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THE INDICATORS OF FEAR OF VICTIMIZATION

BY

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ABSTRACT

The main objective of this thesis was to examine the indicators of fear of victimization by incorporating the variables age, gender, living arrangement and security precautions into Warr and Stafford's (1983) conceptual model of fear (that high levels of perceived risk and perceived seriousness are associated with a high level of fear of victimization for a particular offense) and then testing the explanatory power of this revised model. A probability sample of 194 Thunder Bay students and retirees was drawn using a multi-stage sampling technique and the data indicated that the independent variables explained 41.6 percent of the variation in fear for the combined 16 offenses, with perceived risk, perceived seriousness and gender emerging as the only statistically significant indicators of fear. Thus, fearful persons tended to be females who perceived victimization to be both likely to occur and serious in its consequences.

Contrary to the bulk of fear of crime research, students in general were found to be more fearful than retirees, and female students in particular were found to be more fearful than female retirees, male retirees and male students. These findings suggest that fear of victimization is a phenomenon that is not reserved for the elderly alone and, thus, future research should focus upon the victimization fears of all gender/age categories.

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CHAPTER ONE: INTRODUCTION

During the three-year period of 1989-1991, the criminal code offense rate in Canada increased 16 percent (from 9,245 to 10,736 offenses per 100,000 population) (Statistics Canada, 1992a:5-1) while the proportion of adult Canadians expressing fear of criminal victimization increased nine percent (from 24 to 33 percent) (Chisholm, 1993:25). Thus, while one criminal offense occurred for every 10 Canadians in 1991, three out of every 10 adult Canadians expressed fear of being victimized. Since the number of fearful individuals greatly exceeds the number of actual victims during any given period (Warr, 1985:238), and since a high level of fear is associated with restriction in behavior patterns and decreased morale, life satisfaction and general happiness (Miethe and Lee, 1984:397), Canadian, American and British researchers (Box et al., 1988; Gomme, 1986; Maxfield, 1987; McConnell, 1989) regard this phenomenon as a major social problem. As Elias (1986:119) notes, "fear of crime, particularly in urban areas, pervades the population and people may become victimized more by their fear of crime than by crime itself." Gomme (1986:250) agrees with the preceding statement, as he believes that anxiety over becoming the victim of a crime, to the extent that it undermines sociability, mutual trust and a willingness to

help one another, erodes the overall quality of social life.

Since the advent of systematic research on fear of victimization in the mid-1960's, most investigators have been content to uncover general correlates of fear (e.g., age, gender) and, thus, the "fear-victimization paradox" within criminology remains unexplained: since the elderly have an objectively lower level of risk than younger persons, why do they tend to be more fearful of crime (Akers et al., 1987:489)? The Solicitor General of Canada (1984a:3; 1985a:2), for example, found that persons 16-24 years were ten times more likely than those 65 years and over to experience a personal theft. The elderly, however, were almost twice as likely as younger persons to express feelings of unsafety when walking alone in their neighborhoods after dark.

Ferraro and LaGrange (1987), Killias (1990), Skogan and Maxfield (1981) and Yin (1985) believe that the elderly are more fearful than other age groups because of how they "define their situations" - they tend to perceive themselves to be very vulnerable to crime and tend to regard any offense as having serious financial, physical and psychological consequences. Warr and Stafford (1983:1035) agree with this reasoning, as they believe that both perceived risk and perceived seriousness are necessary conditions for fear: an offense must be viewed as sufficiently serious and likely in order to be highly feared

(Warr, 1987:41). Perceived risk and seriousness seem to be important indicators of fear of victimization and may explain the paradox concerning low victimization rates and high levels of fear among the urban elderly. As Fattah and Sacco (1989:226) state, "elderly fear of crime may represent the exercise of caution by a group in society that frequently lacks the control necessary to manage the risk of criminal harm or to marshal the resources necessary to offset its consequences."

This thesis contains four objectives: 1) to test the empirical validity of Warr and Stafford's (1983:1035) conceptual model of fear, that high levels of perceived risk and perceived seriousness are associated with a high level of fear of victimization for a particular offense; 2) to incorporate the variables age, gender, living arrangement and security precautions into Warr and Stafford's (1983) probabilistic model, as research suggests that the elderly (Brillon, 1987; Warr, 1984), females (LaGrange and Ferraro, 1989; Solicitor General of Canada, 1985b), and those who live alone (Silverman and Kennedy, 1985; Ward et al., 1986) tend to be more fearful than their counterparts. Those more fearful of victimization also tend to engage in more security precautions to prevent victimization (Brillon et al., 1984; Fattah and Sacco, 1989); 3) to measure levels of fear, risk and seriousness for each of 16 personal, property and public order offenses among the sample and four

subsamples of male students, male retirees, female students and female retirees; 4) to measure recurrent security precaution use among the sample and four subsamples. It is anticipated that fulfillment of these objectives will provide a better understanding of who the fearful are, why they are fearful, and what precautionary behaviors the fearful may engage in.

Gordon and Riger (1989), Skogan (1987) and Smith (1987) believe that fear of victimization is a beneficial emotion when it is related to objective risk, for only then can it incite a healthy degree of caution among vulnerable populations. Garofalo (1981:856) agrees that fear can become debilitating when emotional and behavioral responses go beyond what is necessary to prevent victimization and produce effects such as unnecessary avoidance of potentially rewarding social interactions and unwarranted distrust of others. If the types of offenses which the elderly and young fear the most do not correspond to the types of offenses each group is most likely to experience, then these fear levels should be regarded as excessive. For example, it would be unreasonable for elderly Canadians to be highly fearful of "being raped" when this age group is eight times more likely to experience a personal assault and thirteen times more likely to experience a personal theft (Solicitor General of Canada, 1985a:2). Disproportionately high levels of fear could be reduced through "tell the truth" campaigns

designed to educate and provide citizens with accurate information about the crime problem in their own neighborhoods (McPherson, 1978:328) and by increasing the visibility of the police within communities (McMurray, 1983:41). Eliminating the fear of any criminal offense (if possible) would be undesirable, as this practice could result in decreased precautionary behaviors and, hence, increased victimization. As Skogan (1987:152) points out, "some 'healthy anxiety' leading to awareness and caution probably is a good thing, when it is rooted one way or another in reality. It is when fear is incapacitating, or not linked to environmental conditions, that it can be dysfunctional."

Having known many persons, both elderly and young, who were fearful of being victimized and having witnessed how fear prompted some to restrict their activities and to be distrustful of others, this researcher believes that it is important to examine not only who the fearful are, but why they are fearful and what behavioral changes fear may bring about in the daily lives of individuals. Discovering the indicators of fear of victimization may be the only way to reduce excessive fear levels and the distress, restriction and withdrawal which they can produce. Since research (Baumer, 1985; Lindsay, 1991; Solicitor General of Canada, 1985a) indicates that fear is an important problem among the urban elderly, this phenomenon is likely to increase in

occurrence as persons aged 65 years and over increase in number (from 11.8 percent of the Canadian population in 1993 to a projected 23 percent in 2031) (Statistics Canada, 1993:13). One of the major consequences of crime for both the community and its residents is the fear of crime (Donnelly, 1988:69), as "victims are not the only people affected by criminal activity - many more people are indirectly affected through fear" (Maxfield, 1984:234).

CHAPTER TWO: PREVIOUS RESEARCH AND THE CONCEPTUALIZATION OF FEAR

2.1 Age and Fear of Victimization

Research conducted in Canada and the United States indicates that the elderly (usually defined as persons 65 years and over) fear victimization more than other age groups although they are least likely to experience crime (Clemente and Kleiman, 1976; Garofalo, 1981; Solicitor General of Canada, 1985a). The Canadian Urban Victimization Survey, conducted in seven Canadian cities in 1982, surveyed 61,000 persons aged 16 years and over and found that, for all crimes, the rate of victimization diminished with advancing age. For example, the rate of household thefts was 239 incidents per 1,000 inhabitants aged 30 years and under as compared to 48 incidents per 1,000 inhabitants 60 years and over (Solicitor General of Canada, 1984b, as cited in Brillon, 1987:35). Measuring fear of victimization with the question "How safe do you feel walking alone in your neighborhood after dark?", 8 percent of the elderly feared victimization during the day compared to 4 percent of persons 30 years and under; 52 percent of the elderly feared victimization at night compared to 37 percent of younger respondents (Solicitor General of Canada, 1984a:3).

Conducting interviews among adults in three American cities, Skogan and Maxfield (1981:75) discovered that age was related to fear in a linear fashion: 7.1 percent of those 18-20 years, 9.3 percent of those 33-39 years, 22 percent of those 50-59 years and 40.7 percent of those 60 years and over expressed fear of criminal victimization. Examining a sample of 387 Thunder Bay residents, Worrell (1992:17-18) measured fear using the global question "Do you feel safe walking in your neighborhood at night?"; 42.9 percent of those 21-30 years of age responded "no" compared to 58.3 percent of those 66-70 years. Conducting telephone interviews among 149 adults, Khullar and Wyatt (1989:104) found that 25 percent of those 60 years and over were afraid to walk alone in their neighborhoods all of the time compared to only 4 percent of those under 60 years of age. Thus, although the proportion of elderly individuals who express fear of victimization varies across studies, "the weight of the evidence would seem to support the conclusion that elderly persons are somewhat more likely than younger people to express fear" (Fattah and Sacco, 1989:213).

Research indicates that the elderly are not only more fearful than other age groups, but their fears seem to be increasing over time. As Brillon (1987:53) notes, 38 percent of elderly individuals expressed fear of victimization in 1965, compared to 41 percent in 1968 and

56 percent in 1974; for those 18-25 years of age, 35 percent were fearful in 1965, 37 percent in 1968 and 43 percent in 1974. What is important to note about the preceding figures is the ever-increasing gap in fear levels between the young and the old. In 1965, the difference in percentages between each age group was 3 percent; in 1968 it rose to 4 percent; in 1974 the difference increased to 13 percent. Yin (1985:169) provides data to support this trend among the elderly: in 1967, 31 percent of those surveyed were afraid to walk alone in their neighborhoods at night, compared to 45 percent in 1974 and 47 percent in 1982.

Examining a sample of 402 elderly persons in Michigan, Kahana et al. (1977:124) state that one of the major concerns of the aged is the fear of crime. Hahn and Miller (1980) found fear to be the single most pressing concern among elderly residents in Cincinnati, even surpassing problems associated with health and money (Hahn and Miller, 1980, as cited in Janson and Ryder, 1983:207). In a 1974 survey, fear of crime ranked above health, money and loneliness in a list of the major concerns of older Americans (Cox, 1984:291). In sharp contrast to the above findings, Yin (1982:241-42) interviewed 1,228 elderly persons in Michigan and found that only 1 percent of the sample listed fear of crime as a serious personal problem or worry: poor health was the most frequently mentioned problem (25 percent), followed by lack of money (9 percent).

Liska and Baccaglini (1990:360) state that "the best studies examining fear of crime use multivariate statistical techniques and large samples." Conducting a mail survey among 1,835 persons 15 years of age and over in Mississippi, Parker and Ray (1990:33-35) found age to be significantly related to fear ($r = .153$, $p < .001$). When fear was regressed on eight socioeconomic variables, previous victimization ($\beta = .231$, $p < .001$) and age ($\beta = .155$, $p < .001$) emerged as the strongest predictors of one's fear of being victimized. Smith and Hill (1991b:230) collected data from 2,129 adults through a mail survey and, after calculating a multiple regression equation, found that gender was a strong predictor of fear ($\beta = .166$, $p < .001$), followed by age ($\beta = .052$, $p < .05$) and living arrangement ($\beta = -.015$, $p > .05$). These findings support Warr's (1990:897) assertion that "fear of victimization is strongly age and sex related."

Interviewing 1,867 adults in Nebraska, Ollenburger (1981:111) found the urban elderly to have the highest level of fear of crime, with those persons 18-24 years reporting the lowest level of fear. Warr (1984:685) collected data from 339 residents of Seattle, Washington and found that mean fear levels were highest among elderly respondents for nine of 16 criminal offenses. Only one offense, that of "being raped", generated the highest mean fear level among those 19-35 years. O'Bryant et al. (1991:171-72)

interviewed 300 widowed women aged 60 years and over living in an urban metropolitan area and found that "each year of age increased the odds of the widow being afraid 4.1 percent." Lindsay (1991:55) concludes that general population surveys consistently show that the elderly are more fearful than the young. Figgie (1980) qualifies the preceding statement by asserting that the elderly are more likely to experience "formless fear" (concern of some vague threat to one's security), while younger individuals are more likely to experience "concrete fear" (concern of being a victim of acts of violence). In a study of 1,028 adult Americans, Figgie (1980) found that 49 percent of those 30 years and under reported a high degree of concrete fear compared to 33 percent of those 60 years and over; 36 percent of the younger subsample reported a high degree of formless fear compared to 43 percent of the older subsample. These findings are explained by the fact that the lifestyles of young persons expose them to a much greater risk of victimization and, therefore, they experience a higher level of concrete fear (Figgie, 1980, as cited in Brillon, 1987:59).

Brillon (1987:52) states that the "fear-victimization paradox" can be explained by the argument that, since the elderly have a greater fear of crime than others, they isolate themselves more, and are thus less exposed to crime; hence they experience less victimization. Clarke et al.

(1985:1) go on to note that the elderly may be more fearful of crime "because they misperceive their risks or because the consequences of victimization may generally be more severe for them."

Although a majority of studies indicate that fear of victimization increases with age (Baumer, 1985; Burt and Katz, 1985; Toseland, 1982), some researchers contend that fear among the elderly has been greatly exaggerated (Akers et al., 1987; LaGrange and Ferraro, 1987), and that fear of victimization is a greater problem for the young than for the elderly (Elias, 1986:121). Conducting 640 interviews among adult Canadians, Gomme (1988:71-73) entered nominal to ordinal-level variables into a multiple regression equation and found gender to be the strongest predictor of fear (beta= .226, $p < .05$), followed by previous victimization (beta= .176, $p < .05$) and age (beta= $-.095$, $p < .05$). Contrary to extant research, the young were more fearful of crime than older segments of the sample. Parker (1988:491-92) arrives at a similar conclusion from a study of 1,835 respondents: age was a determinant of fear (beta= $-.147$, $p < .0001$), although the young reported a higher mean level of fear than the elderly. The author explains this finding by stating that young persons, because they tend to frequent places such as bars and clubs, put themselves at high risk of becoming crime victims which, in turn, increases their fears. Brillon (1987:59) agrees with this conclusion:

"young people...go out more than old people...and often go to places where there is a much greater risk of victimization. This explains why they have a greater concrete fear of crime."

Using a mail survey to collect data from 2,987 Texans aged 16 years and over, Jeffords (1983:107-09) examined which situations were most fear-provoking for respondents and discovered that 1) older persons were most fearful of walking alone in their neighborhood if that neighborhood was in a dangerous area of the city; 2) younger persons were most fearful of being home alone at night. The author concludes that "the elderly are not more fearful of crime per se, but rather better able to discern dangerous situations, and subsequently put themselves at risk less often than do younger persons." Finding that 46.7 percent of high school students in St. Louis (n= 1,799) were fearful that "someone would hurt or bother them at school", Hepburn and Monti (1979:123-27) conclude that fear of victimization is a problem, not only for the elderly, but also for the young. Concurrent with extant research, 41.3 percent of female students expressed fear of victimization compared to 38.3 percent of males.

LaGrange and Ferraro (1987:381-86) believe that the amount of fear experienced in the everyday lives of most older persons has been overstated by researchers, "as the relationship between age and fear is highly dependent on the

operationalization of fear." When persons are asked about their victimization fears of specific, identifiable criminal offenses, the elderly report being substantially less fearful than younger respondents. When the level of formless, nonspecific fear is assessed, the elderly report being slightly more fearful. Within the fear of victimization literature, global, formless fear measures are most common and mask genuine differences in victimization fears across the age range: "this has the effect of exaggerating fear of crime among the elderly and perhaps even underestimating the level of fear among younger respondents."

Conducting telephone interviews among 320 Americans aged 18-86 years, LaGrange and Ferraro (1989:700-08) partially replicated Warr and Stafford's (1983) study on the proximate causes of fear, with fear being measured for each of 11 offenses using a 3-point scale. Correlation analyses revealed that younger persons were more fearful of victimization than older persons ($r = -.18, p > .05$). The authors conclude that 1) the relationship between age and fear of crime is not as prominent as the relationship between gender and fear; 2) fear of crime among older persons is not nearly as high when measured by specific, concrete measures of fear as opposed to ambiguous, formless measures. Fattah and Sacco (1989:212) agree with these conclusions, as the variability in fear of victimization

research findings is influenced by differences in how the concepts "elderly" and "fear" are operationalized.

2.2 Gender and Fear of Victimization

The Solicitor General of Canada (1985b:1) states that women express greater fear for their personal safety than do men: "this finding has been consistent across nations and over time, regardless of the age of the respondents." Research indicates that, regardless of how fear of crime is measured, women tend to be significantly more fearful than men (LaGrange and Ferraro, 1989; Lawton and Yaffe, 1980); women are more likely to restrict their behavior because of crime (Riger et al., 1982); women are more likely to worry about a wider variety of crimes (Warr, 1984). The consistency of these findings suggests that the gender distribution of fear is an empirical reality rather than a methodological artifact resulting from a greater reluctance on the part of men to admit fear of criminal harm (Sacco, 1990:487). Fattah and Sacco (1989:214) agree with the preceding statement and note that the strong relationship between gender and fear holds in both elderly and nonelderly samples, and for perceptual and behavioral measures of fear.

Conducting a mail survey among 817 Canadians in Winnipeg, Toronto and Montreal, Brillon et al. (1984:34-41) examined gender differences in fear of victimization and

found that, regardless of age, females expressed higher levels of concrete and formless fear than males. Among those 30 years and under, 44 percent of women and 33 percent of men reported concrete fear (concern of being a victim of acts of violence), while 59 percent of women and 22 percent of men reported formless fear (concern of some vague threat to one's security). Among those 60 years and over, 38 percent of women and 27 percent of men reported concrete fear, while 68 percent of women and 18 percent of men reported formless fear. Examining a sample of 1,028 adult Americans, Figgie (1980) arrives at similar conclusions: 46 percent of female respondents indicated a high level of concrete fear as compared to 34 percent of males ($\gamma = .19$); 48 percent of female respondents indicated a high level of formless fear as compared to 26 percent of males ($\gamma = .44$) (Figgie, 1980, as cited in Friedberg et al., 1983:220).

Interviewing 61,000 Canadians in 1982, the Solicitor General of Canada (1983:6) measured fear of victimization using a global, single-item indicator and found that 56 percent of women and 18 percent of men expressed feelings of unsafety when walking alone in their neighborhoods after dark. Riger et al. (1978:276) interviewed 367 adults in three American cities to examine the relationship between gender and fear. Measuring fear of crime with the question "How safe do you feel being out alone in your neighborhood

at night?", 22.8 percent of females reported feeling "very unsafe" compared to 6.4 percent of males. Among the sample, mean fear levels were significantly different between women (2.49) and men (1.84) ($F= 155.5, p=.0001$). Using personal interviews as their methods of data collection, Braungart et al. (1980:57), Lebowitz (1975:698) and Toseland (1982:204) found females to be significantly more fearful than males, and gender to be a crucial factor in understanding fear of crime. Examining a sample of 416 adults, Rucker (1990:156) discovered that 1) women were more fearful of crime than men ($\text{chi-sq.}= 14.17, p<.01$); 2) women believed they were more likely than men to be the victims of crime within the next year ($\text{chi-sq.}= 10.9, p<.01$); 3) women were more likely than men to see themselves at risk to victimization.

In two separate mail surveys conducted among adults in Seattle, Washington ($n= 339$) and Dallas, Texas ($n= 865$), Warr found that females were more fearful than males for each of 16 offenses (Warr, 1984:685-88). When gender/age groupings were compared, females 66 years and over expressed the highest mean level of fear, followed by females 19-35 years, males 19-35 years and males 66 years and over. Warr (1990:906) concludes that "when exposed to a fixed level of perceived risk, females and the elderly show greater fear than males and the young. A 50 percent probability of being assaulted will not typically produce the same degree of fear

in a 19-year-old male and a 65-year-old female." Fattah and Sacco (1989:214) agree with this conclusion, as females are likely to be fearful irrespective of their age, whereas males are likely to become fearful as they grow old.

Many studies employing multivariate statistical techniques have found gender to be a strong and consistent determinant of fear (Donnelly, 1988:77; Lee, 1982b:294; Lewis and Salem, 1986:54-56). Analysing data collected from 1,468 adults, Hill et al. (1985:547-49) regressed fear on 10 nominal to interval-level variables and found that gender explained the most variance in the dependent variable (beta= .385, $p < .01$), followed by city size (beta= .199, $p < .01$) and age (beta= .065, $p < .01$). Van Der Wurff et al. (1989:155-58) conducted 110 interviews among residents in the Netherlands to test the explanatory power of a demographic model they had constructed. A multiple regression equation comprising seven variables explained 18 percent of the variation in fear, with gender emerging as the only significant predictor in the equation (beta= .32, $p < .05$). Examining a sample of 2,900 adults in Chicago, Clemente and Kleiman (1977:527-28) found that 61 percent of women and 22 percent of men responded "yes" to the global measure of fear, "Is there any area right around here - that is, within a mile - where you would be afraid to walk at night?" When five variables were entered into a multivariate nominal scale analysis equation, gender emerged as the strongest indicator of fear (beta=

.39), followed by age (beta= .09), income (beta= .06), race (beta= .05) and education (beta= .02). Together, the five variables explained 23 percent of the variance in fear of walking alone at night. Elias (1986:120) and Toseland (1982:205) conclude that demographic factors might better predict fear than psychosocial and crime-related factors.

Researchers offer different explanations why females express higher fear levels than their male counterparts. One argument states that the physical strength of men and relative weakness of women result in the latter feeling less capable of protecting themselves from criminals. As Fattah and Sacco (1989:215) note, women are less physically capable than the young males who pose the modal threat of criminal harm, and their greater fear reflects an awareness of this reality. Gomme (1988:69) states that many women perceive themselves to be singularly indefensible and dependent upon men for protection. Conducting interviews among 367 persons, Riger et al. (1978:277-82) asked respondents how they perceived their strength and speed compared to the average male and female. Women believed themselves to be weaker and slower than both men and other women: 54 percent of males reported that they could successfully defend themselves against attack, compared to 41 percent of females ($p=.0004$). The authors conclude that lack of strength or defensive capacity among women may be more important in its effects on fear than socialized personality

traits.

Sacco (1990:499-500) uses "power-control theory" to explain the high fear level among women, for this theory suggests that there is a tendency for parents to stress the sexual vulnerability of daughters, but not sons. As a result, daughters are encouraged to restrict their activities to a greater extent and to exercise greater caution in a variety of settings and situations. Thus, variation in fear levels between the sexes is rooted in differences in family socialization into risk taking. This position is consistent with that of Warr (1985:248) who believes that the sexual vulnerability of women is fundamental to an understanding of their greater fear of crime. Burt and Estep (1981:512-20) state that virtually all women live at some level of consciousness with their sexual vulnerability. Interviewing 201 university students in Minnesota, the authors found that females expressed more fear of victimization than males ($t= 3.68, p<.001$), and that females were warned about more situations (and were afraid of more situations) than either their male counterparts or than they themselves could recall being fearful of in childhood. The authors conclude that "a sense of sexual vulnerability...becomes 'common sense' for women by the time they reach adulthood. Adult males do not share this sense of the world as a sexually dangerous place." Fattah and Sacco (1989:215), Lee (1982b:285) and Riger et al.

