PSYCHOLOGICAL FACTORS RELATED TO PUBLIC PERCEPTIONS OF CRIME

by

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ABSTRACT

A review of the literature indicated that psychological variables have been largely ignored in analyses of the factors related to varying levels of concern about crime problems, estimates of the likelihood of victimization, and feelings of being threatened. Evidence from other research areas suggested a number of psychological constructs which might be expected to be related on an individual level with indicators of crime perceptions. Those constructs included psychological well being, psychological distress, anomia, life satisfaction, locus of control, and various aspects of social relating, including availability of social support and loneliness.

Three studies were done to investigate the nature of the relationships between these constructs and various crime perception indices. Each study involved secondary analyses of archival survey data. Data were available from the 1981 Edmonton/Winnipeg Area Study, the 1981 Survey of Crime as a Stressful Life Event, and from the 1982 Delta Crime Perception Survey.

The primary analytical technique used was principal components analysis. This procedure was separately applied to subsets of the crime perception variables and also to the psychological variables, in order to reduce the total number of variables involved in each domain and to create sets of uncorrelated variables representative of each domain. The final step of the analyses involved calculation and interpretation of

correlations between component scores from the crime perception and the psychological variable domains.

The findings indicated that, as hypothesized, there were significant relationships between psychological indicators and crime perception measures. These relationships were of a magnitude consistent with those previously found between other kinds of indices and crime perception measures. Among the findings were indications that decreased psychological well being, higher levels of psychological distress, external locus of control, and unavailability of social support were associated with increases in certain types of crime perceptions. Perceptions of the likelihood of particular kinds of victimization and the seriousness of neighborhood crime problems were found to be elevated in relation to increased social relationship activity.

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Psychological Factors Associated With Public Perceptions of Crime

During the mid-1960s there was a notable increase in public concern about rising crime in the United States. This concern was evident from citizen responses to surveys conducted by various organizations and by expressions of concern made by politicians on behalf of their constituents (Skogan, 1977). The United States government responded to this problem by instituting various research efforts to ascertain the nature of the crime problem as a basis for planning possible responses to it.

One such effort attempted to ascertain the "true" extent of crime occurrence by conducting surveys of the general population to determine whether or not individuals had been victims of crime during a specified prior time period. The main hope was that this methodology would provide more accurate estimates of the level of crime than were available from police statistics based only on reported crimes.

As well as inquiring about experience with crime, victimization surveys typically included some number of

questions about the respondents' perceptions of the crime problem.[1] Initial expectations were that responses to these questions would provide additional information to round out understanding of the nature and extent of crime problems, as well as giving some idea of the impact that crime was having on people's lives.

Analyses of the data from victimization surveys revealed, however, that perceptions of crime problems were inconsistently related to measures of actual crime occurrence based on the same surveys or on reported crime statistics (Biderman, Johnson, McIntyre, & Weir, 1967; Reiss, 1967). For instance, sub-groups of the population were more "fearful" than might be predicted based on their relative rates of criminal victimization. As another example, it was found that regardless of where they lived, almost all people perceived that there was more of a problem with crime in other areas than there was in their own neighborhoods.

Early researchers had expected to find that survey measures of public perceptions of crime problems and "objective" measures of crime incidence would be positively and consistently related.

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[1]A later section points out the confusion that has arisen from ambiguities in the way terms are used during discussions of people's responses to crime-related survey questions. However, it is very difficult to write about this subject in completely unambiguous terms. The reader should understand that people's written or spoken responses to crime-related questions will be characterized most generally as "perceptions." This word is meant to include more specific terms such as "beliefs", "opinions", "attitudes", etc. In those instances where a precise distinction is crucial, an operational definition of the terms will be provided.

Investigation of public reactions to crime received considerable impetus when these simple expectations were not met. This led to a broadened search, primarily from a sociological perspective, for variables which might be affecting crime perceptions directly, or which might otherwise be mediating the connection between "actual" crime and individual perceptions of crime problems.

A considerable amount of research has been done attempting to resolve the apparent inconsistencies between individual perceptions of crime and more objective measures of crime incidence. In general, these efforts have met with limited success. Two principle problems can be identified from the research literature in this area: first, there is little understanding of the structure of the domain of crime perceptions; and, second, attempts to explain the origins of crime perceptions have met with little success. The next two sections review the findings related to each of these problems and suggest directions in which research might fruitfully proceed.

The Relationships Among Crime Perception Measures

So far there is relatively little understanding of the nature of the domain of crime perceptions. Having initially expected crime perception indices to parallel and expand upon what was known about objectively measured crime, survey designers wrote a variety of questions based on common-sense ideas of what seemed appropriate. These questions were

developed around a number of loosely related concepts: the absolute level of crime; the level of crime in one area relative to some other area; the likelihood of victimization; feelings of safety in various situations; as well as others. After having collected hundreds of thousands of responses to crime perception questions and discovering that the relationships in the data did not match expectations, researchers then began to try to understand what constructs were being measured and what the underlying structure of the domain of crime perceptions might be.

A problem which has continually plagued this effort is the widespread use of terms which have been operationalized in different ways by different researchers. A prominent example of this is the use of the phrase "fear of crime", which has been variously operationalized as respondents' answers to questions asking about such specifics as: how safe they feel, or would feel, when out alone at night; whether or not they believe there is an unsafe area within a mile of home; the extent to which they worry about becoming victimized; and the likelihood of their being victimized (DuBow, McCabe, & Kaplan, 1979).

In an early attempt to bring some order to this research, Furstenberg (1971) was the first to point out that questions which ask respondents for their assessments of the seriousness of the crime problem relative to other kinds of problems, as well as questions asking respondents about the probability of their becoming victims of crime, had both been called measures

of "fear of crime." He then proposed that questions of the first type be labelled measures of concern about crime and only those of the second type measures of fear of crime.

A very comprehensive typology of crime perceptions was subsequently presented by DuBow et al. (1979). Following the work of Fowler and Mangione (1974, ref. in DuBow et al.), they proposed that crime perceptions be grouped into three qualitatively distinct categories, each incorporating a continuum varying from those perceptions which have a very general referent to those involving very personal assessments.

Their first category of crime perceptions relates to the individual's system of values. At the general end of this continuum are perceptions about crime which are expressions of the individual's opinions about the relative ranking of crime as a societal or cultural problem within a hierarchy of other possible problems. At the more personal end of the dimension are expressions of the extent of crime that the individual is willing to tolerate in immediate proximity.

The second category of crime perceptions proposed by DuBow et al. comprise judgements about occurrence of crime. At the general end of this continuum, these consist of estimates of rates of crime which might be made specific to times, places, and types of crime. At the personal end, the estimates are of the likelihood or risk of the individuals themselves being criminally victimized.

The final category proposed by these authors involves questions which tap emotions associated with crime perceptions. At the personal level these reactions might consist of expressions of fear for personal safety or worry about being victimized.[2] At more general levels these reactions might involve fear for the safety of others.

Cook, Skogan, Cook, and Antunes (1981) adopted a different categorization by proposing that Furstenberg's typology be further refined into a total of three types of crime perceptions. They argued (as did Furstenberg) that concern about crime is being expressed in responses to questions about the relative seriousness of crime problems. They then proposed that estimates of the likelihood of becoming a victim be referred to as measures of perceived risk, and that answers to questions about situations which might hypothetically affect the respondent (e.g., "How safe would you feel if you were out alone in your neighborhood at night?") be termed measures of crime threat. This distinction between risk and threat constitutes an improvement over Furstenberg's typology in that it accounts for individuals who may simultaneously believe that the probability of their becoming a crime victim (i.e., risk) is low (perhaps as a result of having taken extensive precautionary measures), and also that there would be considerable danger to them in the event that they were exposed to specific situations (i.e., high

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[2]Other kinds of emotional responses to crime (e.g., anger or outrage) have been suggested but not researched.

threat).

Although DuBow et al.'s typology of crime perceptions is the most comprehensive, more use will be made in this paper of the concepts concern, risk, and threat as developed by Cook et al., following Furstenberg. This terminology is the most convenient and appropriate for discussions of prior research into crime perceptions, as the majority of items that have actually been used can be easily characterised by these categories.

The Relationships Between Crime Perception Measures and Other Variables

A definite conclusion that can be drawn from research into perceptions of crime is that no one has had much success in accounting for their genesis, either in terms of objective crime measures moderated by other variables, or as the direct result of other factors. To a large extent this may have been due to the unavailability of appropriate concommitant variables in some of the data sets that have been analyzed. In many cases the studies were conducted within a sociological framework. As a result, the variables typically chosen for analysis were demographics or other types of cultural indices. The relationships between these kinds of variables and the nature/level of crime perceptions (however operationalized) have in most cases been relatively weak.

The following sections 1) examine findings relating crime perceptions with other variables; 2) review attempts to use

multivariate analyses to comprehend these relationships; and 3) suggest additional variables that might usefully be included in analyses of public perceptions of crime.

Variables That Have Previously Been Related to Crime Perceptions

Several categories of variables have been used by researchers in efforts to comprehend the meaning of responses to crime perception items. These include demographic characteristics, crime-related experiences, area characteristics, and a variety of other attitude constructs.

Demographic characteristics of respondents. The characteristics of sex, age, race, income and education have consistently been found to be related to crime perception measures (Braungart, Braungart, & Hoyer, 1980; Clemente & Kleiman, 1977; Garofalo, 1979; Hindelang et al., 1978). Women are much more likely than men to perceive threats to their personal safety, and older persons of both sexes are more likely to feel threatened. It has been suggested that this is understandable in terms of these groups' levels of vulnerability to harmful attack (Skogan & Maxfield, 1981).

It has also been noted that those who are unmarried and those who are living alone express more fear related to crime. This has been taken to be a result of insufficient social support resources (Braungart et al., 1980).

Although findings are less consistent, it is generally the case that blacks, those with low income, and those with little education are also more likely to give fearful responses to

crime perception questions. This has been understood as a result of lower status groups having to exist in environments where they are more exposed to crime (Skogan & Maxfield, 1980).

Experience with crime. It has always been assumed that having been a victim of crime would result in a greater degree of fearfulness. However, the evidence on this point has been somewhat equivocal, with some studies showing no effect of victimization (DeFronzo, 1979) and others indicating that being a victim is associated with higher levels of fear and concern (Braungart et al., 1980; Skogan, 1976; Skogan & Maxfield, 1980). The inconsistencies in these findings may in fact be a case in point of the confusion arising from differing operationalizations of research variables. In particular, victimization has usually been uniquely defined in each study.

More distant contacts with crime occurrences (i.e., "vicarious victimization") as a witness, through talking with victims, and through the media have also been proposed as potential influences on crime perceptions. Witnessing crimes, or talking with crime victims or others who have, has been consistently related to greater levels of concern about crime (Skogan, 1977; Skogan & Maxfield, 1980). On the other hand, and somewhat surprisingly, high levels of exposure to vicarious crime experience through mass media does not seem to affect crime perceptions in any definite and predictable way (Sacco 1982a; Skogan & Maxfield, 1980).

Area characteristics. There is a general consensus that characteristics of areas frequented by respondents affect perceptions of crime, but the exact form of the relationships varies a good deal among studies.

In some studies, the higher the level of crime in an area, measured via reported crime statistics or victimization surveys, the greater the degree of expressed concern about crime (Conklin, 1975; Garofalo, 1979). On the other hand, Furstenberg (1971) found concern high and perception of risk low, in low crime rate areas, and levels of concern low with perceptions of risk high, in high crime rate areas.

Researchers have also found that respondents who live in areas where residents perceive higher levels of crime (whether or not their perceptions are veridical) have also been more likely to give fearful responses to perception of crime questions (Garofalo, 1979).

Assessing the theory that absolute levels of crime, rather than high crime rates, generate more concern (DuBow et al., 1979), researchers have investigated the role of city size (the larger the city the higher the absolute number of crimes) in influencing perceptions of crime. Sacco (in press) found that those living in larger cities of Alberta were more concerned about certain types of crime. A similar finding was made in the U.S. by Clemente and Kleiman (1977). Conversely, Braungart et al. (1980) found that women living in small non-urban communities were more fearful.

Signs of "incivility" in an area such as neighborhood deterioration, vandalism, or the obvious presence of groups of youths on the streets have been related to increased perceptions of crime (Lewis & Maxfield, 1980; Skogan & Maxfield, 1980).

Other attitudes. Many authors have suggested that responses indicating awareness of crime problems are actually the expression of other attitudes held by the respondents, such as social concern, racism, conservatism, resentment of changing social conditions, or simply "general discontent". Findings are available to either support or refute such suggestions.

Skogan and Maxfield (1980) found that respondents' level of threat was unrelated to measures of trust, suspicion, and dissatisfaction with social change. They also determined that their measure of fear was unrelated to an index of racial prejudice.

In Holland, Van Dijk (1978) found positive relationships between measures of dislike of leftist positions, resentment of social change, and increased concern about crime. Resentment of social change was also found by Furstenberg (1971) to be related to crime perception measures in the U.S.

Garofalo and Laub (1978) have suggested that perception of crime measures are most usefully considered indices of the overall quality of the respondents' lives. They also contend that perceptions of crime are a combination of actual crime-related fear and fear of social instability.

Multivariate analyses

It became apparent from early research that none of the variables discussed above had strong bivariate relationships with perception of crime measures. Accordingly, most analysts examined them in combination with one another. Four examples typical of these efforts will suffice to show the limited progress made in understanding perceptions of crime.

Clemente & Kleiman (1977) accounted for 23% of the variability in fear of crime (presence of an area within one mile where the respondent would be afraid to walk at night) using a variant of multiple classification analysis with a sample (N=2700) of the United States population. In terms of variance accounted for, gender was most important (15%), with city size next (6%). Race, age, income, and education together accounted for an added 2%.

Hindelang, Gottfredson, and Garofalo (1978) accounted for 21% of the variance in fear of crime (feelings of safety out alone at night) through a multiple regression using ten independent variables from surveys done with about 22,000 people in each of eight U. S. cities. Gender was the most important variable (13%), followed by age (3%), and race (3%). Seven additional variables, including marital status, socio-economic status, and victimization indices, accounted for the remaining 2%.

Garofalo (1979) was able to account for 26% of the variance in fear of crime (feelings of safety out alone at night) in

terms of sex, age, neighborhood danger[3], and attitudes about local police in data from a sample of 70,000. Again, gender was the most powerful predictor.

Sacco (1982b) used factor scores, based on the first two factors from an analysis of sixteen perception of crime measures, as dependent variables in multiple regression analyses.[4] He was able to account for 18% of the variability of crime-related perceptions of the city-as-a-whole (as opposed to the neighborhood) in terms of city size (13%), age (1%), sex, SES, length of residence, victimization, and media exposure. He was able to account for only 10% of neighborhood crime perceptions, mainly as a function of gender.

Additional Variables That Might Usefully Be Considered in Relation to Crime Perceptions

In general, it can be said that researchers have been relatively unsuccessful in adequately accounting for public perceptions of crime in terms of the kinds of variables and models examined to date.

A number of authors have made suggestions about additional influences which might be considered in efforts to better comprehend the meaning of people's responses to crime perception questions. Three areas that appear to be promising are described in the following sections.

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[3]Operationalized in terms of race and income.

[4]This was a rare instance of dependent variables based on more than a single item being used in analyses of crime perceptions.

Subjective Perceptions of Well-Being. One potential explanation for individual variability in crime perceptions lies in the possibility that these judgements are influenced by each person's general level of psychological well-being. An analogous situation pertains with respect to the "halo effect" which is widely recognized in employee evaluation and other personal attribute rating situations as a tendency to allow general impressions to affect ratings of specific qualities. A similar process may well influence individuals' responses to questions about crime problems. Such considerations have resulted in suggestions for research into factors such as psychological well-being and individual life satisfaction (Garofalo & Laub, 1978).

