational basis, locus of control would appear to be one of those beliefs. Locus of control is similar to a person's world view (Hersch & Schiebe, 1967) and is partly developed through gender (Levenson, 1981). The male schema as determined by North American society is strong, active, and powerful; whereas the female schema is frequently comprised of passiveness and helplessness (Bem, 1981; Janoff-Bulman & Frieze-Hanson, 1987). From these stereotypical gender schemas one could infer that male burglary victims are more likely to use more problem-focused coping than emotion-focused coping, and women burglary victims are likely to use more emotion-focused coping than problem-focused coping. McCaan et al. (1988) also suggest that the impact of victimization on an individual's schema will influence the coping of the individual. In particular, a person may develop a negative self-trust schema that
involves the belief that a person cannot trust his or her own perceptions or judgements and perceives a lack of control over life. Theoretically, a negative self-trust schema makes a person vulnerable to powerful others.

In summary, there is little known about gender differences as they pertain to crime victim coping. Researchers offer evidence that in threat situations females tend to use more emotion-focused coping than problem-focused coping and that men tend to use more problem-focused coping than emotion-focused coping (Blanchard-Fields & Irion, 1988; Carver et al., 1989; Vingerhoets & Van Heck, 1990). Maguire (1990), Janoff-Bulman and Frieze (1987), and Waller and Okihiro (1978) have observed that men and women behave differently in response to criminal victimization. Gender schema, partly comprised of locus of control (Hersch & Scheibe, 1967; Levenson, 1981), may, in part, account for gender differences in crime victim coping. Accordingly, for victims of burglary, locus of control should mediate the gender-coping function relationship.

**Mediator and Moderator Variables**

This study is concerned with control beliefs that may account for individual differences in the way burglary victims cope. Therefore, it was useful to examine locus of control, outcome value, situational appraisals of control, and gender in light of their mediating or moderating effects on coping functions. Frequently, psychological researchers have used the terms mediating and moderating interchangeably. However, Baron and Kenny (1986) cogently argue that mediators and moderators are distinct. A variable acts as a mediator when:

(a) variations in levels of the independent variable significantly account for variations in the presumed mediator (i.e., Path a), (b) variations in the mediator significantly account for variations in the dependent variable
(i.e., Path b), and (c) when Paths a and b are controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration occurring when Path c is zero (Baron & Kenny, 1986, p. 1176).

Based on theory and empirical research, it is expected that locus of control affects situational appraisals of control (Path a) and situational appraisals of control affect coping (Path b), and when Path a and b are controlled, locus of control will no longer have a significant relation with coping function (Path c). Hence, situational appraisal will mediate the locus of control-coping relationship (see Figure 1).

A moderator variable affects the direction and/or strength between an independent or predictor variable and a dependent or criterion variable (Baron & Kenny, 1986; Smith, Smoll, & Ptacek, 1990). Within the framework of analysis of variance a moderator effect occurs when there is a significant interaction between "a focal independent variable and a factor that specifies the appropriate conditions for its operation" (Baron & Kenny, 1986, p. 1174). For example (see Figure 2), based on theory and empirical research, it is expected that locus of control is a predictor of burglary victim coping functions with outcome value as a moderator of this relation. The moderator hypothesis is supported if there is significant interaction between locus of control and outcome value regardless of the main effect (Baron & Kenny, 1986).
Figure 1. Hypothetical model of situational appraisals of control mediating the locus of control-coping function relation.
Figure 2. Hypothetical model of outcome value as moderator of the locus of control-coping function relation.
In summary, previous researchers have failed to delineate the distinction between moderator and mediator variables. Baron and Kenny (1986) clarify the ways in which moderators and mediators differ and in doing so help to clarify the complex relationships so often found within the stress and coping literature.

**Methodological Issues**

Once an individual has been burglarized, the opportunity to ascertain the victim's pre-burglary locus of control may be compromised. By studying real victims, the role of locus of control as a predictor variable of coping is confounded creating a methodological dilemma. Furthermore, burglary victim recall is not always accurate because of lying, forgetting, or telescoping (misplace the victimization incident in time) (Fattah, 1991). As well, when people recall events they often do not focus equally on all aspects of the event. Some think more about the facts and some think more about their emotional reaction to the event (Suengas & Johnson, 1988). Moreover, Brewin (1988) argues that in self-report recall when individuals describe or explain their feelings and behaviours they are making inferences designed to account for or justify their actions.

Rotter's theory suggests that an individual's locus of control may change following a significant event (Rotter, 1975). A study by Collins et al. (1990) provided some support for this notion. They examined belief changes surrounding the life domains of the world, priorities and relationships, the self, and the future as a consequence of the experience of cancer. Life domain of self includes feelings of self-efficacy (similar to locus of control in that both address aspects of perceived control). Belief domain of the future includes beliefs that future events are not always controllable (similar to external locus of control). The participants in Collins et al. study included 30 women and 25 men, all of whom were cancer patients. Interviews were conducted to determine positive, negative, or neutral changes in the belief domains
of the victims. Coping was measured with a modified version of the WCC and was hypothesized to lead to changes in the domains of activities/priorities, relationships, the self, and the future. Following diagnosis the majority of participants reported positive and negative changes in their beliefs. Eighty-four percent reported changes in their views of themselves, 83% reported changes in their relations with others, 79% reported changes in priorities/daily activities, 67% reported changes in their beliefs about the future, and 66% reported changes in their beliefs of the world. Repeated measures ANOVA were used to analyze the data. In the belief domains of the self and the future both negative and positive changes occurred as a result of coping efforts. In the case of beliefs about self, the most frequent change was related to perceived vulnerability, with some participants feeling less in control and others feeling more in control. In the case of the future, the most common changes were changes in timetable and not making plans because the future was viewed as threatening. Collins et al. acknowledged that the retrospective nature of the data does not allow for the determination of whether the changes in beliefs reported by the participants were actual or perceived. However, Collins et al. argued that actual change may be less important than perceived change and recommended future research include pre- and post measures of beliefs to clarify the exact nature of the victim's experience.

Regardless of whether the changes in beliefs are negative or positive following victimization, the study by Collins et al. (1990) supports the theoretical position that following victimization an individual's beliefs may change. Hence, following burglary victimization it is likely that an individual's locus of control belief may change from internal to external, external to internal, or an individual's locus of control may not change. Consequently, measuring locus of control after a burglary experience would make it difficult to determine whether locus of control was a predictor of burglary victim coping or
whether the locus of control orientation was a consequence of coping efforts.

It is difficult to determine whether and how locus of control beliefs will change following burglary. However, as a result of the burglary victimization experience it would be expected that victims would have a stronger powerful others locus of control belief than experimentally induced victims. The expected difference in powerful others locus of control belief between victims and experimentally induced victims is expected because it has been suggested that victimization may give rise to a negative self-trust schema. In turn, the negative self-trust schema makes a victim vulnerable to powerful others, such as the police and insurance companies (Janoff-Bulman & Frieze, 1983; McCaan et al., 1988).

An approach to the study of locus of control as an antecedent variable is to use a passive-interpretive design. With this design the researcher has control over when the participants receive the experimental treatment. For example, an individual's locus of control is first established and then the individual is asked to imagine how he or she would cope with burglary victimization. A passive-interpretive design is considered appropriate when use of deception is unethical and for the purpose of theory development and refinement. However, Miller (1972), in a comprehensive review of studies that have employed a passive-interpretive designs, argues that although several studies have found that these designs replicate deception study findings, many of these passive-interpretive results are statistically flawed (i.e., Darroch & Steiner, 1970; Greenberg, 1967; Horowitz & Rothschild, 1970; Willis & Willis, 1970). Miller concludes that people may or may not be able to behave in role play as they would in real life. Thus the cognitive processes involved in passive-interpretive design and real event recall require further elaboration.

Johnson and Raye (1981) offer theory (referred to as reality
monitoring) and empirical evidence that explain the cognitive processes that differentiate real memory (externally generated) and imagined memory (internally generated). Theoretically, the differences between internally and externally generated memories reflect differences between the processes involved in the formation of each (Schooler, Gerhard, & Loftus, 1986). Externally generated memories result from recall and are hypothesized to include more contextual and sensory detail (spatial and temporal), whereas, internally generated events have resulted from imaginal and thought processes and therefore include information that is idiosyncratic to the individual (Schooler et al., 1986).

To empirically examine the theoretical differences between internally and externally generated memories, Schooler et al. (1986) presented colour slides of an auto accident to 175 undergraduate university students. Half the participants were shown slides that depicted a yield sign and the other participants were shown the same slides except the yield sign was not included. Both groups were then asked to describe the yield sign. Two independent raters individually examined all the descriptions of the yield sign. Compared to the real-memory group, the imagined memory group's descriptions "less frequently mentioned the sensory properties of the sign but more often included the subjects' cognitive processes, the function of the sign and verbal hedges" (Schooler et al., 1986, p.173). However, the real-memory group's description contained more sensory properties of the yield sign than the imagine memory group. Schooler et al. suggest that these findings support the theoretical position that recall involves more contextual and sensory detail than imagined memory and that imagined memory includes information that is idiosyncratic to the individual.

Further empirical evidence for the distinction between recall-memory and imagined memory is offered by Johnson et al. (1988) in their study of 72 college students either recalling or imagining autobiographical events. To establish recall memory, participants were
asked to recall a social event, a trip to the library, or a visit to the dentist. To establish imagined memory, participants were asked to recall a fantasy or an unfulfilled intention. The participants then completed measures that assessed sensory, contextual, and idiosyncratic components (i.e., clarity, sound, smell, seeming implications). Comparison of means revealed that, in general, recall-memory involves greater sensory and contextual detail than imagined memory and that imagined memory events were more complex and reflected information idiosyncratic to the participants.

The ability to imagine about future events may be one of the most important features of cognition (Taylor & Schneider, 1989). In their review of the literature on coping with simulated events, Taylor and Schneider (1989) reported that imagining an event made it seem real. They further argued that imagining an event can evoke strong emotions with corresponding physiological reactions.

Although imagining an event may seem real, the literature reviewed suggests that there are differences between recall-memory and imagined memory (Johnson & Raye, 1981; Schooler et al., 1986). As such, it is expected that experimentally induced victims and burglary victims would differ on coping because experimentally induced victims' coping may reflect how they believe they cope in general, as opposed to how they would actually cope with the burglary experience.

In order to examine locus of control as an antecedent variable that serves as a predictor of burglary victim coping it would be necessary to conduct a prospective study. This would prove difficult because I would have to measure people's locus of control, wait for them to be burglarized, and then measure their coping. In this study, practical limitations makes such a design difficult to conduct. Therefore, two studies were conducted to overcome these difficulties. The first study involved burglary victims recalling their experience, whereas the second study replicated the first study but involved participants anticipating
burglary victimization. This type of replication is referred to as a conceptual replication (Cozby, 1981). Conceptual replication is an effort to replicate the original findings using different procedures for measuring the variables of concern (Hendrick, 1991). Replication is important for theory confirmation or disconfirmation and for unconfounding variables (Amir & Sharon, 1991; Lamal, 1991).

Summary

There is a paucity of information explaining why there are individual differences in the way burglary victims cope with the victimization experience. Lazarus and Folkman (1984) provide a theoretical model of coping that is well suited for the study of burglary victim coping. Within their model problem- and emotion-focused coping are the two main functions of coping. Based on the stress and coping literature there is both a theoretical basis and empirical evidence to support the position that locus of control, outcome value, situational appraisals of control, and gender may have main, mediating, or moderating effects that account, in part, for individual differences in burglary victims' short-term use of coping functions (Anderson, 1977; Folkman, 1984; Parkes, 1984; Solomon et al., 1989). In particular, because of socialization and greater distress women are likely to use more emotion-focused coping than men and men are likely to use more problem-focused coping than women (Carver, 1989; Vingerhoets & Van Heck, 1990). With regard to the locus of control and coping relation, victims who hold an internal locus of control belief prior to burglary would likely use more problem-focused than emotion-focused coping. However, victims holding chance or powerful others locus of control beliefs prior to victimization would likely use more emotion-focused coping than problem-focused coping (Anderson, 1977; Parkes, 1984; Solomon et al., 1989). Furthermore, locus of control and situational appraisals of control would account for the relation between gender and coping because generalized expectancies of control and specific control expectancies
appear to mediate the gender and coping relation (Folkman, 1984; Levenson, 1981; Parkes, 1984). However, gender and outcome value would affect the relation between locus of control and coping because locus of control is believed to be influenced by the importance of the outcome; furthermore locus of control is partly developed through gender role socialization (Levenson, 1981; Parkes, 1984; Rotter, 1966, 1975, 1990; Solomon et al., 1989; Vingerhoets & Van Heck, 1990).
HYPOTHESES

It was expected that the burglary victims' locus of control would be affected by the burglary event, therefore it was expected that the burglary victim group would hold greater powerful others locus of control beliefs than the experimentally induced victim group. Furthermore, because of the difference between recall and anticipation, it was expected that experimentally induced victims and burglary victims would differ on coping. In order to determine whether these differences were supported or whether data from the two studies could be combined into one group to test the following hypotheses, analysis was conducted to test differences between burglary victims (Study 1) and experimentally induced victims (Study 2) on the independent (locus of control, outcome value, and situational appraisals of control) and dependent variables (problem- and emotion-focused coping).

Main effects were of secondary interest to this study. However, it was expected that gender would be associated with coping functions, with women using more emotion-focused coping than men and men using more problem-focused coping than women. Furthermore, it was expected that there would be a positive relationship between internal locus of control and problem-focused coping and a positive relationship between chance and powerful others locus of control and emotion-focused coping. It was further expected that the greater the outcome value the more problem-focused coping would be used.

The mediator and moderator hypotheses are stated separately. A variable functions as a mediator to the degree that it accounts for the relation between a predictor and criterion variable; whereas a moderator variable affects the direction and/or strength of the relation between a predictor and criterion variable (Baron & Kenny, 1986).

Specifically, the following mediated relationships were hypothesized:
1. Internal locus of control mediates the gender and problem-focused...
coping relation.