(1978:275-76) agree that socialization into the female sex role emphasizes submissiveness which manifests itself in terms of a pervasive anxiety about personal safety.

Garofalo (1979:88) believes that submissiveness among women is achieved by creating a fear of criminal attack - particularly a fear of rape - and thereby teaching them to feel dependent upon men for protection. Thus, women are not only socialized to be submissive and dependent, but they must live with the constant threat of sexual assault. Conducting a mail survey among 339 Seattle residents, Warr (1984:695-700; 1985:242-47) states that a "core" fear of sexual assault underlies the fears of most women. Examining 16 specific offenses, fear of rape among women was not clearly separable from their anxieties about other crimes, for respondents perceived the offenses of "being raped" and "being murdered" to be equally serious in nature. Since most criminal offenses can result in sexual assault and, since the consequences of this crime are potentially more severe and devastating for the victim than those of other crimes which occur more frequently (Cordner, 1986:230), women express a greater generalized fear than men. Warr (1984:700) and Gordon and Riger (1989:21) agree that rape may be the "master offense" in fear of victimization among women and, for younger women in particular, fear of crime is fear of rape. The Solicitor General of Canada (1985b:3) goes on to note that "the fact that sexual assault can be a

component of break and enter no doubt contributes to women's generalized fear and feelings of vulnerability."

2.3 Living Arrangement and Fear of Victimization

Whether one lives alone or with others in the same household is an important predictive variable in fear of victimization research (Lebowitz, 1975:698). Studies conducted by Pollack and Patterson (1980), Silverman and Kennedy (1985) and Ward et al. (1986) indicate that those who live alone are more fearful of crime than those who reside in multiperson households. Since the percentage of elderly Canadians living alone has been increasing (12 percent in 1961 compared to 24 percent in 1981) (Brillon, 1987:15), this trend in living arrangement among the elderly may contribute to their higher fear levels. As Stone and Frenken (1988:45-46) point out, elderly women are more fearful than elderly men, and elderly women are more likely to live alone than elderly men: in 1986, 10.9 percent of Canadian men aged 65-69 years lived alone, as compared to 26.4 percent of women in this age range.

Conducting interviews among 2,048 adults aged 60 years and over in Pennsylvania, Iutovich and Cox (1990:70) employed three specific indicators to measure fear and found that 10.5 percent of respondents who lived alone felt unsafe in their neighborhoods, as compared to 6.9 percent of those

who lived with one or more other persons ($p=.000$).

Braungart et al. (1980:61) measured fear of victimization with the global question "Is there any area right around here - that is, within a mile - where you would be afraid to walk alone at night?" Among a sample of 1,499 adults, 73 percent of elderly females living alone reported fear compared to 56 percent of those living with others; 43 percent of elderly males living alone reported fear compared to 29 percent of those living with others. Results from the Canadian Urban Victimization Survey show that, of those persons under 65 years of age, females living alone were most fearful (56 percent), followed by females living with others (55 percent), males living with others (17 percent), and males living alone (16 percent). Among persons 65 years and over, females living alone again were the most fearful (67 percent), with those males living with others expressing the least fear of victimization (29 percent) (Solicitor General of Canada, 1985a:5). Warr (1990:899-902) conducted a mail survey among 865 adult Texans and found that there was a 3.91 difference in mean fear levels between young females who lived alone (7.10) and young females who lived with others (3.19) on a scale from 1 to 10. The difference in mean fear levels was not as pronounced between young males who lived alone (3.53) and those who lived with others (1.85). Warr states that higher fear among young females, especially those who live alone,

"lies in the fact that younger women are susceptible to one serious crime to which men are rarely subjected and to which older women are much less susceptible - rape."

Most studies using multivariate statistical techniques have found living arrangement to be a moderate or weak indicator of fear. Collecting data from 1,439 elderly persons in Edmonton, Kennedy and Silverman (1985:250) state that "the fearful individual is female ($r = .30$), who is a long term resident ($r = -.17$), living downtown ($r = .17$) and living alone ($r = .18$)." Conducting a mail survey among 1,835 persons in Mississippi, Parker (1988:491) found living arrangement to be a weak, nonsignificant predictor of fear ($\beta = .009$, $p > .05$). Lee (1983:748) arrives at a similar conclusion from a mail survey of 2,832 adults: regressing fear on 13 socioeconomic variables, living arrangement emerged as the weakest predictor in the equation ($\beta = -.037$, $p > .01$). Akers et al. (1987:496-99) conducted 1,410 interviews among elderly persons in two Florida communities and found that those who lived alone expressed greater fear, but the relationship between the two variables was weak ($r = -.08$).

Researchers offer similar explanations why those who live alone express greater fear of victimization than those who reside with others. Both Gomme (1986:135) and Middleton (1986:252) assert that counting on others in the household to furnish emotional and economic support contributes to

one's sense of security as much as walls and locked doors contribute to one's physical protection. Donnelly (1988:82), Lee (1983:746) and Skogan (1987:141) believe that persons who live alone are more fearful because a ready source of assistance in the event of victimization is not available. Warr (1990:895) follows this reasoning when he states that being alone stimulates fear because having others in the immediate vicinity ensures help in the event of attack and reduces the attractiveness of a potential victim. Goldsmith (1976:40) and Jones (1987:196) believe that living alone enhances vulnerability both to victimization and to the consequences of crime: "being without the social support of living with others is most directly linked to fear of crime among the elderly" (Skogan and Maxfield, 1981:118). The above explanations suggest that living alone increases one's actual and/or perceived risk of victimization which, in turn, increases one's fear. Analysing secondary data from four American surveys of persons 65 years and over, Liang and Sengstock (1981:467) found that the actual rate of victimization was 13-22 incidents per 1,000 individuals who resided by themselves, compared to 6-9 incidents per 1,000 individuals who resided with others. Fattah and Sacco (1989:157) conclude that "not living alone reduces the risk of criminal victimization as well as the level of fear and anxiety relating to criminal victimization."

2.4 Perceived Seriousness and Fear of Victimization

A victimization event can have three different impacts on its victims: financial loss, physical injury and diminution of well-being (Yin, 1985:92). Research suggests (Baumer, 1985; Eve, 1985; Khullar and Wyatt, 1989) that it is rational for the elderly to be fearful of any criminal offense because they tend to experience severe consequences when they are victimized. As Brillon (1987:20) states, "because there are more old people, proportionately, who are vulnerable psychologically, physically and financially, it is easy to understand that, for them, a theft, an attack or ill treatment can have more serious consequences than for younger persons." Skogan and Maxfield (1981:78) agree that the high fear levels among women and the elderly stem from what could happen to them and the potential consequences of criminal attack. Warr and Stafford (1983:1034) make a logical point: why should someone fear a truly petty offense, which has no perceived serious consequences, even if it seems inevitable? "The capacity for self-defense, the gravity of the consequences, and the possibility of recovering after being victimized appear to be important factors in fear" (Brillon et al., 1984:263).

Results from the Canadian Urban Victimization Survey show that, because of the elderly's relatively low annual incomes (an average of \$12,600 for those 65 years and over

compared to \$25,200 for those 16-24 years), mean net loss as a percentage of income is more than twice as high for elderly crime victims (1.4 percent) when compared to victims 16-24 years (.4 percent). The Solicitor General of Canada (1985a:2-3; 1985c:5) concludes from the data that the financial impact of a victimization experience is more severe for elderly people than for any other age group. Goldsmith (1976:40), Hirschel and Rubin (1982:360) and Kinnon and MacLeod (1990:10) suggest that, because many older persons live on fixed incomes, with limited financial resources and reduced employment opportunities, they are least able to afford the depredations of crime. A slight monetary loss may prove catastrophic, and theft may mean the loss of something that cannot be replaced, or only with difficulty, because it is too expensive or is irreplaceable (Brillon, 1987:40). Warr (1984:700) believes that the loss of property may be more subjectively threatening for older than younger persons because it may represent a greater destruction of time and symbolic assets; older persons may feel that there is less time available to cope with change and replace what may have been lost. Smith (1987:6-7) goes on to note that fear of crime among the elderly may reflect their subjective attachment to property and their sensitivity to the symbolic loss associated with the removal or destruction of possessions.

Analysing secondary data collected in national American

surveys in 1973 and 1974, Cook et al. (1978:342-43) state that the crime problem for the elderly is a condition-related problem of low incomes. Among a sample of 3,596 persons, the median victim 65 years and over lost \$60 per burglary in 1973, compared to \$50 for those 33-39 years and \$100 for those 21-26 years. Household heads 65 years and over who experienced a burglary in 1973 lost an average of 10.7 percent of their monthly incomes, compared to 5.5 percent for those 33-39 years and 13.1 percent for those 21-26 years. Cook et al. define "catastrophic" loss as the net loss of more than a household's total monthly income in a given year. For those 65 years and over, 7.3 percent experienced catastrophic losses due to burglary in 1973, as compared to 3.4 percent of persons 33-39 years and 17.5 percent of persons 21-26 years. These findings suggest that 1) elderly victims lose the same or less than other adults when absolute measures are employed; 2) elderly victims lose less than young people, but the same or more than other adults, when the dollar loss from crime is adjusted for differences in monthly incomes.

Cook et al. (1978:345-47) examined medical expenses among different age categories of their sample and found that, of those crime victims who required medical care, 56.7 percent of the elderly received it at some financial expense, compared to 44.2 percent of those 33-39 years

and 58.7 percent of those 21-26 years; median medical expenses as a percentage of monthly incomes were 25.7 percent for the elderly, 17.8 percent for those 33-39 years and 12 percent for those 21-26 years. The authors conclude that elderly crime victims lose less than others on an absolute basis and slightly more than others on a relative basis. But as Iutovich and Cox (1990:66) assert, since the elderly have fewer financial resources to rely on when victimization occurs, their losses tend to be more immediately damaging.

Brillon (1987:91) states that "fear of crime in elderly people is increased...by the dread of the psychological, material and above all, the physical consequences of a personal attack." Analysing secondary data compiled by the American Law Enforcement Administration, Hirschel and Rubin (1982:362) found that elderly crime victims were more likely to sustain physical injuries than younger individuals: 41.7 percent of those 65 years and over and 36 percent of those 25-34 years were injured as a result of robberies. Conklin (1976:104-09) notes that, when aged persons are attacked, there is a greater likelihood of injury and subsequent hospitalization. Among a sample of crime victims, 41.9 percent of those 65 years and over were injured as a result of criminal attack, and 27.5 percent of those injured required hospitalization. The corresponding numbers for those 18-26 years were 25.5 percent and 19.7 percent

respectively. Analysing secondary data collected in national American surveys, Cook et al. (1978:344-46) found that 1) for personal crimes recorded in 1973-1974, 44.6 percent of those 21-26 years were attacked as compared to 32.9 percent of those 65 years and over; 2) when attacked, the elderly (66.2 percent) were more likely to be injured than the young (56.9 percent); 3) while younger persons were likely to sustain knife or gun wounds (10.2 percent) and broken bones or teeth (8.2 percent) in a personal attack, elderly victims were likely to sustain internal injuries and become unconscious (19.5 percent), or receive bruises, cuts, black eyes and scratches (94.5 percent); 4) of those persons injured as a result of victimization, 47 percent of the elderly required medical care compared to 42.4 percent of younger persons. In opposition to the above findings, Clarke et al. (1985:8) conducted a mail survey among 9,150 persons in England and Wales and found that only 23 percent of elderly crime victims reported injuries compared to 41 percent of younger victims.

The Solicitor General of Canada (1985a:2) states that, while elderly crime victims are no more likely than younger victims to suffer injuries as a result of victimization, the consequences of their injuries are typically more severe: elderly victims are twice as likely as younger victims to require medical and dental attention. Because 85 percent of older persons have one or more chronic illnesses, physical

injuries sustained from victimization may require a long and difficult recovery period, or result in permanent disability (Lawton et al., 1976:24). Thus, an elderly person may perceive any criminal offense to be serious in nature, not only because of the physical injuries which may result, but because the severity of those injuries may require the surrender of personal autonomy (entering a nursing home) (Killias, 1990:101).

Skogan and Maxfield (1981:50) believe that citizens are most fearful of crimes which potentially may lead to physical violence. These are "personal contact" crimes which involve a confrontation between victim and offender and may result in injury and death. Data from the Canadian Urban Victimization Survey show that elderly Canadians are most likely to experience household thefts (26 percent) and break and enters (23 percent) (Solicitor General of Canada, 1984a:6). Since the elderly spend more time at home than younger persons (Baker, 1988:70), since most crimes perpetrated against this age group occur in the home, and since the elderly tend to view offenders as murderous, violent individuals (Brillon et al., 1984:27), a criminal offense is likely to be perceived as an extremely serious event: a personal confrontation in the home with a violent offender. Brillon agrees with the above conclusion when he states that "there can be no doubt about how apprehensive elderly respondents feel about the physical consequences of

an attack." Interviewing 210 persons 60 years and over in Montreal, the author found that 69 percent of women and 39 percent of men expressed fear of being attacked in their homes (Brillon, 1986, as cited in Brillon, 1987:18).

Whereas financial loss and physical injury may not follow all types of victimization, diminution of well-being (reductions in general happiness, welfare and prosperity of the victim) is likely to accompany any criminal offense (Yin, 1985:64). As Hough (1985:491) points out, the entire home provides the raw materials from which to construct a sense of order, and the destruction of this order can prove traumatic. Since most crimes committed against the elderly occur in or near their homes (Antunes et al., 1977:324; Decker et al., 1982:74; Solicitor General of Canada, 1984a:6), the sanctity, safety and privacy of the home is violated, which can create a radical sense of vulnerability among this age group (Elias, 1986:116). Thus, any criminal offense may be perceived as serious in nature because it has the potential to destroy the security of a place which most people believe should be a source of unquestioned safety. As Antunes et al. (1977:323) assert, "crimes committed in the home or near it may be especially disconcerting, for they represent a penetration of one's personal life space."

The Solicitor General of Canada (1986:7) states that the emotional trauma caused by the invasion of one's home and privacy can be more painful and enduring than the

financial cost of theft or damage. Conducting a mail survey among persons 15 years and over in England and Wales, Hough (1985:491) found that fear of household burglary (30 percent) was greater than that for vehicle theft (6 percent). Comparing mean fear levels across 16 specific offenses, Warr (1984:685) discovered that respondents (regardless of age or gender) were most fearful of the offense "having someone break into your home while you're away." As Elias (1986:116) states, being victimized can produce a strong sense of invasion or intrusion even from property crimes committed in the victim's absence. Because an elderly person, when victimized, is likely to experience a household crime, there is a violation of one's "defensible space" which can lead to a perceived lack of safety, depression, and feelings of helplessness as one recognizes that the risk of victimization cannot be eliminated by staying at home (Fattah and Sacco, 1989:189; Solicitor General of Canada, 1985c:3; Toseland, 1982:206).

Many researchers (Box et al., 1988; Skogan and Maxfield, 1981; Yin, 1985) contend that the perceived seriousness of victimization is an important determinant of fear among all age categories. As Elias (1986:120) notes, "fear might depend as much on the seriousness of the crimes with which we feel threatened as on our perceived risks of being attacked." Conducting a mail survey among 339 residents of Seattle, Warr and Stafford (1983:1036-38) found

a moderate, positive association between perceived seriousness and fear of victimization ($r = .56$). Calculating a multiple regression equation, the perceived seriousness of an offense ($\beta = 1.05$) and the perceived risk of an offense ($\beta = 1.02$) were almost of equal importance in explaining variation in fear of victimization for a particular offense. Smith and Hill (1991a:321) conducted a mail survey among 3,109 adults in North Carolina and used an index of eight statements to measure fear of crime. Regressing fear on nine variables, perceived crime seriousness emerged as the strongest indicator of fear ($\beta = .358$, $p < .001$), followed by education ($\beta = -.188$, $p < .001$) and gender ($\beta = .158$, $p < .001$). Together, the independent variables explained 22.94 percent ($p < .001$) of the variation in fear. Maxfield (1987:62) concludes that "if perceived risk of victimization is an important component of fear, so are individual beliefs about the consequences or seriousness of possible victimization."

2.5 Perceived Risk and Fear of Victimization

The Solicitor General of Canada (1985a:4; 1988:18) states that the elderly possess a general feeling of vulnerability as age increases and physical capacities decrease. Although females may feel highly at risk to victimization throughout their life cycles, vulnerability

increases among males as they grow older (Liska et al., 1988:833). Brillon (1987:12) agrees that aging, because it is accompanied by a loss of strength and physical resistance, increases one's vulnerability to crime. Because fear levels vary with respondents' subjective estimates of their likelihood of being victimized (McConnell, 1989:42), it is not surprising that those who perceive themselves to be highly at risk to victimization (the elderly) also express the greatest level of fear of victimization (Rucker, 1990:157). Gates and Rohe (1987:427), Holland Baker et al. (1983:321) and Killias (1990:97) agree that the perceived risk of victimization is an important fear-producing factor. As Warr and Stafford (1983:1034) assert, why should someone fear a crime - even a serious crime such as murder - if it seems a remote possibility? Research suggests that "people can be expected to be fearful of crime when they believe themselves to be at risk" (Maxfield, 1987:51), for it is the subjective probability rather than the objective probability of victimization that is the principal determinant of fear (Fattah and Sacco, 1989:157).

In 1978-79, 36 percent of men and 34 percent of women 65 years and over reported a restriction of physical activity due to a major disability. This restriction of activity was four times more likely to occur among those 65 years and over compared to those 15-64 years (Government of Canada, 1983:56-57). Brillon (1987:12,19) goes on to

note that elderly Canadians experience more chronic illnesses (85.6 percent) than younger persons (51.3 percent), and that one in five aged persons have health problems that limit their activities and force them to stay home a great deal. Because the aging process is accompanied by a greater chance of illness, diminished physical strength and stamina, and a weakening/loss of the senses (particularly hearing and eyesight), the criminological importance of this process is that it increases vulnerability to victimization and makes the elderly attractive crime targets (Fattah and Sacco, 1989:7). Braungart et al. (1980:64), Goldsmith (1976:40) and Smith (1987:6) agree that fearfulness among the elderly may be partially based on feelings of vulnerability related to poor or weakening health. As Scruton (1986:40) states, "the situation of being old and frail can produce fear."

Mawby (1982:304) and Skogan and Maxfield (1981:71-72) believe that women and the elderly experience "passive vulnerability", which is a recognition by potential offenders that they can be exploited. Because an openness to attack, powerlessness to resist attack, and exposure to traumatic physical and emotional consequences if attacked usually cannot be altered, the potential for exploitation is an enduring feature in the lives of these two demographic groups. Thus, only in old age do men begin to experience the defensive disadvantage which women experience all their

lives (Stinchcombe et al., 1980:57). Brillon et al. (1984:70-73) conducted a survey of 817 Canadians in 1981 and found their elderly respondents to be "passively vulnerable": only 19 percent of those 60 years and over (compared to 49 percent of those 30 years and under) thought they could do something, alone or with others, to prevent criminal attack or to reduce crime in their neighborhoods. Brillon (1987:18) and Normoyle and Lavrakas (1984:192) agree that perceiving victimization as an inevitable and uncontrollable event increases fear among the elderly.

Warr (1984:694-95) believes that most of the variation in fear among age/gender groups is due to some difference in the relation between fear and perceived risk: confronted with equal (apparent) chances of victimization, females and older individuals display higher fear levels than their counterparts because they tend to associate any criminal offense as being accompanied by additional offenses. For example, a high perceived probability of residential burglary may provoke intense fear among many women because assault, rape, and even homicide are viewed as likely to follow the initial offense. The same perceived risk of burglary may produce little fear among men, however, because of their greater physical strength to resist attack. Similarly, the elderly citizen who encounters a juvenile on the street may "read" much more into that situation than, say, another adolescent. Baumer (1985:245) agrees with Warr

(1984) when he states that "for those who are vulnerable, high levels of fear can be produced by subjectively equal threatening environmental conditions." Interviewing 1,454 adults, Baumer found that women and the elderly were more fearful of crime than men or younger respondents, although each group perceived an almost equal amount of crime in their local environments.

Goldsmith and Tomas (1974:10) list a series of reasons why the elderly are more at risk to victimization than younger age groups: 1) they are more likely to live alone, and social isolation increases vulnerability to crime; 2) older persons have diminished physical strength and stamina and, thus, are less able to defend themselves or to escape from threatening situations; 3) older persons are far more likely to suffer from physical ailments such as loss of hearing or sight, arthritis, and circulatory problems which increase their vulnerability; 4) older persons are physically more fragile and more easily hurt should they opt to defend themselves; 5) potential criminals are aware of the diminished physical capacity and the physical vulnerability of the elderly and are thus more likely to seek out an elderly target (whose age status is easily visible); 6) because of diminished income (one out of 10 elderly families in Canada lives below the poverty level) (Brillon, 1987:20), there is a greater likelihood that older persons will reside in high-crime areas. Thus, they find

themselves in close proximity to those most likely to victimize them - unemployed, teenage drop-outs; 7) the dates of receipt by mail of monthly pension checks and, hence, the dates when older persons are most likely to have cash on their person or in their dwelling, are widely known; 8) mainly due to physical and financial reasons, older persons are more dependent on walking or the use of public transportation. Lindsay (1991:55) concludes that, although older persons are less exposed to victimization than younger adults (they spend more time in the home), their fear may be a realistic response to the risk they run when they are exposed. Brillon (1987:90) follows this argument: if the elderly were to frequent high-risk places (bars, nightclubs) more often, their victimization rates would increase.

LaGrange and Ferraro (1989:704-05) assert that "persons who perceive they are at high risk of victimization are more fearful of crime." Measuring fear for 11 specific offenses among 320 persons 18-86 years, the authors found that all of the correlation coefficients between perceived risk and the 11 indicators of fear were statistically significant at $p < .05$. For example, the correlation between perceived risk and fear of "having someone break into your home while you're home" was $\gamma = .41$ ($p < .05$). Lee (1982a:662-65) conducted a mail survey among 4,069 adults in Washington State and found the urban elderly to be more fearful of crime than their rural counterparts due to their higher

perceived risk of victimization (the correlation between perceived risk and fear was $r = .49$, $p < .001$). Lee concludes that "elderly farm residents are not fearful of walking alone after dark because they know perfectly well that, in their environments, this is not a high-risk situation." O'Bryant et al. (1991:173) interviewed 300 widowed women aged 60 years and over and found that perceived risk had the single greatest effect on the odds of being afraid: "a change in the perception of the crime rate from low to moderate increased the odds of being afraid 125.8 percent." Bankston et al. (1987:104-05) conducted a mail survey among 1,770 adults in Louisiana and employed the fear and perceived risk measurements of Warr and Stafford (1983). Regressing fear on perceived risk, the offense of "being murdered" had a mean fear value (intercept) at minimal risk (0) of .91. With an increase of one unit in perceived risk, the rate of increase in fear (slope) was .57. Thus, respondents perceiving "being murdered" as an "unlikely" event could be predicted to have a fear level of .91. As the perceived risk of this offense increased from "unlikely" (0) to "somewhat likely" (1) or "very likely" (2), the level of fear for that offense would increase from .91 to 1.48 to 2.05 respectively.