A great deal of research has been done on the characteristics and antecedents of individuals' subjective well-being. Much of this work has been done within two distinct frameworks: mental health epidemiological studies and research into social indicators. However, preceding and informing those efforts was earlier work on the source of individual happiness.

Through the early 1960s Bradburn and Caplovitz (1965) worked to understand happiness and life satisfaction in order to develop indicators of individual mental health. These efforts culminated in the Affect Balance Scale (Bradburn, 1969) which, with two subscales, measured the occurrence of various kinds of positive and/or negative affective states in the individual's recent past. Bradburn's theoretical model proposed that an

individual's level of happiness was a function of the predominance of positive over negative affective states rather than being the result of the presence of absolute levels of either one. He found that the affect balance score (calculated as the positive affect score minus the negative affect score) was a reliable predictor of many other indices of subjective well-being and satisfaction. Although his theoretical model has been questioned (Cherlin & Reeder, 1975), Bradburn's scale has proven to be a reliable and useful predictor of subjective well-being in a wide variety of studies (Beiser, 1974; Berkman, 1971; Gaitz & Scott, 1972; Harding, 1982).

Mental health epidemiology studies originated as efforts to provide estimates of the extent of the need for mental health services (Heller & Monahan, 1977). As well as attempting to ascertain the current level of functioning of those respondents taking part in surveys, researchers developed and validated indices of psychological distress and other related factors.

An early large-scale study was conducted in Canada by Leighton and his associates from Cornell University (Hughes, Tremblay, Rapoport, & Leighton, 1960; Leighton, 1959; Leighton, Harding, Malkin, Macmillan, & Leighton, 1963). Over a ten year period starting in 1952 they studied the effects of community integration (and disintegration) on the mental health of all of the residents of the communities within a single county in Nova Scotia. The survey protocols and measuring instruments developed and validated for this study formed the basis for

those used in the later Midtown study.

The Midtown study (Langner & Michael, 1963; Srole, Langner, Michael, Opler, & Rennie, 1962) involved in-person interviews with a random sample of individuals from midtown Manhattan. The findings of this study indicated that 23% of the respondents showed severe psychological impairment and an additional 22% were moderately impaired. (However, only 2% were receiving treatment at a mental health center.)

A more recent study following the same tradition was undertaken in 1972 by Ilfeld through surveys of residents of Chicago (Ilfeld, 1978). His survey used newly developed and validated measures of psychological distress based on those that had been used in the studies described above. He identified a number of demographically defined groups within the population who were at high levels of risk with respect to psychological distress and attempted to investigate the role of various stressors in the development of their problems.

These and similar studies generated a large amount of information from a psychological/psychiatric perspective about the relationships between external community forces and mental health. An important by-product of these efforts was the subsequent availability of psychometrically sound scales for the measurement of psychological well-being which could be used by other researchers.

Social indicators research was originally concerned with the identification of objective indicators which could be used

to monitor the quality of life. Initially it was assumed that economic indices such as the gross national product would be closely related to societal well-being. Realizing the shortcomings of this simple model, researchers began to include a range of other objective indices such as divorce rate, infant mortality, suicide rate, etc. in an attempt to fill in the picture of the current state of societal life quality (Palys, 1973). This broadened effort has been termed the "social indicators movement" (Duncan, 1969) and has resulted in periodic compilations around the world of a large array of statistics on diverse topics.

However, as Campbell (1976) pointed out, it may not necessarily be the case that objective indicators are adequate measures of the quality of life as subjectively experienced by people. For example, he cites data (Campbell, Converse, & Rodgers, 1976) showing that over a period of several years the population of individuals who said that they were "very happy" has been declining steadily, while indicators of economic conditions have been rising. In addition, this trend is most pronounced among the most affluent segments of society. In view of this kind of evidence, it has become clear that subjective measures of life satisfaction must be included in assessments of the quality of life.

Several attempts have been made to develop subjective measures of life quality. Cantril (1965) believed that people's general level of satisfaction was a function of the discrepancy

between their actual life and the ideal life to which they aspired. He developed a self-anchoring scale to measure life satisfaction which he used in cross-cultural comparisons of the quality of life in thirteen countries.

Andrews and Withey (1976) provided additional validation of Bradburn's Affect Balance Scale on a national sample and also investigated a number of alternate measures while examining life quality in a variety of specific sub-areas of subjective experience. In a later examination of these data using a multitrait-multimethod latent structure analysis, it was demonstrated that "the validity of single questionnaire or interview items used to assess perceptions of well-being can be in the range of 0.7 to 0.8" (Andrews & Crandall, 1976).

In a series of related studies, Campbell (1981; Campbell, Converse, & Rodgers, 1976) has examined the patterns of satisfaction (identified through smallest space analysis) within fifteen specific life domains. These range from very important things like health and marriage to more "distant" and unimportant areas like non-work organizational membership. Campbell et al. (1976) noted that there is a high degree of relationship between individuals' ratings of domain satisfactions and their ratings of overall life satisfaction. Their analyses suggest that this relationship is reciprocal, such that those who are generally dissatisfied with life may also express dissatisfaction with specific aspects of their lives.

It is quite possible that general cognitive orientation has more influence on perceptions of specific life experience than vice versa. Overall life satisfaction (along with other psychological factors to be discussed below) may have greater impact on perceptions of crime problems than the reverse. In particular, because of the low base rates of crime occurrence, individuals' overall states of mind may well have more influence on their crime perceptions than any objective crime related evidence available to them from personal or vicarious experience. Stated simply, those who perceive their lives to be largely negative or unsatisfactory would also be expected to have negative views of the world around them, including perceptions of crime problems.

Feelings of Control. It has often been suggested that people's fear of crime results from apprehension about being able to deal adequately with a criminal in a face-to-face confrontation. In broader terms, this suggests that fear results from not feeling "in control" with respect to potential criminal victimization situations. It is also likely that an individual who generally feels less in control will have more doubt about being able to cope with a crime situation and may thereby be more fearful of such situations.

The idea that feelings of control are involved in many aspects of an individual's relations with the world has been examined in extensive research with the "locus of control" construct. The locus of control (LOC) construct developed

within the framework of social learning theory. It is formally described as a "situation-specific expectancy" (Phares, 1976), which consists of people having an expectancy of either being in control, or being controlled, in some specific situation.

The theory also allows for a generalized state of expectancy resulting from prior reinforcement history such that particular individuals will be primarily more inclined to believe either that they are generally in control of events, or that control usually resides outside of themselves.

Research into the locus of control construct began with the work of Phares (1955, cited by Phares, 1976). James (1957, cited by Phares, 1976) modified Phares' instruments and then Rotter (1966) further developed and published the first widely used measure of locus of control.

The construct was originally conceptualized as being unidimensional. A number of studies have found that the early measures involve more than one factor. Two main factors have been identified in the early measures of locus of control: A "fatalism" factor which indicates that the individual feels that the events of life are more or less due to chance; and a "social system control" factor tapping the extent to which the individual feels life events are controlled by powerful others and institutions (Hirsch & Scheibe, 1967; Mirels, 1970). Reid and Ware (1974) developed and validated a measure of locus of control which retained the two earlier dimensions relating to the sources of external control and added a new dimension,

"self-control", measuring the extent to which individuals feel in control of their own impulses, desires, and emotions.

The concept of generalized expectancy of locus of control has frequently been treated as a trait. Rotter (1975) has cautioned against this usage and argues instead that a particular locus of control orientation is more appropriately considered a status, which can be modified by subsequent experience. This has been verified by programs operating within the business and educational systems showing that it is possible to modify generalized expectancies of locus of control (Gardner & Beatty, 1980; Stanton, 1982).

It is quite likely that there is a direct relationship between locus of control and fear. Bandura (1977, Bandura, Reese, & Adams, 1982) has hypothesized that fear reduction is mainly achieved through the acquistion of feelings of control over the threatening stimuli. Newman and Brand (1980) have demonstrated that coping response training is more effective than desensitization in reducing fear.

Past research has provided indications of the relationship between feelings of control and fear of crime. Cohn, Kidder, and Harvey (1978) found that elderly members of a community organization focusing on crime prevention had greater feelings of control over crime and were less fearful than those who did not belong. Cohn et al. (1978) also showed that self defense courses increased women's feelings of control and reduced their fear of being attacked.

The well known finding that women report being a good deal more threatened by crime than do men, may be partially attributable to differential levels of feelings of control. This follows from findings that women have a greater sense of external locus of control than do men, as shown by a recent renorming of the original Rotter scale (Cellini & Kantorowski, 1982). Yuchtman-Yaar and Shapira (1981) propose that this is a result of the status of women in our society and that women's perception of a high level of external control is consistent with reality.

Another concept, self-efficacy, closely related to that of locus of control, has been measured by a scale developed and validated by Ilfeld (1978). This scale is quite similar to those measuring LOC with respect to content, but focuses more directly on the respondents' perceptions of themselves as being capable of initiating change in their own lives.

Whatever the origin of people's level of locus of control, given the evidence that it is modifiable, it would be of interest to learn more about the relationship between perceptions of control and levels of fear and/or concern about crime. Such information might be of considerable use in the planning of interventions aimed at reducing excessive fear of crime.

Social Relationships. In recent years, much attention has been focussed on the role of social relationships in promoting the psychological well-being of individuals. Research into

social support has focussed on two main aspects of social relating, which may loosely be characterized as quantity and quality. Quantity of social support has chiefly been measured in terms of the number of contacts with others which an individual may have had within some specified time period. Quality of social support has a much more subjective character and has usually been measured in terms of individual satisfaction with amounts of support available and received, and/or numbers of contacts of subjectively specified types (e.g., with a confidant).

Social support has been examined as a "buffer" or mediator of stressful life conditions, those having access to adequate social support resources showing lesser effects from the impact of negative stressful life events (Coates, 1969; Dohrenwend & Dohrenwend, 1974).

Some evidence suggests that it is the quality aspect of social support which is most important as a stress moderator (Holahan & Moos, 1981). However, it is also the case that the first aspect, quantity of contacts, has been positively related, although less strongly, to successful stress management.

It is as yet unclear, however, whether the effectiveness of social relationships stems from the mere fact of their existence, with the resulting increase in available resources, or simply from the subjective perception of being supported which is experienced by those involved in social relationships. With respect to the latter possibility, various measures have

been developed which can be used to ascertain the extent to which individuals feel that adequate social relationship resources are available to them.

An early measure was developed by Srole (1956) who was interested in measuring the construct of anomie, or normlessness, in society. Srole's Anomia Scale has subsequently been reevaluated by Teevan (1975) as being more appropriately understood as an index of the extent to which individuals perceive those around them as being anomic. Such perceptions constitute an alienated viewpoint which includes the idea that others are inaccessible and unavailable for supportive relationships. A closely related index is provided by the Loneliness Scale, described by Rubenstein and Shaver (1982).

Direct measures of the extent to which individuals feel adequately supported have been provided by Procidano and Heller (1983). They developed and validated the Perceived Social Support Scale, which has subscales measuring perceived social support received from friends and family.

In addition to functioning as a stress moderator, social support has been shown in a number of studies to be directly related to subjective well-being (Andrews, Tennant, Hewson, & Vaillant, 1978; Berkman & Syme, 1979; Miller & Ingham, 1976).

Social support processes may be particularly relevant to understanding differential crime perceptions appearing within particular population subgroups. For example, Braungart et al. (1980) noted that those who lived alone, or those who were

unmarried, tended to be more fearful. These findings held even when controlling for age, sex, and other factors. This issue is of particular interest in view of 1981 Canadian census data showing that since 1976 the number of single individual households has risen by 40% to now comprise one-fifth of all households in Canada.

Previous research has suggested the role of social support in helping individuals to deal with stressful aspects of their lives, as well as contributing directly to their level of subjective well-being. In view of this, it seems reasonable to propose that some of the variabilty in individuals' perceptions of crime may be related to the quantity and quality of social support available to them, such that those having more extensive social relationships would be expected to express less fear and concern about crime.

Summary

Previous attempts to account for the origins of public perceptions of crime have been relatively unsuccessful. This may be partly due to the inability of those variables that have typically been analyzed to adequately represent important psychological factors which may affect crime perceptions.

Three factors have been identified which could be related to variability in crime perception measures: subjective perceptions of well-being; feelings of control; and social relationship resources.

It was suggested that those with higher levels of subjective well-being will not be as likely to perceive crime as a problem. Crime is also less likely to be problematical for those who feel generally more in control of the events of their lives. Finally, those individuals who receive adequate support from those around them are expected to feel less threatened and concerned about the issue of crime.

Further Studies into Factors Related to Crime Perceptions

The sections which follow describe three studies designed to investigate some of the possible relationships between crime perceptions and the other factors discussed in preceding sections. These studies involve analyses of data gathered in surveys done at different times and in different locations in Canada.

The first set of data comes from in-person surveys (N=736) conducted for the combined Edmonton and Winnipeg Area Study which was done in the spring of 1981 (Kinzel, 1981). In addition to key crime perception items these data include measures of life satisfaction, Bradburn's (1969) Affect Balance Scale, Srole's (1956) Anomia Scale, the Loneliness Scale (Rubenstein & Shaver, 1982), indices of availability of, and satisfaction with, social support, and demographic characteristics.

Another set of data comes from a study of Crime as a Stressful Life Event which was carried out in Vancouver during the summer of 1981 (Glackman & Roesch, 1981). Telephone interviews were conducted with 212 people in the Greater Vancouver area using an instrument which contained a number of crime perception items. This data set also includes Bradburn's (1969) Affect Balance Scale, Ilfeld's (1978) measure of psychological distress, a locus of control scale taken from

Phares (1976), Ilfeld's (1978) self-efficacy scale, several indices of the availability of social support, indices of crime experience, and demographic characteristics.

The final set of data comes from a survey of community crime perceptions conducted in Delta, B.C. in the spring of 1982 (Glackman, 1983). This involved telephone interviews with 597 people, using many of the crime perception items from the surveys described above as well as several additional questions. Respondents also provided information about personal and vicarious experience with crime, life satisfaction, quantity and quality of available social support, and demographic characteristics. In addition to the information directly available from the survey respondents, indices of the occurrence of specific types of crime were available for the areas where the respondents lived.

A subset (N=140) of the Delta respondents provided additional information on a mail questionnaire which included Reid & Ware's (1979) Locus of Control Scale and the Procidano and Heller (1983) Perceived Social Support Scale.

Study I:

Reanalysis of Data from the Edmonton/Winnipeg Area Study

The Edmonton Area Study has been conducted each year since 1977. It's primary purpose is to provide a vehicle for academic research by the members of the Department of Sociology of the University of Alberta. The annual study also constitutes a resource for the community and for public agencies, who may

arrange to have specific questions included in the survey, as well as for other researchers who are given access to the data.

The 1981 Edmonton/Winnipeg Area Study provided data that could be used to assess some of the potential relationships discussed in the preceding sections. The survey included perception of crime items, indices of social relationships, a measure of psychological well-being, life satisfaction ratings, an anomia scale, a loneliness scale, and the usual demographic variables. This set of variables was expected to yield specific kinds of relationships if the main assertion of the preceding sections was valid, simply stated, that those who are disadvantaged in terms of the factors influencing individual positions on indicators like those listed above, are also more likely to express concern about crime in various ways. As stated before, crime perception measures may possibly best be understood as quality of life indicators.[5]

To be more specific with respect to the data at hand, it was hypothesized that elevated perceptions of crime would be found for those who were less involved in social relationships, were in poorer mental health, were less satisfied with their quality of life, were more estranged, or were feeling more lonely.