2. Situational appraisals of control mediates the internal locus of control and problem-focused coping reaction.

3. Situational appraisals of control mediates the gender and problem-focused coping relation.


5. Powerful Others locus of control mediates the gender and emotion-focused coping relation.


7. Situational appraisals of control mediates the powerful others locus of control and emotion-focused coping relation. (See Figure 3 for Hypotheses 1, 2, and 3 and Figure 4 for hypotheses 4, 5, 6, and 7).
Figure 3. Hypothesized model of internal locus of control, situational appraisals of control, and gender (1=men, 2=women) as mediators of problem-focused coping. 1=Gender (2,1; 3,1; 4,1); 2=Internal Locus of Control (3,2; 4,2); 3=Situational Appraisals of Control (4,3); 4=Problem-Focused Coping.
Figure 4. Hypothesized model of chance locus of control, powerful others locus of control, situational appraisals of control, and gender (1=mens, 2=women) as mediator variables of emotion-focused coping. 1=Gender (2,1; 4,1; 5,1); 2=Chance Locus of Control (3,2; 5,2); 3=Situational Appraisals of Control (5,3); 4=Powerful Others Locus of Control (3,4; 5,4); 5=Emotion-Focused Coping.
The following moderated relationships were hypothesized.
1. The relationship between locus of control (internal, powerful others, and chance) and emotion-focused coping will be stronger among individuals holding high outcome value than among individuals holding low outcome value.
2. The relationship between locus of control (internal, powerful others, and chance) and problem-focused coping will be stronger among individuals holding high outcome value than among individuals holding low outcome value.
3. The relation between internal locus of control and problem-focused coping will be stronger among men than women.
4. The relation between chance locus of control and emotion-focused coping will be stronger among women than men.

There is a lack of empirical evidence regarding the role of powerful others locus of control as a moderator of the gender and coping relation. Moreover, powerful others locus of control is an external orientation, yet it does have the potential for control. Because locus of control is partly developed through gender through societal influence, it is possible that gender may affect the direction and/or strength of the relation between powerful others locus of control and coping. Therefore, the following questions of theoretical interest were posed for exploratory purposes.
1. Does gender moderate the powerful others locus of control and problem-focused coping relation?
2. Does gender moderate the powerful others locus of control and emotion-focused coping relation?
METHOD

Because differences were expected between the burglary victim group and experimentally induced victim group due to the fact that an individual’s locus of control may change following victimization and because there may be differences between recall-memory versus imagined memory, details of Study 1 (burglary victims) and Study 2 (experimentally induced victims) are presented separately.

Study 1

Participants

The sample consisted of 61 volunteer college students who were enrolled in first and second year psychology, sociology, and criminology courses at a large Western Canadian college. Only those who had been victims of burglary within the previous year and were not at home at the time of the burglary were eligible to participate. The sample included 31 men and 30 women between the ages of 19 and 37 with a mean age of 22.7 (SD=4.1).

Procedure

I solicited volunteers from 17 first and second year psychology, sociology, and criminology day and evening classes at the college. Each class was comprised of approximately 35 students, therefore a total of approximately 600 students (e.g., 35 students per class) were approached to participate in the study. I attended each class and at the beginning of the class I explained confidentiality and the rationale for the study, and that only those individuals who were not at home when their residence was broken into were eligible to participate. Those who volunteered to participate were asked to complete an informed consent statement, demographic questionnaire, and a locus of control measure (see Appendix A). Those who choose not to participate were asked to sit quietly and look through the questionnaires until all had been collected so that they remained unnoticed. The following week, I returned to the classes and reminded the students of the purpose of the study and
asked the volunteers to view, in the classroom, a video of a residential burglary in progress (video to be discussed more fully following Study 2 procedures). The video was presented in order to facilitate the victims' memory of the burglary victimization that they had experienced. Those who chose not to participate were asked to sit quietly until the video and data collection process was complete. Just prior to the video the participants were instructed to remember back to when they were a victim of burglary. Immediately following the video they received oral and written instructions regarding the completion of the coping measure, situational appraisals of control measure, outcome value measure, a social desirability scale, and an intensity of experience measure, respectively (see Appendix B).

The participant was asked to recall how he/she coped over the first 7 days after the burglary. Seven days had been selected for two main reasons. First, Bard and Sangrey (1986) report that the victim may experience three stages, impact, recoil, and reorganization. The impact and recoil stage are the stages when the victim is most active behaviorally and emotionally in coping with the victimization experience. During the reorganization stage the victim puts the experience into perspective and commits his/her energy to other things (Bard & Sangrey, 1986). Bard and Sangrey do not put a time frame on each phase, but do suggest that the impact and recoil stage may occur within several days after the victimization experience. Hence, using the first 7 days after the burglary experience as the time frame increased the likelihood of capturing the influence of situational appraisals of control on coping following the burglary. Second, I interviewed 5 burglary victims who explained that the first week following the burglary was the most problematic psychologically, while at the same time, the first week was the period when they had their greatest impetus to try and prevent future burglaries (the 5 burglary victims interviewed were not included in the study).
The video was played in a classroom on a 24" colour television set. A maximum group size of 35 viewed the video. After the completion of the questionnaires the participants were debriefed, all questions were answered, and all were thanked for participating. I informed the participants that they could contact me for the results of the study. During the debriefing, several participants enthusiastically commented that the video brought back memories of their burglary victimization experience.

Study 2

Participants

The sample consisted of 102 volunteer college students who were enrolled in first and second year psychology, sociology, and criminology courses (from the same college as Study 1). Approximately 600 students, in different classes from the participants in Study 1, were approached to participate in the study. The sample included 61 men and 41 women between the ages of 19 and 40 with a mean age of 22.3 (SD=3.8). To ensure the participants' locus of control orientation had not been altered from a previous burglary, those respondents who had been previously burglarized were excluded from this study.

Procedure

Study 2 followed the same procedure as Study 1 with the exception of three modifications. First, the participants were college students who had never been previously burglarized. Second, the instructions for the coping, situational appraisals of control, and outcome value measures were changed to allow the participants to answer with regard to how they would react. Finally, the video viewing instructions were changed to instruct the participants to imagine how they would cope with the burglary victimization experience (see Appendix B).

Video Stimulus

A brief video (approximately 2 minutes) was presented to the participants in Study 1 and Study 2 that depicts a residential burglary
in progress. The video allowed the participants to vicariously experience burglary victimization. The video was produced in August, 1990 by the Justice Institute of British Columbia for the purpose of training police officers in the investigation of burglary. Therefore, the portion of the video used in this study depicts a typical burglary and has been designed to realistically portray a burglary in progress (see Appendix B for details of video). To offer further support for the realism of this video, two police officers who are experts in the field were shown the video and interviewed. Both found the video to be a realistic portrayal of a typical burglary. Furthermore, the video was piloted on 18 participants. An assessment of the participants' intensity of imagining the victimization experience was conducted. The participants reported a mean score of 4.5 (SD = 1.21) on an Intensity of Burglary Experience measure (range 1 to 7; See Appendix B). This score indicated that the video was helpful in facilitating the participants to vicariously experience the burglary victimization experience. Similarly, during the debriefing the participants verbally reported that the video was realistic and was helpful in facilitating visualization of falling victim to burglary.

**Predictor Variables**

Levenson's I, P, and C Scales. A review of the literature revealed that there is no locus of control instrument developed specifically for victims of crime. However, Levenson's (1981) internal (I), powerful others (P), and chance (C) Scales treat locus of control as a multidimensional construct and the inclusion of the P Scale makes this instrument well suited for use with victims of burglary (See Appendix A). Levenson's I, P, and C Scales were designed as a reconceptualization of Rotter's (1966) Scale and includes three dimensions of control. First, the I Scale measures the individual's belief that he/she has control over the reinforcements in his/her own life. Second, the P Scale measures the individual's belief that powerful others have control over
the reinforcements in his/her own life. However, if the individual can determine some regularity in the actions of the powerful others there may be an opportunity for control. Finally, the C Scale measure the individuals' belief that the world is unpredictable and unordered, hence reinforcements occur by chance and are not subject to an individual's control. In summary, the internal locus of control orientation is assessed by the I Scale and the external orientation is assessed by the P and C Scales.

The I, P, and C Scales are comprised of three 8-item subscales utilizing a 6-point Likert-type scale (anchors are -3, -2, -1, 1, 2, 3), but are presented as a unified 24-item scale. Total scale scores are the sum of the items scores plus 24. Levenson (1981) recommends adding 24 to eliminate negative scores. The range on each scale is from 0 to 48. A high scale score indicates that the person holds a strong belief towards that particular control orientation. This instrument has been used with a variety of populations including samples of prisoners and persons afflicted with psychopathology, alcoholism, and health related issues (Levenson, 1981).

Kuder-Richardson reliabilities for internal consistency estimates for I, P, and C Scales were moderate; .51, .72, and .73, respectively; and for a 1 week test-retest reliability the coefficients were in the .60 to .79 range (Levenson, 1981). In this study, reliabilities (Cronbach's alpha) for the I, P, and C Scales for the burglary victim group were .73, .79, and .62, respectively; and for the experimentally induced victim group the reliabilities were .51, .72, and .73.

Levenson (1981) reported that the validity of the I, P, and C Scales (convergent and discriminant methods) was demonstrated in several studies. In addition, Rotter's locus of control external scale correlated .25 and .56 with the P and C Scales and -.41 with the I Scale for a college sample (Levenson, 1972). Furthermore, Levenson (1981) found that the P and C Scales (both external orientations) had moderate
correlations with each other, \( r = .41 \) to \(.60 \). The I Scale had a low correlation with the P and C Scales with coefficients that range from \(-.25 \) to \(.19 \). Levenson reported negligible and nonsignificant correlations amongst I, P, and C Scales and social desirability as measured by the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960).

**Situational Appraisals of Control.** Situational appraisals of control are the extent to which a person believes he or she can control a particular stressful encounter (Lazarus & Folkman, 1984). However, situational appraisals of control are difficult to evaluate because it is hard to determine what control aspect of the situation the individual is focusing on (Folkman, 1984). In an effort to resolve this difficulty, Hart and Cardozo (1986, 1988) suggest that control applies to emotions, behaviours, as well as the situation. This study employed 3 items that Hart and Cardozo (1988) used to measure secondary appraisal (controllability) in their study of 135 college students (See Appendix B). Internal consistency as measured by Cronbach's alpha was \(.77 \) (Hart & Cardozo, 1988). In this study Cronbach's alpha was \(.82 \) for the burglary victim group and \(.88 \) for the experimentally induced victim group. Participants indicate on a 6-point Likert type scale (1 = "Strongly Disagree" to 6 = "Strongly Agree") to each of the 3 items ("I felt in control of my emotions"; "I felt in control of what it was that I was doing"; "I felt in control of the situation"). A total score was obtained by summing the ratings on the 3 items and dividing by 3. Scores range from 1 to 6, higher scores indicate a greater sense of control.

**Outcome Value.** Because outcome value has been rarely assessed, it was necessary to develop items to assess this construct. The following 3 items were used to measure outcome value. The participants were asked to indicate on a 6-point Likert-type scale ranging from 1 "strongly disagree" to 6 "strongly agree" whether (a) the situation was one of great personal importance to me, (b) the situation mattered a great deal
to me, and (c) the outcome of my actions mattered a great deal to me (See Appendix B). Internal consistency (Cronbach's alpha) was .81 for the burglary victim group and .79 for the experimentally induced victim group. The first two items were taken from items Hart and Cardozo (1986) used to measure primary appraisal in their study of coping with anger-provoking situations. These items appear similar to outcome value in that they assess the personal significance of the event. The third item was developed by the author and is in keeping with the construct being measured. A total score of outcome value was obtained by summing the ratings on the items listed and dividing by 3. Scores range from 1 to 6, higher scores indicate a greater level of outcome value. Three social psychologists reviewed the construct and indicated that the items were representations of the construct. Furthermore, the outcome value measure was piloted on 18 college students who had a mean score of 4.7 (SD =1.2) with a range of 2.0 to 6.0. The pilot results supported the position that, in general, outcome value would be high but that there would be variance.

**Criterion Variables (Coping)**

Coping functions were assessed using Carver et al. (1989) multidimensional coping inventory (COPE) that has 52 items and 13 subscales that describe several strategies people use to manage stress (See Appendix B). Carver et al. (1989) have identified 5 subscales as problem-focused coping (active coping, planning, suppression of competing activities, restraint coping, seeking instrumental social support) and 5 subscales as emotion-focused coping (seeking of emotional social support, positive reinterpretation, acceptance, denial, turning to religion). Three subscales that they believe to be less useful (focus on and venting of emotions, behavioral disengagement, and mental disengagement) were not identified by Carver et al. (1989) as problem- or emotion- focused coping, but the content of these subscales appeared pertinent to burglary victim coping. Inspection of the items reveals
that focus on and venting of emotions and mental disengagement are in keeping with Lazarus and Folkman's (1984) definition of emotion-focused coping. Behavioral disengagement is active and hence serves as a problem-focused function. Each of the 7 emotion-focused and 6 problem-focused subscales are comprised of 4 items. In a sample of 978 university undergraduates, internal consistency using Cronbach's alpha was calculated for each scale. Only mental disengagement fell below .62, the remaining scales ranged from .62 to .92 (Carver et al., 1989). In this study Cronbach's alpha for problem- and emotion-focused coping for the burglary victim group was .87 and .84, respectively; and .81 and .82 for the experimentally induced victim group.

Each item is rated according to a 4-point Likert-type scale (1 = "I did not do this at all", 2 = "I did this a little bit", 3 = "I did this a medium amount", 4 = "I did this a lot") (Carver et al., 1989). For this study, the 4-point Likert-type scale has been retained, however, because the participants in Study 2 must project their coping into the future, the responses were changed to the future tense for them (1 = "I will not do this at all", 2 = "I will do this a little bit", 3 = "I will do this a medium amount", 4 = "I will do this a lot"). Carver et al. (1989) recommend that the tense of the responses be appropriately changed for the application. Scores for the problem-focused scales range from 24 to 96 and emotion-focused scales range from 28 to 112, higher scores indicated greater coping use (see Appendix C for intercorrelations of subscales).