Researchers employing multivariate statistical techniques have found perceived risk to be a strong predictor of fear. Ortega and Myles (1987:137-48)

interviewed 3,018 adults in Chicago and, measuring fear of crime with the question "Is there an area right around here - that is, within a mile - where you would be afraid to walk alone at night?", found a significant, positive relationship between fear and perceived risk ($r = .203$, $p < .001$). When fear was regressed on six variables, race emerged as the strongest indicator of fear ($\beta = .323$, $p < .0001$), followed by gender ($\beta = .278$, $p < .0001$), perceived risk ($\beta = .201$, $p < .0001$) and age ($\beta = .141$, $p < .0001$). The authors conclude that "the higher the perceived risk of personal victimization, the greater the likelihood of being fearful." Giles-Sims (1984:229-30) agrees with the preceding statement, as she found a moderately positive relationship between perceived risk and fear ($r = .415$, $p = .001$) among a sample of 522 elderly Texans. Calculating a multiple regression equation, the author discovered that 17.8 percent of the variation in fear was explained by perceived risk ($\beta = .399$, $p < .001$), marital status ($\beta = -.064$, $p > .05$), income ($\beta = -.058$, $p > .05$) and gender ($\beta = .053$, $p > .05$).

Analysing data from the 1984 British Crime Survey, Maxfield (1987:27-29) states that "being fearful about becoming a victim of crime is, not surprisingly, related to feeling at risk personally, irrespective of the objective accuracy of such estimates." Maxfield bases his conclusion on the results of a multiple regression equation, where perceived risk emerged as the strongest predictor of the

fear of burglary (beta= .35), followed by perceived seriousness (beta= .11), gender (beta= -.06) and age (beta= -.03). Together, the four variables explained 13.91 percent of the variation in the dependent variable. Studies by Baumer (1985) and Box et al. (1988) arrive at similar conclusions: perceived risk is an important predictor of fear, as "fear is a response to subjectively defined risk" (Baumer, 1985:251).

2.6 Fear of Victimization and Security Precautions

National Crime Survey data show that 46 percent of adult Americans changed some aspect of their lifestyle because of their fear of victimization (Rucker, 1990:151). In a recent Canadian survey of 1,500 adults, 33 percent of the sample expressed fear of walking alone in their neighborhoods at night, 51 percent reported that they locked their doors all of the time (even when home), and 60 percent reported taking more personal and household precautions now than they did a few years ago (Chisholm, 1993:25). Research suggests that fear of crime is linked to behavior: "the more one fears becoming a crime victim, the greater the tendency to take precautions to protect oneself and one's goods" (Brillon et al., 1984:151). Fattah and Sacco (1989:210) and Ortega and Myles (1987:138) agree that the causal order runs primarily from fear to precautionary

behavior, as the latter is a consequence of fear.

Lavrakas and Lewis (1980:255) state that security precautions are specific behaviors by which citizens attempt to avoid experiencing some noxious condition or event. Yin (1985:81-84) conceptualizes security precautions as coping behaviors that people deliberately engage in with the intention of reducing the likelihood of victimization or the severity of its impact if victimization does occur: "this difference is similar...to perceived likelihood and perceived seriousness, the two aspects of fear of crime." Riger et al. (1982:371,83) make a distinction between avoidance behaviors (strategies to isolate oneself from exposure to victimization, such as staying off the streets at night and locking doors), and mobilization behaviors (spending financial resources to resist victimization, such as installing burglar alarms and window bars). Gates and Rohe (1987:427-28) go on to note a third category of precautionary behaviors, collective reactions, which include formal participation in crime prevention activities and informal cooperation through neighborhood communication and surveillance.

Yin (1985:89-90) notes that there is a difference between recurrent/daily and one-time precautionary behaviors, and that researchers should focus on the former as they may be better at reflecting one's daily concern of fear. Since the purchase of theft insurance, burglar alarms

and window bars can involve considerable expense, these one-time precautions are likely to be utilized only by those with high incomes. Renters are less able, financially, and less willing to install security devices permanently on a residence they do not own. Home owners have more control over their property and a long-term commitment to it that facilitates crime-prevention efforts (Skogan, 1987:141). A recurrent behavior, such as turning on lights at night when leaving the home, may become an integral part of a person's daily routine and, thus, may be better at indicating a daily concern of fear.

Research (Burt and Katz, 1985:351; Garofalo, 1981:849; Riger et al., 1982:372) indicates that persons who report greater fear take more precautions to prevent victimization. Maxfield (1987:46) analysed data collected in the 1984 British Crime Survey and found that, of those persons expressing high levels of fear of victimization, 68 percent avoided certain areas of the city, 62 percent avoided certain people, and 25 percent avoided using public transportation. Krahn and Kennedy (1985:704) analysed secondary data collected from 11,061 Canadians and found that 35 percent of the sample always locked their homes and 20 percent practiced an avoidance behavior, such as not walking alone at night. Correlation analyses revealed moderate relationships between fear and precautionary behaviors taken within the home ($r = .59$) and within one's

lifestyle ($r = .55$).

Since females and the elderly tend to be more fearful of crime than males and younger persons (Warr, 1990:906), it is logical that those more fearful should engage in more behaviors to prevent victimization. Warr (1985:239,48) examined home and lifestyle precautions among a sample of 339 adults and found no significant gender difference in the use of home precautions. Females, however, were more likely to engage in lifestyle precautions: 42 percent of females and 8 percent of males avoided going out alone; 40 percent of females and 9 percent of males avoided going out at night; 27 percent of females and 8 percent of males avoided opening their doors to strangers. Warr concludes that "the social costs of fear fall largely on women." Analysing National Crime Survey data, Gordon and Riger (1989:17-18) found that 36 percent of females and 13 percent of males always locked their doors when home, 79 percent of females and 64 percent of males always locked the doors of the vehicle in which they were driving, and 65 percent of females and 57 percent of males always turned on the lights or radio when away from home. From a series of American studies, Gordon and Riger (1979:399) and Riger et al. (1982:380) conclude that 1) females engage in more avoidance behaviors than males ($F = 40.41, p = .001$); 2) fear is the strongest predictor of avoidance behavior among women ($r = .436, p = .001$). Interviewing 523 adults in Atlanta, Gates

and Rohe (1987:449) arrive at similar conclusions: fearful women engage in more avoidance behaviors than fearful men ($r = .20, p < .05$); fearful women engage in more mobilization behaviors than fearful men ($r = .085, p < .05$); as fear increases, both avoidance behaviors ($r = .337, p < .05$) and mobilization behaviors ($r = .067, p > .05$) increase. The authors conclude that avoidance reactions among women are the simplest responses to crime because they are relatively easy to adopt and do not require attending neighborhood meetings and self-defense classes.

Conklin (1976:107) and Yin (1985:93) state that the elderly tend to adopt avoidance behaviors (such as staying off the street) because they are more willing than younger persons to adjust their daily lives to the threat of crime. Goldsmith (1976:40) agrees that the elderly adapt to fear "by locking their doors and refusing to venture out unless it is absolutely necessary." Gordon and Riger (1979:399) analysed secondary data collected in a Kansas City police survey and found that older persons engaged in more avoidance behaviors ($F = 8.13, p = .001$) and mobilization behaviors ($F = 8.43, p = .001$) than younger persons. Brillon et al. (1984:116) conducted a mail survey among 817 Canadians and found the opposite to be true - the elderly participated in fewer mobilization behaviors than the young ($\gamma = -.21$). For example, 22 percent of those 60 years and over and 56 percent of those 30 years and under used

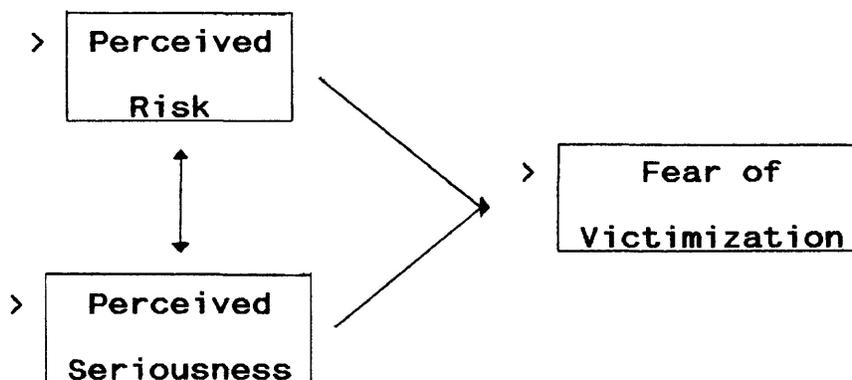
safety locks in their homes; 14 percent of the elderly and 22 percent of younger persons put identification labels on valuables; 10 percent of the elderly and 20 percent of younger persons owned a guard dog. Interviewing 803 residents of Brooklyn, New York, Kail and Kleinman (1985:403-04) found a moderate relationship between fear and behavioral restrictions ($r = .41$), with females being more likely to restrict their behaviors than males, the young or the elderly. Research suggests that fear of victimization increases precautionary behaviors (especially avoidance behaviors) among all demographic categories - especially among women.

2.7 The Conceptualization of Fear

There are two areas of consensus within fear of victimization literature: 1) fear is a multidimensional phenomenon which is empirically complex in terms of specifying its determinants (Bankston et al., 1987:98; Clarke, 1984:338; Parker and Ray, 1990:33; Skogan, 1987:143); 2) fear of crime research lacks a comprehensive theoretical framework and has almost nothing in the way of general theory (Clarke and Lewis, 1982:49; Clemente and Kleiman, 1977:520; Sacco, 1990:486; Warr, 1987:29-30). Yin (1985:37) notes that, to make sense of the empirical generalizations that research has provided, it is necessary

to construct a theory of fear of crime which would provide an intuitive understanding of fear of crime relationships, and suggest new hypotheses. Many researchers (Box et al., 1988:342; Ferraro and LaGrange, 1987:82; Killias, 1990:98; Sparks and Ogles, 1990:352; Yin, 1985:33) believe that Warr and Stafford's (1983) model on the "proximate" causes of fear of victimization contributes, both theoretically and empirically, to a better understanding of this phenomenon. As Taylor and Hale (1986:160) note, "a theoretical understanding of fear will progress only if explicit, simple causal models are the starting point."

Figure 1. A Model of Fear of Victimization



Source: Warr and Stafford (1983)

Warr and Stafford (1983:1034-35) assert that fear of victimization for a particular offense is a function of the perceived seriousness and perceived risk associated with

that offense. High perceived risk and seriousness are both necessary conditions for fear, meaning that fear is high only if perceived risk and seriousness are both high, and is low if either perceived risk or serious is low. As the authors note, "why should someone fear a crime - even a serious crime - if it seems a remote possibility? Or fear a truly petty offense, even it if seems inevitable?" To produce high fear, an offense must be viewed as both serious and likely (Warr, 1985:242; 1987:41). Sparks and Ogles (1990:353) provide an illustration: a truck driver traveling through a high-crime neighborhood might perceive the likelihood of crime to be high, but his actual fear might be low due to a high perception of coping with the consequences of crime. Fattah and Sacco (1989:226) support the logic of Warr and Stafford (1983): "elderly fear of crime may represent the exercise of caution by a group in society that frequently lacks the control necessary to manage the risk of criminal harm or to marshal the resources necessary to offset its consequences."

Conducting a mail survey among 339 residents of Seattle, Washington, Warr and Stafford (1983:1038-40) measured respondents' fear, perceived risk and perceived seriousness of victimization for 16 personal, property and public order offenses and found that 1) mean fear levels were highest for property offenses; 2) neither perceived risk nor seriousness, by itself, was a strong predictor of

fear (the correlation between risk and fear was $r = .17$, while that between seriousness and fear was $r = .56$); 3) perceived risk and seriousness were moderately, inversely correlated ($r = -.63$); 4) using an additive multiple regression model, the ordinal-level variables of perceived risk and seriousness explained 76 percent of the variability in fear; 5) with beta weights of 1.02 (perceived risk) and 1.05 (perceived seriousness), each variable was of almost equal importance in explaining variation in fear.

Killias (1990:98) states that risk and seriousness, the perceptual characteristics of an offense, are necessary conditions for the emergence of fear and "encompass all physical, social and situational components." Yin (1985:37,59) believes that fear of crime is an attitude with two dimensions, perceived risk and perceived seriousness: "as long as a person does not consider himself a likely target or that victimization would seriously harm him, the person is not fearful." Ferraro and LaGrange (1987:80-82) note that not all criminal offenses pose similar levels of threat to the public, partly because of differences in the likelihood of victimization (e.g., mugging versus kidnaping), and partly because of variation in the seriousness of offenses (e.g., property destruction versus sexual assault). Thus, fear reactions vary substantially by the perceived seriousness of the crime and the individual's judgment of the risk of victimization. Gomme (1986:250),

O'Bryant et al. (1991:176) and Rucker (1990:151) agree that the locus of fear is to be found in a person's vulnerability to crime and in concern about its potential consequences (Skogan and Maxfield, 1981:63-64). Ferraro and LaGrange (1987:82) conclude that, as others replicate and extend the work of Warr and Stafford (1983), "we will be in a much better position to understand the etiology and reduction of fear of crime."

CHAPTER THREE: METHODOLOGY

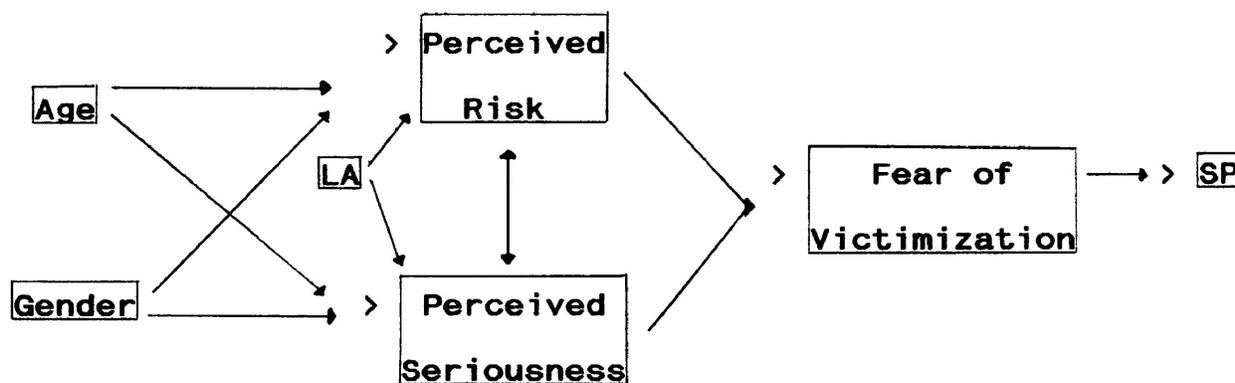
3.1 Propositions and Research Questions

Research indicates that the variables age, gender and living arrangement are predictors of the level of fear of victimization among the Canadian population. Women, the elderly and those who live alone tend to be more fearful than their counterparts because they perceive victimization to be more likely to occur, and more serious in nature when it does occur. Thus, those more fearful of victimization tend to engage in more security precautions to prevent victimization.

Because one of the objectives of this thesis was to test the empirical validity of Warr and Stafford's (1983) conceptual model of fear, the variables perceived risk, perceived seriousness and fear of victimization were incorporated into an explanatory model which included the variables age, gender, living arrangement and security precautions. In the research designs of Giles-Sims (1984) and Maxfield (1987), demographic characteristics, victimization experiences and perceptions of crime preceded fear of victimization in time, with fear resulting in security precautions. Holland Baker et al. (1983:327) believe that perceptions precede fear in causal ordering,

and Fattah and Sacco (1989:223) assert that "perceptions of crime that are conceptualized as being causally prior to fear...have considerable theoretical utility."

Figure 2. An Explanatory Model of Fear of Victimization



(LA = Living Arrangement; SP = Security Precautions)

Five main propositions were deduced from the explanatory model:

- 1) The higher the age, the higher the perceived risk and perceived seriousness of victimization.
- 2) Females have a higher perceived risk and perceived seriousness of victimization than males.
- 3) Those who live alone have a higher perceived risk and perceived seriousness of victimization than those who do not live alone.
- 4) The higher the perceived risk and perceived seriousness of victimization, the higher the fear of victimization.

5) The higher the fear of victimization, the more security precautions taken.

The above propositions led to the prediction that older females living alone who felt highly at risk of being victimized seriously would be the most fearful demographic group in this study and, thus, they would be most likely to engage in security precautions to prevent victimization. Correlation and multiple regression analyses were used to test each proposition (to examine the relationships among variables in the explanatory model) and to answer the following research questions:

Question One: Does the explanatory model of this study explain more variance in fear of victimization than the model of Warr and Stafford (1983)?

Question Two: Are perceived risk and perceived seriousness the strongest indicators of fear of victimization?

Questions three, four and five were answered using descriptive statistics and tests of significance. Refer to Appendix A for a list of the 16 offenses used in this study (and how each was categorized as a personal, property or public order offense) and a list of the eight recurrent

security precautions used in this study.

Question Three: Which of the three categories of offenses (personal, property and public order) elicit the highest and lowest mean levels of fear, risk and seriousness among the sample and four subsamples of male students, male retirees, female students and female retirees?

Question Four: Which of the 16 types of offenses elicit the highest and lowest mean levels of fear, risk and seriousness among the sample and four subsamples?

Question Five: Which of the eight types of recurrent security precautions is utilized the most and least among the sample and four subsamples?

3.2 Concept Definitions

Age

Two age categories were used in this study: 1) the elderly were defined as persons 50 years and over who resided independently in Thunder Bay (not in an

institution), and who were designated as "retired" by the 1991 Henderson Directory; 2) the young were defined as persons 18-30 years who resided in Thunder Bay, and who were designated as a "student" by the Directory. The labels of "retired" and "student" allowed these individuals to be distinguished from others listed in the Directory.

Gender

This dichotomy entailed two mutually exclusive categories: male and female.

Living Arrangement

This variable was defined as whether a respondent lived alone or with one or more other persons in the same household. As Lebowitz (1975:698) notes, because there is so little difference in fearfulness between those living with one other person and those living with two or more persons, it is important only to distinguish between those who live alone and those who do not.

Perceived Risk of Victimization

Researchers define this perceptual variable in a relatively consistent manner: "it is a person's perception of his or her chances of victimization" (Gordon and Riger, 1979:395); "perceived risk is an individual's view of the likelihood that he or she will be a victim of crime"

(Maxfield, 1987:40); "it is the belief that one is susceptible to future negative outcomes and unprotected from danger or misfortune" (Perloff, 1983:43); "it is the probability that an individual will experience a given level of loss or damage" (Stinchcombe et al., 1980:40); "perceived risk is the subjective probability that an offense will occur" (Warr, 1987:30). Because one objective of this thesis was to test the empirical validity of Warr and Stafford's (1983) conceptual model of fear, this entailed a partial replication of their research design and, thus, their definitions and measurements of the variables perceived risk, perceived seriousness and fear of victimization were adopted. Perceived risk of victimization was defined in this study as a person's perception of how likely it was that each of 16 criminal offenses would happen to him during the next year, based on his own circumstances and experiences (Warr and Stafford, 1983:1037). The temporal referent of "during the next year" was included to ensure a consistent reference period for respondents when reporting their perceptions of risk (Warr, 1987:37).

Perceived Seriousness of Victimization

Although many investigators believe that the perceived seriousness of victimization is an important component of fear (Box et al., 1988; Skogan and Maxfield, 1981; Yin, 1985), few define this concept precisely. Box et al.

(1988:343) and Smith and Hill (1991a:326) measured respondents' perceived seriousness of victimization for various criminal offenses without defining the concept explicitly. Warr (1982:196) states that "seriousness is a normative (and hence subjective) property of offenses and is therefore 'available' to everyone. Indeed, seriousness may be the only property of offenses which is 'known' to everyone, and it is surely the most salient." Following Warr and Stafford (1983:1041), perceived seriousness of victimization was defined in this study as a person's opinion of the financial, physical and psychological harm or damage associated with each of 16 criminal offenses.

Fear of Victimization

Yin (1980:496) found in a review of the literature that the concept of fear was almost never explicitly defined by researchers. Examining 46 fear of crime studies, LaGrange and Ferraro (1987:388) conclude that "the striking absence of definitions of fear of crime is partly responsible for the conceptual confusion. More often than not, fear of crime is 'implicitly' defined by the measurement procedure itself, meaning that fear of crime becomes whatever the measure measures." Fattah and Sacco (1989:207) agree with the preceding statement as many researchers measure the emotional character of fear, without defining the concept precisely, through questionnaire items that attempt to gauge

the extent to which respondents "feel unsafe", "worry about crime" or are "afraid to walk alone in the neighborhood after dark." Sacco (1982a:295) believes that the construction of theory and the effective implementation of research design have been hampered by an inability on the part of criminologists to adequately describe the contents or the parameters of fear perceptions. Researchers (Key, 1986:51; McConnell, 1989:30; Teske, Jr. and Hazlett, 1988:275) agree that few efforts have been expended on the task of precisely defining fear and, thus, the meaning of this concept has not acquired uniformity in the literature. As Yin (1985:34) notes, "defining fear of crime is an often overlooked step in research."

Lohman (1983:338) states that fear of victimization is composed of three elements: 1) a cognitive element consisting of information on the subject; 2) a normative element consisting of opinions and attitudes towards crime issues; 3) an emotional element consisting of the character or emotional state of the person concerned. Lohman's (1983) analysis seems complete, as fear (when defined) is usually viewed as an emotional or attitudinal phenomenon (Cordner, 1986:223). Levy and Guttman (1985:263) and Yin (1985:33) believe that fear of victimization is defined most appropriately as an attitude with two components: an assessment of the risk of being victimized and an appraisal of the seriousness of being victimized. Stinchcombe et al.

(1980:39) do not categorize fear as an attitude or emotion but agree with Yin (1985) that it is "the perception by a person of high risk of serious damage, which the person can do nothing to alleviate or control." In opposition to these researchers, Warr (1980:468) asserts that fear is an affective (not a cognitive) phenomenon, and Ferraro and LaGrange (1987:73) note that fear is the negative emotional reaction generated by crime or symbols associated with crime. Although stated in various ways, most researchers concur that fearfulness is an emotional state: "it is an emotional reaction to a situation which is perceived as potentially harmful and dangerous" (Clarke, 1984:327); "fear is an emotional response to a threat: an admission to self and others that crime is intimidating; an expression of one's sense of danger and anxiety at the prospect of being harmed" (Smith, 1987:2); "it is the amount of anxiety and concern that persons have of being a victim" (Sundeen and Mathieu, 1976:214); "fear is the emotional dimension of people's response to crime" (Taylor and Hale, 1986:153); "it is a strong emotion involving perception of danger, unpleasant agitation, and often a desire to hide or to escape (Wolman, 1989:129-30). The above quotations illustrate that no generally accepted definition exists for the concept of fear of victimization within criminology.