Methodology

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[5]Obviously, quality of life can also be affected by "real" crime which will be reflected in perception of crime indices. The point here is that crime is not the only contributor to perception of crime indices.

The 1981 Edmonton/Winnipeg Area Study (EWAS) was conducted in the two cities simultaneously by the Population Research Laboratory of the University of Alberta and members of the Department of Sociology at the University of Manitoba. Identical sampling, interview protocols, and procedures were used in both cities.

Survey Procedures and Participants. Random samples of households were drawn from city enumeration lists. Any available resident of the household over the age of eighteen was eligible to be a respondent for an in-person interview. Special selection procedures were used to increase the likelihood of obtaining harder to contact male respondents.

A letter describing the study was sent to each household in the week prior to the interviewer's initial contact. Ninety-nine percent of the sample was obtained within four callbacks. The procedures resulted in a sample of 400 in Edmonton and a sample of 336 in Winnipeg, representing 75% of the initially selected households. Examination of demographic profiles indicated that the samples were generally representative of the population (Kinzel, 1981).

Instruments. Crime perceptions were assessed with five items, three asking whether the respondent thought that crime had increased, remained the same, or decreased, in the neighborhood, city, and country respectively. A fourth item asked respondents to rate how safe they would feel walking alone in their neighborhood at night. The fifth item asked

respondents to rate their city of residence on a bipolar safe/unsafe scale.[6]

Subjective well-being was assessed with four indicators. Affective experience was measured with Bradburn's (1969) Affect Balance Scale, which was developed to assess psychological well-being. It consists of a listing of five positive and five negative affective experiences. Respondents were asked to indicate whether or not they had had these experiences during the previous four weeks. The scale yields three scores: positive affect, negative affect, and affect balance (the difference between the preceeding two scores). As discussed in the introductory section, this scale has been widely used and has become a cornerstone of social indicators research. The negative affect scale and affect balance scale scores were used in the analyses.

The Anomia Scale, developed by Srole (1956), consists of five agree/disagree items originally intended to measure the psychological effects of societal anomie, or normlessness. This scale has been taken as a measure of individual anomia, but Teevan (1975) has argued convincingly that it actually measures individuals' perceptions that those around them are anomic, essentially a kind of alienated viewpoint whereby others are perceived as inaccessible and unavailable for supportive interaction.

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[6]Items from the EWAS survey instrument analyzed in this study are shown in Appendix A.

The short form of the U.C.L.A. Loneliness Scale (Russell, 1982) consists of four items asking the respondent to rate the frequency of experiencing feelings of being in contact with other people.

Overall life satisfaction was measured with the same single item satisfaction indicator extensively studied by Andrews & Withey (1976), among others. It has been shown to be highly representative of the respondents' satisfaction across a number of specific life domains.

Indices of various aspects of social relating included the number of adults in the household; a rating of the number of neighborhood adults known by name; rating of the frequency of getting together with neighbors and with friends; questions as to whether help had been received from relatives during the previous two years with respect to advice on decisions, special occasions (childbirth, sickness, etc.), financial assistance for everyday expenses or for mortgages, and gifts other than for holidays, birthdays, etc., ratings of satisfaction with family life and with friendships; and a dichotomous variable indicating whether or not the respondent was married.

Additional demographic variables used in the analyses were the respondent's gender, number of years of education, and gross family income level.

Distributional statistics for the items and scales used in the analyses are included in Appendix B.

Analytical Procedures. Off-scale responses were handled in two ways. For items where a "don't know" response could reasonably be expected to represent a neutral position on the dimension under consideration, "don't know" was recoded to the scale midpoint. In all other instances of "missing" data item medians were substituted. No item was used with more than 13% of the data treated in this way, and in fact, all but three items had less than 2% of data which was replaced.

Correlational techniques were used to assess the relationships between the crime perception items and the variables from the other domains of interest. This process proceeded through three distinct stages.

Initially, principle components analysis (PCA) was applied to the correlation matrix with diagonals set equal to one in order to reduce the number of related variables within particular domains to a fewer number of uncorrelated components. This was done separately for the crime perception items and for the social relationship variables.

Next, a "second-order" principle components analysis[7] was conducted using component scores from the PCAs done with the social relationship items, along with the scales and other items representing the conceptual domains which were to be related to the crime perception items. This resulted in a series of uncorrelated components representing the relationships among all

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[7]The use of "second-order" differs here from usual usage in factor analytic literature (cf. Gorsuch, 1973; Rummel, 1970).

of the domains whose associations to crime perceptions were to be examined.

Finally, Pearson's correlations were calculated between the component scores from the PCA done with the crime perception items, and the component scores from the second-order PCA done for the other conceptual domains.[8] This analytical procedure was similar to that used by Golding and Seidman (1974) in an examination of the relative contributions of trait and method effects to relationships within the personality, vocational interest, and aptitude domains. The major advantage of such a procedure is the concentration of information about the associations between a number of variables from specified domains into a set of relatively fewer orthogonal components. The relationships between domains can then be readily examined in terms of the correlations among the components developed within each domain. This process enables the analyst to easily comprehend complex relationships among a large number of variables.

Because of the pervasive influence of gender on crime perception findings in the literature, all of the PCA analyses were first performed separately for each sex within each domain of variables. These were then examined in an effort to identify notable differences between the parallel analyses. When no such

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[8]Those familiar with multiple regression will recognize that these correlations are equivalent to regression weights for predicting the crime perception component scores from the second-order component scores, as the second order components are uncorrelated with each other.

differences were found, the data were combined and single PCAs were done. This had the major advantage of greatly simplifying the presentation of the analytical results, as the crime perception and social relationship components then had the same meaning for everyone.

The second-order PCAs were done separately for males and females as it was expected that the patterns of relationships between the domains represented in the analyses might be different for these two subgroups. This expectation was borne out by the results of the analyses.

Results

Consideration of the plot of eigenvalues (see Figure 1) from the principle components analyses of the crime perception items led to the decision to rotate two components accounting for 60% of the variance of the five items. Table 1 shows the components resulting from a varimax rotation (Kaiser, 1958) of the crime perception items. The first component was interpreted as being consistent with a generalized perception that crime has been increasing. The second component appeared to reflect expressions of feelings of unsafety in the city and in the neighborhood.

The results of the PCA done with the social relationship variables are shown in Table 2. Five components, representing 58% of the item variance, were subjected to varimax rotation. The eigenvalue plot is shown in Figure 2. The first component represented relationships within the framework of the immediate

Figure 1
Plot of Eigenvalues from
Principle Components Analysis of
EWAS Crime Perception Items

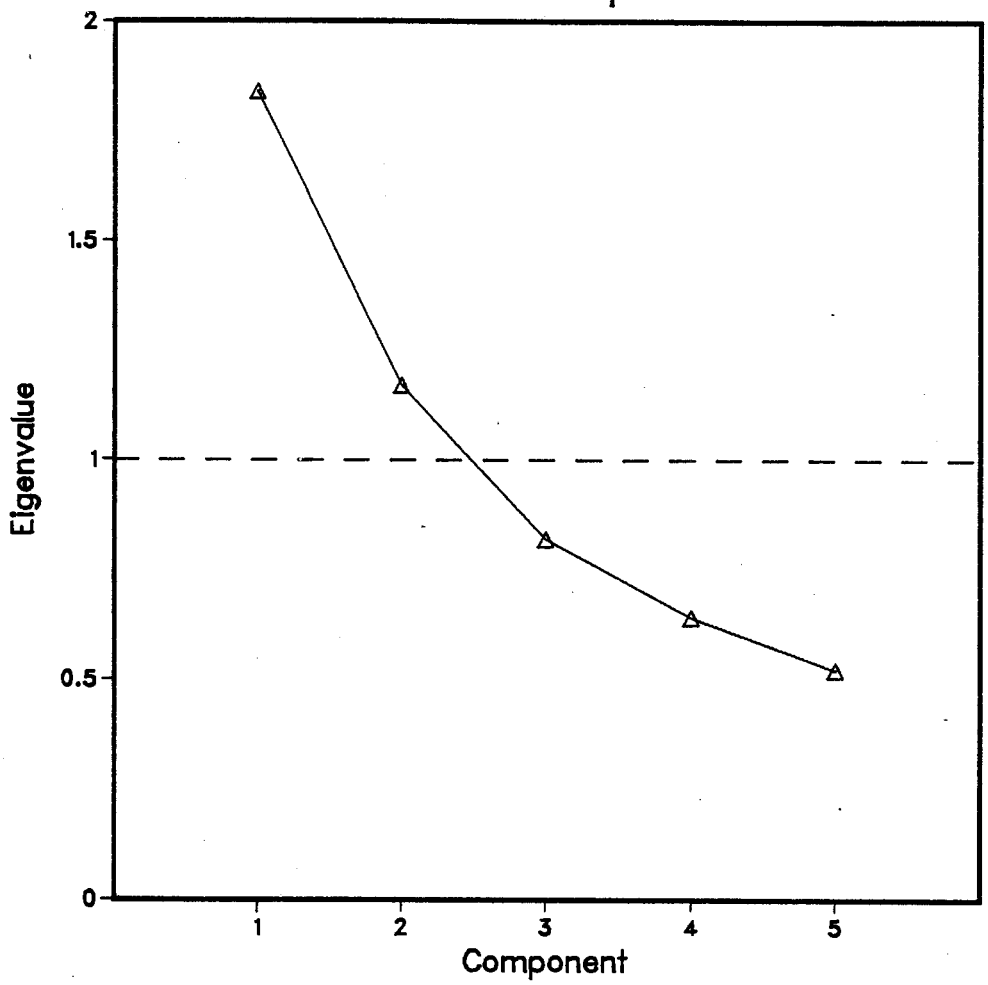

Table 1

Rotated Principal Components (CP1) of
EWAS Crime Perception Variables

	CP11 Increasing crime	CP12 Unsafety	h^2
Increasing crime in country	83		70
Increasing crime in city	82		70
Increasing crime in neighborhood	44	38	34
City unsafe		81	66
Unsafe alone in neighborhood at night		79	63

Figure 2
Plot of Eigenvalues from
Principle Components Analysis of
EWAS Social Relationship Items

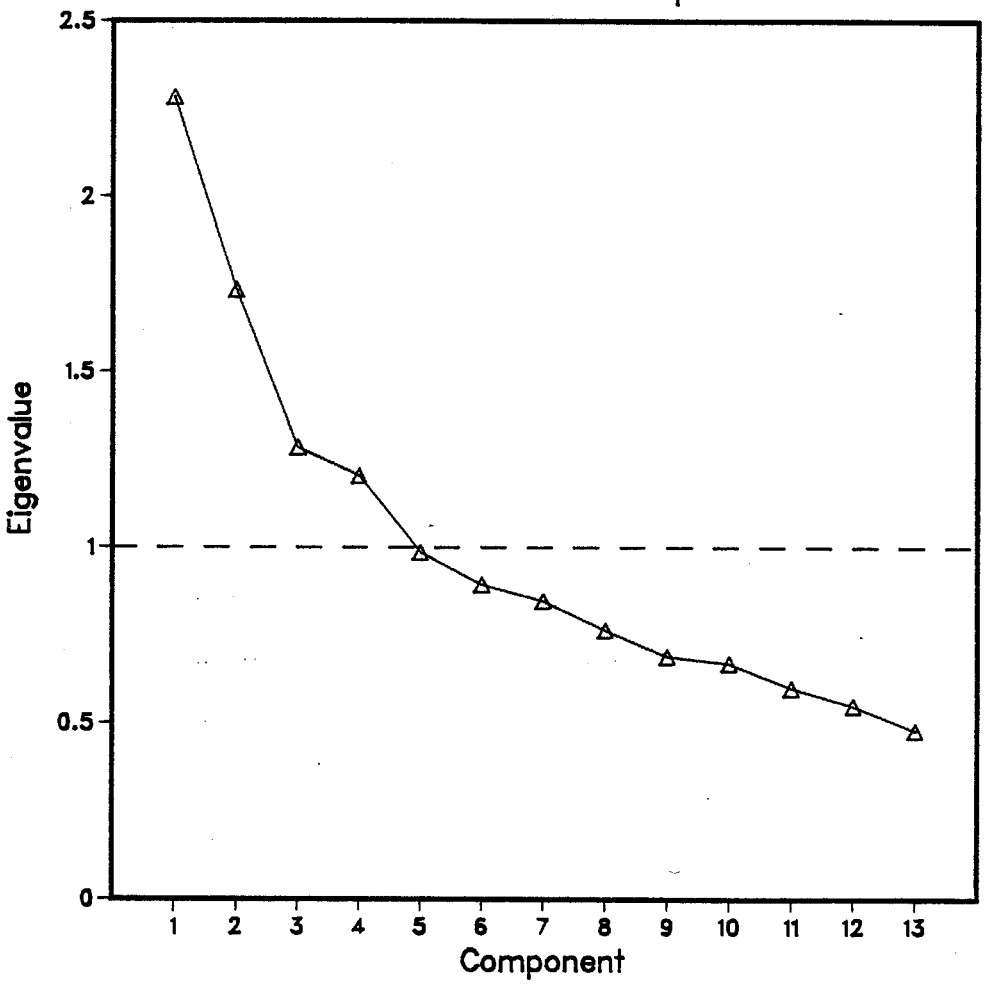

Table 2

Rotated Principal Components (SR1) of
EWAS Social Relationship Variables

Variable	SR11 Family	SR12 Assist-ance from relat-ives	SR13 Fin. assist-from relat-ives	SR14 Friends	SR15 Neigh-bors	h^2
Married	75					68
No. adults in household	68					54
Satis. with family life	62					53
Relatives help-with gifts		72				54
Relatives help-with advice		68				55
Relatives help-on spec. occ.		66				51
Freq. meet with rel.		42				33
Relatives help-expense $$			75			64
Relatives help-mortgage $$			75			59
Satis. with friendships				79		70
Freq. get together with friends				71		61
Freq. chat with neighbors					77	66
No. n'hd adults known					73	62

family. The second and third components were interpretable as support from the extended family in the form of help, and of money. The fourth and fifth components showed the effects of interaction with friends and with neighbors.

Figures 3 and 4 show the eigenvalue plots from the second-order PCAs done separately for males and females on their scores from the various scales, component scores from the social relationship PCA, and demographic variables. In each case, it was decided to rotate five components to varimax simple structure. Five components accounted for 63% of the variability among the items for the male data, and for 66% of the variance in the female data.

The rotated principle components from these analyses are shown in Table 3 for males and in Table 4 for females. The correlations between scores on these components and the component scores from the crime perception items are shown in Table 5 for both males and females.

The initial second-order component for the males (SM11) was related to the first crime perception component (CP11).[9] The relationship was such that a component relating lower levels of negative affective experience, a prevalence of positive over

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[9]Due to the large number of often similar rotated components within the various analyses, each was labelled with an alphanumeric code to enable precise identification of the component to which reference was being made. The letters indicate the type of variables analyzed (e.g., "CP" for "Crime Perception"), the first digit corresponds to the study (1-3), and the last digit is the number of the component within the particular analysis.