Manipulation Check

The M-C1(10) scale (Strahan & Gerbashi, 1972) was used to detect social desirability response sets (See Appendix B). The 10 item M-C1 (10) Scale is a modified version of the 33 item Marlowe-Crowne Scale Desirability Scale (Crowne & Marlowe, 1960). The M-C1 (10) Scale was employed in this study to reduce excessive questionnaire length. This scale has 10 items that require True or False responses (5 are keyed
true and 5 are keyed false). Scores can range from 0 to 10. The higher score indicates the stronger need of the participant to respond in culturally approved ways (Strahan & Gerbashi, 1972). The internal consistency coefficient using Kuder-Richardson 20 ranged from .59 to .70. This scale strongly correlates with the Marlowe-Crowne Social Desirability Scale at ($r = .80$).

I developed the Intensity of Burglary Experience Measure to determine how accurately and intensely the participants imagined falling victim to burglary after viewing the video (See Appendix B). Participants were asked to indicate on a 7-point Likert-type scale whether (a) "I was able to imagine that I was a burglary victim," (b) "I intensely imagined that I was a burglary victim," (c) "the video assisted me in imagining that I was a victim of burglary." A total score of intensity of the burglary experience was obtained by summing the rating on the items listed and dividing by 3. Scores range from 1 to 7, higher scores indicate a greater level of intensity of the burglary experience.

**Analysis of Data**

Of the 175 returned measures, 12 were incomplete (20% or more missing items) and not useable (7 from the experimentally induced victim group and 5 from the burglary victim group). Therefore, analysis was based upon the information of 61 participants from the burglary victim group (Study 1) and 102 participants from the experimentally induced victim group (Study 2). Of the remaining 163 participants, approximately 4 coping measures had two missing items each. An average score was calculated from the participants' previous subscale scores and was assigned to the item that was not completed. The analyses of data were the same for Study 1 and Study 2.

Descriptive statistics (frequencies, means, standard deviations, and zero-order correlation matrix) for all variables were computed. To determine that the participants' answers were not based on a social
desirability response set, zero-order correlations were calculated between the M-C1(10) scale and the independent variables (internal locus of control, powerful others locus of control, chance locus of control, situational appraisals of control, and outcome value) and the dependent variables (problem- and emotion-focused coping). Furthermore, to establish that participants were able to imagine or recall the burglary experience, means and standard deviations were calculated for the Intensity of Burglary Experience measure and correlations with the predictor and criterion variables were examined.

Preliminary analysis was conducted to determine whether the burglary victim group differed from the experimentally induced victim group on demographic data and on the independent and dependent variables. To determine differences between the two groups on demographic data, ANOVA and Chi-square tests of independence were conducted. To determine whether the two groups' means differed on the independent and dependent variables used to test the hypotheses, a 2 x 2 multivariate analysis of variance (MANOVA) was conducted on the combined sample, with gender and victim status (i.e., experimentally induced victims and burglary victims) as independent variables, and problem- and emotion-focused coping, internal, powerful others and chance locus of control, situational appraisals of control, and outcome value as dependent variables. To determine the relative importance of the dependent variables the MANOVA was followed up by univariate F-test and discriminant function analysis. Any significant univariate F-test on any factor in the design was considered a measure of importance of that dependent variable to the multivariate discrimination (Haase & Ellis, 1987). Haase and Ellis (1987) argue that the major disadvantage to the univariate F-test as a follow-up procedure to a MANOVA is that it does not take into consideration the intercorrelations of the dependent variables. To counteract this difficulty, Haase and Ellis recommend the use of standardized discriminate function coefficients for making
decisions about the relative importance of any dependent variable to the multivariate discrimination. Standardized discriminant function coefficients are measures of the individual contribution of one of the dependent variables when all the other dependent variables in the model are controlled for.

The main effects were determined by conducting hierarchical regression analyses. The variables were stepped into the equation in the following order. Gender was entered first, followed by internal locus of control, chance locus of control, powerful others locus of control, outcome value, and situational appraisals of control. The criterion variables were problem- and emotion-focused coping. The standardized scores of each of the continuous predictor variables were used to control for scale differences among the variables.

To test the mediator and moderator hypotheses the criterion recommended by Baron and Kenny (1986) were followed. To test the mediator hypotheses, zero-order correlations were calculated to determine if the independent variable affected the mediator and if the independent variable affected the dependent variable. If these two relationships were significant, a discriminant function analysis was conducted to determine if the mediator variable was the most important variable that accounted for the relationship between the independent variable and dependent variable. The moderator hypotheses were tested with multiplicative terms (cross products) entered into the regression analysis hierarchically following the corresponding first order terms (Cohen & Cohen, 1983).
RESULTS

Descriptive Characteristics of the Burglary Victim Sample

The participants in the burglary victim study (N = 61) included 31 men and 30 women. The mean length of time between burglary experience and completing the questionnaires was 4.8 months (range 1 - 9 months). The largest number of respondents were single (75.4%) with a mean age of 22.7 years (range 19 - 37). Forty-seven percent of the participants lived at home with their parents and 62% of the participants paid rent. The average household income of the participants was between $21,000 - $30,000 per year. The mean value stolen during the victims' burglary was $4,503.00 and the average damage sustained to the residence was light to moderate. Twenty-five percent of the participants had been a victim of property crime other than burglary (i.e., theft) and an equal number had been a victim of violent crime (i.e., assault, sexual assault). See Table 1 for a summary of the descriptive characteristics of the sample.

Manipulation Checks

Social desirability as measured by the M-Cl(10) was significantly related only to emotion-focused coping and chance locus of control, all correlations were less than -.27 (See Appendix D). Therefore, the responses by the burglary victim group to the measures were relatively free from a socially desirable response set. The Intensity of Burglary Experience measure assessed the vividness of the burglary victims' memory of the burglary victimization experience. The mean score on the 3-item Intensity of Burglary Experience measure was 5.54, SD=1.08 (range 1 - 7, "not at all" to "greatly"). No one scored below 3 on the summed scale, which indicated that the video facilitated the participants recall the burglary victimization experience.

Descriptive Characteristics of the Experimentally Induced Victim Sample

The participants in the experimentally induced burglary victim study (N = 102) included 61 men and 41 women. In general, the
Table 1

Descriptive Characteristics of Burglary Victim Participants (N=61) and Experimentally Induced Victim Participants (N=102)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Burglary Victims</th>
<th>Experientially Induced</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
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<tr>
<td>Age</td>
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<tr>
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<tr>
<td>Value in Dollars of Amount Stolen (Md 1000)</td>
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</tr>
<tr>
<td>Gender</td>
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<td></td>
</tr>
<tr>
<td>men</td>
<td>31</td>
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<tr>
<td>women</td>
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<td>Marital Status</td>
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<td>Victim of Previous Crime Other Than Burglary</td>
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respondents were single (88.2%) with a mean age of 22.3 years (range 19 - 40). Fifty-eight percent of the participants lived at home with their parents and 46.1% of the participants paid rent. The average household income of the participants was between $21,000 and $30,000 per year. None of the participants had been previously burglarized, although 42.2% of the participants had been victims of other property offenses (i.e., theft, car theft) and (20.6%) of the participants had been victims of violent crime (i.e., assault, robbery, sexual assault). A one-way MANOVA on all predictor and criterion variables was conducted to determine whether those who reported never having been victimized and those who reported previous victimization (victims of violent and property crime) differed on mean scores for emotion- and problem-focused coping, internal, chance, and powerful others locus of control, situational appraisals of control, and outcome value. The multivariate group effect for previous victimization was not significant, F< 1 (see Appendix E). See Table 1 for a summary of the descriptive characteristics of the sample.

Manipulation Check

Social desirability as measured by the M-CI(10) was significantly related only to gender, all the correlations were less than -.17 (see Appendix D). Therefore, the responses by the experimentally induced victim group to the measures were free from a socially desirable response set. The Intensity of Burglary Experience measure determined how accurately and intensely the participants imagined falling victim to burglary. The mean score on the 3-item Intensity of Burglary Experience measure was 4.94, SD = 1.08 (range 1 to 7, "not at all" to "greatly"). No one scored less than 3 on the summed scale, which indicated that the video was of assistance in helping the participants imagine that they were victims of residential burglary. A one-way MANOVA on all predictor and criterion variables was conducted to determine whether those who scored above the median on the Intensity of Burglary Experience measure
and those who scored below the median differed on mean scores for emotion- and problem-focused coping, internal, chance, and powerful others locus of control, situational appraisals of control, and outcome value. The multivariate group effect for intensity of experience was not significant, $F < 1$ (see Appendix E).

**Descriptive Statistics of Variables for Burglary Victims**

In the burglary victim group, gender (coded 1 for male or 2 for female), locus of control dimensions, situational appraisals of control, and outcome value (independent variables) were not highly correlated and most of the correlations were below .30. However, internal locus of control was negatively related to powerful others locus of control, $r(61) = -.27, p < .02$, and negatively related to chance locus of control, $r(61) = -.31, p < .01$. Internal locus of control was positively related to situational appraisals of control, $r(61) = .31, p < .01$. Moreover, powerful others locus of control was positively correlated with chance locus of control, $r(61) = .74, p < .001$. This relationship was expected because both measure different dimensions of the same orientation.

Problem- and emotion-focused coping were related, $r(61) = .38, p < .001$. In general, problem-focused coping was not correlated with any of the independent variables, with the exception of outcome value, $r(61) = .55, p < .001$. However, emotion-focused coping was related to powerful others locus of control, chance locus of control, situational appraisals of control, and outcome value, $rs(61) = .41, .36, -.34, and .45$, respectively. The means, standard deviations, and intercorrelations for burglary victims are presented in Table 2.
Table 2

Means, Standard Deviations, and Intercorrelations of Predictor and Criterion Variables of Burglary Victims (N=61).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Women (n=30)</th>
<th>Men (n=31)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Internal</td>
<td>33.37</td>
<td>6.71</td>
<td>34.71</td>
<td>8.30</td>
<td>-.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Powerful Others</td>
<td>20.00</td>
<td>10.74</td>
<td>22.45</td>
<td>9.17</td>
<td>-.12</td>
<td>-.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Chance</td>
<td>17.80</td>
<td>7.65</td>
<td>20.16</td>
<td>8.10</td>
<td>-.15</td>
<td>-.31</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>5. Situational appraisals of control</td>
<td>3.46</td>
<td>1.22</td>
<td>4.03</td>
<td>1.32</td>
<td>-.22</td>
<td>.32</td>
<td>-.17</td>
<td>-.17</td>
</tr>
<tr>
<td>6. Outcome value</td>
<td>4.34</td>
<td>1.37</td>
<td>4.71</td>
<td>1.24</td>
<td>-.14</td>
<td>-.03</td>
<td>.19</td>
<td>.02</td>
</tr>
<tr>
<td>7. Problem-focused coping</td>
<td>49.97</td>
<td>11.67</td>
<td>53.68</td>
<td>11.36</td>
<td>-.16</td>
<td>.06</td>
<td>.15</td>
<td>.02</td>
</tr>
<tr>
<td>8. Emotion-focused coping</td>
<td>65.90</td>
<td>11.71</td>
<td>62.16</td>
<td>12.88</td>
<td>.14</td>
<td>-.21</td>
<td>.41</td>
<td>.36</td>
</tr>
</tbody>
</table>

Note. Higher scores indicate greater locus of control, situational appraisals of control, outcome value, and coping.

Gender was coded 1 (men) and 2 (women)

$r(60).21, p<.05; r(60).29, p<.01$ (Bonferroni adjusted $r(60).43, p<.05$; Bonferroni adjusted $r(60).49, p<.01$, Shavelson, 1988)
Descriptive Statistics of Variables for Experimentally Induced Victims

The means, standard deviations, and intercorrelations for the experimentally induced victims are presented in Table 3. In the experimentally induced victim group, gender (coded men=1, women=2), locus of control, situational appraisals of control, and outcome value (independent variables) were not highly correlated and most of the coefficients were below .20.

Internal locus of control was not strongly related to any of the variables. However, internal locus of control was negatively related to chance locus of control, $r(102) = -.20$, $p < .02$. This negative relationship was expected. Although the relationships were not significant, the direction of the relationship of internal locus of control with problem- and emotion-focused coping was as expected; that is, internal locus of control was positively related to problem-focused coping and was negatively related to emotion-focused coping. Powerful others locus of control was positively correlated with chance locus of control, $r(102) = .50$, $p < .001$. Conceptually, this relationship was expected because both measure different dimensions of the same orientation. As well, situational appraisals of control were negatively related to gender, $r(102) = -.36$, $p < .001$, therefore, women reported lower levels of situational appraisals of control. The dependent variables, problem- and emotion-focused coping, were related, $r(102) = .40$, $p < .001$. In general, the independent variables were not significantly related to problem-focused coping, with the exception of a positive relationship with outcome value, $r(102) = .25$, $p < .01$. Hence the greater the outcome value, the more problem-focused coping was used. Gender was positively related to emotion-focused coping, $r(102) = .30$, $p < .001$; therefore, women reported higher levels of emotion-focused coping. Chance locus of control was positively related to emotion-focused coping, $r(102) = .31$, $p < .001$; the greater the chance locus of control the more emotion-focused coping was used.
Table 3
Means, Standard Deviations, and Intercorrelations of Predictor and Criterion Variables of Experimentally Induced Victims (N=102)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Women (n=41)</th>
<th>Men (n=61)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal</td>
<td>34.66 5.60</td>
<td>36.12 5.14</td>
<td>-.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerful Others</td>
<td>15.76 7.42</td>
<td>18.71 7.31</td>
<td>-.19</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chance</td>
<td>17.10 8.60</td>
<td>17.79 7.73</td>
<td>-.04</td>
<td>-.20</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Situational appraisal of control</td>
<td>3.15 1.30</td>
<td>4.05 1.06</td>
<td>-.36</td>
<td>.08</td>
<td>.08</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome value</td>
<td>5.19 .94</td>
<td>4.87 .88</td>
<td>.17</td>
<td>.01</td>
<td>.05</td>
<td>.01</td>
<td>-.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td>59.05 9.50</td>
<td>58.97 8.42</td>
<td>.01</td>
<td>.09</td>
<td>-.02</td>
<td>-.01</td>
<td>-.06</td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td>Emotion-focused coping</td>
<td>67.93 9.70</td>
<td>61.74 10.03</td>
<td>.30</td>
<td>-.09</td>
<td>-.02</td>
<td>.31</td>
<td>-.18</td>
<td>.17</td>
<td>.40</td>
</tr>
</tbody>
</table>

Note. Higher scores indicate greater locus of control, situational appraisals of control, outcome value, and coping.

a Gender was coded 1= men and 2= women

* p<.05; *p<.01 (Bonferroni adjusted *p<.05, Bonferroni adjusted *p<.01, Shavelson, 1988)
Preliminary Analysis

To examine the expected group differences and to determine whether data from the burglary victim group and the experimentally induced group should be combined to answer the hypotheses, preliminary analyses were conducted.