Gates and Rohe (1987:427) define fear of crime as "the affective experience associated with the perceived personal

risk of victimization." Gomme (1986:254) states that "fear of crime refers to a respondent's personal assessment of his or her risks of becoming the victim of a crime." Research suggests that a major problem in conceptualizing fear of crime is the confounding of fear with the risk of or vulnerability to crime (Miethe and Lee, 1984:399). As Ferraro and LaGrange (1988:280) assert, perceptions of risk and feelings of fear are two distinct reactions to crime and, thus, there needs to be a distinction between risk (a cognitive judgment), concern (a cognitive value) and fear (an affective emotion). Giles-Sims (1984:223) and Sparks and Ogles (1990:353) agree that fear of victimization is conceptually distinct from probability estimates of victimization. Warr (1980:459) and Warr and Stafford (1983:1034) note that investigators use the terms "fear of crime", "perceived probability of victimization" and "perceived frequency" as if they were synonymous when logic suggests that there are no necessary relations among these variables: two individuals who share the same perceived probability of victimization may evince quite different levels of fear if one has reason to fear homicide and the other burglary. Yin (1980:496) concludes that although fear of crime is almost never explicitly defined by researchers, their measurements suggest that such fear is implicitly defined as the perception of the probability of being victimized: "this definition, however, is not adequate

because the frightful element of crime is not based solely on the probability of being victimized, whether perceived or real."

Not only is the concept of fear seldom defined precisely and often confused with the concept of risk, but the phrase "fear of crime" is problematic because an individual may fear for the safety of a significant other without fearing for himself (Warr, 1984:681). As Warr and Stafford (1983:1041) note, "fear of victimization denotes the fear of criminal acts committed against one's own person and property, while "fear of crime" carries with it divergent meanings such as concern over declining social trust or "moral decay." Williams et al. (1991:8) agree that "fear of crime" is a vague concept and should be replaced with "worry about crime" until the field reaches agreement on the elements of fear. Ferraro and LaGrange (1987:71) conclude that "fear of victimization" is preferable to "fear of crime" because the latter has acquired so many divergent meanings that its current utility is negligible. Despite the above arguments, the phrases "fear of victimization" and "fear of crime" continue to be used interchangeably in the literature.

Figgie (1980) and Garofalo (1981) each make an important distinction regarding the concept of fear of victimization. Figgie (1980) reports that there are two types of fear: concrete fear is the concern of being a

victim of acts of violence, while formless fear is the concern of some vague threat to one's security (Figgie, 1980, as cited in Brillon, 1987:57). Bernard (1992:67) believes that Figgie's (1980) study was a turning point in American research on fear of crime because it suggested that females were more likely than males to experience both types of fear, while younger persons were more likely to experience concrete fear and older persons were more likely to experience formless fear. Furthermore, Figgie's (1980) distinction may have encouraged investigators to move away from global measures of fear to offense-specific measures.

The emotional state of a person responding to a questionnaire item about fear of being mugged is quite different than his or her emotional state when actually confronted by a mugger on the street. Thus, Garofalo (1981:841) makes a distinction between anticipated and actual fear, and believes that researchers should be aware of this difference when conceptualizing and measuring fear of crime. Ferraro and LaGrange (1988:285) agree with Garofalo (1981) that social surveys of fear are limited to measuring anticipated fear: "a person filling out a questionnaire is not likely to be experiencing fear of crime at that particular moment. Even the best indicators of fear...are approximate measures of real fear because they are removed in time and space from the fear-producing event" (LaGrange and Ferraro, 1989:699).

To summarize the research presented up to this point:
1) most investigators define fear as an emotion (Wolman, 1989:39); 2) perceptions of risk and feelings of fear are two distinct reactions to crime (Ferraro and LaGrange, 1988:280); 3) the phrase "fear of victimization" is preferable to "fear of crime" (Ferraro and LaGrange, 1987:71); 4) fear can be classified as anticipated or actual (Garofalo, 1981:841), concrete or formless (Figgie, 1980, as cited in Brillon, 1987:57).

Warr and Stafford's (1983:1035-36) definition of fear of victimization was used in this study: how afraid a person was of becoming the victim of each of 16 criminal offenses in his everyday life. This definition is supported by researchers (LaGrange and Ferraro, 1987; O'Bryant et al., 1991) because it refers to concrete offenses, deals with respondents' anticipated fear of victimization, and does not confuse perceptions of risk with feelings of fear. Ferraro and LaGrange (1987:81) go on to note that the word "afraid" taps the emotional state of fear, and the phrase "in your everyday life" makes the question relevant to the everyday experiences of individuals. Evans and Himelfarb (1992:85) agree that criminological questions should address the subjective side of crime and address people's everyday fears and concerns.

Security Precautions

These variables were defined as recurrent (daily) behaviors taken within the home and within one's lifestyle to prevent victimization (and to reduce fear of victimization). This type of precautionary behavior does not involve spending financial resources to resist victimization (e.g., purchasing a burglar alarm or theft insurance) because such one-time precautions are likely to be utilized only by those with high incomes. Recurrent security precautions include such behaviors as turning on the lights at night when leaving the home and avoiding outside activities at night. Refer to Appendix A for a list of the eight security precautions used in this study.

3.3 Concept Measurements

Age

Elderly respondents in this study were defined as those persons 50 years and over who resided independently in Thunder Bay and who were designated as "retired" by the 1991 Henderson Directory. Young respondents were defined as persons 18-30 years who resided in Thunder Bay and who were designated as a "student" by the Directory. Each respondent was asked to indicate on the questionnaire the age category to which he belonged: 17 years and under, 18-30 years, 31-49 years, 50 years and over. Retirees under 50 years of

age and students not between 18-30 years were excluded from this study.

Gender

At the sampling stage of the study, this dichotomy was measured by examining the first name or title (Mr., Mrs.) of each respondent chosen from the Directory. If the gender of a retiree or student could not be determined at the time of case selection (such as the entry "H. Miller"), this person was still included in the study, as all respondents were asked to indicate their gender on the questionnaire. Refer to Appendix B for an example of the 1991 Henderson Directory.

Living Arrangement

This variable was defined as whether a respondent lived alone or with one or more other persons in the same household. Living arrangement was measured with the question "How many people live with you in your residence?" (McConnell, 1989:232). A response of zero indicated that the person lived alone.

Warr and Stafford's (1983:1035-43) measurements of perceived risk, perceived seriousness and fear of victimization were used in this study. Each variable was measured for 16 personal, property and public order offenses using an identical question format and five-point (0-4)

response scale (refer to the questionnaire in Appendix C). The perceived risk and seriousness questions were placed after the fear question to avoid cueing respondents to either criterion when they reported their fear. To ensure that respondents reported fear and perceived risk only for themselves (as opposed to, say, another household member), the offense descriptions were written in the passive tense emphasizing (along with the prologue) that the respondent was the hypothetical victim in each question. Respondents were reminded of the direction and meaning of each scale through the use of phrases printed above the scales: "not afraid", "somewhat afraid" and "very afraid" in the fear of victimization question; "not likely", "somewhat likely" and "very likely" in the perceived risk question; "not serious", "somewhat serious" and "very serious" in the perceived seriousness question. To minimize clumping, re-scoring and other potential sources of measurement error, the offenses with the highest and lowest mean levels of perceived seriousness in Warr and Stafford's (1983:1042) study ("being murdered" and "being approached by people begging for money") were placed at the beginning of each list of offenses to give respondents an immediate sense of the range of each scale. The remaining offenses in each list were randomly ordered.

Perceived Risk of Victimization

This variable was measured using the following question: For each type of crime listed below, please indicate how likely you think it is to happen to you during the next year. If you feel that it is NOT LIKELY to happen to you, then circle the number 0 beside the crime. If you feel that it is VERY LIKELY to happen to you, then circle the number 4 beside the crime. If you think the likelihood that it will happen to you lies somewhere in between, then circle the number between 0 and 4 that best indicates how likely you think it is to happen to you in the next year. No one can predict the future, of course, so your answer will only be a guess. But give me your best guess based on your own circumstances and experiences (Warr and Stafford, 1983:1037).

Perceived Seriousness of Victimization ✓

This variable was measured using the following question: There are many different kinds of crime. Some are considered to have very harmful financial, physical and psychological consequences, while others are not so serious in nature. I am interested in your opinion about how serious each type of crime is. If you think it is NOT SERIOUS, then circle the number 0 beside the crime. If you think it is VERY SERIOUS, then circle the number 4 beside the crime. If you think the crime falls somewhere between

the least serious and the most serious, then circle the number between 0 and 4 which best indicates how serious you think the crime is. Remember that the seriousness of a crime is only a matter of opinion, and it is your opinion that I want (Warr and Stafford, 1983:1037).

Fear of Victimization ↙

McConnell (1989:27) believes that measurement problems are common in social science research due to the multifaceted nature of social phenomena and the recognition that all social phenomena are both a cause and effect of other social phenomena. Fear of victimization research is not exempt from measurement problems, as the most appropriate way to operationalize this concept has been deliberated by many investigators (LaGrange and Ferraro, 1987; Teske, Jr. and Hazlett, 1988; Yin, 1985) with no apparent consensus. As LaGrange and Ferraro (1987:373; 1989:698) assert, fear of crime lacks appropriate conceptual and measurement clarity in the literature and the measures used often do not measure fear. Many researchers measure respondents' perceived risk of crime or their general concern about crime as a social problem instead of fear of crime per se. Akers et al. (1987:495) summarize the diverging opinions of researchers in the field:

Is fear to be measured as fear of crime in general or of specific crimes, as fear or as worry or as concern,

as fear of crime without specificity or as specific fear of becoming a victim, as rational assessment of risk or as emotional fear, as fear related to everyday life or in response to hypothetical events unrelated to respondents' ordinary routines, as only attitudinal or as behavioral precautions taken against crime, as risk assessment or as perceived seriousness of crime?

Lewis and Salem (1986:xii-xiii) conclude that, although there are no right or wrong definitions and measurements of fear of crime, there are differences in the extent to which analyses capture the experiences and perceptions of those who are fearful.

Fear of crime as a phenomenon was "discovered" in the mid-1960's by pollsters in the United States (Baumer, 1985:239). During a time of social upheaval, public polls and surveys documented the emergence of crime as a major social issue, as people were feeling less safe on the street. Yin (1985:34-35) argues that social researchers were then alerted to the phenomenon of fear and simply borrowed the two fear of crime measurements used by the pollsters: 1) "Is there any area right around here - that is, within a mile - where you would be afraid to walk alone at night: yes or no?" 2) "How safe do you feel or would you feel being out alone in your neighborhood at night: very safe, reasonably safe, somewhat unsafe, or very unsafe?" Research (Garofalo, 1979; Maxfield, 1987; Smith

and Hill, 1991b) suggests that, although there has been consistency in the use of fear of crime measurements, the validity of these global, single-item indicators is questionable and, thus, research findings derived from these measures also must be questioned.

Ferraro and LaGrange (1987:77) examined 46 fear of crime studies and found that a majority of researchers (Braungart et al., 1980; Clarke and Lewis, 1982; Clemente and Kleiman, 1976; 1977; Erskine, 1974; Jeffords, 1983; Lebowitz, 1975; Lee, 1982a; 1982b) measured fear using the Gallop Poll's global question "Is there any area right around here - that is, within a mile - where you would be afraid to walk alone at night: yes or no?" One of the many problems with this indicator is that it applies only to the issue of street crime and there is no way of ascertaining the fear evoked by various types of crime (Brillon, 1987:61; Ferraro and LaGrange, 1988:279; Fattah and Sacco, 1989:209). Because the word "crime", or a specific act that constitutes a crime, is not mentioned in the question, there is the possibility that respondents may view their neighborhoods as unsafe because of, for example, unsafe construction sites or unleashed neighborhood dogs (Fattah and Sacco, 1989:209). The scenario of walking alone at night appears overly ominous and is likely to evoke exaggerated levels of fear. As LaGrange and Ferraro (1989:699,715) point out, the routine activities of most people do not include walking

alone on the streets at night and, therefore, the question lacks relevance to the everyday lives of most persons - especially to older persons who are least likely to travel alone on the street at night. Two final problems surrounding this measure include: 1) a dichotomous format which disallows measurement of the degree of fear (Smith and Hill, 1991b:221); 2) an inability to distinguish between perception of risk and the fear which that perception evokes (Stinchcombe et al., 1980:45). Ferraro and LaGrange (1987:77) conclude that "continued use of this question as an indicator of fear of crime is difficult to justify."

A second measure commonly employed in fear of crime research (Baumer, 1985; Liska et al., 1982; Maxfield, 1984; Riger et al., 1978; Skogan and Maxfield, 1981; Solicitor General of Canada, 1985b) is the National Crime Survey question "How safe do you feel or would you feel being out alone in your neighborhood at night: very safe, reasonably safe, somewhat unsafe or very unsafe?" Research suggests that this single-item indicator is inherently flawed: 1) the phrase "do you feel or would you feel" is double-barreled and so invites a mixing of actual feelings of fear with guesses about hypothetical situations (Garofalo, 1979:82); 2) the term "neighborhood" is given no specific reference and is probably interpreted differently by different respondents (Fattah and Sacco, 1989:209); 3) a person is directed to think about being alone, but there is

probably great variability among people in the amount of time they spend outside unaccompanied (Garofalo, 1979:82; Jeffords, 1983:104); 4) the word "crime", or a specific act that constitutes a crime, is not included in the question (LaGrange and Ferraro, 1987:377); 5) the question is more an assessment of one's risk of victimization than one's fear: a person who indicates that he feels "very unsafe" may not be afraid at all, but simply aware of the relative risks in his environment (Ferraro and LaGrange, 1987:76); 6) the question is not offense-specific and, thus, it is unclear what people feel safe or unsafe from (Maxfield, 1987:59; Gordon and Riger, 1989:202).

The above research suggests that standard fear of crime measures are too general, too hypothetically abstract and too foreboding to have much relevance to everyday life (although they form the empirical foundation of fear of crime research). LaGrange and Ferraro (1987:386) go on to note that global indicators mask genuine differences in victimization fears across the age range, which has the effect of exaggerating fear of crime among the elderly and perhaps even underestimating the level of fear among younger persons. Gomme (1988:72-73) and Parker (1988:490-91) agree with the preceding statement, as each researcher measured fear with a series of statements and found the young to be more fearful than the elderly. Fattah and Sacco (1989:219) conclude that the reliance upon global measures of fear

hinders an understanding of exactly what it is that frightens the elderly.

Fear of victimization was measured in this study using the following question: At one time or another, most of us have experienced fear about becoming the victim of a crime. Below is a list of different types of crime. I am interested in how afraid you are about becoming the victim of each type of crime in your everyday life. If you are NOT AFRAID at all, then circle the number 0 beside the crime. If you are VERY AFRAID, then circle the number 4 beside the crime. If your fear falls somewhere in between, then circle the number between 0 and 4 which best describes your fear about that crime (Warr and Stafford, 1983:1036-37).

Researchers (Eve, 1985; Lindesay, 1991; Yin, 1985) support the use of offense-specific measures of fear because this phenomenon "does not simply refer to how unsafe people feel on the neighborhood streets after dark - many more people worry about specific offenses" (Maxfield, 1987:56). As Warr and Stafford (1983:1041) note, the use of global measures seems to rest on the assumption that fear of victimization is a diffuse affective state, meaning that the offense(s) that individuals fear are not always phenomenologically apparent to them. Ferraro and LaGrange (1987:74) agree that fear of being victimized varies by the type of crime considered and that, in order to get the most valid and reliable indicators of fear of crime, it is best

to specify the type of crime to the respondent rather than leave it up to the respondent's own inference. Williams et al. (1991:7) believe that the best fear of crime measure is one that clearly focuses on crime, is composed of several items with a simple multi-point response format, and is reliable. After an examination of 46 fear of crime studies, Ferraro and LaGrange (1987:78,82) conclude that 1) the series of indicators employed by Warr and Stafford (1983) to measure the amount of fear for 16 different offenses are useful measures of fear of crime; 2) their study "provides a better measure of fear of victimization than most of the other studies and is a good baseline for further analyses."

Security Precautions

These variables were defined as recurrent (daily) behaviors taken within the home and within one's lifestyle to prevent victimization (and to reduce fear of victimization). Following Gordon and Riger (1989:17-18) and Warr (1985:247), security precautions were measured with the statement "Each day many people take steps to protect themselves and their property from crimes and criminals. Please check either 'yes' or 'no' to each of the following questions." This statement was followed by eight questions relating to security precautions, such as "Do you usually avoid using public transportation at night: yes or no?" Refer to the questionnaire in Appendix C for the exact

questions asked and the open-ended question which asked respondents to "Please list any other precautions which you take each day to protect yourself and your property from crimes and criminals."

3.4 Sampling Procedure

This study was cross-sectional in time dimension and a probability sample was drawn using a multi-stage sampling technique. The populations of interest were students aged 18-30 years and noninstitutionalized retirees aged 50 years and over who resided in Thunder Bay. The sampling frame used in this study was the 1991 Henderson Directory of Thunder Bay, a public document published annually by R.L. Polk & Company of Vancouver. The Directory listed the names, addresses and telephone numbers of businesses and adults residing in the city, and provided such detailed information as the occupations of individuals and whether a person was retired or a student. Use of the 1991 Directory was problematic for two reasons: 1) the data were not up-to-date, as the document was published in December, 1991 but used in September, 1992 as the sampling frame for this study; 2) the Directory was only 69 percent complete, as it listed the names of 59,997 persons aged 18 years and over and there were 87,008 adults residing in the city as of June, 1991 (Statistics Canada, 1992b:440). Despite these

limitations, Kelley (1992) believes that the Directory is one of the best sampling frames available in collecting data from the elderly of Thunder Bay.

Because the goal was to have at least 30 respondents each in four subsamples of male students, male retirees, female students and female retirees, multi-stage sampling was used. Following Babbie (1986:163-65) and Jackson (1988:163): 1) the 1991 Directory contained 384 pages with three columns in each page and a maximum of 96 names in each column; 2) using a table of random numbers, 80 names were selected for each subsample in three stages; the page number was determined first, followed by the column and case numbers. In stage one, the first three digits of each random number (a range of 1-384) indicated the page in which a name would be selected. In stage two, the last digit of each random number (a range of 1-3) indicated the column in which a name would be selected. In stage three, the last two digits of each random number (the range depended on the number of names in each column) indicated the name to be included in the subsample. Any number chosen that exceeded the range in its respective stage (e.g., 459 exceeded the range of 1-384 in stage one) was replaced with a substitute number found in the range; 3) due to the likelihood of nonresponses, 50 replacement names were included in each subsample and, thus, 320 persons (80 in each subsample) were selected to participate in this study.

3.5 The Instrument

Dillman (1991:226) believes that sociology is only one of many disciplines that depends on data collected by mail surveys for the scientific advancement of the discipline. Key (1986:51-52) states that the use of questionnaires has become the dominant technique in a majority of empirical studies examining fear of crime because this method offers the possibility of standardization which facilitates comparisons across samples. The mail survey was chosen as the data collection instrument in this study because 1) fear of victimization appears to be a primary cause of nonresponse in urban surveys using personal interviews (Warr, 1985:239); 2) there is a greater tendency for respondents to report sensitive information about themselves in mail questionnaires than in face-to-face interviews (Herzog and Kulka, 1989:83); 3) it is a relatively fast and inexpensive method of collecting information from a large number of people, and allows the sample results to be generalized to a large population (Jackson, 1988:28,32). Although the mail survey, like all methods of research, has weaknesses (e.g., it can yield a low response rate and is not appropriate for measuring change over time), it is justified for this study because of the sensitive nature of the research topic and because surveys using personal interviews tend to undersample fearful individuals (Warr and

Stafford, 1983:1035).

The questionnaire and covering letter of this study (refer to Appendix C) received ethical approval from the Ethics Advisory Committee of Lakehead University in July, 1992. The covering letter stated that only the person whose name appeared on the envelope was eligible to complete the questionnaire. Respondents were advised of the purpose of the research, how they were selected to participate voluntarily, the confidentiality of their information, and that the completed form was to be returned in the stamped reply envelope provided. The questionnaire itself was four pages in length and several pretests conducted among students at Lakehead University and elderly persons in the community helped to ensure that it was understandable, concise, formal but also personal (e.g., each covering letter was printed on departmental stationery and signed by the researcher).

A questionnaire and stamped reply envelope were mailed to each of 320 Thunder Bay residents in the first week of October, 1992. As suggested by Babbie (1986:211-23) and Dillman (1991:225-49), individuals were contacted by telephone after a three week waiting period to thank them for their participation in the study or to encourage them to complete their questionnaires. It was during the telephone follow-ups that replacement questionnaires were sent to those persons who had not received or had misplaced their

original forms. Dillman (1991:235) supports the use of telephone follow-ups (in lieu of reminder postcards or letters) as research demonstrates that nearly comparable response rates can be obtained with this substitution. Telephone follow-ups were also inexpensive, and the telephone numbers of most individuals in the sample were obtainable from either the Directory or the 1992-93 Thunder Bay Telephone Book.

Three weeks after the initial mailing of 320 questionnaires, 154 forms were received of which 141 were complete (a usable response rate of 44 percent). Thirteen questionnaires were unusable due to respondents falling into the wrong age categories (four), deaths (three), missing data (three), relocations (two) and refusals (one). Of the 166 nonrespondents, 145 were contacted by telephone over a two week period (the remainder could not be reached): 61 persons requested a second questionnaire, 25 persons indicated that they would mail their completed forms, 23 persons had relocated, nine persons refused to participate, and the remaining 27 individuals could not participate due to vision problems, illnesses and deaths. Sixty-one questionnaires were mailed to individuals during the follow-up stage and this resulted in an additional 53 completed forms. The data collection procedure occurred over an 11 week period (October-December, 1992) and yielded a total of 207 questionnaires of which 194 were complete (a

final usable response rate of 61 percent). Babbie (1986:221) asserts that "a response rate of at least 50 percent is adequate for analysis and reporting. A response rate of 60 percent is good." Of the four demographic groups to which questionnaires were mailed, the highest usable response rate came from female students (76 percent of the subsample), followed by female retirees (74 percent), male students (49 percent) and male retirees (44 percent). Females were overrepresented in the sample: 63 percent of respondents aged 50 years and over were female as compared to 54 percent of Thunder Bay residents aged 50 years and over; 61 percent of respondents aged 18-30 years were female as compared to 50 percent of Thunder Bay residents aged 18-30 years (Statistics Canada, 1992b:440). Females may have been overrepresented in this study for two reasons: 1) there was a lack of fear among men, or a reluctance to admit fear of criminal harm (even though respondents' anonymity and confidentiality were assured); 2) due to their higher fear levels, the topic was more salient to women and so they were more willing than men to admit their fears and to participate in a study examining why people are fearful of victimization.