Figure 3
Plot of Eigenvalues from
Second-order Principle Components Analysis of
EWAS First-order Components and Other Items
for Male Respondents

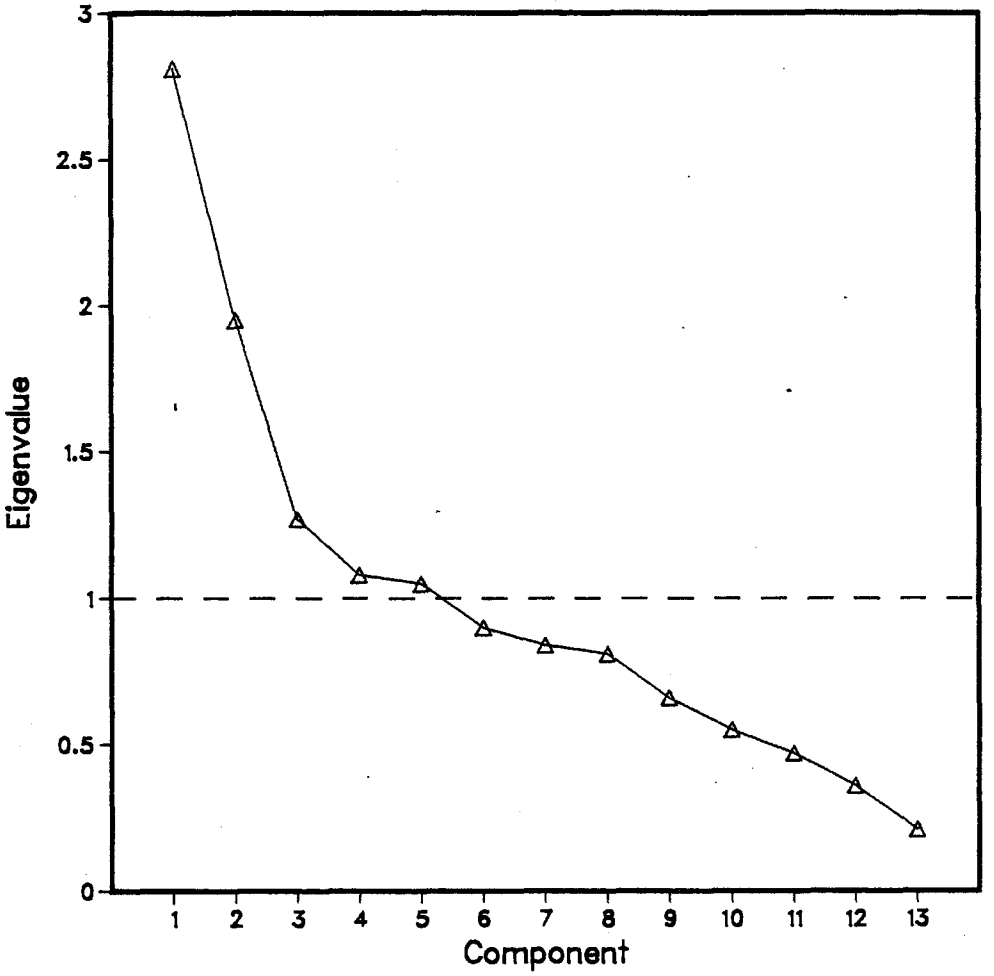

Figure 4
Plot of Eigenvalues from
Second-order Principle Components Analysis of
EWAS First-order Components and Other Items
for Female Respondents

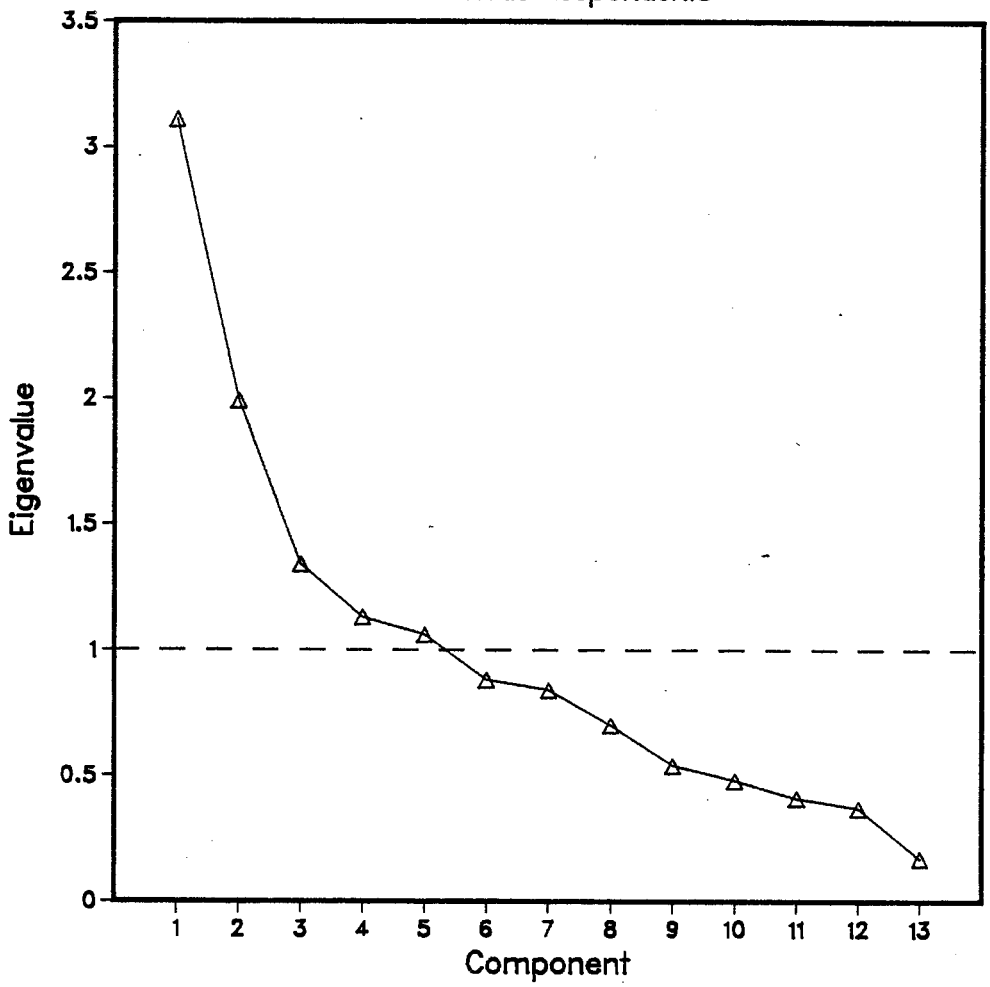

Table 3

Rotated Second-Order Principal Components (SM1) of EWAS Scales and First Order Component Scores for Male Respondents

Variable	SM11	SM12	SM13	SM14	SM15	h^2
Life Satis.	58		33			50
Neg. Affect	-82					70
Aff. Balance	79					71
Anomia		-67				58
Loneliness	-35		-54			52
Family	70					57
Assist. Rel.				66		51
Fin. Assist. Rel.				74		62
Friends			83			73
Neighbors					82	69
Age	30	-33	-40	-50	30	74
Years Schooling		79				68
Family Income		65			-41	65

Table 4

Rotated Second-Order Principal Components (SF1) of EWAS Scales and First Order Component Scores for Female Respondents

Variable	SF11	SF12	SF13	SF14	SF15	h^2
Life Satis.	38			67		66
Neg. Affect	-78					71
Aff. Balance	77			34		71
Anomia	-57	-33				50
Loneliness	-64			-33		53
Family			84			74
Assist. Rel.					-79	67
Fin. Assist. Rel.		62			48	66
Friends				83		74
Neighbors	54				37	53
Age	31	-78				76
Years Schooling		72				67
Family Income			79			73

negative affective experience, involvement in family life, higher overall life satisfaction, less loneliness, and being older, was associated with perceptions that crime had been increasing. Feelings of unsafety (CP12) for males were related to another component (SM12) reflected in feelings of alienation (anomia) being less educated, having lower income, and being older.

For females, perceptions of increasing crime (CP11) were positively associated with a second-order component (SF13) associating greater family involvement and higher family income. This same component was also related to decreased feelings of unsafety (CP12). Feelings of unsafety were also separately related for females with two other components, the first (SF11) associating greater negative affect, a negative affect balance, being lonely and anomic, having less involvement with neighbors, less satisfaction with life overall, and being younger. The other component related to feelings of unsafety for females related being older, less educated, receiving less financial assistance from relatives, and seeing others as anomic (SF12).

Summary

Initial expectations regarding the outcome of this study were that increased crime perceptions would be associated with lower levels of subjective well-being and lesser involvement in social relationships. Some of the findings of the study fulfilled those expectations, but some also ran counter to them.

Table 5

Correlations of EWAS Crime Perception (CP1) Components with Second-Order Components for Males (SM1) and Females (SF1)

	CP11	CP12
	Males (n=331)	
SM11	15**	07
SM12	-01	-19***
SM13	08	-08
SM14	01	-04
SM15	08	04
	Females (n=405)	
SF11	01	-21***
SF12	-02	-17***
SF13	11*	-17***
SF14	00	-01
SF15	00	03

*p<.05 **p<.01 ***p<.001

For both males and females, the unsafety crime perception component was related to a second-order component such that greater unsafety was linked to anomia, being older, having less education, and for males only, less income. Greater unsafety was also associated for females with a second-order component linking less family involvement and lower family income. Both of these findings were in accordance with expectations.

The male and female groups each had a second-order component associating greater life satisfaction, less negative affect, positive affect balance, less loneliness, and being older. The male component also had a high positive loading of family involvement, while the female component included a negative loading of anomia and a positive loading of involvement with neighbors.

For females there was a negative correlation of this component with feelings of unsafety. That is, those females scoring high on this component were more likely to feel safer, or conversely, those scoring lower would feel more unsafe. This pattern was in accordance with expectations that increased perceptions of crime would be associated with lesser subjective well-being.

For males, however, this second-order component was related to the increasing crime component such that those males who were better off in terms of subjective well-being and family involvement were more likely to perceive crime as increasing. This finding was exactly opposite to what had been expected.

In a similar vein, perceptions that crime had been increasing were correlated for females with a component associating greater family involvement and higher family income. Again, a finding contrary to expectations.

Study II:

Reanalysis of Data from the Survey of Crime As a Stressful Life Event

The study of Crime as a Stressful Life Event (CSLE) was originally designed to address three separate but associated issues related to the effect of criminal victimization on people's lives, giving particular emphasis to the impact such events have for women (Glackman & Roesch, 1981). First, the relative stressfulness of several different kinds of victimization was to be established using procedures previously used for other kinds of stressful life events. Second, specific effects of the threat of criminal victimization on women's lives were to be assessed. Third, the relationships between criminal victimization, psychological health, other stressful life events, and several additional variables were to be assessed in order to identify moderating effects on stress impacts.

For the purposes of this study, the data from the survey are useful in that the instrument used contained several perception of crime items as well as measures of psychological distress, psychological well-being, locus of control, self-efficacy, a number of social relationship items, several demographic variables, and indicators of whether the respondents

had been victimized or had known other victims.

In accordance with the background material presented in the introductory section, it was expected that various kinds of crime perceptions would be more prominent in association with lesser subjective well-being, including greater degrees of psychological distress, and lower levels of psychological well being. Crime perceptions were also expected to be greater for those with fewer social relationships. In addition, it was expected that elevated crime perceptions would be related to an external locus of control orientation, as well as to lower levels of the closely related construct, self-efficacy. It was also expected that having experienced a serious criminal victimization, or having known someone who had, would contribute to increased perceptions of crime.

Methodology

Survey Procedures and Participants. Telephone interviews were conducted by three female researchers with respondents from randomly selected households having current listings in the Greater Vancouver directory. During the early part of the study (approximately half of the telephone interviews were done in June and half in July, 1981) selected households were sent a letter explaining the intent of the study and indicating that an interviewer would be telephoning in the near future. Introductory letters could not be sent during the second half of the interviewing because of an intervening postal strike. A maximum of five calls were made in an attempt to make initial

contact with the household. If necessary, as many as three more calls were made in order to contact an adult respondent in the household who could supply information to enable a random selection of one household member over the age of 18 years for the interview. Up to three more calls were made to contact the selected respondent.

Completed telephone interviews were received from 220 respondents (136 women and 84 men) representing 51% of those households selected for contact. Refusals were received from household or selected respondents at 37% of households. There was no answer at an additional 6% of selected households and another 6% had telephones no longer in service. Ignoring these latter two outcomes, completed interviews were obtained at 58% of contacted households.[10]

It may be noted that the response rate for this study is somewhat lower than that for Study I. This is likely due to the difference in in-person versus telephone interview methodology and is not inconsistent with other similar studies.

Instruments. The survey protocol included 26 items enquiring into crime concerns. These included likelihood ratings of the occurrence of various types of crimes involving the respondents or others, ratings of absolute levels of crime, ratings of the amount of increase or decrease in crime in various areas, ratings of degree of worry about crime and extent

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[10]There was no significant difference in completion rates between households receiving introductory letters and those which did not.

of limitations placed on activities as a result of crime related concerns.[11]

Subjective well-being was measured with two indices. The first was the Affect Balance Scale, developed by Bradburn (1969) to assess psychological well-being. It consists of a listing of five positive and five negative affective experiences. Respondents were asked to indicate whether or not they had had these experiences during the previous four weeks. Two scores were used from the scale, the negative affect score, and the affect balance score.

The second measure was designed by Ilfeld (1978) to assess the extent to which an individual is experiencing psychological discomfort. It is mainly sensitive to depression and anxiety. It includes thirteen symptoms for which the respondents were asked to provide ratings of the frequency of occurrence during the previous week.

Feelings of control were assessed with two scales. Respondents' feelings that their lives were largely under the control of fate or powerful others were measured with a seven item scale taken from Lefcourt (1976). Respondents were asked to agree or disagree with each item.

The extent to which individuals felt sufficiently in control to be able to effect changes in various aspects of their lives was measured with a seven item scale developed by Ilfeld (1978). Ratings were obtained for each item on a four point

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[11]Items used in the present study are contained in Appendix C.

agree-disagree scale.

Variables associated with social relationships included the extent to which respondents felt they belonged in the community, planned to move, number of neighborhood friends and frequency of contact with them, identification with neighbors, contact with relatives, involvement in organizations, whether or not married, and number of confidants.

Experience with victimization was assessed in terms of personal victimization events or through contact with other victims.

Demographic variables included gender, educational level, and level of gross family income.

Distributional properties of the items and scales used in the analyses are included in Appendix D.

Analytical Procedures. Off scale responses were dealt with in two ways. If the scale was such that a "don't know" response could reasonably be considered as a neutral answer, the "don't know"s were recoded to the scale midpoint. In all other cases missing values were recoded to median values. With one exception no item had more than 1.8% missing data replaced. Family income level had 13.6% missing data.

As in Study I, correlational techniques were used to assess the relationships between the crime perception items and the variables from the other domains of interest. Again, the process proceeded through three distinct stages. As before, the PCA analyses on the crime perception items and social

relationship variables were first performed separately for each sex within each domain of variables. These were then examined to identify notable differences between the parallel analyses. When no such differences were found, the data were combined and single PCAs were done.

A principle components analysis was used to reduce the number of variables within the crime perception domain to a fewer number of uncorrelated components. This procedure was also followed for the social relationship variables.

Next, second-order principle components analyses were conducted separately for males and females using component scores from the PCA done with the social relationship items along with the items representing the other conceptual domains which were to be related to the crime perception items, as it was again expected that the patterns of relationships between the variables entered into the analyses might be different for these two subgroups.

Pearson's correlations were then calculated between the component scores from the PCA done with the crime perception items, and the component scores from the second-order PCAs done for the other conceptual domains.

Results

Table 6 contains the loadings of the 26 perception of crime items after varimax rotation of seven components accounting for 62% of the variance of the complete set. Seven components were selected after consideration of the eigenvalue plot. (See

Figure 5.)