Group differences on demographic data. In order to compare the participants from the two studies (experimentally induced victims, N=102; burglary victims, N=61) on demographic data, Chi-square tests of independence were conducted on categorical data. For the purpose of the analysis the categories were kept the same as found in Table 1. The groups did not differ significantly on gender, Chi-square (1, N = 163)=.91, p<.33; income, Chi-square (4, N = 163)=8.61, p<.07; type of previous victimization, Chi-square (1, N = 163)=2.35, p<.13; and marital status, Chi-square (1, N = 163)=3.67, p<.06 (for marital status the categories were married and other). Although burglary victims' mean household incomes were not statistically different from experimentally induced victims', it is worth noting that 40% of the experimentally induced victims versus 29.5% of the burglary victims had a household income of $40,000 and over per year. Similarly, 19.7% of the burglary victims were married versus 6.9% of the experimentally induced victim group. ANOVA results indicated no significant difference between groups on age, F < 1. Therefore, on demographic data the burglary victim group did not differ significantly from the experimentally induced victim group.

Group differences on independent and dependent variables. A 2(burglary victims, experimentally induced victims) by 2(gender) MANOVA with seven dependent variables (emotion- and problem-focused coping, internal, chance, and powerful others locus of control, situational appraisals of control, and outcome value) was conducted to determine whether burglary victims and experimentally induced victims differed on the dependent variables. The multivariate group effect for victim status
Table 4
Multivariate and Univariate F-Tests for Victim Status, Gender, and Victim Status by Gender Interaction Effects (N=163)

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Victim Status</th>
<th>Gender</th>
<th>Victim Status by Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>p&lt;</td>
<td>F</td>
</tr>
<tr>
<td>Multivariate</td>
<td>(7,153)</td>
<td>4.96</td>
<td>.01</td>
<td>4.93</td>
</tr>
<tr>
<td>Univariate</td>
<td>(1,159)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotion-focused coping</td>
<td>&lt;1</td>
<td>.59</td>
<td>7.39</td>
<td>.01</td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td>19.68</td>
<td>.01</td>
<td>1.26</td>
<td>.26</td>
</tr>
<tr>
<td>Internal locus of control</td>
<td>1.75</td>
<td>.19</td>
<td>1.89</td>
<td>.17</td>
</tr>
<tr>
<td>Powerful Others locus of control</td>
<td>8.47</td>
<td>.01</td>
<td>3.87</td>
<td>.05</td>
</tr>
<tr>
<td>Chance locus of control</td>
<td>1.39</td>
<td>.24</td>
<td>1.36</td>
<td>.25</td>
</tr>
<tr>
<td>Situational appraisals of control</td>
<td>&lt;1</td>
<td>.46</td>
<td>14.16</td>
<td>.01</td>
</tr>
<tr>
<td>Outcome value</td>
<td>8.33</td>
<td>.01</td>
<td>&lt;1</td>
<td>.88</td>
</tr>
</tbody>
</table>
(burglary victims and experimentally induced victims) was significant, $F(7,153) = 4.96, p<.001$ (see Table 4).

Burglary victims differed from experimentally induced victims on mean scores (see Tables 2 and 3) for problem-focused coping, powerful others locus of control, and outcome value, univariate $F$s$(1,159) = 19.68, 8.47, \text{ and } 8.33$, all $p$s$<.01$, respectively (see Table 4). An examination of means revealed that experimentally induced victims reported significantly more problem-focused coping and held greater outcome value than burglary victims. However, burglary victims were significantly higher on powerful others locus of control than experimentally induced victims (see Tables 2 and 3). The standardized discriminant function coefficients for the victim status main effect (see Table 5) suggested a similar ordering of importance of the dependent variables: the most important variables were problem-focused coping and powerful others locus of control. However, chance locus of control and outcome value were the next important variables in differentiating between experimentally induced victims and burglary victims (see Tables 4 and 5). Unlike the univariate $F$ tests, the discriminant analysis does take into consideration the intercorrelations. Because problem-focused coping and outcome value are correlated ($r(163) = .45, p<.001$), the unique contribution of outcome value is more modest than the univariate tests suggest (see Appendix F).

The multivariate group effect for gender was significant, $F(7,153)=4.93, p<.001$ (see Table 4). Men differed significantly from women on mean scores for emotion-focused coping and situational appraisals of control, univariate $F$s$(1,159) = 7.39 \text{ and } 14.16$, all $p$s$<.01$, respectively (see Table 4). The difference between men and women on powerful others locus of control was significant, $F(1,159) = 3.87, p<.05$. 
Table 5

**Standardized Discriminant Function Coefficients for Victim Status and Gender (N=163)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Victim Status Standardized Coefficient B</th>
<th>Gender Standardized Coefficient B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion-focused coping</td>
<td>-.28</td>
<td>.76</td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td>.75</td>
<td>-.43</td>
</tr>
<tr>
<td>Internal locus of control</td>
<td>.13</td>
<td>-.16</td>
</tr>
<tr>
<td>Powerful Others locus of control</td>
<td>-.70</td>
<td>-.33</td>
</tr>
<tr>
<td>Chance locus of control</td>
<td>.34</td>
<td>-.36</td>
</tr>
<tr>
<td>Situational appraisals of control</td>
<td>-.13</td>
<td>-.57</td>
</tr>
<tr>
<td>Outcome Value</td>
<td>.33</td>
<td>-.15</td>
</tr>
</tbody>
</table>
An examination of the means revealed that women reported significantly more emotion-focused coping than men, whereas men were significantly higher on situational appraisals of control and powerful others locus of control (see Tables 2 and 3). The standardized discriminant function coefficients for gender main effect (see Table 5) suggested a similar ordering of importance of the dependent variables: the most important variables were emotion-focused coping and situational appraisals of control. Furthermore, problem-focused coping, chance locus of control, and powerful others locus of control were the next most important variables in defining the dimension (see Tables 4 and 5). Because powerful others locus of control and chance locus of control are correlated ($r(163) = .60, p<.001$), the unique contribution of powerful others locus of control is more modest than the univariate tests suggest (see Appendix F).

Finally, the multivariate tests of significance for the Victim Status by Gender interaction was not significant, $F< 1$ (see Table 4). The absence of an interaction suggested a similar pattern of means on the gender factor at each level of victim status for emotion- and problem-focused coping, internal, powerful others, and chance locus of control, situational appraisals of control, and outcome value.

The conceptual difference between the burglary victim group and the experimentally induced victim group was supported by these data. The univariate $F$-tests revealed mean differences on problem-focused coping, powerful others locus of control, and outcome value. Discriminant function analysis further supported these findings and revealed that the most important variables in distinguishing burglary victims from experimentally induced victims were problem-focused coping and powerful others locus of control. Therefore, conceptually and based on the data, the hypotheses were analyzed separately for Study 1 (burglary victim group) and Study 2 (experimentally induced victim group).
Test of Main Effects for Study 1 (Burglary Victims)

It was expected that gender would be associated with coping functions, with women using more emotion-focused coping than men and men using more problem-focused coping than women. It was expected that there would be a positive relationship between internal locus of control and problem-focused coping and a positive relationship between chance and powerful others locus of control and emotion-focused coping. It was further expected that the greater the outcome value the more problem-focused coping would be used.

To test the main and moderating effects two hierarchical regression analyses were conducted. The continuous predictor variables were standardized. The variables were stepped into the equation in the following order: Gender (coded 1=men and -1=women) was entered first, followed by internal locus of control, chance locus of control, powerful others locus of control, outcome value, and situational appraisals of control. The main effects were followed by the corresponding interaction terms (Internal locus of control by Gender, Chance locus of control by Gender, Powerful Others locus of control by Gender, Internal locus of control by Outcome Value, Chance locus of control by Outcome Value, and Powerful Others locus of control by Outcome Value). The criterion variables were problem- and emotion-focused coping. Main effects must be interpreted cautiously in light of significant interaction effects.

The overall regression was significant for problem-focused coping, $\bar{F}(12,48)=3.37, p < .01$. All variables accounted for 46% (32% adjusted) of the variance in problem-focused coping. After the effects of gender, internal, chance, and powerful others locus of control were accounted for, outcome value accounted for a significant $R$ change (.252) in problem-focused coping ($R=7.23$) (see Table 6).

The overall regression was significant for emotion-focused coping, $\bar{F}(12,48)=4.59, p < .01$. All variables accounted for 53% (42% adjusted) of the variance in emotion-focused coping (see Table 7). Gender
### Hierarchical Regression Analysis Testing Main and Moderating Effects

Predicting Problem-Focused Coping for Burglary Victims (N=61)

<table>
<thead>
<tr>
<th>Source</th>
<th>Change R</th>
<th>F</th>
<th>p&lt;</th>
<th>a B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.005</td>
<td>&lt;1</td>
<td>.50</td>
<td>.93</td>
</tr>
<tr>
<td>Internal</td>
<td>.006</td>
<td>&lt;1</td>
<td>.45</td>
<td>1.15</td>
</tr>
<tr>
<td>Chance</td>
<td>.003</td>
<td>&lt;1</td>
<td>.60</td>
<td>1.07</td>
</tr>
<tr>
<td>Powerful Others</td>
<td>.001</td>
<td>&lt;1</td>
<td>.77</td>
<td>-.61</td>
</tr>
<tr>
<td>Outcome value</td>
<td>.252</td>
<td>22.32</td>
<td>.01</td>
<td>7.23</td>
</tr>
<tr>
<td>Situational Appraisals of Control</td>
<td>.021</td>
<td>1.86</td>
<td>.18</td>
<td>1.96</td>
</tr>
<tr>
<td>Internal x Gender</td>
<td>.001</td>
<td>&lt;1</td>
<td>.75</td>
<td>-.46</td>
</tr>
<tr>
<td>Chance x Gender</td>
<td>.027</td>
<td>2.38</td>
<td>.13</td>
<td>3.14</td>
</tr>
<tr>
<td>Powerful Others x Gender</td>
<td>.036</td>
<td>3.20</td>
<td>.08</td>
<td>-3.53</td>
</tr>
<tr>
<td>Internal x Outcome value</td>
<td>.019</td>
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<td>.20</td>
<td>-2.63</td>
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<tr>
<td>Chance x Outcome value</td>
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<td>&lt;1</td>
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<td>-.92</td>
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<tr>
<td>Powerful Others x Outcome value</td>
<td>.032</td>
<td>2.86</td>
<td>.10</td>
<td>-2.89</td>
</tr>
</tbody>
</table>

Cumulative R adjusted .32

Residual Mean Square = 88.64 df = 12,48

**Note.** Gender is coded 1=men, -1=women.

a The B values are the unstandardized coefficients from the final simultaneous analysis. The constant in the equation is 52.32.

The df are 1,60 for the stepped in variables. *p<.001.
Table 7

Hierarchical Regression Analysis Testing Main and Moderating Effects Predicting Emotion-Focused Coping for Burglary Victims (N=61)

<table>
<thead>
<tr>
<th>Source</th>
<th>2 Change R</th>
<th>F</th>
<th>p&lt;</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.035</td>
<td>3.62</td>
<td>.06</td>
<td>-2.56</td>
</tr>
<tr>
<td>Internal</td>
<td>.001</td>
<td>&lt;1</td>
<td>.77</td>
<td>-.43</td>
</tr>
<tr>
<td>Chance</td>
<td>.044</td>
<td>4.58</td>
<td>.04</td>
<td>4.27</td>
</tr>
<tr>
<td>Powerful Others</td>
<td>.001</td>
<td>&lt;1</td>
<td>.90</td>
<td>-.25</td>
</tr>
<tr>
<td>Outcome value</td>
<td>.161</td>
<td>16.61</td>
<td>.01</td>
<td>6.15</td>
</tr>
<tr>
<td>Situational Appraisals</td>
<td>.023</td>
<td>2.46</td>
<td>.12</td>
<td>-2.28</td>
</tr>
<tr>
<td>of Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal x Gender</td>
<td>.001</td>
<td>&lt;1</td>
<td>.86</td>
<td>-.26</td>
</tr>
<tr>
<td>Chance x Gender</td>
<td>.011</td>
<td>1.15</td>
<td>.29</td>
<td>2.15</td>
</tr>
<tr>
<td>Powerful Others x Gender</td>
<td>.094</td>
<td>9.64</td>
<td>.01</td>
<td>-6.06</td>
</tr>
<tr>
<td>Internal x Outcome value</td>
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<td>&lt;1</td>
<td>.72</td>
<td>-.74</td>
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<td>Chance x Outcome value</td>
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<td>.80</td>
<td>-.52</td>
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<tr>
<td>Powerful Others x</td>
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<td>&lt;1</td>
<td>.93</td>
<td>.14</td>
</tr>
<tr>
<td>Outcome value 2</td>
<td></td>
<td></td>
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<tr>
<td>Cumulative R adjusted</td>
<td>.42</td>
<td></td>
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</tbody>
</table>

Residual Mean Square = 86.86  df = 12,48

**Note.** Gender is coded 1=men, -1=women.

a The B values are the unstandardized coefficients from the final simultaneous analysis. The constant in the equation is 64.30. The df are 1,60 for the stepped in variables. ***p<.001, **p<.01, *p<.05
approached significance for emotion-focused coping, $F(1,60)=3.62$, $p < .06$. Furthermore, after the effects of gender, internal, chance, and powerful others locus of control were accounted for, outcome value accounted for a significant $R^2$ change (.161) in emotion-focused coping ($R^2=6.15$) (see Table 7).