CHAPTER FOUR: FINDINGS

The nominal and ordinal-level variables of this study were analyzed using parametric and nonparametric statistics in a SPSS program (with the significance level set at $p < .05$). Interval-level statistics were employed 1) so that the results of this study could be compared to those of Warr and Stafford (1983) and 2) because even though some errors in inference may occasionally be made by using ordinal data with parametric techniques, the increase in power makes the risk seem small (Bohrnstedt and Carter, 1971:131). As Hedderson (1987:80) points out, many researchers like to use interval measure statistics because they are better than ordinal measure statistics for handling multiple variable analyses and for detecting weak associations between variables. Consequently, there is a tendency to use interval-level statistics with ordinal variables. Bohrnstedt and Carter (1971:120,132), after examining the degree to which parametric estimates are unaffected by violations of assumptions, conclude that "when one has a variable which is measured at least at the ordinal level, parametric statistics not only can be, but should be, applied." Anderson (1961:316) agrees with the preceding statement, as he believes that an interval scale is not prerequisite to making a statistical inference based on a

parametric test. Research suggests that the classification of a variable's level of measurement is not always clear-cut, and that "there is no simple, hard-and-fast rule about which statistical technique to use for a particular set of variables" (Hays, 1973:87-90). Hedderson (1987:80) concludes that there will always be disputes over whether variables are "interval enough" to justify the use of statistics designed for interval measures.

Warr and Stafford (1983:1035-37) measured fear, perceived risk and perceived seriousness of victimization using 11-point (0-10) scales and analyzed their data by calculating means, correlation coefficients and regression coefficients. Since respondents in their Seattle study rated each of 16 offenses on scales from 0-10, Warr (1992:1) argues that the scales are "at least interval...and even if they weren't, regression models are very robust when it comes to levels of measurement." Bankston et al. (1987:105) follow this rationale as they not only borrowed the fear of victimization measurement of Warr and Stafford (1983), but analyzed their data using analysis of variance and multiple regression techniques. Kerlinger and Pedhazur (1973:48) agree with this type of statistical analysis, as one "can ordinarily go ahead with analysis of variance and multiple regression analysis without worrying too much about assumptions."

Many researchers support the statistical reasoning of

Warr and Stafford (1983). Hedderson (1987:92) states that a common practice is to assume that the categories on an ordinal variable represent roughly equal steps on the measurement and to use the variable as an interval variable. Williams et al. (1991:4) assert that "the use of a numbered scale with standard boundaries boosts what is normally ordinal measurement to a close approximation of interval scales." In studies conducted by Giles-Sims (1984), Gomme (1988), Hill et al. (1985), Ortega and Myles (1987), Parker (1988) and Sacco (1982b), ordinal-level variables were analyzed in multiple regression equations due to "the robustness of regression analysis" (Gomme, 1988:73). Other researchers (Burt and Estep, 1981; Hedderson, 1987; Riger et al., 1978; Warr, 1984) apply parametric statistics (e.g., analysis of variance) to ordinal-level variables and are justified in doing so (according to Bohrnstedt and Carter, 1971:130-31) because 1) most of the measuring instruments in sociology measure at the ordinal level; 2) "statistical tests are robust enough to allow the researcher to use them with little fear of gross errors regardless of whether or not he has an interval or ratio scale so long as his ordinal measure is monotonically related to the underlying true scale."

4.1 Proposition Testing

Five propositions were deduced from the explanatory model of this thesis and each was tested by calculating rank-order correlation coefficients and chi-square tests of independence. When the relationships between fear, perceived risk and perceived seriousness were assessed, zero-order correlation coefficients were calculated so that the results of this study could be compared to those of Warr and Stafford (1983). The Spearman coefficient measures the strength and indicates the direction of the relationship between two ordinal variables and, like the zero-order coefficient, it ranges in value from -1 (perfect negative association between the rankings of two variables) to +1 (perfect positive association) (Ott et al., 1987:408-12). Chi-square statistics were calculated to test the null hypothesis of bivariate independence.

Proposition One: The higher the age, the higher the perceived risk and perceived seriousness of victimization.

The chi-square values in Table 1 show that age was related to perceived risk, perceived seriousness and fear of victimization. The weak but significant coefficients suggest that, although students perceived the consequences

Table 1. Spearman rank-order (rs) correlation matrix of Fear and Independent Variables with chi-square (cs) tests.

	Age	Gender	LA	Risk	Serious
Risk	cs=15.07** rs= -.14*	4.42 .09	2.50 .02		
Serious	cs=28.00** rs= .15*	12.02* .25**	17.07* -.01	29.07** .13* (r= .21**)	
Fear	cs=10.34* rs= -.13*	14.86** .25**	6.48 .05	95.75** .54** (r= .59**)	55.19** .30** (r= .31**)

LA= Living Arrangement/r= zero-order correlation coefficient
**p<.01 / *p<.05 (one-tailed test)

Table 2. Chi-square (cs) tests between Fear and Eight Recurrent Security Precautions for the Sample (n= 194).

Lights	Fear			Doors	Fear		
	Low	High			Low	High	
	%	%			%	%	
No	17	9	cs= 2.30	No	43	34	cs= 1.32
Yes	83	91		Yes	57	66	
Strangers	Fear			Neighbor	Fear		
	Low	High			Low	High	
	%	%			%	%	
No	49	19	cs=15.48**	No	82	72	cs= 2.02
Yes	51	81		Yes	18	28	
Out Alone	Fear			Out Night	Fear		
	Low	High			Low	High	
	%	%			%	%	
No	70	45	cs=11.03**	No	72	53	cs= 6.39*
Yes	30	55		Yes	28	47	
Ride Bus	Fear			Lock Car	Fear		
	Low	High			Low	High	
	%	%			%	%	
No	44	16	cs=14.40**	No	52	36	cs= 4.14*
Yes	56	84		Yes	48	64	

Low Mean Fear = 0-2.0; High Mean Fear = 2.1-4.0
**p<.01 / *p<.05

of victimization to be slightly less serious than retirees ($r_s = .15, p < .05$), students felt slightly more at risk to victimization ($r_s = -.14, p < .05$) and expressed a slightly higher level of fear of victimization ($r_s = -.13, p < .05$). Proposition One was only partially supported by the data, as there was no evidence to conclude that retirees perceived victimization to be more likely to occur, or that they were more fearful of crime than students.

Proposition Two: Females have a higher perceived risk and perceived seriousness of victimization than males.

The chi-square values in Table 1 indicate that gender was related to perceived seriousness and fear of victimization, but was unrelated to perceived risk. The weak but significant coefficients suggest that females perceived victimization to be more serious in nature than males ($r_s = .25, p < .01$) and also expressed a higher level of fear of victimization than males ($r_s = .25, p < .01$). Proposition Two was only partially supported by the data, as there was no evidence to conclude that females perceived themselves to be significantly more at risk to crime. It should be noted that inferences regarding gender can only be extended to populations of retired and student males and retired and student females, since respondents were selected

to participate in this study based on these attributes (retiree or student).

Proposition Three: Those who live alone have a higher perceived risk and perceived seriousness of victimization than those who do not live alone.

The chi-square values in Table 1 show that living arrangement was related to perceived seriousness only, although the strength of the relationship was weak ($r_s = -.01$). The analyses suggest that persons who lived alone perceived victimization to be slightly more serious in its consequences than persons who lived with others. Proposition Three was only partially supported by the data, as there was statistical independence between living arrangement and both perceived risk and fear of victimization.

Proposition Four: The higher the perceived risk and perceived seriousness of victimization, the higher the fear of victimization.

The strongest bivariate relationships in Table 1 existed between risk and fear ($r_s = .54$) and seriousness and fear ($r_s = .30$). These coefficients indicate that the ranks

on risk and fear and the ranks on seriousness and fear were positively correlated (e.g., a person ranked high on perceived risk was likely to be ranked high on fear of victimization, and vice versa). Proposition Four was supported by the data, as both perceived risk and perceived seriousness varied directly with fear of victimization.

Table 1 includes three zero-order correlation coefficients which were calculated so that the results of this study could be compared to those of Warr and Stafford (1983). The analyses indicate that 1) since the rank-order and zero-order correlation coefficients were similar in value (e.g., the correlations between seriousness and fear were $r_s = .30$ and $r = .31$ respectively), the ordinal-level data of this thesis were not grossly misrepresented by being assessed on a parametric model; 2) the weak relationship between risk and seriousness ($r_s = .13$, $r = .21$) supported the use of multiple regression analysis in this study, as this method assumes the absence of perfect multicollinearity (Lewis-Beck, 1980:58).

Warr and Stafford (1983:1038,1040) collected data from 339 Seattle residents and found that the relationship between risk and seriousness ($r = -.63$) was stronger than that between seriousness and fear ($r = .56$) or risk and fear ($r = .17$). The results of this study were not closely comparable, as the association between risk and fear ($r = .59$) was stronger than that between seriousness and fear

($r = .31$) or risk and seriousness ($r = .21$).

Proposition Five: The higher the fear of victimization, the more security precautions taken.

The chi-square values in Table 2 indicate that fear of victimization was related to five of eight security precautions: avoiding opening the door to strangers, avoiding going out alone, avoiding going out at night, avoiding using public transportation at night, locking doors when sitting or riding in a vehicle. When persons with a high degree of fear (mean= 2.1-4.0) were significantly more likely to engage in a precautionary behavior than persons with a low degree of fear (mean= 0-2.0), there was statistical dependence between fear and that security precaution. For example, 81 percent of persons expressing a high degree of fear responded "yes" to the question "Do you usually avoid opening your door to strangers?" ("strangers") compared to 51 percent of persons expressing a low degree of fear (chi-sq.= 15.48, $p < .01$). The relationship between fear and "Do you usually lock the doors and windows of your residence during the day even when you are home?" ("doors") was nonsignificant (chi-sq.= 1.32, $p > .05$) because respondents in both fear categories were almost equally likely to engage (or not to engage) in this behavior. Proposition Five was supported by the data, as those persons

expressing a high degree of fear were more likely to engage in each security precaution than those persons expressing a low degree of fear.

4.2 The Research Questions

Since few phenomena are products of a single cause (Lewis-Beck, 1980:47), the relations between independent variables and the dependent variable and the relations among independent variables must be known in order to explain a phenomenon (Kerlinger and Pedhazur, 1973:48-49). Fear of victimization was examined in this study using multiple regression analysis, as the basic goal of this technique is to produce a linear combination of independent variables which correlate as highly as possible with the dependent variable. This linear combination can then be used to predict values of the dependent variable, and the importance of each of the independent variables in that prediction can be assessed (Nie et al., 1975:8-9).

The stepwise method of regression analysis was used in this study because it indicated the increase in explained variance that was achieved with the addition of each predictor variable to the regression equation (Mueller et al., 1977:306). The stepwise procedure occurred in three stages: 1) independent variables were entered into the regression equation one at a time (starting with the

variable having the strongest zero-order correlation with fear) until there were no new variables which added significantly ($p < .05$) to the collective predictive power of those already entered; 2) if adding a new variable to the equation caused one which was previously entered no longer to provide an adequate independent prediction of the dependent variable, it was removed from the equation at that step (West, 1991:126-32); 3) when no variables in the equation could be removed at the $p > .10$ level and no variables not in the equation could be entered at the $p < .05$ level, the procedure was complete (SPSS Inc., 1990:592). The stepwise method generated a regression equation in which each variable present made a significant, independent contribution in predicting fear of victimization. It should be noted that those variables not in the equation when the stepwise method was complete were forced into the equation (using the "enter" method) so that the predictive strength of all variables could be assessed (SPSS Inc., 1990:589).

Hedderson (1987:104) states that the regression model is based upon three major assumptions: 1) the dependent and independent variables are interval-level and normally distributed; 2) the effects of the independent variables are linear (the effect of a unit difference in an independent variable is the same at all points in the range of the variable); 3) independent variables are not correlated with one another. The ordinal-level variables of this study

(perceived risk, perceived seriousness and fear of victimization) satisfied most of the preceding assumptions: 1) each variable approximated a normal distribution (see Figure 3); 2) scatter diagrams were produced using a SPSS program and the relationships between risk and fear and between seriousness and fear appeared to be linear; 3) the rank-order and zero-order correlation coefficients in Table 1 indicate that risk and seriousness were weakly intercorrelated ($r_s = .13$, $r = .21$).

Although there is some disagreement in the statistical literature over the seriousness of violating the regression assumptions, many researchers consider this technique to be "robust." Lewis-Beck (1980:54) argues that it is not necessary to assume that the dependent variable is determined by the additive effects of independent variables; Hedderson (1987:104) states that ordinal variables are commonly used in regression analysis, and that moderate deviations from normality do not bias the results greatly. Bohrnstedt and Carter (1971:138) conclude that "the regression model is, in fact, robust in the presence of violations of many of the required assumptions."

Question One: Does the explanatory model of this study explain more variance in fear of victimization than the model of Warr and Stafford (1983)?

Figure 3. Frequency Histograms of Mean Fear, Risk and Seriousness of 16 Offenses for Sample (n= 194).

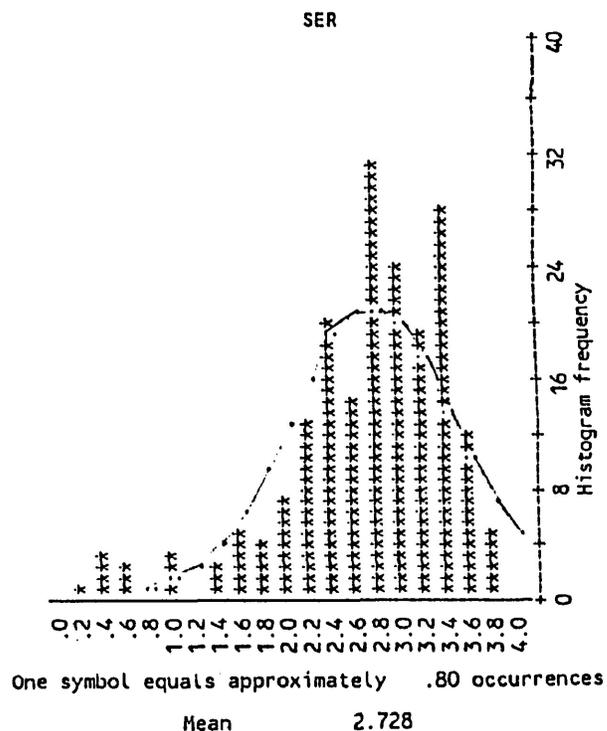
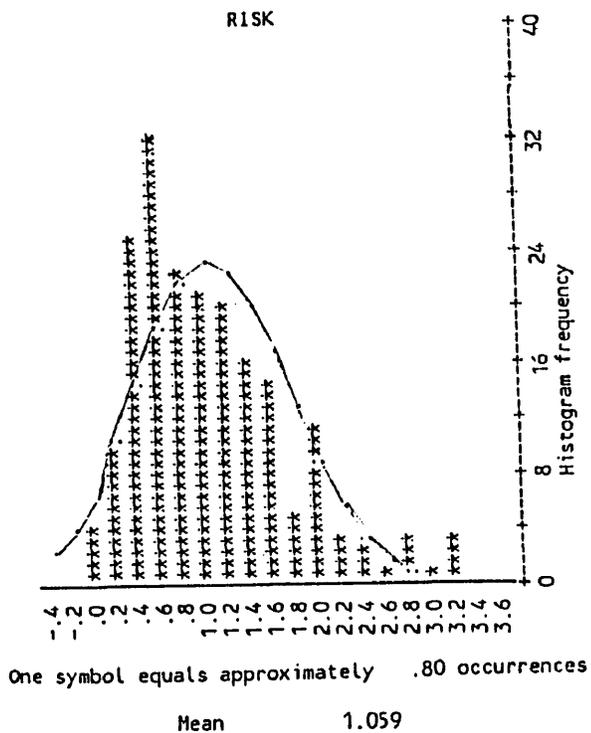
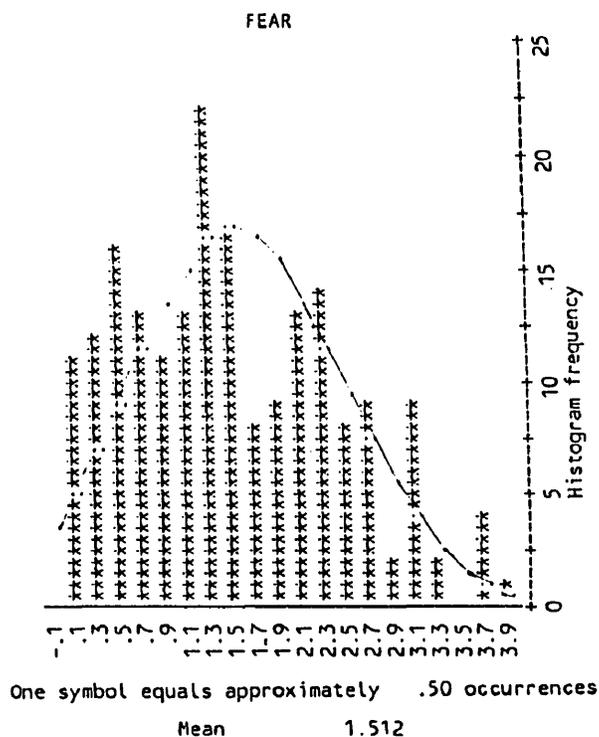


Table 3 displays ten stepwise regression equations which contain various statistics: the multiple correlation coefficient (R) is a measure of the linear relationship between the dependent variable and the combined effects of the independent variables; the coefficient of multiple determination (Rsquared) indicates the proportion of total variation in the dependent variable that is explained jointly by the independent variables (Elifson et al., 1982:259-60); the standardized partial regression coefficient (beta) standardizes each variable in the regression equation (by converting scores into standard deviation units from the mean) and indicates which independent variable is relatively more important in explaining variability in the dependent variable (Vaidyanathan and Vaidyanathan, 1992:704).

Referring to the first additive equation in Table 3, fear was regressed on risk and seriousness for the entire sample and each independent variable was found to make a significant contribution in predicting fear of victimization, with risk emerging as the strongest indicator of fear (beta= .552, $p < .01$). Thus, one standard deviation change in risk was associated with a .552 standard deviation change in fear, on the average, with seriousness held constant; one standard deviation change in seriousness was associated with a .200 standard deviation change in fear, on the average, with risk held constant. These regression

Table 3. Regression Equations of Fear and Independent Variables for Sample and Subsamples (Additive Models).

	<u>Steps</u>	<u>R</u>	<u>Rsq</u>	<u>RsqCh</u>	<u>B</u>	<u>Beta</u>	
Sample	1 Risk	.593	.352	.352	.755	.552**	Rsq= .390 n= 194
	2 Serious	.625	.390	.038	.252	.200**	
Sample	1 Risk	.593	.352	.352	.737	.539**	Rsq= .416 n= 194
	2 Serious	.625	.390	.038	.202	.160**	
	3 Gender	.640	.409	.019	4.581	.152*	
	Age LA	.645	.416	.007	-1.877 1.365	-.064 .036	
Male Students	1 Serious	.420	.176	.176	.564	.366*	Rsq= .294 n= 39
	2 Risk LA	.542	.294	.118	.501	.348*	
		-	-	-	-	-	
Male Retirees	1 Risk	.555	.307	.307	.660	.521**	Rsq= .339 n= 35
	Serious LA	.582	.339	.032	.131 .052	.171 .031	
Female Students	1 Risk	.411	.169	.169	.497	.370**	Rsq= .176 n= 61
	Serious LA	.420	.176	.007	.152 -.179	.084 -.048	
Female Retirees	1 Risk	.738	.545	.545	.910	.706**	Rsq= .594 n= 59
	2 Serious LA	.770	.593	.048	.307 .073	.218* .032	
		.771	.594	.001			
Students	1 Risk	.442	.195	.195	.474	.320**	Rsq= .337 n= 100
	2 Gender Serious LA	.557	.310	.115	.514 .322 -.203	.303** .177 -.042	
		.581	.337	.027			
Retirees	1 Risk	.691	.477	.477	.847	.658**	Rsq= .516 n= 94
	2 Serious LA Gender	.718	.516	.039	.206 .043 .026	.193* .022 .013	
		.718	.516	.001			
Males	1 Risk	.492	.242	.242	.611	.457**	Rsq= .295 n= 74
	2 Serious Age LA	.533	.285	.042	.202 .155 .024	.218* .102 .011	
		.543	.295	.010			
Females	1 Risk	.622	.387	.387	.770	.578**	Rsq= .436 n= 120
	2 Serious Age LA	.640	.411	.025	.249 -.296 .064	.160* -.154* .026	
		.660	.435	.022			
		.660	.436	.001			

LA = Living Arrangement / **p<.01 / *p<.05
Note: No male students "lived alone" (LA).

coefficients suggest that perceptions of risk were twice as important as perceptions of seriousness in explaining fear of victimization among the sample; in Warr and Stafford's (1983:1036) Seattle study, risk and seriousness were almost equally important in explaining variation in fear (beta weights of 1.02 and 1.05 respectively). Comparing additive models, risk and seriousness explained 39 percent ($R^2 = .390$) of the variability in fear of victimization among the sample in this study, and 76 percent of the variability in fear among the sample in Warr and Stafford's (1983:1038) study.

In the second additive equation of Table 3, fear was regressed on the five independent variables of this study (for the sample) and only perceived risk (beta = .539, $p < .01$), perceived seriousness (beta = .160, $p < .01$) and gender (beta = .152, $p < .05$) were found to make significant, independent contributions in predicting fear. The regression coefficients suggest that fearful persons tended to be females who perceived victimization to be both likely to occur and serious in its consequences. Although the five variables explained 41.6 percent ($R^2 = .416$) of the variation in fear, perceived risk accounted for most of this variation (35.2 percent), followed by perceived seriousness (3.8 percent), gender (1.9 percent) and age and living arrangement (.7 percent). Clearly, the inclusion of gender, age and living arrangement in the regression equation added

little to the explained variation in fear (2.6 percent). The analyses indicate that the model of this study did not explain more variance in fear of victimization than the risk-seriousness-fear model of Warr and Stafford (1983).

Question Two: Are perceived risk and perceived seriousness the strongest indicators of fear of victimization?

Table 3 displays additive regression equations which were calculated for various subsamples of respondents and the analyses indicate that 1) perceived risk was the only variable which made a significant, independent contribution in predicting fear of victimization among each subsample; 2) living arrangement was the only nonsignificant predictor of fear of victimization among each subsample; 3) although fear levels among male retirees, female students and female retirees were determined almost entirely by perceptions of risk (e.g., the effect of risk on fear for female students was four times that of seriousness: $.370/.084 = 4.40$), perceived seriousness (beta= .366) carried slightly more weight than perceived risk (beta= .348) in producing fear among male students; 4) perceived risk and perceived seriousness were the strongest predictors of fear among retirees, males and females, while gender (beta= .303) was more important than seriousness (beta= .177) in predicting

fear among students. Thus, fearful students tended to be females who perceived victimization to be likely to occur; 6) age ($\beta = -.154$, $p < .05$) emerged as a significant predictor of fear among females only, suggesting that being young contributed to the victimization fears of this gender.

The combined effects of risk, seriousness and living arrangement explained as little as 17.6 percent ($R^2 = .176$) of the variation in fear among female students (with risk being the only significant predictor of fear among this subsample) to as much as 59.4 percent ($R^2 = .594$) of the variation in fear among female retirees. The combined effects of the independent variables accounted for 33.7 percent ($R^2 = .337$) of the variation in fear among students, 51.6 percent ($R^2 = .516$) among retirees, 29.5 percent ($R^2 = .295$) among males and 43.6 percent ($R^2 = .436$) among females. The data in Table 3 indicate that 1) the independent variables did not explain the same proportion of variance in fear across subsamples; 2) perceived risk, perceived seriousness and gender (in that order) were the strongest indicators of fear of victimization among the sample of this study.