Loadings on the first component (CP21) reflect feelings of danger and unsafety related to the threat of violent personal victimization. The second crime perception component (CP22) influences perceptions of the likelihood of several kinds of victimization occurring to the respondent or an acquaintance. The third component (CP23) shows belief that the chances of being victimized have increased. The fourth (CP24), is primarily concerned with worry and limitation of activities because of crime, as well as a perception that crime is more serious than protrayed in the media. CP25, the fifth component, shows the effect of a belief that there is a serious neighborhood crime problem. The sixth component (CP26) is mainly a reflection of the opinion that the seriousness of the crime situation is unappreciated by the public and the media. The final component (CP27) reflects mainly a belief that crime has increased.

A decision was made to rotate five components from the PCA done with the social relationship items from the CSLE survey. (The eigenvalue plot is shown in Figure 6.) All but the smallest had eigenvalues greater than one. These components accounted for 61% of the total item variance. Loadings of the variables on these components after varimax rotation are shown in Table 7. The first component was interpreted as reflecting the degree to which respondents felt embedded in their communities. The second related to contacts with neighborhood

Figure 5
Plot of Eigenvalues from
Principle Components Analysis of
CSLE Crime Perception Items

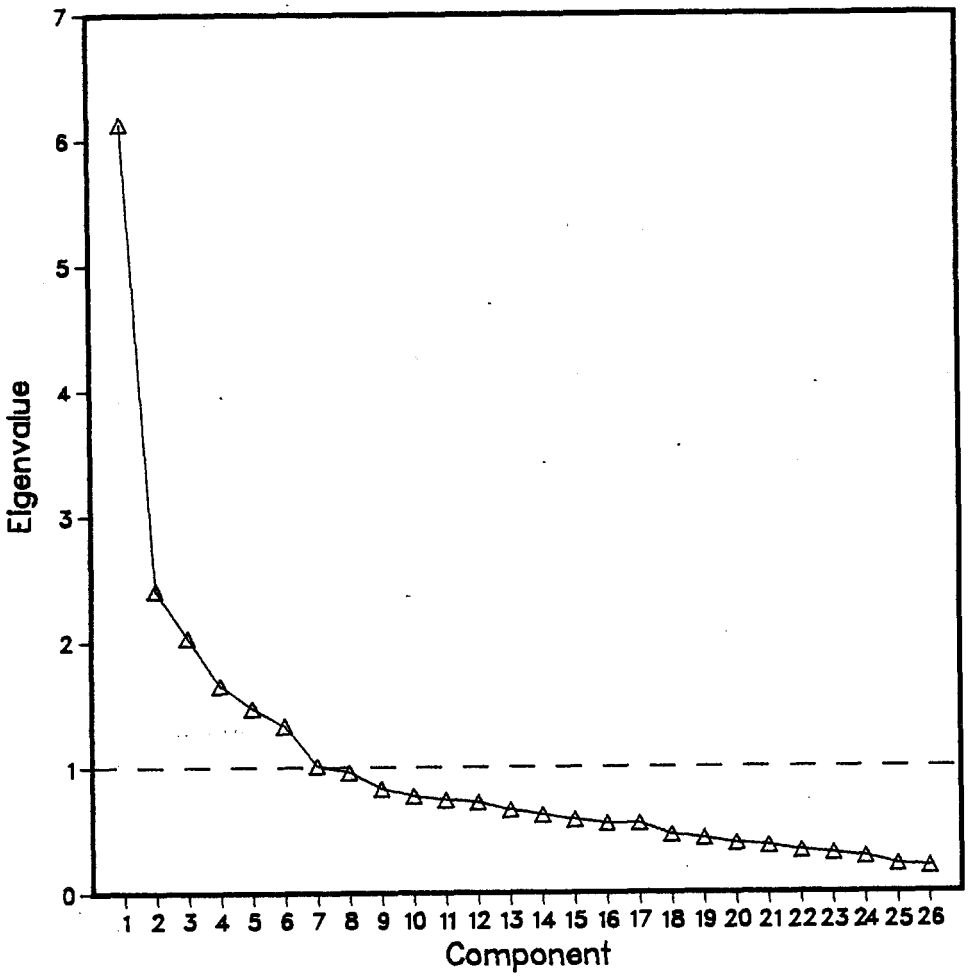

Table 6

Principal Components (CP2) of CSLE Crime Perception Variables

Variable	CP21 Danger	CP22 Likeli-hood of victim.	CP23 Incr. chance of victim.	CP24 Worry	h^2
Likely resp. victim if walking in n'hd	78				72
Likely resp. victim if in n'hd park	75				65
Unsafe if walking alone in n'hd after dark	71				64
Likely woman threatened in if walking on n'hd street	67				65
Likely person robbed in n'hd	61				59
Area near home where fear to walk at night	59				42
Likely child victim if playing in n'hd park	55				53
Likely respondent or friend B & E victim		76			76
Likely respondent or friend assault victim		75			69
Likely respondent or friend sexual assault victim	32	66			68
Likely respondent or friend vandalism victim		65			60
Likely car B&E in n'hd	32	41			57
Chance of being assault victim increased			80		70
Chance of being sexual assault victim increased			78		65
Chance of being B & E victim increased			62		60
Chance of being vandalism victim increased			53		60

Table 6 (Con't)

Principal Components (CP2) of CSLE Crime Perception Variables

Variable	CP21 Danger	CP22 Likeli-hood of victim.	CP23 Incr. chance of victim.	CP24 Worry	h^2
Agree worry about being a victim				75	68
Agree crime is a major concern				74	64
Agree crime has limited activities				63	51
Agree crime more serious than in media				58	64
More crime in n'hd than in Greater Vancouver					61
Serious crime in n'hd					52
Likely home B & E in n'hd		41			58
Agree people don't realize seriousness of crime					65
Increased crime in n'hd					47
Increased crime in Greater Vancouver					72

Table 6 (Con't)

Principal Components (CP2) of CSLE Crime Perception Variables

Variable	CP25 N'hd crime prob	CP26 Crime ser. not app.	CP27 Incr. crime	h^2
Likely resp. victim if walking in n'hd				72
Likely resp. victim if in n'hd park				65
Unsafe if walking alone in n'hd after dark				64
Likely woman threatened if walking on n'hd street	30			65
Likely person robbed in n'hd			34	59
Area near home where to walk at night				42
Likely child victim if playing in n'hd park		37		53
Likely respondent or friend B & E victim	38			76
Likely respondent or friend assault victim				69
Likely respondent or friend sexual assault victim		-34		68
Likely respondent or friend vandalism victim				60
Likely car B & E in n'hd	35	33		57
Chance of being assault victim increased				70
Chance of being sexual assault victim increased				65
Chance of being B & E victim increased				60
Chance of being vandalism victim increased			46	60

Table 6 (Con't)

Principal Components (CP2) of CSLE Crime Perception Variables

Variable	CP25 N'hd crime prob	CP26 Crime ser. not app.	CP27 Incr. crime	h^2
Agree worry about being a victim				68
Agree crime is a major concern				64
Agree crime has limited activities				51
Agree crime more serious than in media		52		64
More crime in n'hd than in Greater Vancouver	75			61
Serious crime problems in n'hd	67			52
Likely home B & E in n'hd	51			58
Agree people don't realize seriousness of crime		78		65
Increased crime in n'hd	35	41		47
Increased crime in Greater Vancouver			76	72

Figure 6
Plot of Eigenvalues from
Principle Components Analysis of
CSLE Social Relationship Items

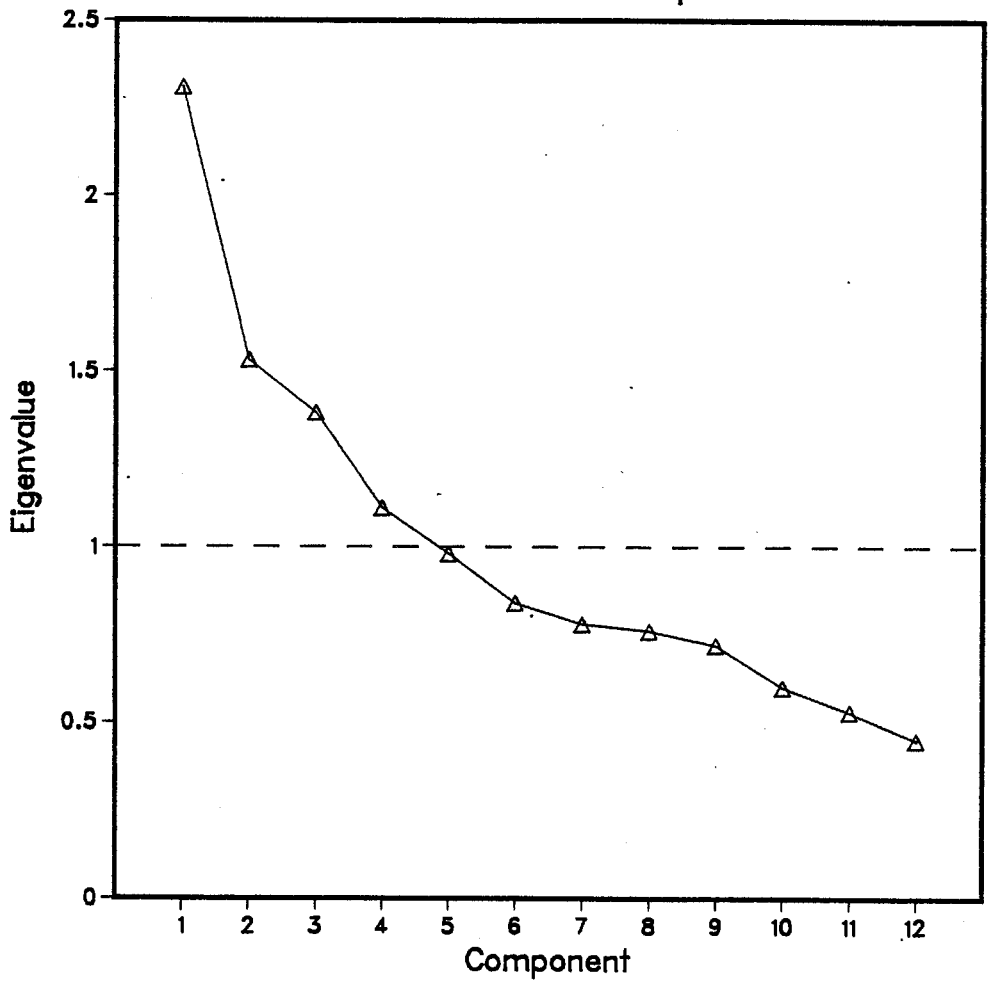

Table 7

Principal Components (SR2) of
CSLE Social Relationship Variables

Variable	SR21 Embedded	SR22 N'hd friends	SR23 Greg-arious	SR24 Friend activity	SR25 Confi-dants	h^2
Happy with n'hd	73					64
No plans to move	73					59
Really belong in community	72					61
Most friends live in n'hd		77				61
Very often visit n'bors		71				61
Much the same as n'bors		53		-37		51
In touch with relatives			68			53
No. of org. memberships			66			47
Freq. chat with friends		35	59			56
Freq. together with friends				83		73
Married	45			-45	-36	59
No. of confidants					91	86

friends. The third involved a gregarious pattern of contact with relatives, friends, and organizations. The fourth primarily represented frequency of getting together with friends along with not being married or identifying with neighbors. The final component mainly reflected the number of confidants available to respondents.

The outcomes of the second-order principal components analyses done separately for the males and females with component scores from the social relationship variables, the various scales included in the CSLE survey, and a variety of demographic variables, are shown in Tables 8 and 9. These loadings resulted after varimax rotation of seven components accounting for 71% of the variance in the male data, and six components accounting for 63% of the variance in the female data. The correlations between the second-order components and the crime perception components are shown in Table 10. The numbers of components for rotation were chosen after consideration of the eigenvalue plots shown in Figures 7 and 8.

Within the male data there were relationships between six of the seven second-order components and various of the crime perception components. The first, SM21, involving higher levels of negative affective experience, an excess of negative over positive affective experience, lower self-efficacy, an external locus of control orientation, and less contact with relatives and friends, was associated with perceptions that there was a serious neighborhood crime problem (CP25). The second, SM22,

Figure 7
Plot of Eigenvalues from
Second-order Principle Components Analysis of
CSLE First-order Components and Other Items
for Male Respondents

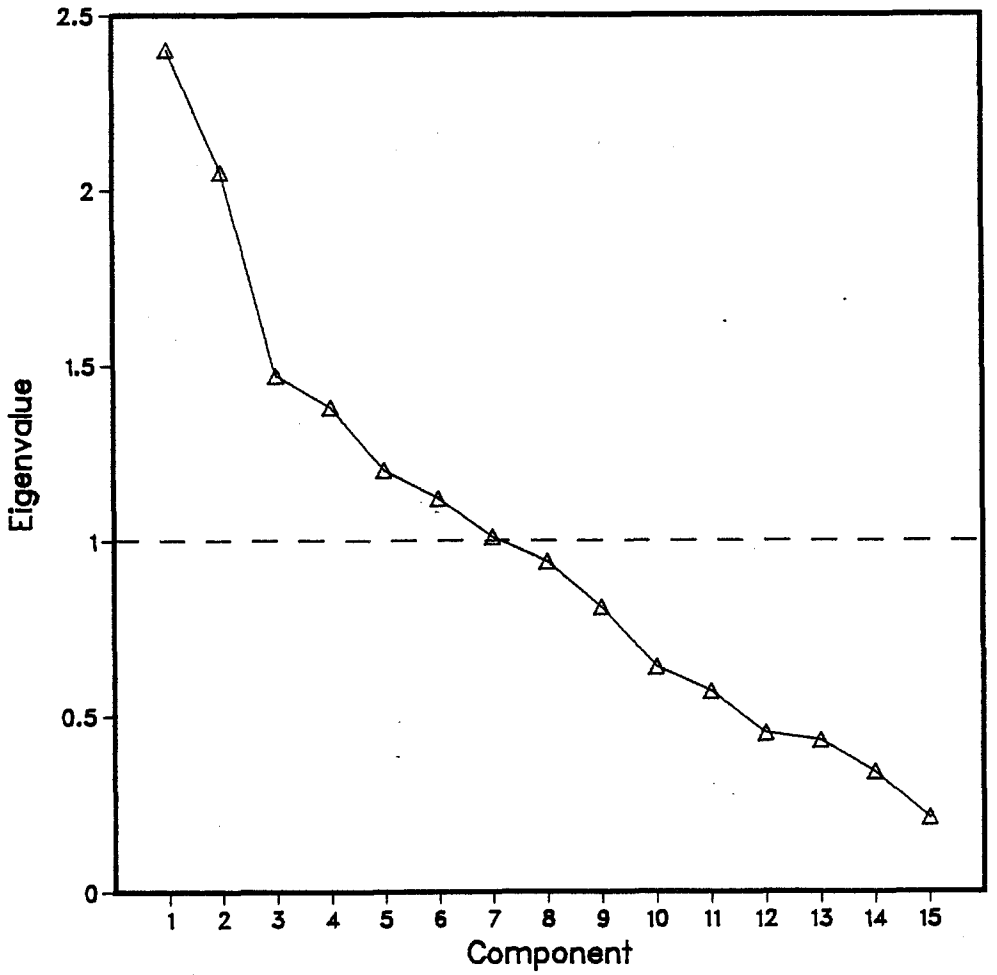

Figure 8
Plot of Eigenvalues from
Second-order Principle Components Analysis of
CSLE First-order Components and Other Items
for Female Respondents