In summary, as expected, after having accounted for the variance of gender, internal, chance, powerful others locus of control, outcome value accounted for a significant $R^2$ increase in the variance in problem-focused coping. However, outcome value also accounted for a significant $R^2$ increase in the variance in emotion-focused coping.

**Test of Mediator Hypotheses for Study 1 (Burglary Victims)**

In general, the hypotheses were tested by conducting zero-order correlations and descriptive discriminant function analysis. The hypotheses for the two groups (experimentally induced victims and burglary victims) were tested separately.

To establish mediation, the conditions recommended by Baron and Kenny (1986) were followed: "First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation. If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. Perfect mediation holds if the independent variable has no effect when the mediator is controlled" (p. 1177).

Hypothesis 1: Internal locus of control mediates the gender and problem-focused coping relation. The first condition for mediation—that the independent variable (gender) must affect the mediator (internal locus of control) was not met, $r(61)=-.09$, $p > .25$. Failure to satisfy the first condition eliminates the necessity to establish the second condition. Hypothesis 1 was not supported for the burglary victim group.
Hypothesis 2: Situational appraisals of control mediate internal locus of control and problem-focused coping relation. The first condition for mediation was met, internal locus of control affects situational appraisals of control, \( r(61) = .32, p < .01 \). The second condition—that the independent variable (internal locus of control) must affect the dependent variable (problem-focused coping) did not hold, \( r(61) = .06, p > .32 \). Therefore, hypothesis 2 was not supported.

Hypothesis 3: Situational appraisals of control mediate the gender and problem-focused coping relation. The first condition for mediation—that gender affects situational appraisals of control was met, \( r(61) = .22, p < .04 \). However, the second condition of mediation, gender affects problem-focused coping, did not hold, \( r(61) = -.16, p > .11 \). Therefore, hypothesis 3 was not supported for the burglary victim group.

Hypothesis 4: Chance locus of control mediates the gender and emotion-focused coping relation. The first condition for mediation—that gender affects chance locus of control was not met, \( r(61) = -.15, p > .12 \). Hypothesis 4 was not supported for the burglary victim group.

Hypothesis 5: Powerful Others locus of control mediates the gender and emotion-focused coping relation. The first condition for mediation—that gender affects powerful others locus of control was not met, \( r(61) = -.12, p > .17 \). Therefore, for the victim group hypothesis 5 was not supported.

Hypothesis 6: Situational appraisals of control mediate the chance locus of control and emotion-focused coping relation. The first condition for mediation, chance locus of control affects situational appraisals of control, was not met, \( r(61) = -.17, p > .10 \). Therefore, hypothesis 6 was not supported.

Hypothesis 7: Situational appraisals of control mediate powerful others locus of control and emotion-focused coping relation. The first condition for mediation, powerful others locus of control affects
situational appraisals of control was not met, $r(61) = -0.17$, $p > .10$. Therefore, hypothesis 7 was not supported for the burglary victim group.

Test of Moderator Hypotheses for Study 1 (Burglary Victims)

Moderating effects were tested with multiplicative terms (cross products) entered into a multiple regression analysis hierarchically following the corresponding first order terms (Cohen & Cohen, 1983). The order of entry of variables was: gender, internal locus of control, chance locus of control, powerful others locus of control, outcome value, situational appraisals of control, Internal Locus of Control by Gender, Chance Locus of Control by Gender, Powerful Others Locus of Control by Gender, Internal Locus of Control by Outcome Value, Chance Locus of Control by Outcome Value, and Powerful Others Locus of Control by Outcome Value. To facilitate interpretation of interaction terms, the continuous variables were standardized prior to analysis, and unstandardized regression coefficients were calculated.

Hypothesis 1: The relationship between locus of control (all 3 dimensions) and emotion-focused coping is stronger among individuals holding high outcome value, than those with low outcome value. Results indicated that for the burglary victim group the interaction effects for Internal Locus of Control by Outcome Value, Chance Locus of Control by Outcome Value, and Powerful Others Locus of Control by Outcome Value were not significant, $F_s < 1$ (see Table 7). Therefore, outcome value did not moderate the locus of control (all 3 dimensions) and emotion-focused coping relations and as a result, hypothesis 1, for the burglary victim group, was not supported.

Hypothesis 2: The relationship between locus of control (all 3 dimensions) and problem-focused coping is stronger among individuals holding high outcome value, than those with low outcome value. Results indicated that the interaction effects for Internal Locus of Control by Outcome Value, Chance Locus of Control by Outcome Value, and Powerful Others Locus of Control by Outcome Value were not significant, $F_s < 1.65$,
<1, 2.86, respectively (see Table 6). Therefore, outcome value did not moderate the locus of control and problem-focused relations; hypothesis 2 was not supported.

Hypothesis 3: The relation between internal locus of control and problem-focused coping is stronger among men than women. The interaction term, Gender (code 1=men and -1=women) by Internal Locus of Control, was not significant, $F < 1$. Therefore, there was an absence of a moderator effect and hypothesis 3 was not supported (see Table 6).

Hypothesis 4: The relation between chance locus of control and emotion-focused coping is stronger among women than men. Results indicated that for the burglary victim group the interaction term, Gender by Chance Locus of Control, was not significant, $F(1,60)=1.15$, $p>.29$ (see Table 7). Therefore, there was an absence of a moderator effect and hypothesis 4 was not supported.

Questions of Theoretical Interest for Study 1 (Burglary Victims)

1. Does gender moderate the powerful others locus of control and problem-focused coping relation? To test this question of theoretical interest, the Powerful Others Locus of Control by Gender interaction was entered into the regression analysis hierarchically following the corresponding first order terms. Results (see Table 6) indicated that the Powerful Others Locus of Control by Gender interaction was not significant, $F (1,60) = 3.20$, $p < .08$. Therefore, gender did not moderate the powerful others locus of control and problem-focused coping relation.

2. Does gender moderate the powerful others locus of control and emotion-focused coping relation? The Gender by Powerful Others Locus of Control interaction was significant, $F (1,60) = 9.64$, $p < .01$ (see Table 7). To examine the form of the significant interaction, the relationship between gender and emotion-focused coping were graphed for relatively low (minimum standardized score) and high (maximum standardized score) levels of powerful others locus of control. Unstandardized regression
coefficients (β values) were determined from the residuals of the dependent variable when the reduced model had been applied. The significant interaction was graphed according to the method suggested by Cohen and Cohen (1983). When graphed, inspection of the interaction revealed that powerful others locus of control beliefs held by women were positively related to emotion-focused coping; in contrast, powerful others locus of control beliefs held by men were negatively related to emotion-focused coping (see Figure 5). Therefore, for the burglary victim group, gender moderated the powerful others locus of control and emotion-focused coping relation.
Figure 5. Moderating effect of gender on the powerful others locus of control and emotion-focused coping relation for burglary victims (N=61). The minimum and maximum standardized scores for powerful others locus of control were -1.93 and 1.78, respectively. The regression equations for powerful others locus of control for men: $Y = -2.05(x) - 2.12$; powerful others locus of control for women: $Y = 3.27(x) + 2.86$. 
Test of Main Effects for Study 2 (Experimentally Induced Victims)

To test main and moderating effects for Study 2 (experimentally induced victims) two hierarchical regression analyses were conducted.

The overall regression was not significant for problem-focused coping, $F(12,89)=1.09, p > .38$. All variables accounted for only 1% of the variance found in problem-focused coping. Therefore, gender, locus of control, outcome value, and situational appraisals of control were not predictors of problem-focused coping for the experimentally induced victim group.

The overall regression was significant for emotion-focused coping, $F(12,89)=2.89, p < .01$. All variables accounted for 28% (18% adjusted) of the variance in emotion-focused coping (see Table 10). Gender was a significant predictor for emotion-focused coping, $F(1,101)=5.78, p < .02$. Women used more emotion-focused coping than men. After the effects for gender and internal locus of control were accounted for, chance locus of control accounted for a significant $R^2$ change (.010) in emotion-focused coping ($R=3.91$) (see Table 8).

In summary, gender accounted for a significant amount of variance in emotion-focused coping. Furthermore, after having accounted for the variance by gender and internal locus of control, chance locus of control accounted for a significant $R^2$ increase in emotion-focused coping.
### Table 8

**Hierarchical Regression Analysis Testing Main and Moderating Effects Predicting Emotion-Focused Coping for Experimentally Induced Victims**

*(N=102)*

<table>
<thead>
<tr>
<th>Source</th>
<th>Change R</th>
<th>F</th>
<th>p&lt;</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td>5.78</td>
<td>.02</td>
<td>-2.53</td>
</tr>
<tr>
<td>Internal</td>
<td>.001</td>
<td>&lt;1</td>
<td>.99</td>
<td>.01</td>
</tr>
<tr>
<td>Chance</td>
<td>.010</td>
<td>12.31</td>
<td>.01</td>
<td>3.91</td>
</tr>
<tr>
<td>Powerful Others</td>
<td>.007</td>
<td>&lt;1</td>
<td>.36</td>
<td>-1.10</td>
</tr>
<tr>
<td>Outcome value</td>
<td>.009</td>
<td>1.09</td>
<td>.30</td>
<td>1.03</td>
</tr>
<tr>
<td>Situational Appraisal of Control</td>
<td>.006</td>
<td>&lt;1</td>
<td>.40</td>
<td>-.87</td>
</tr>
<tr>
<td>Internal x Gender</td>
<td>.007</td>
<td>&lt;1</td>
<td>.34</td>
<td>1.05</td>
</tr>
<tr>
<td>Chance x Gender</td>
<td>.032</td>
<td>3.94</td>
<td>.05</td>
<td>2.23</td>
</tr>
<tr>
<td>Powerful Others x Gender</td>
<td>.028</td>
<td>3.50</td>
<td>.07</td>
<td>-2.16</td>
</tr>
<tr>
<td>Internal x Outcome value</td>
<td>.002</td>
<td>&lt;1</td>
<td>.64</td>
<td>.62</td>
</tr>
<tr>
<td>Chance x Outcome value</td>
<td>.002</td>
<td>&lt;1</td>
<td>.61</td>
<td>.67</td>
</tr>
<tr>
<td>Powerful Others x Outcome value</td>
<td>.016</td>
<td>1.94</td>
<td>.17</td>
<td>-1.80</td>
</tr>
</tbody>
</table>

Cumulative R adjusted .18

Residual Mean Square = 86.86  df = 12,89

**Note.** Gender is coded 1=men, -1=women.

a The B values are the unstandardized coefficients from the final simultaneous analysis. The constant in the equation is 64.98. The df are 1,101 for the stepped in variables. *p<.05, **p<.01
Test of Mediator Hypotheses for Study 2 (Experimentally Induced Victims)

Hypothesis 1: Internal locus of control mediates the gender and problem-focused coping relation. The first condition for mediation—that the independent variable (gender) must affect the mediator (internal locus of control) was not met, $r(102) = -0.13, p > .10$. This information can be found in Table 3. Failure to satisfy the first condition eliminates the necessity to establish the second condition. Thus, hypothesis 1 was not supported for the experimentally induced victim group.

Hypothesis 2: Situational appraisals of control mediate internal locus of control and problem-focused coping relation. For the experimentally induced victim group the first condition for mediation, internal locus of control affects situational appraisals of control, was not met, $r(102) = 0.08, p > .21$. Therefore, hypothesis 2 was not supported for the experimentally induced victim group.

Hypothesis 3: Situational appraisals of control mediate the gender and problem-focused coping relation. For the experimentally induced victim group the first condition for mediation—that gender affects situational appraisals of control was met, $r(102) = -0.36, p < .01$. However, the second condition of mediation, gender affects problem-focused coping, did not hold, $r(102) = 0.01, p > .50$. Therefore, hypothesis 3 was not supported for the experimentally induced victim group.

Hypothesis 4: Chance locus of control mediates the gender and emotion-focused coping relation. The first condition for mediation—that gender affects chance locus of control was not supported, $r(102) = -0.04, p > .34$. Therefore, hypothesis 4 was not supported for the experimentally induced victim group.

Hypothesis 5: Powerful Others locus of control mediates the gender and emotion-focused coping relation. For the experimentally induced victim group the first and second condition for mediation were met--
gender affects powerful others locus of control, \( r(102) = -0.19, \ p < 0.03 \), and gender affects emotion-focused coping, \( r(102) = 0.29, \ p < 0.001 \). Moreover, Baron and Kenny (1986) argue that a variable functions as a mediator to the extent that it accounts for the relation between the predictor (gender) and criterion variable (emotion-focused coping). However, standardized discriminant function coefficients revealed that emotion-focused coping (\( B = 0.54 \)) contributes more to gender differences than does powerful others locus of control (\( B = -0.34 \)) (see Table 9). Hence, powerful others locus of control does not account for the relation between gender and emotion-focused coping, therefore hypothesis 5 was not supported.

Hypothesis 6: Situational appraisals of control mediate the chance locus of control and emotion-focused coping relation. The first condition for mediation, that chance locus of control affects situational appraisals of control, was not met, \( r(102) = 0.01, \ p > 0.49 \). Therefore, hypothesis 6 was not supported for the experimentally induced victim group.

Hypothesis 7: Situational appraisals of control mediate the powerful others locus of control and emotion-focused coping relation. The first condition for mediation, that powerful others locus of control affects situational appraisals of control, was not met, \( r(102) = 0.08, \ p > 0.22 \). Therefore, hypothesis 7 was not supported for the experimentally induced victim group.
<table>
<thead>
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<th>Variable</th>
<th>B</th>
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<tr>
<td>Emotion-focused coping</td>
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<tr>
<td>Internal locus of control</td>
<td>-.25</td>
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<tr>
<td>Powerful Others locus of control</td>
<td>-.34</td>
</tr>
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<td>Chance locus of control</td>
<td>-.15</td>
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<tr>
<td>Situational appraisals of control</td>
<td>-.62</td>
</tr>
<tr>
<td>Outcome value</td>
<td>.19</td>
</tr>
</tbody>
</table>
Test of Moderator Hypotheses for Study 2 (Experimentally Induced Victims)

The same procedures for testing moderator effects in Study 1 (burglary victims) were used for testing moderating effects in Study 2 (experimentally induced victims).