Question Three: Which of the three categories of offenses (personal, property and public order) elicit the highest and lowest mean levels of fear, risk and seriousness among the

sample and four subsamples of male students, male retirees, female students and female retirees?

Analysis of variance (F-test) is a parametric technique used to determine whether the differences among two or more ✓ sample means (derived from different subjects) are large enough to imply a difference among corresponding population means. All differences in sample means (between-samples variance) are judged for statistical significance by comparing them with a measure of the random variation within the sample data (within-samples variance). If the between-samples estimate of variance is much larger than that from within samples, then ordinary sampling variation is not enough to account for the difference in means and the null hypothesis (that all population means are equal) is rejected (Rowntree, 1981:148-49). Although analysis of variance assumes interval measures and random sampling from normal populations with a common variance (Mueller et al., 1977:466), many researchers (Hedderson, 1987; Riger et al., 1978; Warr, 1984) have applied this statistical test to ordinal-level variables. Boneau (1970:234) believes that "both the t and the F tests are much less affected by extreme violations of the assumptions than has been generally realized."

Repeated measures analysis of variance is similar to

the one-way procedure except that this technique is used to test the equality of means among data that have been provided by the same subjects. A repeated measures analysis generates the Hotelling T-square (Tsq) statistic whose associated F value indicates whether or not at least one of the population means is different from the others (Morrison, 1976:145). As West (1991:108) points out, the repeated measures method can be used if the variables are normally distributed or if the sample size is large.

Table 4 displays mean levels of fear, perceived risk and perceived seriousness of personal, property and public order offenses for the sample and subsamples (refer to Appendix A for a list of the 16 offenses used in this study and how each was assigned to one of three categories of offenses). Repeated measures analyses of variance were calculated to test for equality among each set of means and the data indicate that 1) personal offenses (e.g., "being raped") were perceived to be most serious in their consequences by the sample and subsamples while public order offenses (e.g., "being approached by people begging for money") were perceived to be least serious in their consequences; 2) public order offenses were perceived by the sample and subsamples to be most likely to occur while personal offenses were perceived to be least likely to occur. Thus, respondents perceived public order offenses to be most likely but least serious, and personal offenses to

Table 4. Mean Fear, Risk, Seriousness and Repeated Measures Analyses of Variance by Category of Offense for Sample and Subsamples.

<u>Sample Category</u>	<u>Fear</u>	<u>Risk</u>	<u>Seriousness</u>
Personal	1.56	.72	3.32
Property	1.72 F= 32.09**	1.03 F=111.34**	2.97 F=325.61**
Public	1.28	1.55	1.72
Male Students			
Personal	1.16	.58	3.27
Property	1.58 F= 17.08**	.75 F= 72.00**	3.02 F=242.68**
Public	.87	1.67	1.28
Male Retirees			
Personal	1.23	.69	2.71
Property	1.59 F= 13.18**	.93 F= 10.15**	2.58 F= 18.24**
Public	1.10	1.34	1.78
Female Students			
Personal	2.18	.76	3.61
Property	1.89 F= 18.42**	1.09 F= 50.38**	2.98 F=365.09**
Public	1.45	1.83	1.62
Female Retirees			
Personal	1.38	.79	3.40
Property	1.73 F= 10.63**	1.23 F= 29.14**	3.15 F= 66.71**
Public	1.48	1.32	2.07
Students			
Personal	1.78	.69	3.48
Property	1.77 F= 30.71**	.96 F=105.22**	2.99 F=545.51**
Public	1.22	1.77	1.49
Retirees			
Personal	1.33	.75	3.14
Property	1.67 F= 20.25**	1.12 F= 34.37**	2.94 F= 77.12**
Public	1.34	1.33	1.96
Males			
Personal	1.19	.63	3.00
Property	1.58 F= 27.90**	.83 F= 50.54**	2.81 F= 95.92**
Public	.98	1.51	1.52
Females			
Personal	1.79	.78	3.51
Property	1.81 F= 10.74**	1.16 F= 65.72**	3.06 F=237.74**
Public	1.47	1.58	1.84

**p<.01

be least likely but most serious; 3) property offenses (e.g., "having someone break into your home while you're away") generated the highest mean levels of fear among the sample, male students, male retirees, female retirees, retirees, males and females, while personal offenses generated the highest mean levels of fear among female students and students; 4) public order offenses generated the lowest mean levels of fear among each group of respondents, with the exceptions of female retirees and retirees, as these groups were least fearful of personal offenses.

The F values in Table 4 suggest that respondents' fears and perceptions of risk and seriousness were not uniform across the three categories of offenses, for at least one of the means in each set was significantly ($p < .01$) different from the others. The data lead to the following conclusions: each group of respondents perceived personal offenses (e.g., "being beaten up by a stranger") to be most serious in their consequences but felt most at risk to public order offenses (e.g., "having strangers loiter near your home late at night"); property offenses (e.g., "having your car stolen") generated the highest mean level of fear among the sample (1.72), as these offenses were perceived to be both somewhat likely to occur (1.03) and somewhat serious in their consequences (2.97). Personal and public order offenses generated the lowest mean levels of fear among the

sample (1.56 and 1.28 respectively) because the former were perceived to be least likely to occur (.72) while the latter were perceived to be least serious in their consequences (1.72); male students, male retirees and female retirees were most fearful of property offenses while personal offenses generated the highest mean level of fear among female students; students were most fearful of personal offenses, although the mean fear levels for personal (1.78) and property (1.77) offenses were almost identical for this age group; retirees, males and females were most fearful of property offenses although, like students, females were almost equally fearful of property (1.81) and personal (1.79) offenses.

Table 5 compares mean levels of fear, risk and seriousness for the combined 16 offenses (among subsamples) and the data indicate that the four gender/age groups were not equally fearful of victimization ($F= 6.20, p<.01$), as the mean level of fear among female students was significantly greater than that of male students ($F= 20.28, p<.01$), male retirees ($F= 11.91, p<.01$) and female retirees ($F= 4.72, p<.05$). Although there was no significant difference in mean fear levels between students and retirees ($F= 1.98, p>.05$), females were significantly more fearful of victimization than males ($F= 12.66, p<.01$).

The analyses of variance in Table 5 show that perceptions of risk were not significantly different among

Table 5. Mean Fear, Risk and Seriousness of Combined 16 Offenses for Sample and Subsamples (with Analyses of Variance).

	Fear	Risk	Seriousness
Sample	1.51	1.06	2.73
Male Students	1.17	.97	2.59
Male Retirees	1.28 F= 6.20**	.95 F= 1.17	2.39 F= 5.15**
Feml Students	1.88	1.18	2.83
Feml Retirees	1.50	1.07	2.92
Male Students	1.17 F= .34	.97 F= .01	2.59 F= 1.06
Male Retirees	1.28	.95	2.39
Male Students	1.17 F=20.28**	.97 F= 3.43	2.59 F= 7.24**
Feml Students	1.88	1.18	2.83
Male Students	1.17 F= 2.83	.97 F= .47	2.59 F= 6.13*
Feml Retirees	1.50	1.07	2.92
Male Retirees	1.28 F=11.91**	.95 F= 2.90	2.39 F= 7.73**
Feml Students	1.88	1.18	2.83
Male Retirees	1.28 F= 1.10	.95 F= .49	2.39 F= 7.65**
Feml Retirees	1.50	1.07	2.92
Feml Students	1.88 F= 4.72*	1.18 F= .69	2.83 F= .64
Feml Retirees	1.50	1.07	2.92
Students	1.60 F= 1.98	1.09 F= .53	2.72 F= .01
Retirees	1.42	1.02	2.75
Males	1.22 F=12.66**	.96 F= 2.73	2.49 F=13.52**
Females	1.69	1.12	2.87

**p<.01 / *p<.05

the four subsamples ($F= 1.17, p>.05$), although the mean risk levels suggest that female students (1.18) felt slightly more at risk to victimization than female retirees (1.07), male students (.97) and male retirees (.95). Though their perceptions of risk were similar, the subsamples did not perceive victimization to be equally serious in its consequences ($F= 5.15, p<.01$). The data show that both female students and female retirees perceived the consequences of victimization to be significantly more serious than male students and male retirees. It appears that the differences in mean levels of fear and seriousness among the four subsamples were due primarily to gender. For example, age could not account for the difference in mean levels of seriousness among the four subsamples because seriousness levels between students and retirees were almost identical ($F= .01, p>.05$). Females, however, perceived the consequences of victimization to be significantly more serious than males ($F= 13.52, p<.01$).

Question Four: Which of the 16 types of offenses elicit the highest and lowest mean levels of fear, risk and seriousness among the sample and four subsamples?

The first part of Table 6 presents mean levels of fear, risk and seriousness for each of 16 offenses among the

Table 6. Mean Fear, Risk and Seriousness for each of 16 Offenses for Sample and Subsamples.

<u>Offense Descriptions</u>	<u>Sample</u>					
	<u>Fear</u>		<u>Perceived Risk</u>		<u>Perceived Seriousness</u>	
	<u>Mean</u>	<u>Rank</u>	<u>Mean</u>	<u>Rank</u>	<u>Mean</u>	<u>Rank</u>
Having someone break into your home while you're away	2.19	1	1.36	6	3.10	7
Having someone break into your home while you're home	2.05	2	.86	11	3.31	5
Being hit by a drunk driver while driving your car	2.01	3	1.42	5	3.49	3
Having strangers loiter near your home late at night	1.90	4	1.61	3	1.80	13
Being threatened with a knife, gun or club	1.86	5	.80	12	3.47	4
Having something taken from you by force	1.68	6	.99	8	3.01	8
Being beaten up by a stranger	1.63	7	.79	13	3.22	6
Being raped	1.47	8	.46	14	3.50	2
Having your car stolen	1.42	9	1.02	7	2.93	9
Being murdered	1.34	10	.24	16	3.61	1
Being cheated or conned out of your money	1.33	11	.89	10	2.54	11
Having a group of youths disturb the peace near your home	1.28	12	1.63	2	1.76	14
Being sold contaminated food	1.22	13	.91	9	2.53	12
Receiving an obscene phone call .....	.96	14	1.52	4	1.60	15
Being beaten up by someone you know .....	.93	15	.35	15	2.91	10
Being approached by people begging for money .....	.92	16	2.11	1	.89	16

<u>Abbreviated Offense Descriptions</u>	<u>Male Students</u>						<u>Male Retirees</u>					
	<u>Fear</u>		<u>Risk</u>		<u>Seriousness</u>		<u>Fear</u>		<u>Risk</u>		<u>Seriousness</u>	
	<u>Mean</u>	<u>Rank</u>	<u>Mean</u>	<u>Rank</u>	<u>Mean</u>	<u>Rank</u>	<u>Mean</u>	<u>Rank</u>	<u>Mean</u>	<u>Rank</u>	<u>Mean</u>	<u>Rank</u>
Burglary (Away)	2.03	1	1.03	6	2.90	7	2.20	1	1.17	5	2.74	5
Burglary (Home)	1.36	7	.26	14	3.44	5	1.63	5	.80	12	2.69	7
Drunk Driver	1.74	2	1.23	5	3.64	2	1.89	2	1.34	4	2.91	1
Loiter	1.33	8	1.51	4	1.23	13	1.69	4	1.51	2	1.91	14
Threaten	1.74	3	.74	10	3.59	4	1.71	3	.86	10	2.91	2
Robbery	1.33	9	.87	8	2.85	8	1.34	9	.83	11	2.80	3
Assault (Stranger)	1.23	10	.74	11	2.77	9	1.51	6	.91	7	2.74	6
Rape	.28	15	.00	16	3.62	3	.49	15	.14	16	2.51	9
Auto Theft	1.51	5	.74	12	3.15	6	1.46	8	1.11	6	2.63	8
Murder	1.05	11	.05	15	3.97	1	1.09	11	.40	14	2.77	4
Fraud	1.59	4	.87	9	2.54	11	1.20	10	.89	8	2.40	10
Disturb Peace	.59	14	1.54	3	1.13	14	1.49	7	1.51	3	1.97	13
Con. Food	1.41	6	.97	7	2.59	10	1.06	12	.63	13	2.26	12
Obscene Call	.15	16	1.67	2	1.08	15	.40	16	.89	9	1.43	15
Assault (Known)	.74	12	.44	13	2.44	12	.57	14	.31	15	2.31	11
Begging	.67	13	2.77	1	.44	16	.71	13	1.87	1	1.20	16

Table 6 Continued.

Abbreviated Offense Descriptions	Female Students						Female Retirees						Students					
	Fear		Risk		Seriousness		Fear		Risk		Seriousness		Fear		Risk		Seriousness	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Burglary (Away)	2.26	6	1.39	6	3.12	8	2.22	1	1.64	1	3.42	6	2.17	1	1.25	6	3.03	9
Burglary (Home)	2.69	2	.95	10	3.44	7	2.10	2	1.19	8	3.46	5	2.17	2	.68	13	3.44	5
Drunk Driver	2.43	3	1.57	5	3.77	3	1.81	4	1.42	5	3.42	7	2.16	3	1.44	5	3.72	3
Loiter	2.28	5	1.82	4	1.71	13	2.02	3	1.53	2	2.20	13	1.91	6	1.70	4	1.52	13
Threaten	2.33	4	.71	13	3.69	4	1.54	8	.90	10	3.51	2	2.10	4	.72	11	3.65	4
Robbery	2.08	7	1.00	9	2.90	10	1.68	6	1.14	9	3.36	8	1.79	7	.95	9	2.88	10
Assault (Stranger)	2.00	8	.71	14	3.49	5	1.59	7	.85	12	3.53	1	1.70	8	.72	12	3.21	6
Rape	2.97	1	.77	12	3.98	1	1.31	11	.63	14	3.51	3	1.92	5	.47	14	3.84	2
Auto Theft	1.41	12	.93	11	2.98	9	1.36	10	1.22	7	2.90	10	1.45	11	.86	10	3.05	8
Murder	1.84	9	.25	16	3.95	2	1.17	13	.27	16	3.51	4	1.53	9	.17	16	3.96	1
Fraud	1.48	11	1.10	7	2.38	11	1.09	14	.70	13	2.80	12	1.52	10	1.01	8	2.44	12
Disturb Peace	1.10	15	1.92	2	1.67	14	1.81	5	1.46	4	2.14	14	.90	15	1.77	3	1.46	14
Con. Food	1.18	14	1.07	8	2.36	12	1.22	12	.86	11	2.81	11	1.27	12	1.03	7	2.45	11
Obscene Call	1.31	13	1.90	3	1.56	15	1.46	9	1.41	6	2.10	15	.86	16	1.81	2	1.37	15
Assault (Known)	1.61	10	.33	15	3.49	6	.58	16	.34	15	2.97	9	1.27	13	.37	15	3.08	7
Begging	1.07	16	2.39	1	.79	16	1.05	15	1.51	3	1.10	16	.91	14	2.54	1	.65	16

Table 6 Continued.

Abbreviated Offense Descriptions	Retirees				Males				Females									
	Fear		Risk		Fear		Risk		Fear		Risk							
	Mean Rank	Rank																
Burglary (Away)	2.23	1	1.47	4	3.17	5	2.11	1	1.10	6	2.82	7	2.24	2	1.52	5	3.27	7
Burglary (Home)	1.93	2	1.04	8	3.17	6	1.49	5	.51	13	3.08	5	2.40	1	1.07	8	3.45	6
Drunk Driver	1.84	4	1.39	5	3.23	2	1.81	2	1.28	5	3.30	2	2.13	5	1.50	6	3.60	3
Loiter	1.89	3	1.52	2	2.10	13	1.50	4	1.51	3	1.55	13	2.15	4	1.68	3	1.95	13
Threaten	1.61	6	.88	10	3.29	1	1.73	3	.80	12	3.27	3	1.94	6	.80	12	3.60	4
Robbery	1.55	8	1.02	9	3.15	7	1.34	9	.85	9	2.82	8	1.88	7	1.07	9	3.13	9
Assault (Stranger)	1.56	7	.87	11	3.23	3	1.37	8	.82	10	2.76	9	1.80	8	.78	13	3.51	5
Rape	1.00	14	.45	14	3.14	8	.38	15	.07	16	3.10	4	2.15	3	.70	14	3.75	1
Auto Theft	1.39	9	1.18	7	2.80	9	1.49	6	.92	7	2.91	6	1.38	11	1.08	7	2.94	10
Murder	1.14	11	.32	16	3.23	4	1.07	11	.22	15	3.41	1	1.51	9	.26	16	3.73	2
Fraud	1.13	12	.77	13	2.65	11	1.41	7	.88	8	2.47	10	1.28	13	.90	11	2.58	11
Disturb Peace	1.69	5	1.48	3	2.08	14	1.01	12	1.53	2	1.53	14	1.45	10	1.69	2	1.90	14
Con. Food	1.16	10	.78	12	2.61	12	1.24	10	.81	11	2.43	11	1.20	14	.97	10	2.58	12
Obscene Call	1.06	13	1.21	6	1.85	15	.27	16	1.30	4	1.24	15	1.38	12	1.66	4	1.83	15
Assault (Known)	.58	16	.33	15	2.72	10	.66	14	.38	14	2.38	12	1.10	15	.33	15	3.23	8
Begging	.93	15	1.65	1	1.14	16	.69	13	2.35	1	.80	16	1.06	16	1.96	1	.94	16

sample and the data indicate that the property offense of "having someone break into your home while you're away" was the most feared offense among respondents (mean= 2.19/4.0), as it was perceived to be somewhat likely to occur (mean= 1.36/4.0) and very serious in its consequences (mean= 3.10/4.0). The public order offense of "being approached by people begging for money" was the least feared offense among respondents (mean= .92), as it was perceived to be somewhat likely to occur (mean= 2.11) and very minor in its consequences (mean= .89). It appears that both mean levels of risk and seriousness were important in determining the mean level of fear for a particular offense. For example, although the offense of "being raped" was perceived to be very serious in its consequences (mean= 3.50), it generated only a moderate level of fear (mean= 1.47) because respondents perceived this offense to be very unlikely to occur (mean= .46). It should be noted that the offense rankings (on mean fear, risk and seriousness) for this sample were closely comparable to the offense rankings for the sample in Warr and Stafford's (1983) study (refer to Appendix D).

Table 6 displays mean levels of fear, risk and seriousness for each of 16 offenses among various subsamples of respondents and the data show that 1) "having someone break into your home while you're away" was the most feared offense among male students, male retirees and female

retirees, while female students were most fearful of "being raped." In fact, female students perceived rape to be more serious in its consequences (mean= 3.98) than any other offense, including murder; 2) mean fear levels were similar between male students and male retirees, as the three most feared offenses for each group were "having someone break into your home while you're away", "being hit by a drunk driver while driving your car" and "being threatened with a knife, gun or club"; 3) female retirees were most fearful of offenses involving the home: "having someone break into your home while you're away" (mean= 2.22), "having someone break into your home while you're home" (mean= 2.10), "having strangers loiter near your home late at night" (mean= 2.02); 4) mean levels of fear were similar between students and retirees for all but two of the offenses: "being raped" was one of the most feared offenses among students (mean= 1.92) but one of the least feared offenses among retirees (mean= 1.00); "having a group of youths disturb the peace near your home" generated a moderate level of fear among retirees (mean= 1.69) but a low level of fear among students (mean= .90); 5) for all but three of the 16 offenses ("having your car stolen", "being cheated or conned out of your money" and "being sold contaminated food"), mean levels of fear and seriousness were higher among females than among males; 6) "having someone break into your home while you're home" (mean= 2.40), "having someone break into

your home while you're away" (mean= 2.24) and "being raped" (mean= 2.15) were the three most feared offenses among females, as each offense was perceived to be somewhat likely to occur and very serious in its consequences. Like female students; females perceived rape to be the most serious offense in this study; 7) with the exception of female retirees, each group of respondents perceived "being approached by people begging for money" to be the least serious but most likely offense (female retirees felt most at risk to "having someone break into your home while you're away"); 8) each subsample perceived "being murdered" to be the least likely offense to occur, with the exceptions of male students, male retirees and males, as these groups felt least at risk to "being raped." In fact, not one male student in this study perceived himself to be susceptible to rape (mean= .00).

Question Five: Which of the eight types of recurrent security precautions is utilized the most and least among the sample and four subsamples?

The data in Table 7 show that turning on the lights at night when leaving the home was the most utilized precautionary behavior in this study, as a large proportion of respondents in the sample and subsamples reported that

Table 7. Percentage of Sample and Subsamples responding "yes" to using each of Eight Recurrent Security Precautions.

Abbreviated Precaution Descriptions	Sample %	Male Students %	Male Retirees %	Female Students %	Female Retirees %
Turn lights on when out	85.6	59.0	91.4	88.5	96.6
Lock doors when home	59.3	38.5	62.9	59.0	71.2
Avoid strangers at door	59.8	25.6	57.1	65.6	78.0
Neighbors watch house	21.1	5.1	34.3	18.0	27.1
Avoid going out alone	37.6	2.6	28.6	45.9	57.6
Avoid going out at night	33.5	0.0	34.3	14.8	74.6
Avoid using bus at night	64.4	28.2	45.7	75.4	88.1
Lock doors when driving	52.6	25.6	57.1	55.7	64.4

Abbreviated Precaution Descriptions	Students %	Retirees %	Males %	Females %
Turn lights on when out	77.0	94.7	74.3	92.5
Lock doors when home	51.0	68.1	50.0	65.0
Avoid strangers at door	50.0	70.2	40.5	71.7
Neighbors watch house	13.0	29.8	18.9	22.5
Avoid going out alone	29.0	46.8	14.9	51.7
Avoid going out at night	9.0	59.6	16.2	44.2
Avoid using bus at night	57.0	72.3	36.5	81.7
Lock doors when driving	44.0	61.7	40.5	60.0

Table 8. Percentage of Sample and Subsamples engaging in each of Eight Recurrent Security Precautions with chi-square (cs) tests.

"Do you usually turn on the lights in your residence when you go out at night?"

	Sample %	Male Stud %	Male Retr %	Feml Stud %	Feml Retr %	Stud %	Retr %	Male %	Feml %
No	14.4	41.0	8.6	11.5	3.4	23.0	5.3	25.7	7.5
Yes	85.6	59.0	91.4	88.5	96.6	77.0	94.7	74.3	92.5
			cs=29.56**			cs=12.27**		cs=12.24**	

"Do you usually lock the doors and windows of your residence during the day even when you are home?"

	Sample %	Male Stud %	Male Retr %	Feml Stud %	Feml Retr %	Stud %	Retr %	Male %	Feml %
No	40.7	61.5	37.1	41.0	28.8	49.0	31.9	50.0	35.0
Yes	59.3	38.5	62.9	59.0	71.2	51.0	68.1	50.0	65.0
			cs=10.65*			cs= 5.86*		cs= 4.27*	

**p<.01 / *p<.05

Table 8 Continued.

"Do you usually avoid opening your door to strangers?"