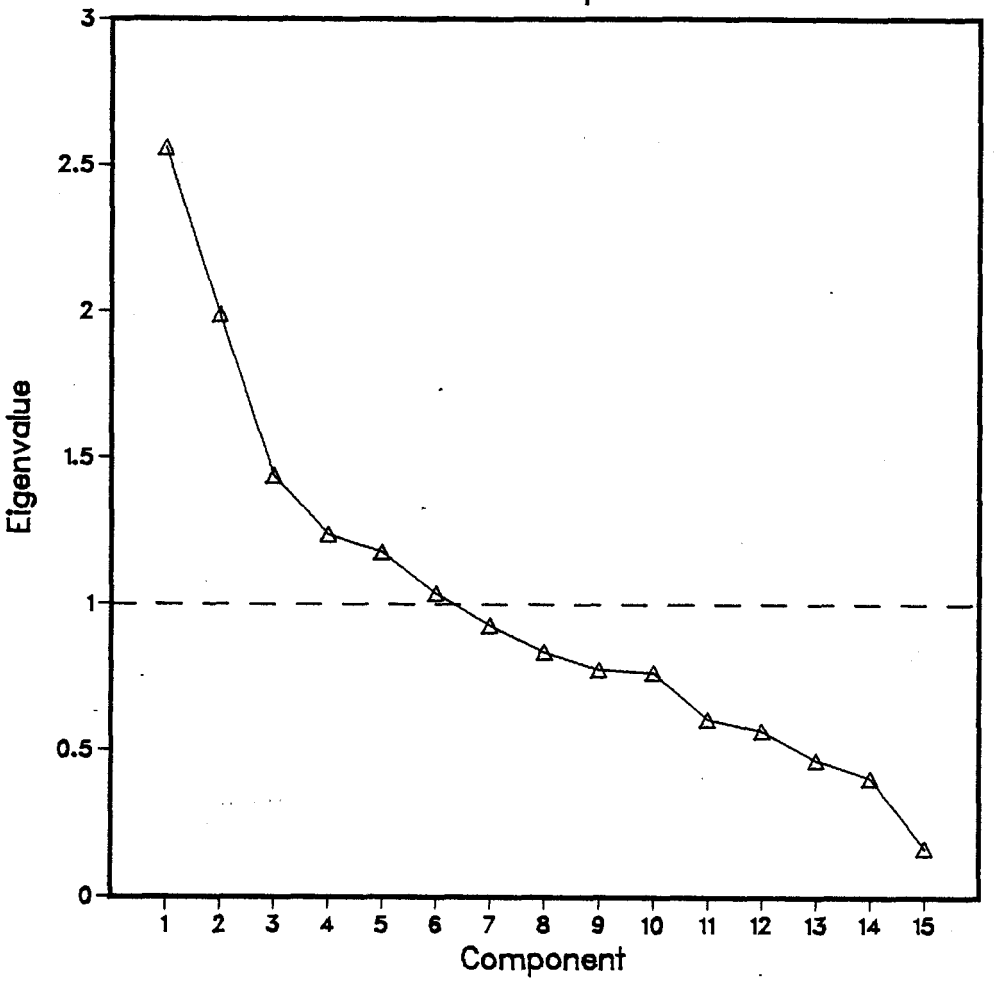

Table 8

Second-Order Principal Components (SM2) of CSLE Scales and First-Order Component Scores for Male Respondents

Variable	SM21	SM22	SM23	SM24	SM25	SM26	SM27	h^2
Negative Affect	-80							74
Affect Balance	88							83
Low Self-Efficacy	-30	33		-52		32		66
Ext. Locus Control	-31		36	-53			32	67
Psych. Distress					68			59
Embedded		84						75
N'hd Friends						85		80
Gregarious	44		59					57
Friend Activity				84				76
Confidants							94	90
Age		55			61			80
Education Level					-37	-60		64
Income Level			41		-53			56
Know victim		-73						63
Victim			82					72

Table 9

Second-Order Principal Components (SF2) of CSLE Scales and First-Order Component Scores for Female Respondents

Variable	SF21	SF22	SF23	SF24	SF25	SF26	h^2
Negative Affect	-74						70
Affect Balance	86						81
Low Self-Efficacy	-41	-63					61
Ext. Locus Control						84	80
Psych. Distress	-69						53
Embedded	53	-31			43		65
N'hd Friends					-76		64
Gregarious		41		38		55	69
Friend Activity		51	35				40
Confidants				-76			70
Age		-71					61
Education Level		48			56		57
Income Level				73			63
Know victim			73				61
Victim			66				51

Table 10

Correlations of CSLE Crime Perception (CP2) Components with Second Order Components for Males (SM2) and Females (SF2)

	CP21	CP22	CP23	CP24	CP25	CP26	CP27
			Males (n=84)				
SM21	-16	-14	01	06	-25**	-11	-00
SM22	03	-24*	-14	01	-31**	05	07
SM23	-06	14	16	08	19	27**	05
SM24	-26**	11	00	-23*	03	10	-09
SM25	12	20*	-09	-00	19*	12	22*
SM26	12	11	-01	-07	01	05	12
SM27	07	32**	-31**	26**	-08	-12	-09
			Females (n=136)				
SF21	-11	-12	-14	-15	-20**	02	18*
SF22	-21**	00	03	-09	-03	-07	-25**
SF23	-02	31***	24**	01	22**	01	09
SF24	-08	14	01	13	01	10	-03
SF25	-14	-16*	17*	-13	05	-06	-16*
SF26	-10	12	-11	17*	-11	24**	01

*p<.05 **p<.01 ***p<.001

primarily reflected in less neighborhood embeddedness, being younger, and having known victims was related to perceptions of a neighborhood crime problem (CP25) and to greater likelihoods of the respondent or an acquaintance being victimized in the future (CP22). Belief that the public and media don't appreciate the seriousness of the crime problem (CP26) was associated with having been victimized, being in greater contact with friends and relatives, having higher income, and an external locus of control (SM23). Perceptions of danger and feelings of unsafety (CP21), as well as worry and limitation of activities related to crime (CP24), were related to less contact with friends, external locus of control, and lowered self-efficacy (SM24). A component (SM25) linking psychological distress, being older, having less education, and lower income, was related to elevated perceptions of increased likelihood of victimization (CP22), a neighborhood crime problem (CP25), and a generalized increase in crime (CP27). The final second-order component (SM27), mainly concerned with having a larger number of confidants, was related to perceptions of greater likelihood of the respondent or an acquaintance being victimized (CP22), worry and changes in activities (CP24), but also to perceptions that chances of victimization had decreased (CP23).

As was the case for males, females showed a relationship between the second-order component (SF21) linking greater negative affect, negative affect balance, lower self-efficacy, higher psychological distress, and less neighborhood

embeddedness, with perceptions of a serious neighborhood crime problem (CP25). This component was, however, also associated with perceptions that crime had been decreasing (CP27). On the other hand, perceptions that crime had been increasing (CP27), as well as feelings of unsafety (CP21), were associated with a component (SF22) relating lower self-efficacy, less contact with friends or relatives, being older and less educated. Beliefs that the likelihood of victimization were higher (CP22), and increasing (CP23), along with perceptions of a neighborhood crime problem (CP25), were all associated with victimization of the respondent or someone else known to the respondent (SF23). More contact with neighbors along with less embeddedness and lower education (SF25) were related to perceptions of higher likelihood of victimization (CP22) but also that chances of victimization had decreased (CP23), as crime elsewhere was increasing (CP27). Finally, worry and changed activities (CP24), as well as beliefs that people don't appreciate the seriousness of the crime problem (CP26) were associated with an external locus of control orientation and greater contact with friends and relatives (SF26).

Summary

As in the previous study, initial expectations were that lower levels of subjective well-being, and fewer social relationships would be related to increased perceptions of crime. In addition, it was expected that an external locus of control orientation would be similarly related to crime

perceptions. These expectations were mostly fulfilled, but again there were some exceptions.

Contrary to expectations, for males there was an association between having more confidants and believing likelihood of victimization was greater. In the case of females, a component reflecting greater subjective well-being was associated with perceptions of crime increasing. Also for females, there was some association between a component involving greater contact with neighborhood friends and crime perception components involving perceptions of greater likelihood of victimization and increasing crime.

In general though, lower levels of subjective well-being, fewer relationships, and external locus of control were associated with indices of threat (perceptions of danger, worry), risk components (likelihood of victimization, increased chances of victimization), and measures of concern (neighborhood crime problems, crime problems not appreciated, increasing crime).

Study III:

Reanalysis of Delta Crime Perception Survey Data

The third set of data which was used to address the issues raised in the introductory section came from the 1982 Delta Crime Perception Survey (DCPS). This survey was instigated by the Delta Municipal Police Department in an effort to gain information to aid in planning community crime prevention efforts.

The survey instrument included a number of crime perception items along with questions about specific types of crime problems in particular areas of Delta. The questionnaire also enquired into quality of life issues, social relationships, and victimization experience. A subset of the survey respondents completed additional measures of perceived social support and locus of control.

An added feature of this data set was the availability of measures of the extent of vandalism and of break and enter incidents in the neighborhoods where the respondents lived.

As in the previous studies, it was expected that crime perceptions would be elevated in conjunction with lowered levels of subjective well-being, an external locus of control orientation, inferior social relationships, and lesser socio-economic attainment. Residence in an area with higher levels of crime occurrence was anticipated to contribute to increased crime perceptions. It was also expected that having experienced a serious criminal victimization, having witnessed a serious victimization, or having known someone who had been victimized, would contribute to increased perceptions of crime.

Methodology

Survey Procedures and Participants. The procedures used for this survey were described by Glackman (1983). The sampling frame for the survey included all telephone numbers within the exchanges serving Delta, B.C. A randomly selected list of 1957 numbers from within this frame was provided by the staff of the

Special Surveys Group of Statistics Canada.[12] After a maximum of eight attempts to contact each number, 1033 of the numbers were either outside of the survey area, not households, or were not contacted. In the remaining cases the interviewers ascertained the number of persons in the household and randomly selected one person over the age of 18 years to participate in the survey. Of the 924 households within the survey area which were contacted, 597 (64.6%) completed an interview.

All of the respondents who completed the interview were asked whether they would be willing to participate in an additional in-person interview. However, as the study progressed it became apparent that resources were not sufficient to undertake in-person interviews with the large number of persons willing to be interviewed. As an alternative, a mail questionnaire was sent to each of those respondents that had agreed to an in-person interview. A total of 139 questionnaires was returned from among the 200 which were sent to agreeing respondents, representing 23% of those who had participated in the telephone interview. Distributions of demographic characteristics were compared for the telephone respondents, and for the mail respondents, with those of respondents from a large scale population-representative survey conducted in the same region by Statistics Canada in 1979. These comparisons

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[12]These numbers were those that remained on an original listing of 2000 numbers after deletion of those numbers that had already been included in an earlier survey undertaken in the same area by Statistics Canada. This procedure was used to avoid the possibility of reinterviewing recently surveyed individuals.

indicated that the Delta samples were generally representative of the population but had somewhat higher proportions of males, university educated individuals, and those aged 40-49.

Instruments. Those items from the telephone interview that were used in the analyses are shown in Appendix E. These included 19 questions tapping a variety of perceptions of crime: likelihood ratings for various types of victimization, ratings of the extent of crime increase in various locales, feelings of unsafety, etc.

There were also indices of the extent of personal victimization experience, as well as whether or not respondents had ever witnessed a serious crime, or had ever known a victim of a serious crime.

Subjective well-being was measured in terms of overall life satisfaction using the item from the work of Andrews and Withey (1976).

Several aspects of the respondents' social relationships were assessed. These included satisfaction with family and friendships, frequency of interaction with friends and relatives, involvement with neighbors and the neighborhood, activity in organizations, and number of confidants.

The mail questionnaire contained a locus of control scale (Reid & Ware, 1974) which included subscales measuring social system control (SSC), self-control (SC), and fatalism (F).

The mail questionnaire also contained a scale measuring perceived social support from friends and from family (Procidano

& Heller, 1983).

Victimization experience was assessed in terms of personal victimization, having witnessed a serious crime event, or having known the victim of a serious crime.

Measures of reported crime incidence were available from the records of the Delta Municipal Police Department. Examination of these data indicated that there was relatively little violent "street crime" in Delta. The crimes having most impact in terms of police statistics and relatively wide geographic dispersion were vandalism and residential break and enter. Data on all of these reported incidents, including location, were obtained covering the year preceding the telephone survey. These data were used to calculate incidents per number of households for each of the three major subareas in Delta. These indices were attached to each respondents' data for subsequent analysis.

Demographic variables used included gender, age, level of educational attainment, and gross family income.

The distributional properties of the items and scales used in the analyses are presented in Appendix F for the entire sample, and in Appendix G for the mail respondents.

Analytical Procedures. The same general procedures used in Studies I & II were applied in Study III. "Don't know" responses were recoded to mid-scale values where appropriate. Other off-scale responses were replaced with medians. All but three items had less than 1.8% missing data. Two items had less

than 7.0%, and family income level had 22.8% missing data. Although the latter would be considered to be unacceptably high in most circumstances, the variable was retained in the analysis in order to achieve maximum comparability with the other studies, wherein it also tended to have relatively high amounts of missing data.

As before, in order to reduce the number of variables and to isolate the covariation within them into relatively fewer independent variables, principle components analysis was used within the domains of crime perceptions and social relationship measures. These initial PCAs were conducted separately by sex and then was recalcualted for the entire group after no notable differences in the subgroup analyses were found. This was then followed by separate second-order PCAs for males and females on the social relationship component scores and other indices, prior to calculating correlations between second-order components and crime perception components.

Separate second-order principle component analyses were done with the data from those males and females who had returned the mail questionnaire. This was followed by correlation computations between second-order components and crime perception components for the male and female mail respondent subgroups.

Results

Telephone Respondents. A principle components analysis was applied to the 19 crime perception items included in the survey.

Examination of the eigenvalue plot (see Fig. 9) suggested the rotation of either five or six components. Both of those alternatives were undertaken and ultimately the five component varimax rotation was chosen as being most parsimonious and interpretable. The five components accounted for 57% of the crime perception item variance.

The results of the PCA of crime perception items is presented in Table 11. The first two components represented the likelihood of more remote and more proximate crime occurrence respectively. For example, in the former case, crime events occurring in shopping areas and on transportation were contrasted, in the latter case, with those occurring in the neighborhood, such as car thefts and break and enter. The third component was mainly concerned with feelings of unsafety and perceptions of the likelihood of street crime, overall a perception of threat. The fourth component reflected a belief that there are serious crime problems in the neighborhood. The fifth component expressed a generalized impression that crime is increasing.