Hypothesis 1: The relationship between locus of control (all 3 dimensions) and emotion-focused coping is stronger among individuals holding high outcome value, than those holding low outcome value. Results of the multiple regression analysis indicated that the Locus of Control (Internal, Chance, and Powerful Others) by Outcome Value interactions were not significant in predicting emotion-focused coping, \( F(1,101) = <1, <1, 1.94, .17 \), respectively (see Table 8). Therefore, for the locus of control and emotion-focused coping relations, outcome value was not a moderator.

Hypothesis 2: The relationship between locus of control (all 3 dimensions) and problem-focused coping is stronger among individuals holding high outcome value, than those holding low outcome value. Results indicated that the overall linear regression for problem-focused coping was not significant. Therefore, there was an absence of a moderator effect and hypothesis 2 was not supported.

Hypothesis 3: The relation between internal locus of control and problem-focused coping is stronger among men than women. Results indicated that the overall regression was not significant. Therefore, there was an absence of a moderator effect and hypothesis 3 was not supported.

Hypothesis 4: The relation between chance locus of control and emotion-focused coping is stronger among women than men. Results indicated that the interaction term, Gender by Chance Locus of Control, was significant, \( F(1,101)=3.94, p < .05 \) (see Table 8). When graphed (the same procedures for graphing in Study 1 were applied in Study 2), inspection of the interaction revealed that chance locus of control
beliefs held by both men and women were positively related to emotion-focused coping. However, the relationship was stronger for men than for women (see Figure 6). Although hypothesis 4 was not supported, gender did moderate the chance locus of control and emotion-focused coping relation.

Questions of Theoretical Interest for Study 2 (Experimentally Induced Victims)

1. Does gender moderate the powerful others locus of control and problem-focused coping relation? To answer this question of theoretical interest, the Gender by Powerful Others Locus of Control interaction was entered into the regression analysis hierarchically following the corresponding first order terms. Results indicated that for the experimentally induced victim group the Powerful Others Locus of Control by Gender interaction was not significant, \( F < 1 \). Therefore, gender did not moderate the powerful others locus of control and problem-focused coping relation.

2. Does gender moderate the powerful others locus of control and emotion-focused coping relation? Results indicated that for the experimentally induced victim group, the Powerful Others Locus of Control by Gender interaction was significant, \( F(1,101) = 3.50, p < .07 \) (see Table 8). When graphed, inspection of the interaction revealed that powerful others locus of control beliefs held by women were not related to emotion-focused coping; in contrast, powerful others locus of control beliefs held by men were negatively related to emotion-focused coping. Therefore, gender moderated the powerful others locus of control and emotion-focused relation for the experimentally induced victim group (see Figure 7).
Figure 6. Moderating effect of gender on the chance locus of control and emotion-focused coping relation for experimentally induced victims (N=102). The minimum and maximum standardized scores for chance locus of control were -2.17 and 2.54, respectively. The regression equations for chance locus of control and men: $Y=4.19(x) - 1.84$; chance locus of control and women: $Y=1.82(x) + 2.61$. 
Figure 7. Moderating effect of gender on the powerful others locus of control and emotion-focused coping relation for experimentally induced victims (N=102). The minimum and maximum standardized scores for powerful others locus of control were -1.67 and 1.94, respectively. The regression equations for powerful others locus of control and men: $Y = -2.47(x) + -1.48$; powerful others locus of control and women: $Y = .26(x) + 2.80$. 
DISCUSSION

The purpose of this study was to determine the extent to which control beliefs account for individual differences in burglary victims' short-term use of coping strategies. Two studies were conducted. In Study 1, the participants were college students who had been burglarized within the previous year. In Study 2, the participants, who had never been burglarized, viewed a video of a burglary in progress and anticipated how they would cope with burglary victimization.

Because previous research has found gender differences in reaction to criminal victimization, it was hypothesized that locus of control would account for (mediate) the gender and coping function relation. It was also expected that gender and outcome value would affect the direction or strength (moderate) of the locus of control and coping function relation. In both the victim group and experimentally induced victim group, emotion-focused coping was significantly predicted by gender, locus of control, outcome value, and situational appraisals of control. However, problem-focused coping was significantly predicted by gender, locus of control, outcome value, and situational appraisals of control for the victim group only. Although the mediating hypotheses were not supported, several moderating effects were found. In both groups, powerful others locus of control beliefs held by men were negatively related to emotion-focused coping; in contrast, in the burglary victim group, powerful others locus of control beliefs held by women were positively related to emotion-focused coping and powerful others locus of control beliefs held by women in the experimentally induced victim group were not related to emotion-focused coping. For experimentally induced victims, chance locus of control beliefs held by women and men were positively related to emotion-focused coping; yet, the relationship was stronger for men than for women. Unexpectedly, in both groups, outcome value did not moderate the locus of control and coping relation.
Preliminary analysis revealed that those who recalled the burglary victimization experience (burglary victim group) differed from those who imagined burglary victimization (experimentally induced victim group). Experimentally induced victims reported significantly more problem-focused coping and considered the outcome of the burglary experience more important than did the burglary victims. However, burglary victims were significantly higher on powerful others locus of control than experimentally induced victims.

As expected, burglary victims held a stronger powerful others locus of control orientation than experimentally induced victims. The powerful others locus of control orientation may have resulted as a consequence of the burglary victims coping behaviour in response to burglary victimization (Collins et al., 1990). Burglary victims' experience with the police, insurance, and possibly the courts (i.e., if the offender was arrested and disputed the allegation in court) may have demonstrated to them that control is neither self-determined nor in the hands of fate, but rather powerful others have a strong influence. Furthermore, it has been suggested that victimization may give rise to a negative self-trust schema that makes a victim vulnerable to powerful others (Janoff-Bulman & Frieze, 1983; McCaan et al., 1988).

Another expected difference that was supported by the data was that the experimentally induced victims used more problem-focused coping than burglary victims. An explanation is that following victimization many burglary victims believe that control over their life has been suspended (Fischer, 1984; Papp, 1981; Tyler, 1981). That is, efforts to use problem-focused coping following the burglary may have been altered or stopped by powerful others (i.e., police, insurance). However, those who imagined falling victim to burglary did not have their belief systems altered by unforeseen realities that follow victimization. Therefore, they may have maintained that the situation was controllable and therefore used more problem-focused coping strategies than the burglary
Furthermore, experimentally induced victims valued the outcome of the burglary experience more than burglary victims. Unlike the burglary victim group, the experimentally induced victims' responses may have been dispositional as opposed to situational. Other researchers have found that recall-memory (e.g., burglary victim group) is richer in sensory and contextual detail than imagined memory (e.g., experimentally induced victim group) and that imagined memory contains more information that is idiosyncratic than does recall-memory (Johnson & Raye, 1981; Johnson et al., 1988; Schooler et al., 1986). Therefore, without the actual experience of burglary and the devaluation of the event from powerful others (i.e., police, insurance companies), the experimentally induced victims believed that the outcome of burglary victimization was more important than did the burglary victims.

Although the main effects were of secondary interest to this study, it was expected that for both the victim group and experimentally induced victim group women would use more emotion-focused coping than men and men would use more problem-focused coping than women. It was also expected that internal locus of control would be positively related to problem-focused coping and that chance and powerful others locus of control would be positively related to emotion-focused coping. It was further expected that outcome value would be positively related to problem-focused coping.

As expected, women used more emotion-focused coping than men in both the victim group and the experimentally induced victim group. This finding is consistent with several other studies (Blanchard-Fields & Irion, 1988; Carver et al., 1989; Vingerhoets & Van Heck, 1990). However, there were no gender differences for problem-focused coping. An explanation for the finding is that both problem- and emotion-focused coping are used in any one event (Lazarus & Folkman, 1984). Furthermore, problem-focused coping may be related to perceived control, whereas
emotion-focused coping may be linked to emotional distress (Compas & Orosan, in press; Peacock and Wong, 1990). Men and women did not differ on control. Moreover, previous research has found that women burglary victims experience greater distress following burglary than male burglary victims (Maguire, 1980; Waller & Okihiro, 1978). Therefore, men and women did not differ on the use of problem-focused coping, but because women may have experienced greater distress following burglary they used more emotion-focused coping than men. Alternatively, women may have used more emotion-focused coping because this form of coping may be acquired through socialization (Greenglass, 1982; Vaughter, 1979).

For the burglary victim group, problem-focused coping was significantly predicted by gender, locus of control, outcome value, and situational appraisals of control. These variables accounted for 27% (adjusted) of the variance in problem-focused coping. In particular, outcome value was a significant predictor, accounting for a significant $R^2$ change (.252) in problem-focused coping. As expected, the greater the importance of the outcome, the more problem-focused coping was used. The more a burglary victim valued the outcome of the burglary victimization experience the more they used instrumental types of coping (i.e., changing locks) to achieve the desired outcome (i.e., to not be burglarized again).

Emotion-focused coping was significantly predicted by gender, locus of control, outcome value, and situational appraisals of control for the burglary victim group. These variables accounted for 35% (adjusted) of the variance found in emotion-focused coping. Again, outcome value was a significant predictor, accounting for a significant $R^2$ change (.161) in emotion-focused coping. The greater the importance of the outcome the more emotion-focused coping was used. This finding is consistent with Peacock and Wong (1990), but some previous research has found that emotion-focused coping was associated with lower outcome value (Parkes, 1984). A possible explanation for these apparently conflicting results
is in terms of the congruence between coping and the stressor (Peacock & Wong, 1990). When the outcome of the situation is considered important this may give rise to greater distress, in turn, greater distress is linked with emotion-focused coping (Compas & Orosan, in press; Peacock & Wong, 1990).

For the experimentally induced victim group, problem-focused coping was not significantly predicted by locus of control, situational appraisals of control, outcome value, and gender. It is not clear why problem-focused coping was not significantly predicted. A partial explanation is that previous research has found that age moderates the relationship between control beliefs and coping. In particular, control beliefs of college age individuals influenced emotion-focused coping more than problem-focused coping (Blanchard-Fields & Irion, 1988). In this study the participants were college age, therefore it is not completely unexpected that their control beliefs did not predict problem-focused coping. Alternatively, for experimentally induced victims, competence beliefs (i.e., self-efficacy, are perceptions of an individual's ability to take the necessary actions to obtain the desired outcome) and not contingency beliefs (i.e., locus of control), may be linked to problem-focused coping (Thompson & Spacapan, 1991). Furthermore, because 60% of the participants lived with their parents it is conceivable that they did not perceive that they had the control to implement active coping strategies without their parents' consent.

Emotion-focused coping was significantly predicted by locus of control (all three dimensions), situational appraisals of control, outcome value, and gender for the experimentally induced victim group. These variables accounted for 17% (adjusted) of the variance found in emotion-focused coping. Chance locus of control was a significant predictor accounting for 9% of the variance found in emotion-focused coping. As expected, the greater the chance locus of control the more emotion-focused coping was used. For the most part, this finding is
consistent empirically and conceptually. That is, experimentally induced victims who believed control was not possible endorsed emotion-focused coping functions (i.e., denial, turning to religion). Anderson (1977), Blanchard and Irion (1988), and Parkes (1984) also found that individuals holding an external locus of control belief (i.e., chance locus of control) used coping strategies similar to emotion-focused coping.

In this study it was expected that locus of control and situational appraisals of control would mediate the gender and coping relation, in that locus of control and situational appraisals of control would account for the relation between gender and coping. In both Study 1 (burglary victim group) and Study 2 (experimentally induced victims) the mediator hypotheses were not supported because, in part, locus of control was not strongly related to coping. Similar to Carver et al. (1989) and Folkman and Lazarus (1980, 1985), the relationship between internal locus of control and problem-focused coping was not significant. However, researchers studying extreme stressful events (i.e., war and hurricanes) have found significant relationships between locus of control and coping (Anderson, 1977; Solomon et al., 1989).

Several issues may account for the failure of this study to find a strong relationship between locus of control and coping. In Study 1 (burglary victims), the relationship between internal locus of control and problem-focused coping was not significant for three possible reasons. First, Blanchard-Fields and Irion (1988), in their study of age and coping, found that for college age participants' locus of control was not associated with problem-focused coping strategies but was associated with emotion-focused coping strategies. They posit that young people in stressful situations equate internal control with self-blame and therefore cope by avoiding the situation. Blanchard-Fields and Irion further argue that young people with a chance or powerful others locus of control orientation are less likely to engage in problem-focused
coping than emotion-focused coping because the young people feel that the control of the situation is ultimately not in their hands. This finding is consistent with the present study.

Second, the lack of specificity of the items that comprise problem-focused coping (Stone et al., 1990) may have detracted from the relationship between locus of control and coping. Fattah (1991) contends that many victims of crime, even if the recall period is limited to six months, forget details of the victimization. As such, burglary victims in this study may have been able to remember salient emotional issues reflected in the strategies that comprise emotion-focused coping, but could not remember their coping strategies as reflected in the items that comprise problem-focused coping. Therefore, this aspect of recall may have weakened the relationship between locus of control and problem-focused coping.

Finally, Collins et al. (1990) provided empirical support for the position that an individual's beliefs may change following victimization as a result of the victimization experience and subsequent coping efforts. Hence, as a result of the burglary experience and subsequent coping efforts, the victims' locus of control may have changed and therefore was not related to the coping strategies that were recalled.