	Sample	Male Stud	Male Retr	Feml Stud	Feml Retr	Stud	Retr	Male	Feml
	%	%	%	%	%	%	%	%	%
No	40.2	74.4	42.9	34.4	22.0	50.0	29.8	59.5	28.3
Yes	59.8	25.6	57.1	65.6	78.0	50.0	70.2	40.5	71.7
			cs=27.98**			cs= 8.23**		cs=18.45**	

"Do you usually ask neighbors to watch your residence when you are away for a few hours?"

	%	%	%	%	%	%	%	%	%
No	78.9	94.9	65.7	82.0	72.9	87.0	70.2	81.1	77.5
Yes	21.1	5.1	34.3	18.0	27.1	13.0	29.8	18.9	22.5
			cs=11.25*			cs= 8.19**		cs= .35	

"Do you usually avoid going out alone?"

	%	%	%	%	%	%	%	%	%
No	62.4	97.4	71.4	54.1	42.4	71.0	53.2	85.1	48.3
Yes	37.6	2.6	28.6	45.9	57.6	29.0	46.8	14.9	51.7
			cs=33.49**			cs= 6.55*		cs=26.41**	

"Do you usually avoid going out at night?"

	%	%	%	%	%	%	%	%	%
No	66.5	100.0	65.7	85.2	25.4	91.0	40.4	83.8	55.8
Yes	33.5		34.3	14.8	74.6	9.0	59.6	16.2	44.2
			cs=73.96**			cs=55.63**		cs=16.05**	

"Do you usually avoid using public transportation at night?"

	%	%	%	%	%	%	%	%	%
No	35.6	71.8	54.3	24.6	11.9	43.0	27.7	63.5	18.3
Yes	64.4	28.2	45.7	75.4	88.1	57.0	72.3	36.5	81.7
			cs=45.36**			cs= 4.98*		cs=40.77**	

"When sitting or riding in a vehicle, do you usually keep the doors locked?"

	%	%	%	%	%	%	%	%	%
No	47.4	74.4	42.9	44.3	35.6	56.0	38.3	59.5	40.0
Yes	52.6	25.6	57.1	55.7	64.4	44.0	61.7	40.5	60.0
			cs=15.20**			cs= 6.09*		cs= 6.95**	

**p<.01 / *p<.05

they usually engaged in this behavior (from 59 percent of male students to 96.6 percent of female retirees). Asking neighbors to watch one's vacant home, avoiding going out alone, and avoiding going out at night were the three least utilized precautionary behaviors among all groups of respondents. In fact, not one male student indicated that he avoided going out at night in order to protect himself from a possible victimization experience.

The chi-square values in Table 8 indicate that both age and gender were related significantly to security precaution use, as retirees and females were more likely to engage in each security precaution than students and males respectively. For example, 59.6 percent of retirees but only 9 percent of students reported that they usually avoided going out at night as a precaution against victimization (chi-sq.= 55.63, $p < .01$); 51.7 percent of females but only 14.9 percent of males reported that they usually avoided going out alone as a precaution against victimization (chi-sq.= 26.41, $p < .01$). Even though there was statistical independence between gender and the precaution of asking neighbors to watch one's vacant home (chi-sq.= .35, $p > .05$), a higher percentage of females (22.5) than males (18.9) reported that they usually engaged in this behavior.

Comparing responses among the four gender/age groups, male students were least likely and female retirees were

most likely to engage in each precautionary behavior (the only exception being that male retirees were most likely to ask neighbors to watch their vacant homes). For example, 88.1 percent of female retirees reported that they usually avoided using public transportation at night, as compared to 75.4 percent of female students, 45.7 percent of male retirees and 28.2 percent of male students. The chi-square value of 45.36 ($p < .01$) suggests that at least one of these subsamples was drawn from a different population.

Precautionary use among male students was minimal, as turning on the lights at night when leaving home was the only security precaution used by more than 50 percent of this subsample. In contrast, asking neighbors to watch one's vacant home was the only precaution used by less than 50 percent of female retirees.

The questionnaire in Appendix C included the open-ended question "Please list any other precautions which you take each day to protect yourself and your property from crimes and criminals." Male retirees and male students were least likely to answer this question but, when they did, their recurrent precautionary behaviors tended to center upon automobiles and money. Responses from male retirees included "I keep my vehicle locked at all times", "I always have the car locked and parked in a lighted street area" and "I do not keep large amounts of money at home or on my person." One male retiree stated that he was "always ready

for combat duty and always ready for anything at any time." Locking the doors of one's vehicle was a common security precaution among male students, though many members of this subsample seemed equally cautious with their money: "money is kept in my front pocket instead of in the wallet in my rear pocket"; "I stand close to the bank machine so nobody can see my identification number"; "I never leave money in the open"; "I don't endorse cheques until they're about to be deposited."

Female retirees and female students were most likely to answer the open-ended question of this study. Although both groups engaged in recurrent precautionary behaviors within the home, the latter group seemed equally cautious when outside of the home. Many female retirees reported that they left the radio on during the day and night, locked windows when not at home, and turned on a night light before going to bed. One member of this subsample commented that "before answering the door, I look out the front window to see if I recognize the car. If no car is visible, I don't answer the door." The response from another female retiree was quite unique: "I was a Cub Leader (Akela) for 17 years and was also in the RCAF, and so I have an authoritative voice. I already experienced rape and will kill the next one. If someone tried to attack me, they would get the worst of the deal."

Of the four subsamples, female students provided the

widest variety of responses to the open-ended question. While many persons indicated that they left the television or radio on when away from home, kept the curtains closed most of the time, and turned on outside lights at night, one respondent stated that "when my husband is out of town, our kids are aware to pretend he's home if someone comes to the door." Recurrent precautionary behaviors taken outside of the home were common among female students: "I always park in a well lighted area - no parkades"; "I always lock car doors"; "someone always walks me to my car and, when being dropped off at home, I make the person dropping me off wait until I'm safe in the house before they drive off." A total of seventeen respondents indicated that they carried keys, whistles, pens or beepers on their persons in order to defend themselves in the event of being attacked. One female student stated that "when walking at night, I keep my keys in between my fingers so that if someone attacks me I can scratch at their face/body so that I can get some time to get away." Female students seemed to be especially aware of their surroundings: "in going to some places, I usually ask the advice of a friend if it is safe to go there"; "I leave places early if I feel unsafe about walking out late"; "I try to be alert and aware of what is going on around me"; "I just use common sense, like staying away from people or places that just don't look right"; "I only walk on well lit or busy streets."

The data analyses of this chapter lead to some general conclusions: 1) perceived risk, perceived seriousness and gender (in that order) were the strongest indicators of fear of victimization among the sample in this study, with risk emerging as the only significant predictor of fear among each subsample of respondents; 2) the five independent variables in the explanatory model explained 41.6 percent of the variation in fear for the combined 16 offenses (among the sample); 3) female students were the most fearful subsample in this study, followed by female retirees, male retirees and male students; 4) although mean levels of fear, risk and seriousness for the combined 16 offenses were similar between students and retirees, females were significantly more fearful than males and perceived victimization to be significantly more serious in its consequences; 5) the sample and subsamples were most fearful of property offenses (e.g., "having someone break into your home while you're away"), with the exceptions of female students and students, as these groups were most fearful of personal offenses (e.g., "being raped"); 6) although female students were most fearful of victimization (and male students were least fearful), female retirees were most likely to engage in recurrent security precautions (and male students were least likely); 7) turning on the lights at night when leaving the home was the most utilized precautionary behavior among the sample and subsamples.

When the five propositions of this thesis were formulated, it was predicted that older females living alone who felt highly at risk of being victimized seriously would be the most fearful demographic group in this study and, thus, they would be most likely to engage in security precautions to prevent victimization. The data suggest that this prediction was only partially correct, as younger females who felt highly at risk of being victimized seriously were the most fearful demographic group in this study (but not the most security precautions).

CHAPTER FIVE: DISCUSSION

Fear of crime as a phenomenon was "discovered" in the mid-1960's by pollsters in the United States (Baumer, 1985:239). During a time of social upheaval, public polls and surveys documented the emergence of crime as a major social issue, as people were feeling less safe on the street. Yin (1985:34-35) argues that social researchers were then alerted to the phenomenon of fear and simply borrowed the global fear of crime measurements developed by the pollsters: "Is there any area right around here - that is, within a mile - where you would be afraid to walk alone at night?" and "How safe do you feel or would you feel being out alone in your neighborhood at night?" Reliance upon these general, single-item indicators led many early investigators (Clemente and Kleiman, 1976; 1977; Lebowitz, 1975; Riger et al., 1978) to conclude that the elderly were significantly more fearful than other age groups although least likely to experience crime: the "fear-victimization paradox" had emerged. Soon popular magazines were writing narratives portraying the urban elderly as "prisoners of fear" living under self-imposed house arrest (Time, 1976).

Not until the early 1980's did researchers (Garofalo, 1979; Jeffords, 1983; Warr and Stafford, 1983) begin to question the content validity of global measures of fear and

the findings derived from these measures. Warr's (1984:685) study was one of the first to measure fear for specific criminal offenses and he found that fear levels were highest among those 66 years and over for only nine of 16 offenses. The results of this thesis and of other studies that have employed offense-specific measures of fear (Gomme, 1988; LaGrange and Ferraro, 1989; Parker, 1988) do not support the existence of a "fear-victimization paradox", for it is the young - not the elderly - who are more fearful of victimization. As LaGrange and Ferraro (1987:385-86) note, the elderly are no more fearful than other age groups when their fears are measured for specific types of crime. Global measures, however, mask genuine differences in victimization fears across the age range which has the effect of exaggerating the level of fear among older persons and underestimating the level of fear among younger persons.

Despite a mass of research (Garofalo, 1979; Gordon and Riger, 1989; Maxfield, 1987; Smith and Hill, 1991b; Warr, 1984) criticizing the use of global measures of fear, some investigators (Box et al., 1988; Chisholm, 1993; Khullar and Wyatt, 1989; O'Bryant et al., 1991) continue to employ these measures for no better reason than "some comfort can be found in the consistency provided by the widespread usage of these items" (Baumer, 1985:245). It is equally astonishing that many recent fear of crime studies (Akers et al., 1987; Iutovich and Cox, 1990; Jones, 1987; Mawby, 1986; Ward et

al., 1986) have excluded nonelderly respondents from their samples. Since the findings of this thesis and of other offense-specific studies (Gomme, 1988; LaGrange and Ferraro, 1989; Parker, 1988; Rucker, 1990) indicate that younger persons are most fearful of victimization, the empirical generalizations of earlier, global studies must be questioned. Continued research is necessary to improve our understanding of who the fearful are and what they are fearful of - research that is offense-specific but not elderly-specific.

Contrary to the bulk of fear of crime research (Khullar and Wyatt, 1989; Riger et al., 1978; Skogan and Maxfield, 1981; Solicitor General of Canada, 1985a; 1988; Worrell, 1992), students in this study were found to be more fearful than retirees and to perceive victimization to be more likely to occur. Parker (1988:491-92) argues that the young should be most fearful because they put themselves at high risk of becoming crime victims: not only do they frequent certain places at night (clubs, mass transit stations, parks and recreation centers), but they associate with the type of people who tend to commit most crimes (teenagers and young adults, divorced and separated people, those who have never been married). Brillon (1987:59) agrees that, because younger persons go out more than older persons and often frequent places where there is a much greater risk of victimization (discotheques, bars, the downtown area,

questionable districts, the drug scene), younger persons express a higher level of concrete fear. Since persons 16-24 years are most likely to engage in evening activities outside the home, and since an increase in the number of evening activities is associated with an increase in the number of violent crimes experienced (Solicitor General of Canada, 1985a:2), those most likely to experience violent victimization (the young) are also most fearful of victimization. It appears that individuals are aware of the risks inherent in their lifestyles. Since retirees spend most of their time at home (Baker, 1988:70), they are most fearful of property offenses (e.g., "having someone break into your home while you're home"); since work, school and leisure activities demand that time be spent away from the home, students are slightly more fearful of personal (e.g., "being raped") than property offenses.

Elias (1986:119) states that "people tend to fear the wrong crimes, or generally have fears that contradict their objective danger." The data of this thesis suggest that the opposite is true, as students and retirees tend to fear the types of offenses which they are likely to experience. For example, the two offenses which generated the highest mean levels of fear among both students and retirees were the property offenses of "having someone break into your home while you're away" and "having someone break into your home while you're home." According to the Solicitor General of

Canada (1984b), household robbery/break and enter ranks second to household theft as the type of offense Canadians 16 years and over are most likely to experience. Since adults are at least five times less likely to experience a motor vehicle theft than a household robbery (Solicitor General of Canada, 1984b, as cited in Brillon, 1987:35), "having your car stolen" was one of the least feared offenses among students (rank of 11) and retirees (rank of 9) of Thunder Bay. The data support Warr's (1980:467) contention that there is a remarkable degree of correspondence between the official incidence of criminal offenses and public perceptions. Given the preceding argument (that fear levels appear to be related to objective risk levels), and the fact that persons 60 years and over are relatively unlikely to be victimized (Solicitor General of Canada, 1983:3), it is not surprising that students in this study expressed higher levels of fear than retirees for 12 of 16 offenses. Mean fear levels of 1.60/4.0 (students) and 1.42/4.0 (retirees) for the combined 16 offenses suggest that both age categories exhibit a moderate, what Skogan (1987:152) would refer to as a "healthy", level of fear.

Consistent with previous research (Brillon et al., 1984; LaGrange and Ferraro, 1989; Lawton and Yaffe, 1980; Lebowitz, 1975; Sacco and Johnson, 1990), females in this study were found to be significantly more fearful than males and to perceive victimization to be significantly more

serious in its consequences. Fattah and Sacco (1989:215) suggest that most women are physically incapable of defending themselves from the young males who pose the modal threat of criminal harm, and their greater fear reflects an awareness of this reality. Thus, only in old age do men begin to experience the defensive disadvantage which women experience all their lives (Stinchcombe et al., 1980:57). Other researchers (Burt and Estep, 1981; Hagan, 1990; Sacco, 1990; Warr, 1985) contend that socialization into the female sex role emphasizes submissiveness which manifests itself in terms of a pervasive anxiety about personal safety. Drawing upon the "power-control theory" which he helped to develop, Hagan (1990:140) states that fear is disproportionately female, as it dates from adolescence and is rooted in warnings (transmitted from mothers to daughters) about sexual vulnerability. Daughters are encouraged to restrict their activities and to exercise caution in a variety of situations, all of which lead to a search for protection and an aversion for risk-taking. Burt and Estep (1981:519-20) agree that "a sense of sexual vulnerability...becomes 'common sense' for women by the time they reach adulthood. Adult males do not share this sense of the world as a sexually dangerous place." The assumptions of power-control theory are supported by the data of this thesis, as females were not only more fearful of victimization than males but were also more likely to engage in all types of recurrent

precautionary behaviors (e.g., avoiding going out at night and avoiding going out alone). As one female student commented, "I just use common sense, like staying away from people or places that just don't look right."

Garofalo (1979:88) believes that submissiveness among women is achieved by creating a fear of criminal attack - particularly a fear of rape - and thereby teaching them to feel dependent upon men for protection. Stanko (1985:12) agrees that women's fear stems from their powerless and precarious position of being vulnerable to men's threatening, sexually harassing behavior and unable to predict when this behavior will turn to violence. Given this argument, it is not surprising that females in this study were most fearful of "being raped" or of other offenses that could ultimately lead to a sexual offense (e.g., "having someone break into your home while you're home" and "having strangers loiter near your home late at night"). Warr (1984:700) may be correct that, "for younger women in particular, fear of crime is fear of rape" as female students in this study were not only most fearful of "being raped" but perceived this offense to be more serious in its consequences than any other offense, including murder. Since rape appears to be the "master offense" underlying the fears of most young women, this may explain why female students were the only subsample to be most fearful of personal offenses. The findings of this study

parallel those of Genest (1993:24) and Warr (1984:688): the former discovered that "not one man in our survey feared sexual assault. Every woman did"; the latter discovered that females aged 19-35 and 66 years and over expressed higher mean levels of fear than their male counterparts.

Warr (1984:695) believes that some offenses generate high levels of fear because they tend to be associated with other, more serious, offenses. To illustrate, the thought of residential burglary may provoke intense fear among many women because assault, rape or even homicide are viewed as likely to follow the initial offense. The same thought of burglary may produce little fear among men, however, because of their greater physical strength to resist attack. The data of this thesis support Warr's (1984) argument, as males expressed higher levels of fear than females for only three of 16 offenses, with each of these offenses ("having your car stolen", "being cheated or conned out of your money", "being sold contaminated food") being unlikely to result in additional serious offenses. Since research (Burt and Estep, 1981; Garofalo, 1979; Hagan, 1990; Sacco, 1990; Stanko, 1985; Warr, 1985) suggests that the fear of rape lies behind and contributes to the fear of many other offenses among women, it should not be surprising that women (especially younger women) express higher levels of fear than men for most criminal offenses. Though the likelihood of experiencing a sexual offense is minimal (six reported

incidents per 1,000 female population aged 16 years and over) (Solicitor General of Canada, 1985b:2), the fear of this offense seems to be a part of every woman's consciousness: each female student in this study indicated that she was at least slightly (1 on a scale from 0-4) fearful of "being raped."

Brillon et al. (1984:151) contend that "the more one fears becoming a crime victim, the greater the tendency to take precautions to protect oneself and one's goods." The data of this thesis only partially support the preceding proposition: although females were significantly more fearful than males and significantly more likely to engage in seven of eight security precautions, students were slightly more fearful than retirees but significantly less likely to engage in each of eight security precautions. Power-control theory adequately explains the increased precautionary behavior among women but the question remains why, given their higher fear level, students are less security precautions than retirees? Conklin (1976:107) and Yin (1985:93) believe that older persons tend to adopt avoidance behaviors (e.g., avoiding going out alone) because they are more willing than younger persons to adjust their daily lives to the threat of crime. Perloff (1983:45-48), Tamborini et al. (1984:508) and Tyler (1984:32-33) suggest that younger persons may not feel the need to alter their high-risk lifestyles because they have an "illusion of

invulnerability", which is an exaggerated sense of one's ability to avoid victimization. This overconfidence represents both a generalized overestimation of competence and a tendency to exaggerate how much threatening events can be controlled. One of the consequences of this perception is that it may lead the individual to think that precautionary behaviors are unnecessary.

Perloff (1983:45-48) believes that "illusions of invulnerability" allow individuals to go about the business of everyday life without being completely immobilized by fear: "people do not want to believe that severe negative outcomes can happen randomly, since such a belief forces them to concede that misfortune could happen to them. Nonvictims...convince themselves that they are somehow different from, and more capable than, the victim." Since an "illusion of invulnerability" is likely to accompany the health, strength and optimism of youth, this may explain why students, though the most victimized age group in Canada (Solicitor General of Canada, 1985a:2), were only slightly more fearful but less security precautions than retirees.

The regression analyses of this study indicate that perceived risk, perceived seriousness and gender were the only variables to make significant, independent contributions in predicting fear of victimization among the sample. Thus, fearful persons tended to be females who

perceived victimization to be both likely to occur and serious in its consequences. Perceived risk was at least three times more important than any other independent variable in predicting fear among the sample, and it emerged as the only significant predictor of fear among each subsample of respondents. The preceding findings have important policy implications for, as Warr and Stafford (1983:1034) assert, "if fear of victimization for various offenses were solely a function of the perceived seriousness of those offenses, then fear would almost certainly be immutable. But to the degree...that fear is determined by perceived risk, fear could be reduced by altering the objective and/or perceived risk." Since the Canadian criminal justice system seems to be unable to lower the crime rate (it has increased every year since 1988) (Statistics Canada, 1992a:5-1), reducing the perceived risk of victimization may be an effective and perhaps only means of reducing fear levels when they are excessive, or disproportionately higher than objective risk levels.

Fattah and Sacco (1989:157) state that it is the subjective probability of victimization that is the principal determinant of fear. Regression analysis supports this assertion, as a one unit change in perceived risk was associated, on the average, with a .81 unit change in fear (fear being regressed on perceived risk only). Referring to the 0-4 response scales used in this study, if one's

perceived risk level for a particular offense was to increase from "not likely" (0/4.0) to "very likely" (4.0/4.0), one's fear level for that offense would be predicted to increase from "not afraid" (.65/4.0) to "very afraid" (3.9/4.0). Similarly, a two unit decrease in one's perceived risk level for a particular offense would be predicted by the regression equation to bring about a 1.62 unit decrease in one's fear level for that particular offense. Given the importance of perceived risk in the regression equation, respondents in this study were only moderately fearful of victimization (a mean fear level of 1.51/4.0 for the combined 16 offenses) because they perceived themselves to be only moderately at risk of victimization (a mean risk level of 1.06/4.0). If, however, the crime rate in Thunder Bay was to rise dramatically, an increase in perceived risk levels (among students and retirees) would likely produce a comparable increase in fear of victimization levels.

Yin (1985:155) believes that researchers should focus on "malleable" variables which can be changed or manipulated in order to reduce excessive fear levels. Given that a person's age and gender cannot be changed, and that it would be almost impossible to convince individuals that an offense such as rape was not serious in nature, perceived risk appears to be the only malleable variable in this study - one's living arrangement could certainly be manipulated, but

this variable was found to be unrelated to fear of victimization. The "foot patrol" service offered at Lakehead University is an example of a program aimed at changing/reducing perceived risk and fear levels, as a personal escort is offered to those students who feel unsafe walking alone at night on the university campus. Other strategies designed to reduce perceived risk and fear levels include increasing the visibility of the police within communities (Cordner, 1986; Jones, 1987; McMurray, 1983) and sponsoring "tell the truth" campaigns so that citizens receive accurate information about the crime problem in their own neighborhoods (Henig and Maxfield, 1978; McPherson, 1978).

Although the perceived risk of victimization is a strong indicator of fear which also appears to be malleable, it bears repeating that fear levels should only be reduced when excessive. Since students and retirees of Thunder Bay tend to fear the types of offenses which they are likely to experience, reducing these reasonable fear levels, without simultaneously reducing objective risk levels, would likely result in decreased precautionary behaviors and, hence, increased victimization. Researchers need to be reminded that the elimination of fear would not eliminate the risk of being victimized. The data of this thesis support Yin's (1985:169) conclusion that "the public's fear of crime is not necessarily high, and neither is it irrational."

One area of consensus within the literature is that fear of victimization research lacks a comprehensive theoretical framework and has almost nothing in the way of general theory (Clarke and Lewis, 1982; Sacco, 1990; Warr, 1987). Of the few investigators (Clemente and Kleiman, 1977; Middleton, 1986; Yin, 1985) who have attempted to explain their empirical findings by way of a sociological or social psychological theory, most have relied upon symbolic interactionism and, more specifically, the "definition of the situation." Blumer (1969:2-6) outlines three premises on which symbolic interactionism is based: 1) humans act toward things (e.g., physical objects, other persons, ideals) on the basis of the meanings that the things have for them; 2) the meaning of such things is derived from, or arises out of, social interaction with others; 3) individuals define and construct their social situations by using sets of cultural meanings and understandings as the bases for their interpretations. This third premise, that of the "definition of the situation", was introduced by W.I. and Dorothy Thomas with the claim that "if men define situations as real, they are real in their consequences" (Thomas and Thomas, 1970:154). In other words, to understand a person's behavior in any situation it is necessary to know how he defines the situation: "what attitudes does it arouse in him, what values if any function in it for him, in short, what meanings does it have for him.