A principle components analysis was also applied to the set of variables having to do with social relationships. Examination of the Eigenvalue plot (see Figure 10) led to varimax rotation of four components. The four components (Shown in Table 12) were interpretable as satisfaction with family life and friendships, a sense of embeddedness in the community, frequency of interacting with neighborhood friends, and

Figure 9
Plot of Eigenvalues from
Principle Components Analysis of
DCPS Crime Perception Items

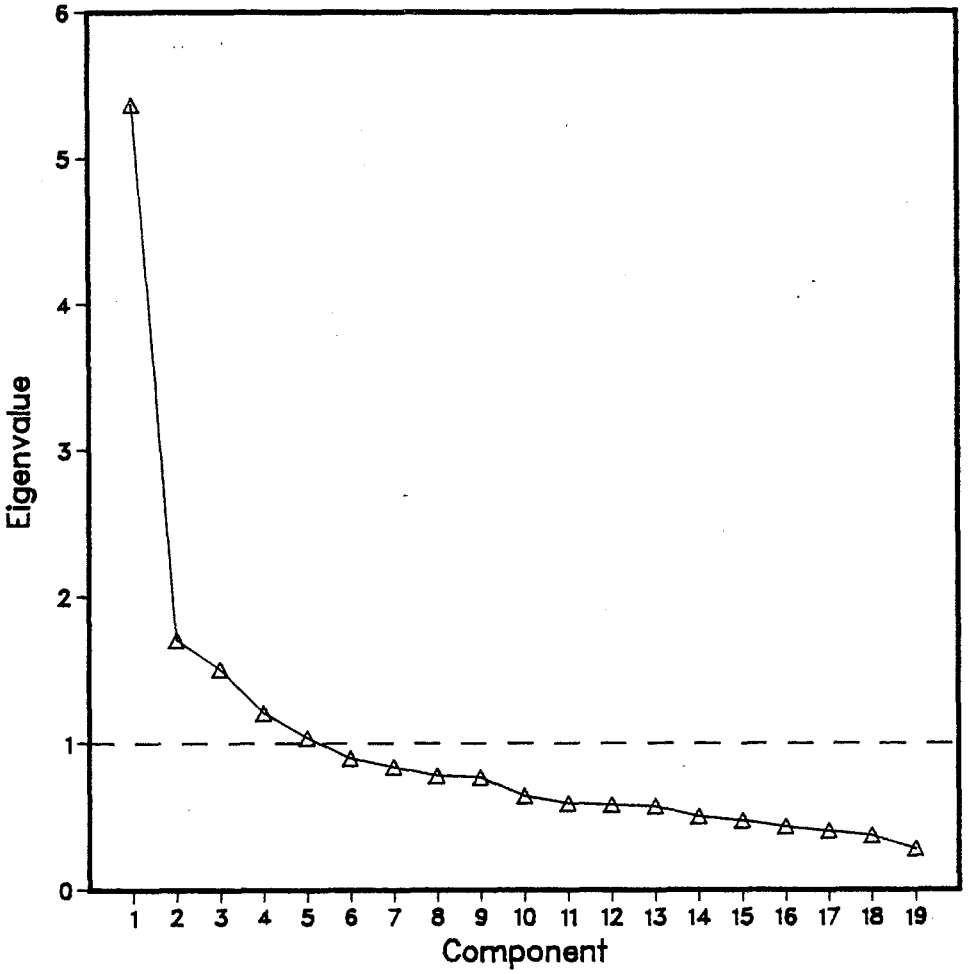
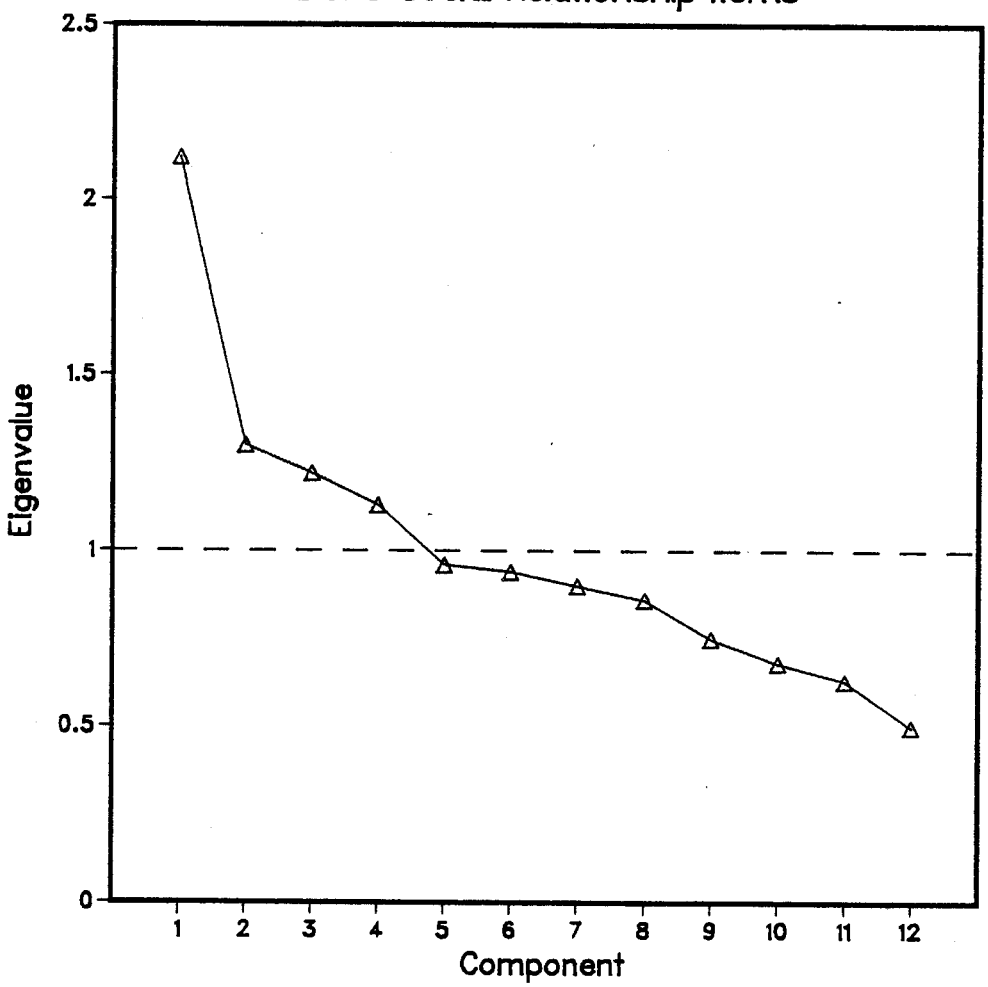


Table 11

Rotated Principal Components (CP3) of
DCPS Crime Perception Variables

Variable	CP31 L'hood distant victim.	CP32 L'hood n'hd victim.	CP33 Peril	CP34 N'hd crime prob.	CP35 Incr. crime	h^2
Likely crime on public trans.	73					56
Likely crime in shopping area	71					56
Likely crime in undeveloped area	66					50
Likely crime in park	64					54
Likely crime in motor vehicle	57					46
Likely n'hd car broken into		73				63
Likely n'hd house broken into		73				65
Likely n'hd car stolen		73	32			65
Likely respondent's residence B & E		58				50
Unsafe if walking alone - night			76			62
Unsafe if walking alone - day			66			47
Likely person robbed		36	65			64
Likely respondent vict. ser. crime	39		64			63
Likely woman threatened	33	35	59			58
High amount of crime in n'hd				73		59
Serious crime problem in n'hd				67		50
More crime n'hd than Greater Vancouver				61		49
Increased crime in Greater Vancouver					80	68
Increased crime in n'hd				38	63	58

Figure 10
Plot of Eigenvalues from
Principle Components Analysis of
DCPS Social Relationship Items



frequency of contacting relatives and being active in organizations. These components encompassed 48% of the social relationship item variance.

Component scores from the PCA of social relationship variables were entered into second-order PCAs for males and females, along with the life satisfaction index, the crime indices, the victimization variables, and the demographic variables. Consideration of the eigenvalue plots (see Figures 11 & 12) led to varimax rotation of five components, accounting for 60% of the variance for the males, and 58% for the females. The loadings of the variables on the rotated principal components are shown in Table 13 for males and in Table 14 for females.

Four of the males' second-order components, were related to crime perception components (see Table 15). Feelings of unsafety (CP33) was associated with elevated area crime indices (SM31). Unsafety was also associated with lower levels of education, less income, and decreased interaction with relatives, organizations, and confidants (SM34). Another second-order component (SM32) related to the second crime perception component (CP32) such that those less involved with relatives or organizations, less embedded in the neighbourhood but with increased interaction with neighbourhood friends, and having experienced victimization were more likely to perceive increased likelihoods of neighbourhood crime events (CP32). The final relationship for males involved perceptions of increasing

Table 12

Rotated Principal Components (SR3) of
DCPS Social Relationship Variables

Variables	SR31 Relation-ship satis.	SR32 Embedded	SR33 N'hd friends	SR34 Gregarious	h^2
Satisfaction with friendships	83				69
Satisfaction with family life	74				61
Freq. visiting friends	47	-39		38	60
No plans to move		72			54
Really belong in community		59			42
Same as others in n'hd		45			25
Able to recognize n'bors		43			25
Friends live in n'hd			75		59
Freq. visit with n'bors			74		61
In touch with relatives				71	52
No. organization memberships				53	33
No. of confidants			-36	45	36

Figure 11
Plot of Eigenvalues from
Second-order Principle Components Analysis of
DCPS First-order Components and Other Items
for Male Respondents

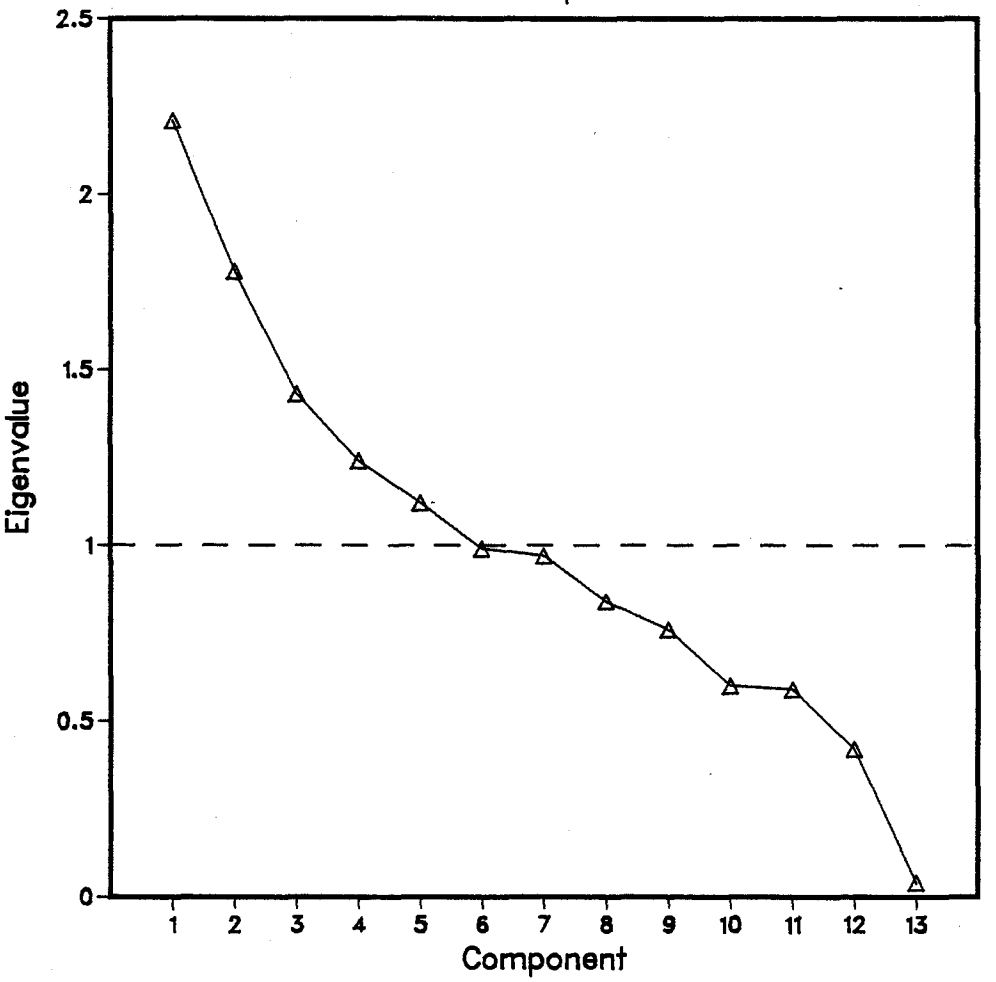


Figure 12
Plot of Eigenvalues from
Second-order Principle Components Analysis of
DCPS First-order Components and Other Items
for Female Respondents

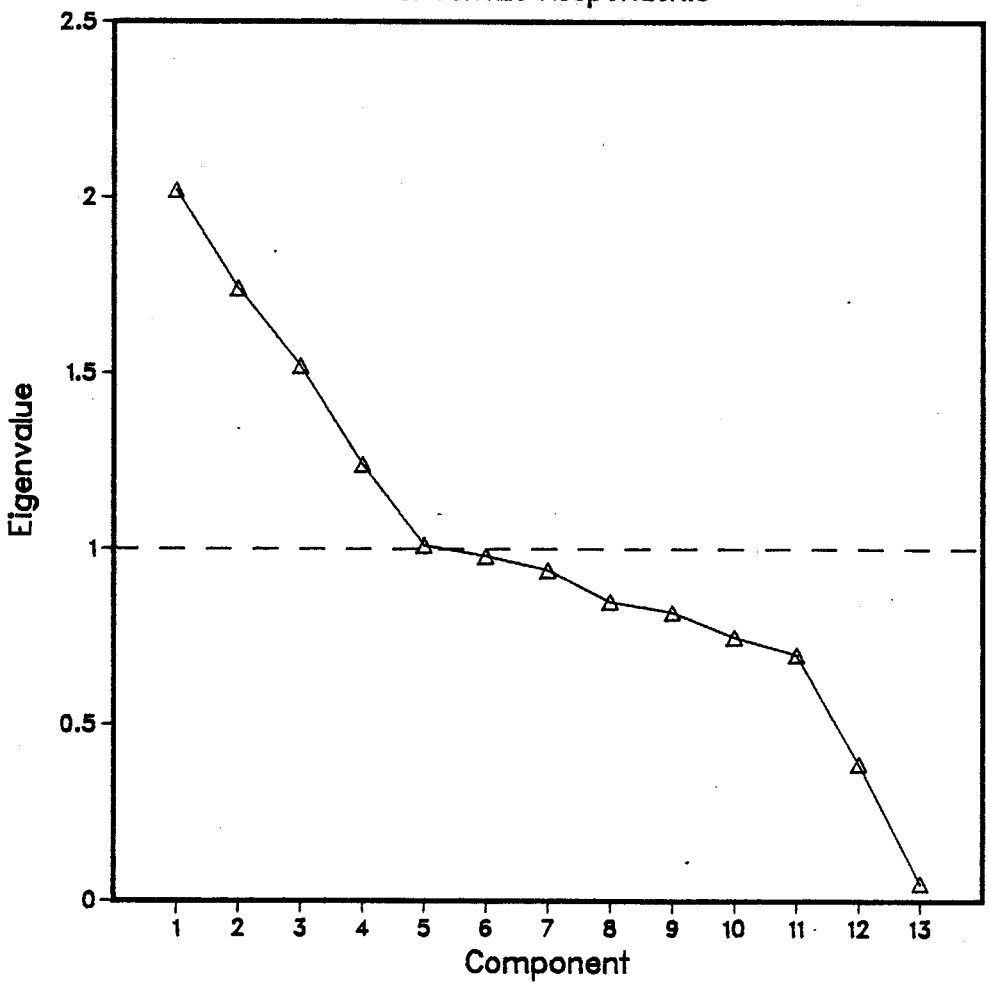


Table 13

Rotated Second-Order Principal Components (SM3) of DCPS Scales and First Order Component Scores for Male Respondents

Variables	SM31	SM32	SM33	SM34	SM35	h^2
Life Satisfaction			85			76
Relationship satisfaction			86			74
Embedded		66				46
Neighborhood friends		-57				47
Gregarious				53		30
Age		76				64
Education Level				68		51
Family Income				70		53
Area Vandalism Index	97					97
Area B & E Index	98					96
Crime Victim		-41			-36	34
Witnessed Serious Crime					69	51
Know Crime Victim					72	58

Table 14

Rotated Second-Order Principal Components (SF3) of DCPS Scales and First Order Component Scores for Female Respondents

Variables	SF31	SF32	SF33	SF34	SF35	h^2
Life Satisfaction		80		31		76
Relationship satisfaction		87				
Embedded				71		46
Neighborhood friends					75	
Gregarious			56			47
Age			-42	43		30
Education Level			55	30		64
Family Income			40		42	51
Area Vandalism Index	98					97
Area B & E Index	97					96
Crime Victim				-66	30	34
Witnessed Serious Crime					48	51
Know Crime Victim			61			58

Table 15

Correlations of DCPS Crime Perception (CP) Components with Second-Order Components(SC) for Males and Females

	CP31	CP32	CP33	CP34	CP35
		Males (n=269)			
SM31	09	02	17**	01	04
SM32	00	-18**	09	-06	-03
SM33	-03	-03	-09	-02	07
SM34	00	-07	-29***	03	02
SM35	01	-03	-00	02	14*
		Females (n=328)			
SF31	10*	19***	17**	04	10*
SF32	-11*	-01	-00	10*	-01
SF33	11*	-06	-25***	07	-01
SF34	-11*	-14**	-00	-17***	-01
SF35	-02	-01	-09	12*	-01

*p<.05 **p<.01 ***p<.001

crime (CP35) associated with a component reflecting on having witnessed a serious victimization event or having known the victim of such an event.