Three issues may account for the failure of Study 2 (experimentally induced victim group) to find a significant relationship between locus of control and coping. First, the process of burglary victimization may not have been novel to the majority of the participants. From a theoretical basis locus of control has its greatest influence on behaviour in novel and/or ambiguous situations (Rotter, 1966, 1975). Moreover, as Lazarus and Folkman (1984) argue, the novelty of a situation is relative rather than absolute. For the experimentally induced victims, 60% of the participants had been victims of other crimes, and as Fattah (1991) argues, many people do not report their victimization officially or through surveys. Therefore, although MANOVA
results (see Appendix E) were nonsignificant for previous victimization, it is difficult to determine whether those who reported no previous victimization had actually never been victimized or whether they were failing to report previous victimization. Hence, because of the transferability of knowledge from previous victimization, the influence of locus of control on burglary victim coping may have been minimized because the burglary experience may not have been novel.

Second, the studies reviewed that found a relationship between locus of control and coping may have dealt with more extreme stressors than burglary (i.e., war, surviving a hurricane), and as such increased the novelty and ambiguity of the stressor and increased the pertinence of locus of control as a predictor of coping behaviour. Finally, the internal locus of control scale had low internal consistency (.51), although similar to the internal consistency found by Levenson (1981) with a college population, a low internal consistency does make a measure less dependable (Shavelson, 1988).

To a large degree locus of control did not account for the relationship between gender and coping because gender and locus of control were not strongly related. Vitaliano, Russo, and Maiuro (1987), used Mirels' (1970) 9-item locus of control measure and found that externality was associated with female medical students compared with male medical students. However, Blanchard-Fields and Irion (1988), in their study of age and coping, used Levenson's (1981) locus of control measure and found no difference between men and women on the internal and chance scales. Yet, they did find that men scored significantly higher on the powerful others scale, indicating that men have a stronger belief in the control of powerful others than women. Conceivably, the use of a multidimensional locus of control scale [Levenson's (1981) powerful others scale is an external locus of control orientation, but also allows for the opportunity for control] more realistically captures an individual's locus of control orientation than does a dichotomous
locus of control measure.

It was expected that gender and outcome value would affect the direction and/or strength of the relation between locus of control and coping. That is, the relationship between locus of control and emotion-focused coping was expected to be stronger among individuals holding high outcome value than among individuals holding low outcome value. Also, the relationship between locus of control and problem-focused coping was expected to be stronger among individuals holding high outcome value than among individuals holding low outcome value. Furthermore, the relationship between internal locus of control and problem-focused coping was expected to be stronger among men than women. As well, the relation between chance locus of control and emotion-focused coping was expected to be stronger among women than men. Outcome value did not moderate the locus of control (all three dimensions) and coping relationships for either the burglary victim group or the experimentally induced victim group. This finding is similar to Parkes' (1984) study. However, the importance of outcome value should not be dismissed. Rosolack and Hampson (1991) contend that outcome value must reach a certain, yet unspecified, minimum level before it may influence the direction and/or strength of the relation between locus of control and coping. Although the participants in this study held moderately high outcome value, it is possible that level of importance attached to outcome value by the participants was not sufficiently strong enough to affect the direction and/or strength of the relation between locus of control and coping.

In both Study 1 (burglary victims) and Study 2 (experimentally induced victims) gender affected the direction of the relation between powerful others locus of control and emotion-focused coping. In both groups, powerful others locus of control beliefs held by men were negatively related to emotion-focused coping; in contrast, in the burglary victim group, powerful others locus of control beliefs held by
women were positively related to emotion-focused coping and powerful others locus of control beliefs held by women in the experimentally induced victim group were not related to emotion-focused coping. These findings suggest that the burglary group more accurately reflects the reality of burglary victim coping than does the experimentally induced victim group. The disordinal nature of the interaction (see Figure 5) of the burglary victims is consistent both theoretically and empirically. Conceivably, as a result of gender schema and negative self-trust schema the direction of the relation between powerful others locus of control and emotion-focused coping was affected by gender (Bem, 1981; Janoff-Bulman & Frieze-Hanson, 1987; McCann et al., 1988). These findings support Levenson's (1981) contention that powerful others locus of control is an external locus of control orientation that does have potential for control. For example, unlike women, men may have found through experience that powerful others (i.e., police) may help achieve desired reinforcement, thus providing a sense of control to this external orientation. Thus, strong powerful others locus of control beliefs held by men were negatively related to emotion-focused coping because men with this belief saw potential for control; whereas women with similar beliefs did not see potential for control and therefore strong powerful other locus of control beliefs held by women were positively related to emotion-focused coping (Lazarus & Folkman, 1984).

Finally, as predicted, gender affected the strength of the chance locus of control and emotion-focused coping relation for the experimentally induced victim group. However, contrary to what was hypothesized, chance locus of control beliefs held by women and men were positively related to emotion-focused coping, yet the relationship was stronger for men than women. This finding suggests that men who hold external locus of control beliefs use more emotion-focused coping strategies to deal with a stressor than do women. This finding is in keeping with Hoyenga and Hoyenga's (1979) review of the locus of control
literature. They found that men who held external locus of control beliefs had greater inhibited goal oriented behaviour than women. However, gender did not affect the strength of the relation between chance locus of control and emotion-focused coping for the burglary victim group. Again, this finding further demonstrates the difference between experiencing victimization and imaging victimization; suggesting that experiencing victimization more accurately reflects the nature of the relation between locus of control and coping than does imaging victimization. Conceivably, the distress of the burglary victimization experience was sufficiently strong in the burglary victim group to create a negative self-trust schema that emphasized the powerful others locus of control orientation but detracted from the chance locus of control orientation for women victims (Maguire, 1980; McCann et al., 1988). As such, gender would only affect the direction of the powerful others locus of control and coping relation and not the strength of the chance locus of control and coping relation. Therefore, in the case of burglary victims, gender moderated the powerful others locus of control and emotion-focused coping relation, but did not moderate the chance locus of control and coping relation.

In summary, experimentally induced victims reported significantly more problem-focused coping and held greater outcome value than burglary victims. However, burglary victims were significantly higher on powerful others locus of control than experimentally induced victims. In both groups women used more emotion-focused coping than men. For the victim group, outcome value accounted for a significant amount of variance found in problem- and emotion-focused coping. Chance locus of control accounted for a significant amount of variance found in emotion-focused coping for the experimentally induced victim group. Findings indicated that for both the burglary victim group and the experimentally induced victim group, locus of control and situational appraisals of control did not account for the relationship between gender and coping. However, in
both groups, gender affected the direction of the relation between powerful others locus of control and emotion-focused coping. Gender also affected the strength of the relation between chance locus of control and emotion-focused coping in the experimentally induced victim group. Moreover, the moderating effect of gender offers some support for the contention that data from the burglary victim group more realistically captures the relation between locus of control and coping than does the data from the experimentally induced victim group.

**Implications for Counselling**

Counselling victims of crime falls directly within the mandate of counselling psychology (Douce, 1988). Although this was not an intervention study, three main implications arise from this study for counselling burglary victims. First, the differences between burglary victims and experimentally induced victims demonstrates that coping with burglary victimization may increase the victims' powerful other locus of control orientation and may decrease the value of the importance attached to the outcome of victimization. From the perspective of the burglary victim, a counsellor may represent a powerful other. As such, the client may look to the counsellor to impose solutions to the problems the client is experiencing. Clearly, from a phenomenological understanding of stress and coping, such a relationship between a client and counsellor would not be advantageous to either party. Therefore, counsellors must be aware not to further increase dependency in their clients who have been victims of burglary, but to try and restore a sense of agency. Furthermore, it is possible that burglary victims may discount the importance of the outcome of the burglary victimization experience even though they are experiencing psychological distress. Counsellors may wish to take this into consideration because the client's discounting of outcome importance may affect his or her current psychological functioning and behaviour (i.e., the client may place his or her property or person at unnecessary risk to victimization because
he or she believes that victimization does not matter). Exploration of the victim's beliefs regarding the importance of the outcome of the burglary victimization experience may provide the victim greater understanding of his or her coping responses.

Second, women burglary victims use more emotion-focused coping than male burglary victims. Recognizing that women and men use both functions of coping, counsellors should establish that women victims are using enough active coping strategies (e.g., changing locks) to reduce the risk of subsequent victimization and that men are addressing their emotional needs (e.g., social support). Although this study did not examine healthy psychological functioning following victimization, it is believed that the broader the range of coping strategies (i.e., problem- and emotion-focused coping) that an individual has available, the better able the person is to cope with threatening situations (Parkes, 1984).

Finally, findings from this study suggest that imaging victimization may not reflect the realities of actual victimization. Because there are differences between imaging and experiencing victimization, counsellors who use visualization with clients who are at risk of victimization or who fear victimization, may not adequately prepare the client to deal with victimization. Therefore, in an effort to reduce the distress associated with victimization, it is important for counsellors and crime prevention practitioners to recognize that there may be limitations (i.e., may not accurately reflect the victimization process) in having clients imagine or visualize the victimization process (e.g., to burglary or sexual assault).

**Limitations**

There were six main limitations with Study 1 and Study 2. First, all the questionnaires were self-report. Second, both studies were not concerned with the process and change that is related to causality as advocated by Lazarus and Folkman (1984). Third, the sample was comprised of college students from a homogeneous age group, that is not
representative of the general public. To determine whether age moderated the locus of control and coping relation it would be necessary to have participants from a broader range of ages. Fourth, it is difficult to compare victims and nonvictims because socioeconomic factors (i.e., household income) may be, in part, a contributing factor that separates victims from nonvictims. Fifth, many unmeasured psychosocial variables that may affect how an individual copes with burglary were not the focus of this study. For example, inclusion of negative affectivity into an expanded model may prove useful in understanding individual differences in the use of emotion-focused coping. Finally, because the number of participants in the burglary victim group was relatively small (N=61), the power of the multiple regression analyses was reduced.

**Future Research**

Clarification of the relationship between locus of control and coping for burglary victim coping may best be accomplished by prospective research. In future research, researchers should measure the locus of control of individuals in a particular community prior to burglary victimization and then gather the pertinent information on outcome value, situational appraisals of control, and coping following burglary victimization. Furthermore, locus of control should be measured before and after burglary victimization to determine the affect that victimization and subsequent coping efforts have on an individual's locus of control. However, practical constraints may not make such research possible, therefore researchers conducting analogue research could incorporate detailed visualization of the burglary experience using small group settings. Future research should be directed towards the development of a coping measure that contains problem- and emotion-focused coping items that are representative of burglary victim's coping efforts. This may help clarify the relation between control beliefs and coping for burglary victims. This research focused on coping for the first seven days following victimization, future research should be
directed towards understanding how victims of burglary cope over the course of the stressful encounter. Finally, control is a multidimensional construct, composed of contingency, competence, and control beliefs (Thompson & Spacapan, 1991). Further investigation is required to determine how these different aspects of control interact to influence burglary victim coping.
References


Appendix A

Informed Consent

Demographic Questionnaire

Locus of Control Measure
Informed Consent

Title of the Study: Burglary Victim Coping

Date:

Purpose of the Study:
This investigation is being conducted to gain a better understanding of how burglary victims cope with the burglary experience.

Procedure:
As a participant you will be asked to do the following:

1. View a 2 minute video.

2. Do paper and pencil questionnaires before and after you view the video. The questionnaires will take 25 to 30 minutes to complete.

This is to certify that I, ________________, agree to voluntarily participate in this investigation on burglary. I understand that I do not have to participate and that I am free to withdraw my consent and may terminate my participation at any time. This will not jeopardize my standing nor my opportunity to participate in any other programs sponsored by the University of British Columbia or Douglas College. Data that are collected will remain confidential with regard to my identity. Participants will be identified by number only and all questionnaires will be kept in a locked file cabinet. Only the investigator and his supervisor will have access to the files.

I will have a chance to ask any questions I want about this research project. Questions I ask will be answered to my satisfaction. I will receive a copy of this consent form.

Date: ________________

Participant's signature

Faculty Supervisor:
Dr. B. Long
Dept. of Counselling Psychology 228-4756

Investigator's Signature
Randy Mackoff, MA, Dept. of Counselling Psychology, UBC 527-5328
Demographic Information

Directions: Please circle the letter that is appropriate for each item.


2. Age: ____ years

3. Marital Status
   [A] single
   [B] married (includes common law)
   [C] separated
   [D] divorced
   [E] remarried
   [F] widow(er)

4. Do you live at home with your parents?
   [A] yes [B] no

5. Do you pay rent where you live?
   [A] yes [B] no

6. How many persons do you live with? ____ persons

7. What is your yearly household income?
   [A] under $10,000 per year
   [B] $10,000 - $20,000 per year
   [C] $21,000 - $30,000 per year
   [D] $31,000 - $40,000 per year
   [E] over $40,000 per year

8. Have you ever been a victim of burglary (burglary is defined as when a person(s) enters your residence without permission in order to commit a crime)?
   [A] yes [B] no

Burglary Victims Only

9. Were you in your home at the time of the burglary?
   [A] yes [B] no
10. Were you confronted by the suspect(s) at the time of the burglary?
   [A] yes  [B] no

11. What was the total value of items stolen?
   _______ dollars

12. How severe was the damage to your property as a result of the burglary?
   [A] severe
   [B] moderate
   [C] light
   [D] none

Burglary Victims and Experimentally Induced Victims

13. Have you been a victim of any crime other than burglary?
   [A] yes  [B] no

14. If you answered yes to 13, please specify the crime(s).

_________________________________________________________________
_________________________________________________________________
Locus of Control

Directions

On the next page is a series of attitude statements. Each represents a commonly held opinion. There are no right or wrong answers. You will probably agree with some items and disagree with others. We are interested in the extent to which you agree or disagree with such matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by circling the number following each statement. The numbers and their meanings are indicated below:

If you agree strongly: circle +3
If you agree somewhat: circle +2
If you agree slightly: circle +1

If you disagree slightly: circle -1
If you disagree somewhat: circle -2
If you disagree strongly: circle -3

First impressions are usually best. Read each statement, decide if you agree or disagree and the strength of your opinion, and then circle the appropriate number.