'It is these meanings which determine the individual's behavior'" (Bogardus, 1949:41). Put another way, the meanings men impart to the objective world become the reality in which they live their lives (Parenti, 1967:xii).

Middleton's (1986:134) thinking is close to that of W.I. and Dorothy Thomas when he states that fears have something to do with who we are, what we know, and how we feel about that identity and knowledge. Females, for example, may express higher levels of fear than males for most criminal offenses because they have been socialized to identify themselves as sexually vulnerable beings. This identity colors their perceptions of the world to the extent that most criminal offenses are viewed as probable sexual offenses and, thus, a search for protection, an aversion for risk-taking and precautionary behaviors become a female way of life. Women, through their fears and restricted behavior patterns, are in essence responding to the hazards they have been taught to perceive. Or, as Berger and Luckmann (1966:173) might suggest, women are responding to an identity which has been socially produced and which is maintained by social relations. Following this line of thought, retirees may be significantly more security cautious than students (although they are less likely to experience all types of victimization) (Solicitor General of Canada, 1984b, as cited in Brillon, 1987:35) because they are aware of their deteriorating health and physical frailty

and thus define victimization as a serious event - one that could result in physical injury, the loss of personal autonomy (entering a nursing home) and death.

Stebbins (1967:163) believes that "knowledge about how the situation is defined...can tell us what people in situations are reacting to." The regression analyses suggest that the situation of being fearful of criminal victimization is primarily a reaction to subjectively defined risk (this holds true for the sample and for each subsample of respondents). Thus, students are more fearful than retirees, females are more fearful than males, and female students are more fearful than the other three subsamples because those more fearful of victimization define themselves (their situations) as being more at risk to victimization. These definitions of risk may be derived from objective reality (e.g., being told by a policeman that one resides in a high-crime neighborhood) or from a subjective appreciation (e.g., having one's hubcaps stolen and thus interpreting this to mean that one resides in a high-crime neighborhood) (Thomas and Thomas, 1970:154).

Some authors (Hall et al., 1978; McConnell, 1989; Scruton, 1986) contend that fear of victimization is not only influenced by one's lifestyle, physical condition and living environment but also by the larger "crime situation" as defined by the police, the judiciary and the media. "Crimestoppers" commercials, for example, are designed to

elicit the public's assistance in solving local crimes but, by documenting the prevalence of serious criminal offenses, the police are justifying their existence by creating and/or maintaining an awareness of crime within the community. As McConnell (1989:177) points out, "the criminal justice system itself has a vested interest in escalating fear of crime as people who are fearful are desirous of that very service which the criminal justice system provides." How the judiciary, the media and particularly the police define society's "crime situation" should have an affect upon how the individual defines his "crime/fear of crime situation." Future research, for example, might examine whether police policies are directed towards increasing fear levels among the population or among certain segments of the population (e.g., women, racial minorities).

This thesis ends with a few ideas for future researchers to ponder: 1) since younger persons in this and in other offense-specific studies (Gomme, 1988; LaGrange and Ferraro, 1989; Parker, 1988; Rucker, 1990) have been found to be more fearful of victimization than older persons, we must question not only the existence of a "fear-victimization paradox" but also the empirical generalizations (of earlier global studies) upon which this paradox is based. Fear seems to be a phenomenon that is not reserved for the elderly alone and, thus, future research should be offense-specific but not elderly-specific; 2)

criminologists and gerontologists need to recognize that not all fear is phobic, as "some 'healthy anxiety' leading to awareness and caution probably is a good thing, when it is rooted one way or another in reality" (Skogan, 1987:152). It is when fear levels are excessive, or disproportionately higher than objective risk levels, that they should be reduced - not eliminated; 3) since perceived risk is a strong indicator of fear which also appears to be malleable, programs designed to reduce excessive fear levels may not be successful unless they also attempt to reduce perceived risk levels. Some researchers (Box et al., 1988; Cordner, 1986; Yin, 1985) suggest that this goal could be achieved quite readily by increasing the visibility of the police within communities (e.g., foot patrols).

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APPENDICES

APPENDIX A

<u>Category of Offense</u>	<u>Offense Description</u>	<u>Response Scale</u>
Personal	1. Being murdered.....	0 1 2 3 4
Public Order	2. Being approached by people begging for money	0 1 2 3 4
Property	3. Having someone break into your home while you're away.....	0 1 2 3 4
Personal	4. Being raped	0 1 2 3 4
Public Order	5. Receiving an obscene phone call.	0 1 2 3 4
Public Order	6. Being cheated or conned out of your money	0 1 2 3 4
Personal	7. Having something taken from you by force.....	0 1 2 3 4
Public Order	8. Having strangers loiter near your home late at night	0 1 2 3 4
Property	9. Having someone break into your home while you're home.....	0 1 2 3 4
Personal	10. Being beaten up by someone you know	0 1 2 3 4
Public Order	11. Having a group of youths disturb the peace near your home.....	0 1 2 3 4
Property	12. Having your car stolen	0 1 2 3 4
Personal	13. Being hit by a drunk driver while driving your car.....	0 1 2 3 4
Personal	14. Being threatened with a knife, gun or club	0 1 2 3 4
Property	15. Being sold contaminated food....	0 1 2 3 4
Personal	16. Being beaten up by a stranger	0 1 2 3 4

Source: Warr and Stafford (1983:1036-40)

Recurrent Security Precautions

1. Do you usually turn on the lights in your residence when you go out at night?
2. Do you usually lock the doors and windows of your residence during the day even when you are home?
3. Do you usually avoid opening your door to strangers?
4. Do you usually ask neighbors to watch your residence when you are away for a few hours?
5. Do you usually avoid going out alone?
6. Do you usually avoid going out at night?
7. Do you usually avoid using public transportation at night?
8. When sitting or riding in a vehicle, do you usually keep the doors locked?

Sources: Gordon and Riger (1989:17-18); Warr (1985:247)

APPENDIX B

h HOUSEHOLDER

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MIKULASIK

Mikulasik Joseph P retd h742 N Mc Kellar St
 Mikulinski Helen retd h630 Sherrington Dr Apt 201
 " Jim W bus driver Greyhound Bus Lines h405b University Dr
 " Tom M & Lynn; genl supt Lakehead Region Conservation Authority h477 E Francis St
 Mikulinsky Joseph retd h2243 E Miles St
 Mikus Ann Mrs h925 Alberta St
 " Anne emp Arc Annex r161 Johnson Av Apt 11
 Milalus Margaret-Rose h502 Van Norman St
 Milanese Brian & Dorothy; tchr Conf College h125 Cox Cres
 " Mary retd h362 N Mc Kellar St
 " Shari studt r125 Cox Cres
 Milani Brian studt r784 Red River Rd
 " D emp T & T Auto Supply r201 N Brunswick Av
 " David studt r784 Red River Rd
 " Elisa h285 S Algonquin Av
 " Janis Mrs child care provider h524 Kingsway Av
 " John D & Sharon L; emp Can Car h818 Mc Millan St
 " Kathleen A Mrs sec Carrell & Partners h222 Pomona Dr
 " L emp Sears h427 W Arthur St Apt 31
 " Louis G & Edith B h230 S Vickers St Apt 1
 " Louis J & Kathleen A; insp Dept of Agrl h222 Pomona Dr
 " Margarida & Mrs br adm Nesbitt Thomson Inc h230 Pine St
 " May retd h330 Sherwood Dr
 " Outdoor Fabric (Thos A Milani) 401 Valley St
 " Robt W & Anne; emp Mc Millan Bloedel h784 Red River Rd
 " Sharon L Mrs mtcewn Thunder Bay Public Library h818 Mc Millan St
 " Tanya emp M O D h704 Mc Laughlin St
 " Terrence & Margarida; emp City of T Bay h230 Pine St
 " Terry & Lynda; carp h54 Mona St
 " Thos A & Debbie L (Milani Outdoor Fabric) h401 Valley St
 Milano Gaetano h487 John St
 " Georgio & Rita; emp United Grain Growers h97 Ontario St
 " Neno studt r97 Ontario St
 " Rita Mrs cln Corpus Christ h97 Ontario St
 Milanovic Rjko & Rose; retd h376 Surrey St
 " Rose Mrs (Rose's High Styling) h376 Surrey St
 Mile Mary retd hBsmT 346 E Empire Av
 Milenko Kenneth V slsmn Intercity Ford SlS r651 Oliver Rd
 " Paul & Loretta; emp Selkirk Term h77 S Clarkson Av
 " Paul H lab Quality Hardware r77 S Clarkson Av
 " Shirley E customer serv rep Toronto Dom Bank h60 Carrie St
 " Victor F asst mgr L C B O h651 Oliver Rd
 Miles Isabel retd h1725 E Arthur St Apt 402
 " Jacqueline L h2222 Ridgeway St
 " Jo-Anne E Mrs emp Toronto Dom Bank h168 Conestoga St
 " Kendall J & Jo-Anne E; mgr United Repr Serv h168 Conestoga St
 " Olive retd h321 St Vincent St Apt 3
 " Richard h1216 Castlegreen Dr
 " Rick adm Handicapped Action Group Inc Housings

MILKS

Milks Kathleen Mrs therapist Mc Kellar Hosp h237 W Christina St
 " Leslie O & Emma; retd h274 W Christina St
 " Michl & Kathleen; therapist P A Genl Hosp h237 W Christina St
 Mill John S & Virginia R; firefrt City of Thunder Bay h170 Duke St
 " Ted chf City Fire Dept
 " Virginia R Mrs emp Confederation College h170 Duke St
 Millar Esther retd h747 S Norah St
 " Lenard pub relations offr The Salvation Army r78 Melon St
 " Lenore Mrs driver Turner Bus Lines h224 River St
 " Mike & Sandra h110 Hogarth St
 " Sam & Lenore; plant prod offr Inco Mines h224 River St
 Millard A B h120 S Cumberland St Apt 217
 " D R h2145 Mc Gregor Av
 " Dave gas atndt Husky r735 Ruskin Cres
 " Deanna studt h451 York St
 " Elli studt r735 Ruskin Cres
 " Freda cook Adanal Grill h631 S Vickers St Apt 4
 " Gary T & Sandra; emp Abitibi h448 Dawson St
 " Josephine Mrs cln H A Paragord h735 Ruskin Cres
 " Ray & Frances; emp Northern Wood Preservers h220 S Court St
 " Raymond A retd h2710 E Churchill Dr
 " Rick E radiator repairer Techni-Cool Inc r220 S Court St
 " Robert supvr Valhalla Inn h223 Villa St Apt 5
 " Tony W & Tania P; lab Northern Wood Preservers h628 Winnipeg Av
 " Valerie typist Can Emp Centre r2710 E Churchill Dr
 Miller A L & Mina; emp Miller Precast h420 W Christina St
 " A W h429 W Donald St
 " Alvin & Joanne; emp C N Rail h110 Ashland Pl
 " B J asst Brodie St Public Library h322 Heron St
 " Barry A & Grace (Gilmar Supply) h790 Arundel St
 " Betty pres Harborview Seniors Club
 " Beverly A Mrs emp Upjohn's Home Care h425 N Court St
 " Blair A station atndt Air Canada r544 Egan St
 " Bruce & Patricia; tchr Lakehead Bd of Educ h324 Dublin Av
 " C P retd h151 N Court St Apt 33
 " Carol A cook P A Genl Hosp h89 Academy Dr
 " Carrie L clk Canadian Tire r722 S Marks St
 " Cecil G & Elsie M; retd h126 Dorothy St
 " Chester & Laverne; retd h3309 Willard Av
 " Cindy A Mrs clk Fort Wm Gardens h2843 Isabella St
 " Clinton h170 W Donald St Apt 408
 " D D & Kelly R; emp C P Rail h536 E Christina St
 " David & Pattie; serv tech Mac Lean Hunter Cable TV h844 N Brodie St
 " David J electronic tech r2616 Chestnut St
 " Dean & Alice; driver Gino Antoniazzi Ltd h449 E Brock St
 " Debbie L studt r111 Audrey St
 " Debra-Lynn studt r312 Erie St
 " Derek & Sue; purchasing agt Thunder

MILLER

" Gary R h194 Ironwood Av
 " Geo & Shirley; installer T Bay Tel h127 S Edward St Apt 307
 " Gertrude retd h51 Walkover St Apt 106
 " Gertrude retd h238 Wilson St
 " Glen & Janice; emp Can Car h472 W Arthur St Apt 300
 " H retd h429 Arundel St
 " H M retd h223 S Mc Kellar St Apt 5
 " Heather Mrs emp Lakehead Univ h436 W Walsh St
 " Hilka Mrs emp Confederation College h258 Theresa St
 " Iris Mrs acct Diesel Power Ltd h2601 Ridgeway St
 " Iris & Les clk The Salvation Army r111 Audrey St
 " J r127 S Edward St Apt 307
 " J Drew h1526 Rankin St
 " J M veterinarian Algoma Pk Animal Clinic
 " Jack R pntr r722 S Marks St
 " James E & Linda; retd h367 Toledo St
 " James W lab Abitibi r258 W Amelia St
 " Jan W & Rosemary C; lab Miller Precast h424 W Christina St
 " Janice Mrs emp Valhalla Inn h472 W Arthur St Apt 300
 " Janie L genl mgr Renegade Brewery h142 Hemlock Pl
 " Jean-Ann Mrs ofc adm Indian Affairs h312 Erie St
 " Jeanne C retd h401 N Edward St Apt 206
 " Jim h1055 Highway 61b
 " Jim & Kathy G; sta eng Abitibi Price h331 W Pacific Av
 " Jim studt r496 Rupert St
 " Joanne Mrs emp Greyhound Bus Depot h110 Ashland Pl
 " Joe & Heather; timber tech M N R h436 W Walsh St
 " John & Elsa; retd h85 Oswald St
 " John W emp Fed Govt h1414 Mc Gregor Av
 " Johnna cleaner G A Mac Eachern Serv r79 Burriss St
 " Karen Mrs slswn Wanson Lbr
 " Karen A Mrs mgr Painted Turtle h90 Shuniah St
 " Kathy h969 Holt Pl
 " Keith G & Irene; retd h125 S Edward St Apt 112
 " Kelly studt h140 Jean St Apt 18
 " L retd h130 S Brodie St Apt 15
 " L h2640 Isabella St Apt 1b
 " L Earl & Marjorie T; retd h110 Pinedale Pl
 " Len D & Hilka h258 Theresa St
 " Les A & Iris; emp Lakehead Univ h111 Audrey St
 " Linda M h82i Limbrick Pl
 " Loredana Mrs emp P A Clinic h234 St James St
 " Louis & Iona h1913 Bailey Av
 " M retd h745 S Marks St
 " M Kim & Lisa E; constn formn Parnell Constn h342 N Archibald St
 " Marilyn Mrs emp C P F P h1331 Alpine Av
 " Marilyn D Mrs dental asst Rivercrest Dental Clinic h305 N High St
 " Mary retd r377 Arundel St
 " Mary R retd h376 River St
 " Maurice & Bertha; retd h2370 W Broadway Av
 " Melvin R & Sylvia; retd h104 Birch St
 " Michael h182 Farrand St
 " Michele (The Pampered Pet)
 " Mike studt .r496 Rupert St

APPENDIX C

Dear Participant:

I am a graduate student in the Department of Sociology at Lakehead University writing a thesis entitled "The Indicators of Fear of Victimization." The purpose of this study is to examine who are fearful of crime, why they are fearful, and what security precautions people may take to protect themselves and their property from crimes and criminals. The information gathered will provide a better understanding of fear of victimization so that unnecessary fear may be reduced among all age groups. Through a random selection of names from the 1991 Henderson Directory, you have been chosen to participate in this study. I ask that the person whose name appears on the envelope completes this questionnaire and returns it to me at Lakehead University in the stamped reply envelope provided.

Your participation in this study is very important, and all answers are acceptable. The information gathered will remain strictly confidential and will only be seen by me. No individual will be identified in any report of the results. If you have any questions, or wish to obtain the findings of this study when it is complete, please contact me at 807-343-8477 or my Thesis Supervisor, Dr. J.D. Stafford, at 807-343-8791.

It will take about 15 minutes to complete this questionnaire. I thank you for your voluntary participation and ask that you mail the completed form to me as soon as possible.

Yours respectfully,

Timothy Cullen
Graduate Student
Department of Sociology
Lakehead University
Thunder Bay, Ontario
P7B 5E1
807-343-8477

At one time or another, most of us have experienced fear about becoming the victim of a crime. Below is a list of different types of crime. I am interested in how afraid you are about becoming the victim of each type of crime in your everyday life. If you are NOT AFRAID at all, then circle the number 0 beside the crime. If you are VERY AFRAID, then circle the number 4 beside the crime. If your fear falls somewhere in between, then circle the number between 0 and 4 which best describes your fear about that crime.

	Not Afraid	1	Somewhat Afraid	2	3	Very Afraid	4
1. Being murdered.....	0			2			4
2. Being approached by people begging for money	0			2			4
3. Having someone break into your home while you're away.....	0			2			4
4. Being raped	0			2			4
5. Receiving an obscene phone call	0			2			4
6. Being cheated or conned out of your money	0			2			4
7. Having something taken from you by force.....	0			2			4
8. Having strangers loiter near your home late at night	0			2			4
9. Having someone break into your home while you're home.....	0			2			4
10. Being beaten up by someone you know	0			2			4
11. Having a group of youths disturb the peace near your home.....	0			2			4
12. Having your car stolen	0			2			4
13. Being hit by a drunk driver while driving your car.....	0			2			4
14. Being threatened with a knife, gun or club	0			2			4
15. Being sold contaminated food...	0			2			4
16. Being beaten up by a stranger	0			2			4

For each type of crime listed below, please indicate how likely you think it is to happen to you during the next year. If you feel that it is NOT LIKELY to happen to you, then circle the number 0 beside the crime. If you feel that it is VERY LIKELY to happen to you, then circle the number 4 beside the crime. If you think the likelihood that it will happen to you lies somewhere in between, then circle the number between 0 and 4 that best indicates how likely you think it is to happen to you in the next year. No one can predict the future, of course, so your answer will only be a guess. But give me your best guess based on your own circumstances and experiences.

	Not Likely	1	Somewhat Likely	2	3	Very Likely	4
1. Being murdered.....	0	1	2	3	4		
2. Being approached by people begging for money	0	1	2	3	4		
3. Having someone break into your home while you're away.....	0	1	2	3	4		
4. Being raped	0	1	2	3	4		
5. Receiving an obscene phone call	0	1	2	3	4		
6. Being cheated or conned out of your money	0	1	2	3	4		
7. Having something taken from you by force.....	0	1	2	3	4		
8. Having strangers loiter near your home late at night	0	1	2	3	4		
9. Having someone break into your home while you're home.....	0	1	2	3	4		
10. Being beaten up by someone you know	0	1	2	3	4		
11. Having a group of youths disturb the peace near your home.....	0	1	2	3	4		
12. Having your car stolen	0	1	2	3	4		
13. Being hit by a drunk driver while driving your car.....	0	1	2	3	4		
14. Being threatened with a knife, gun or club	0	1	2	3	4		
15. Being sold contaminated food...	0	1	2	3	4		
16. Being beaten up by a stranger	0	1	2	3	4		

There are many different kinds of crime. Some are considered to have very harmful financial, physical and psychological consequences, while others are not so serious in nature. I am interested in your opinion about how serious each type of crime is. If you think it is NOT SERIOUS, then circle the number 0 beside the crime. If you think it is VERY SERIOUS, then circle the number 4 beside the crime. If you think the crime falls somewhere in between, then circle the number between 0 and 4 which best indicates how serious you think the crime is. Remember that the seriousness of a crime is only a matter of opinion, and it is your opinion that I want.

	Not Serious	1	Somewhat Serious	2	3	Very Serious	4
1. Being murdered.....	0	1	2	3	4		
2. Being approached by people begging for money	0	1	2	3	4		
3. Having someone break into your home while you're away.....	0	1	2	3	4		
4. Being raped	0	1	2	3	4		
5. Receiving an obscene phone call	0	1	2	3	4		
6. Being cheated or conned out of your money	0	1	2	3	4		
7. Having something taken from you by force.....	0	1	2	3	4		
8. Having strangers loiter near your home late at night	0	1	2	3	4		
9. Having someone break into your home while you're home.....	0	1	2	3	4		
10. Being beaten up by someone you know	0	1	2	3	4		
11. Having a group of youths disturb the peace near your home.....	0	1	2	3	4		
12. Having your car stolen	0	1	2	3	4		
13. Being hit by a drunk driver while driving your car.....	0	1	2	3	4		
14. Being threatened with a knife, gun or club	0	1	2	3	4		
15. Being sold contaminated food...	0	1	2	3	4		
16. Being beaten up by a stranger	0	1	2	3	4		

Each day many people take steps to protect themselves and their property from crimes and criminals. Please check either "yes" or "no" to each of the following questions:

1. Do you usually turn on the lights in your residence when you go out at night? yes no
2. Do you usually lock the doors and windows of your residence during the day even when you are home? yes no
3. Do you usually avoid opening your door to strangers? yes no
4. Do you usually ask neighbors to watch your residence when you are away for a few hours? yes no
5. Do you usually avoid going out alone? yes no
6. Do you usually avoid going out at night? yes no
7. Do you usually avoid using public transportation at night? yes no
8. When sitting or riding in a vehicle, do you usually keep the doors locked? yes no

Please list any other precautions which you take each day to protect yourself and your property from crimes and criminals.

1. Are you: male female
2. Your age at last birthday: 17 years and under
 18-30 years
 31-49 years
 50 years and over
3. How many people live with you in your residence? _____

****THANK YOU FOR YOUR PARTICIPATION****

APPENDIX D

<u>Offense Descriptions</u>	<u>Mean Fear Ranks</u>		<u>Mean Risk Ranks</u>		<u>Mean Serious Ranks</u>	
	<u>TO</u>	<u>SW</u>	<u>TO</u>	<u>SW</u>	<u>TO</u>	<u>SW</u>
Having someone break into your home while you're away	1	1	6	2	7	8
Having someone break into your home while you're home	2	4	11	8	5	4
Being hit by a drunk driver while driving your car	3	3	5	6	3	5
Having strangers loiter near your home late at night	4	6	3	5	13	13
Being threatened with a knife, gun or club	5	7	12	10	4	3
Having something taken from you by force	6	5	8	9	8	7
Being beaten up by a stranger ...	7	9	13	14	6	6
Being raped	8	2	14	11	2	2
Having your car stolen	9	11	7	8	9	10
Being murdered	10	10	16	15	1	1
Being cheated or conned out of your money	11	12	10	13	11	11
Having a group of youths disturb the peace near your home	12	8	2	3	14	14
Being sold contaminated food	13	15	9	12	12	12
Receiving an obscene phone call	14	14	4	4	15	15
Being beaten up by someone you know	15	16	15	16	10	9
Being approached by people begging for money	16	13	1	1	16	16

TO = Thunder Bay, Ontario sample of this study (n= 194).
 SW = Seattle, Washington sample of Warr and Stafford's (1983:1036) study (n= 339).

Note: Means are not presented since 0-4 response scales were used in this study, while 0-10 response scales were used in Warr and Stafford's (1983:1037) study (the means are not comparable).