Give Your Opinion On Every Statement

If you find that the numbers to be used in answering do not adequately reflect your own opinion, use the one that is closest to the way you feel. Thank you.
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1. Whether or not I get to be a leader depends mostly on my ability. -3 -2 -1 +1 +2 +3

2. To a great extent my life is controlled by accidental happenings. -3 -2 -1 +1 +2 +3

3. I feel like what happens in my life is mostly determined by powerful people. -3 -2 -1 +1 +2 +3

4. Whether or not I get into a car accident depends mostly on how good a driver I am. -3 -2 -1 +1 +2 +3

5. When I make plans, I am almost certain to make them work. -3 -2 -1 +1 +2 +3

6. Often there is no chance of protecting my personal interests from bad luck happenings. -3 -2 -1 +1 +2 +3

7. When I get what I want, it's usually because I'm lucky. -3 -2 -1 +1 +2 +3

8. Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power. -3 -2 -1 +1 +2 +3

9. How many friends I have depends on how nice a person I am. -3 -2 -1 +1 +2 +3

10. I have often found that what is going to happen will happen. -3 -2 -1 +1 +2 +3
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11. My life is chiefly controlled by powerful others.  
-3 -2 -1 +1 +2 +3

12. Whether or not I get into a car accident is mostly a matter of luck.  
-3 -2 -1 +1 +2 +3

13. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.  
-3 -2 -1 +1 +2 +3

14. It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.  
-3 -2 -1 +1 +2 +3

15. Getting what I want requires pleasing those people above me.  
-3 -2 -1 +1 +2 +3

16. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.  
-3 -2 -1 +1 +2 +3

17. If important people were to decide they didn't like me, I probably wouldn't make friends.  
-3 -2 -1 +1 +2 +3

18. I can pretty much determine what will happen in my life.  
-3 -2 -1 +1 +2 +3

19. I am usually able to protect my personal interests.  
-3 -2 -1 +1 +2 +3
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20. Whether or not I get into a car accident depends mostly on the other driver.

21. When I get what I want, it's usually because I worked hard for it.

22. In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.

23. My life is determined by my own actions.

24. It's chiefly a matter of fate whether or not I have a few friends or many friends.
Appendix B

Video Description

Video Viewing Instructions

Coping Measure

Situational Appraisals of Control Measure

Outcome value Measure

Social Desirability Scale

Burglary Intensity Measure
Description of Video

Two caucasian males in their late teens attempt to pry open the side door of a house. Unable to gain entry, one of the males smashes open the adjacent window and unlocks the door. Both males enter the house and go directly to the master bedroom. Once inside the bedroom one of the males empties a clothing drawer on the bed and scatters the belongings. The second male opens a desk drawer and finds a cheque in an envelope. He opens the envelope and steals the cheque. Both males drop the socks that they had used to cover their hands and run out the front door carrying stolen property. The burglary takes place in the night and there is no apparent sign of anyone being at home.

There is dramatic music in the background and the excited breathing of the suspects can be heard. The video is in colour and is shown on a 24" screen. The video lasts approximately 2 minutes.
**Video Viewing Instructions for Burglary Victims**

"You are about to watch a 2 minute video of a typical burglary. While viewing this burglary try to remember, in as much detail as possible, what your own experiences were when you were burglarized."

**Video Viewing Instructions for Experimentally Induced Victims**

"You are about to watch a 2 minute video of a typical burglary. Imagine, as you sit here a similar burglary as the one you are about to witness is taking place at your residence. When you get out of class tonight you return home to discover that your residence has been burglarized. Personal and private items have been touched by a stranger and some items have been stolen."

The viewing of this video took place in a maximum group size of 35 participants in a classroom. The participants were seated at tables. The video was played on a 24" colour screen."
COPE (Victim Group)

Instructions:
Remember back to when you were a victim of burglary. In the following questionnaire, rate each item according to what you did and felt over the first 7 days following the burglary.

Then respond to each of the following items by circling the appropriate number at the end of each item. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU - not what you think "most people" would say or do. Indicate what you did when YOU were burglarized.

COPE (Experimentally Induced Victim Group)

Instructions:
Imagine a similar burglary to the one you have viewed has just occurred at your residence. When you get out of class tonight you return home to discover that your residence has been burglarized. Personal and private items have been touched by a stranger and some items have been stolen. In the following questionnaire, rate each item according to what you would do and feel over the first 7 days following the burglary.

Then respond to each of the following items by circling the appropriate number at the end of each item. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU - not what you think "most people" would say or do. Indicate what you would do if YOU were burglarized.
### Experimentally Induced Victims

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### Burglary Victims

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1. I tried to grow as a person as a result of the experience.

2. I turned to work or other substitute activities to take my mind off things.

3. I got upset and let my emotions out.

4. I tried to get advice from someone about what to do.

5. I concentrated my efforts on doing something about it.

6. I said to myself "this isn't real."

7. I put my trust in God.

8. I admitted to myself that I couldn't deal with it, and quit trying.

9. I restrained myself from doing anything too quickly.

10. I discussed my feelings with someone.

11. I got used to the idea that it happened.

12. I talked to someone to find out more about the situation.

13. I kept myself from getting distracted by other thoughts or activities.

14. I daydreamed about things other than this.

15. I got upset, and was really aware of it.
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16. I sought God's help. ........................................... 1 2 3 4

17. I made a plan of action. ...................................... 1 2 3 4

18. I accepted that this had happened and that it couldn't be changed. 1 2 3 4

19. I held off doing anything about it until the situation permitted. 1 2 3 4

20. I tried to get emotional support from friends or relatives. .............................................. 1 2 3 4

21. I just gave up trying to reach my goal. ...................... 1 2 3 4

22. I took additional action to try to get rid of the problem. 1 2 3 4

23. I refused to believe that it had happened. .................. 1 2 3 4

24. I let my feelings out. .......................................... 1 2 3 4

25. I tried to see it in a different light, to make it seem more positive. 1 2 3 4

26. I talked to someone who could do something concrete about the problem. 1 2 3 4

27. I slept more than usual. ....................................... 1 2 3 4

28. I tried to come up with a strategy about what to do. ........ 1 2 3 4

29. I focused on dealing with this problem, and if necessary let other things slide a little. 1 2 3 4

30. I got sympathy and understanding from someone. ............ 1 2 3 4
31. I gave up the attempt to get what I wanted.  
32. I looked for something good in what was happening.  
33. I thought about how I might best handle the problem.  
34. I pretended that it hadn't really happened.  
35. I made sure not to make matters worse by acting too soon.  
36. I tried hard to prevent other things from interfering with my efforts at dealing with this.  
37. I went to movies or watched TV, to think about it less.  
38. I accepted the reality of the fact that it happened.  
39. I asked people who have had similar experiences what they did.  
40. I felt a lot of emotional distress and I found myself expressing those feelings a lot.  
41. I took direct action to get around the problem.  
42. I tried to find comfort in my religion.  
43. I forced myself to wait for the right time to do something.  
44. I reduced the amount of effort I put into solving the problem.
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45. I talked to someone about how I felt. 1 2 3 4

46. I learned to live with it. 1 2 3 4

47. I put aside other activities in order to concentrate on this. 1 2 3 4

48. I thought hard about what steps to take. 1 2 3 4

49. I acted as though it hadn't even happened. 1 2 3 4

50. I did what had to be done, one step at a time. 1 2 3 4

51. I learned something from the experience. 1 2 3 4

52. I prayed more than usual. 1 2 3 4
Situational Appraisals of Control (Victim Group)

Instructions:
Remember back to when you were a victim of burglary. In the following questionnaire, rate each item according to how you felt over the first 7 days following the burglary.

Situational Appraisals of Control (Experimentally Induced Victim Group)

Instructions:
Imagine a similar burglary to the one you have viewed has just occurred at your residence. When you get out of class tonight you return home to discover that your residence has been burglarized. Personal and private items have been touched by a stranger and some items have been stolen. In the following questionnaire, rate each item according to what you would feel over the first 7 days following the burglary.

Rate each item according to the following scale. Indicate your response by circling the appropriate number at the end of each item.

Strongly disagree 1  2  3  4  5  6 Strongly Agree

1. During the week after the burglary I felt in control of my emotions.  
   1  2  3  4  5  6

2. During the week after the burglary I felt in control of what it was that I was doing.  
   1  2  3  4  5  6

3. During the week after the burglary I felt in control of the situation.  
   1  2  3  4  5  6
Outcome Value (Victim Group)

Instructions:
Remember back to when you were a victim of burglary.

Outcome Value (Experimentally Induced Victim Group)

Instructions:
Imagine a similar burglary to the one you have viewed has just occurred at your residence. When you get out of class tonight you return home to discover that your residence has been burglarized. Personal and private items have been touched by a stranger and some items have been stolen.

Rate each item according to the following scale. Indicate your response by circling the appropriate number at the end of each item.

Strongly Disagree 1 2 3 4 5 6 Strongly Agree
1. This situation was one of 1 2 3 4 5 6 great personal importance to me.
2. The situation mattered a 1 2 3 4 5 6 great deal to me.
3. The outcome of my actions 1 2 3 4 5 6 after the burglary mattered a great deal to me.
Instructions:

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Place a T for True or an F for False on the space to the left of each statement.

1. ___ I'm always willing to admit it when I make a mistake.
2. ___ I always try to practice what I preach.
3. ___ I never resent being asked to return a favour.
4. ___ I have never been irked when people expressed ideas very different from my own.
5. ___ I have never deliberately said something that hurt someone's feelings.
6. ___ I like to gossip at times.
7. ___ There have been occasions when I took advantage of someone.
8. ___ I sometimes try to get even rather than forgive and forget.
9. ___ At times I have really insisted on having things my own way.
10. ___ There have been occasions when I felt like smashing things.
**Burglary Intensity Measure (Victim Group)**

Please circle the response which best indicates the extent to which you were able to recall the burglary experience.

1. I was able to recall that I was a burglary victim.
   
   Not at all 1 2 3 4 5 6 7 With great accuracy

2. I intensely recalled when I was a burglary victim.
   
   Not at all 1 2 3 4 5 6 7 With great accuracy

3. The video assisted me in recalling when I was a victim of burglary.
   
   Not at all 1 2 3 4 5 6 7 Greatly

1. Was your reaction to the burglary experience as you expected it to be?

   Not at Very Somewhat Slightly Exactly as
   all different different different expected

   1 2 3 4 5

   \( f(N=61) \) 3 6 8 25 19

**Burglary Intensity Measure (Experimentally Induced Victim Group)**

Please circle the response which best indicates the extent to which you experienced imagining that you were a burglary victim.

1. I was able to imagine that I was a burglary victim.
   
   Not at all 1 2 3 4 5 6 7 With great accuracy

2. I intensely imagined that I was a burglary victim.
   
   Not at all 1 2 3 4 5 6 7 With great accuracy

3. The video assisted me in imaging that I was a victim of burglary.
   
   Not at all 1 2 3 4 5 6 7 Greatly
APPENDIX C

Intercorrelations of Coping Subscales of Victims

Intercorrelations of Coping Subscales of Experimentally Induced Victims
### Intercorrelations of Coping Subscales of the Burglary Victim Group (N=61)

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</table>

**Note.** Active = Active coping; Plan = Planning; Seekins = Seeking social support-instrumental; Suppres = Suppression of competing activities; Behdis = Behavioral disengagement; Restra = Restraint coping; Posit = Positive reinterpretation and growth; Seekemo = Seeking social support-emotional; Relig = Turning to religion; Accept = Acceptance; Mdiseng = Mental disengagement; Focus = Focus on and ventilation of emotions. Variables 1 to 6 are problem-focused coping subscales. Variables 7 to 13 are emotion-focused coping subscales.

*r*(60).21, *p*<.05

*r*(60).29, *p*<.01 (Bonferroni adjusted *r*(60).53, *p*<.05, *r*(60).58, *p*<.01, Shavelson, 1988)
## Intercorrelations of Coping Subscales of Experimentally Induced Victims

(N=102)

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Note. Active = Active coping; Plan = Planning; Seekins = Seeking social support-instrumental; Suppres = Suppression of competing activities; Behdis = Behavioral disengagement; Restra = Restraint coping; Posit = Positive reinterpretation and growth; Seekemo = Seeking social support-emotional; Relig = Turning to religion; Accept = Acceptance; Mdiseng = Mental disengagement; Focus = Focus on and ventilation of emotions. Variables 1 to 6 are problem-focused coping subscales. Variables 7 to 13 are emotion-focused coping subscales.

\[ r(100).16, \ p<.05 \]

\[ r(100).23, \ p<.01 \] (Bonferroni adjusted \[ r(100).43, \ p<.05 \], \[ r(100).47, \ p<.01 \], Shavelson, 1988).
Appendix D
Correlation Matrix
of Social Desirability
with Independent and
Dependent Variables
Correlations of Social Desirability with Independent and Dependent Variables of Burglary Victims (N=61) and Experimentally Induced Victims (N=102)

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<td><strong>Powerful Others locus of control</strong></td>
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<td>Outcome Value</td>
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<tr>
<td>Emotion-focused coping</td>
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* Gender was coded 1 (men) and 2 (women)

$r(60).21, p<.05$  
$r(60).29, p<.01$  
$r(100).16, p<.05$  
$r(100).23, p<.01$  

Bonferroni adjusted:  
$r(60).43, p<.05$  
$r(60).49, p<.01$  
$r(100).34, p<.05$  
$r(100).39, p<.01$ (Shavelson, 1988).
Appendix E

Multivariate and Univariate F-Tests for Previous Victimization and Intensity of Experience Effects
### Multivariate and Univariate F-Tests for Previous Victimization and Intensity of Experience Effects (N=102)

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<th>Intensity of Experience</th>
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<tr>
<td></td>
<td></td>
<td>F</td>
<td>p&lt;</td>
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<td>Powerful Others locus of control</td>
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**Note.** No prior victimization (n=38) vs. prior victimization (n=64). Below median for Intensity (n=43) vs. above median for Intensity (n=59).
Appendix F

Intercorrelations of Predictor and Criterion Variables of Combined Groups
### Intercorrelations of Predictor and Criterion Variables of Combined Groups (N=163).

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</table>

*a Gender was coded 1 (men) and 2 (women)*

$r(100).16, p<.05$

$r(100).23, p<.01$ (Bonferroni adjusted $r(150).31, p<.05$; $r(150).35, p<.01$, Shavelson, 1988).