The female's second order components also had several relationships with their crime perception component scores. Area crime indices (SF31) were associated with perceptions of greater likelihood of distant crime events (CP31), greater likelihood of neighbourhood crime events (CP32), and with feelings of unsafety (CP33). Lower levels of satisfaction (SF32) were linked to perceptions of greater likelihood of distant events (CP31) but also with decreased perception of a crime problem in the neighbourhood (CP34). SF33, relating less involvement with relatives and organizations, being older, less educated, having lower income, but not knowing a crime victim, was related to increased feelings of unsafety (CP33), but also to decreased perceptions of likelihood of distant crime (CP31). The fourth component from the female's data (SF34) linked not being embedded in the community, having been victimized, being younger, less educated, and less satisfied with life overall. This component was associated with perceptions of greater likelihood of distant crime (CP31), greater likelihood of impersonal proximal events (CP32), and with increased perceptions of a neighbourhood crime problem (CP34). Also associated with the latter crime perception was the final second-order component from the female data (SF35) involving greater involvement with neighbourhood friends, being better

educated, and having witnessed or been the subject of a victimization (CP34).

Mail Respondents. Examination of the eigenvalue plots from the second-order PCAs using the same variables that were used for the entire sample, plus the additional scale scores contained in the mail questionnaire, led to the varimax rotation of eight components for both males and females (see Figures 13 & 14). These accounted for 73% and 72% of the variance of the input items for males and females respectively. These components (Tables 16 & 17) were then correlated with the mail respondents crime perception component scores from the PCA analysis done with the whole sample. (See Table 18.)

For the male data, six of the eight second-order components were related to crime perception components. One component, SM42, relating subjective perceptions of social support from friends and family with increased interaction with neighbourhood friends, satisfaction with friends and family, knowing crime victims, and internal locus of control (fatalism), was associated with perceptions of a generalized increase in crime (CP35), but also with lowered perceptions of a neighbourhood crime problem (CP34). Another component (SM44) characterized by lower income and less education, decreased interaction with neighbourhood friends, and a fatalistic locus of control orientation, was related to perceptions of a generalized increase in crime (CP35) and to feelings of unsafety (CP33). Both of those crime perceptions were also associated with a

Figure 13
Plot of Eigenvalues from
Second-order Principle Components Analysis of
First-order Components and Other Items
for Male DCPS Mail Respondents

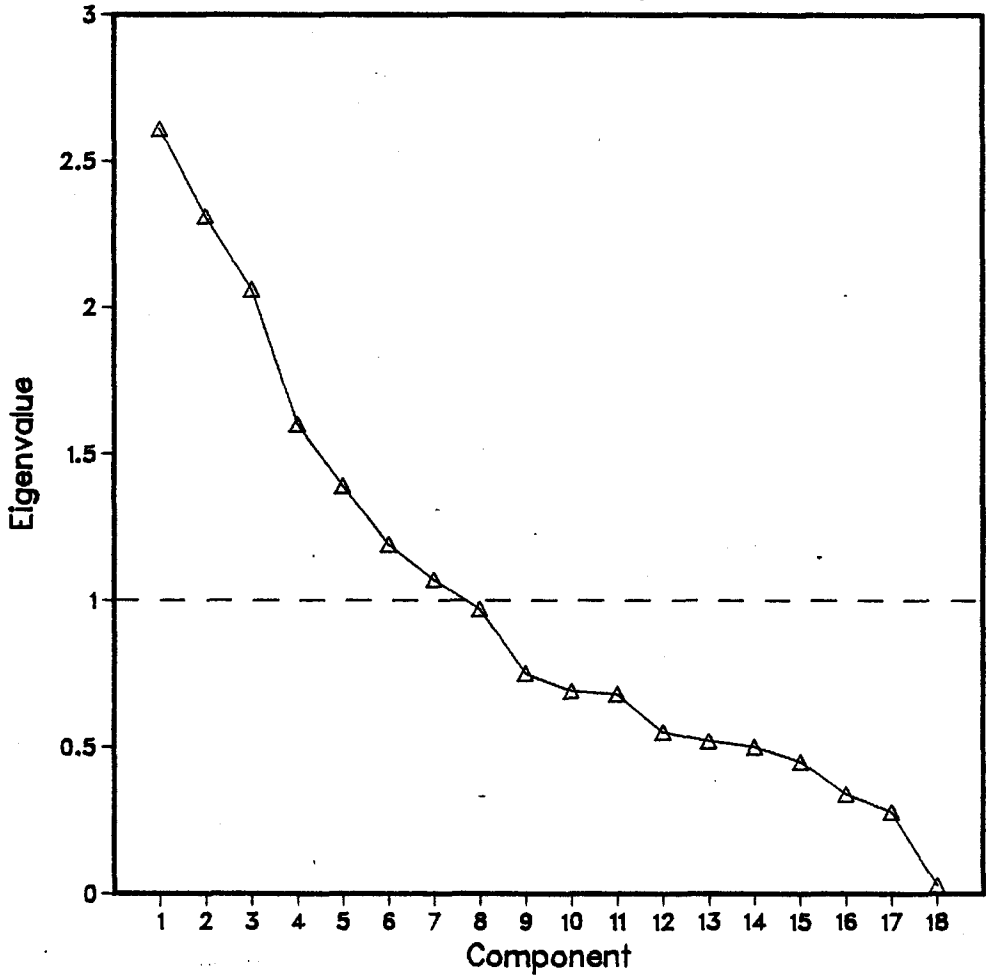


Figure 14
Plot of Eigenvalues from
Second-order Principle Components Analysis of
First-order Components and Other Items
for Female DCPS Mail Respondents

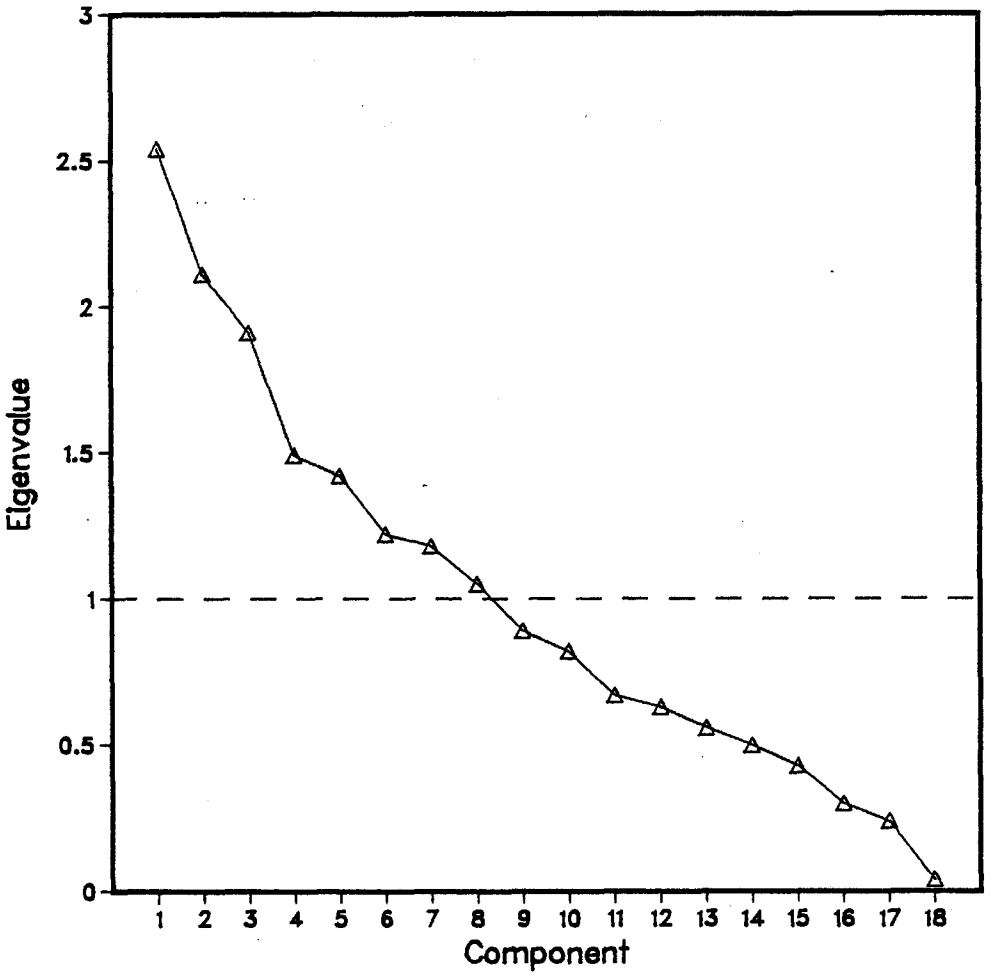


Table 16

Rotated Second-Order Principal Components (SM4) of
Scales and First-Order Components
For Male DCPS Mail Respondents

Variables	SM41	SM42	SM43	SM44	h^2
Life Satisfaction	34				79
Relationship satisfaction		34	54		66
Embedded					83
Neighborhood friends		53		44	66
Gregarious					76
Age			-59		57
Educ. Level				60	68
Family Income				87	79
Area Vandalism Index	97				96
Area B & E Index	96				95
Victim of crime			30		79
Witnessed serious crime					76
Know crime victim		30			64
Ext. Locus of Control (SSC)			80		67
Ext. Locus of Control (SC)			34		60
Ext. Locus of Control (F)		-31	63	-31	63
Perceived Soc. Supp. (Friends)		86			77
Perceived Soc. Supp. (Family		75			67

Table 16 (Con't)

Rotated Second-Order Principal Components (SM4) of
Scales and First-Order Components
For Male DCPS Mail Respondents

Variables	SM45	SM46	SM47	SM48	h^2
Life Satisfaction	-32	-53		-44	79
Relationship satisfaction		-41			66
Embedded		87			83
Neighborhood friends			-38		66
Gregarious				77	76
Age			30		57
Educ. Level				-48	68
Family Income					79
Area Vandalism Index					96
Area B & E Index					95
Victim of crime	-76			31	79
Witnessed serious crime			85		76
Know crime victim	61				64
Ext. Locus of Control (SSC)					67
Ext. Locus of Control (SC)	62		34		59
Ext. Locus of Control (F)					63
Perceived Soc. Supp. (Friends)					77
Perceived Soc. Supp. (Family					67

Table 17

Rotated Second-Order Principal Components (SF4) of Scales and First-Order Components For Female DCPS Mail Respondents

Variables	SF41	SF42	SF43	SF44	h^2
Life Satisfaction					82
Relationship satisfaction			-58		63
Embedded					70
Neighborhood friends		36		41	76
Gregarious					76
Age			-49		72
Educ. Level					79
Family Income					76
Area Vandalism Index	94				93
Area B & E Index	93				90
Victim of crime			39	36	48
Witnessed serious crime				70	67
Know crime victim				78	69
Ext. Locus of Control (SSC)	46				66
Ext. Locus of Control (SC)			75		68
Ext. Locus of Control (F)					46
Perceived Soc. Supp. (Friends)		86			80
Perceived Soc. Supp. (Family		82			71

Table 17 (Con't)

Rotated Second-Order Principal Components (SF4) of
Scales and First-Order Components
For Female DCPS Mail Respondents

Variables	SF45	SF46	SF47	SF48	h^2
Life Satisfaction		87			82
Relationship satisfaction			30		63
Embedded			76		70
Neighborhood friends		56			76
Gregarious				84	76
Age	-58				72
Educ. Level	64			49	79
Family Income	77				76
Area Vandalism Index					93
Area B & E Index					90
Victim of crime					48
Witnessed serious crime					67
Know crime victim					69
Ext. Locus of Control (SSC)		36	-40		66
Ext. Locus of Control (SC)			31		68
Ext. Locus of Control (F)			62		46
Perceived Soc. Supp. (Friends)					80
Perceived Soc. Supp. (Family					71

Table 18

Correlations of Crime Perception (CP4) Components with Second Order Components for Male (SM4) and Female (SF4) DCPS Mail Respondents

	CP41	CP42	CP43	CP44	CP45
		Males (n=70)			
SM41	16	-03	06	-01	03
SM42	10	06	-08	-19*	20*
SM43	09	02	08	00	-03
SM44	-08	-08	-25*	08	-22*
SM45	08	-01	28**	-00	20*
SM46	-07	-02	28**	-02	-09
SM47	26*	09	07	14	11
SM48	03	13	-13	-06	-20*
		Females (n=69)			
SF41	32**	13	-07	16	10
SF42	02	02	10	-09	17
SF43	19*	20*	-14	03	-01
SF44	05	13	-18	23*	-02
SF45	06	07	-22*	22*	08
SF46	02	-17	-17	02	-08
SF47	02	-05	-10	-17	-20*
SF48	-05	-09	-10	02	01

*p<.05 **p<.01

component (SM45) linking knowing, but not having been, a victim, external locus of self control, and decreased overall life satisfaction. A component relating being embedded in the community with being less satisfied with family and friends and being less satisfied overall (SM46) was associated with greater feelings of unsafety (CP33). Perceptions of greater likelihood of distant crime events (CP31) was associated with having witnessed victimization, being older, having fewer neighbourhood friends (SM47), and an external cocus of self-control. Finally, perceptions of a generalized increase in crime (CP35) was related to having less involvement with relatives, confidants, and organizations, having more education, and being more embedded in the community, and more satisfied with friends and family.

For the female respondents to the mailed survey, perceptions of greater likelihood of distant crime events (CP31) were associated with the area crime indices and external locus of control by the social system (SF41). Perceptions of distant crime (CP31), as well as of greater likelihood of neighbourhood crime events (CP32) were also associated with external locus of self control, less satisfaction with friends and family, being younger, and having been victimized (SF43). Knowing a victim, witnessing a victimization, or having been victimized, along with greater interaction with neighbourhood friends (SF44) was associated with perceptions of a neighbourhood crime problem (CP34). This latter crime perception was separately related to

being younger, better educated, and having higher income (SF45), but this component was also associated with decreased feelings of unsafety. Finally, for females, perceptions of a general increase in crime (CP35) were related to being less embedded in the community, having an internal locus of control with respect to fatalism and self control, but an external orientation to social system control, and less family and friendship satisfaction (SF47).

Summary

As was the case with the previous two studies, several of the findings of this study were consistent with expectations that crime perceptions would be more prevalent for those with lower levels of subjective well-being, lower feelings of internal control, and fewer social relationships. However, as before, there were also inconsistent findings.

Subjective well-being in this study was indexed by overall life satisfaction. For the entire sample of male respondents, overall life satisfaction was closely linked to relationship satisfaction, and both types of satisfaction were essentially unrelated to any of the crime perception components. Within the subgroup of males who provided additional information on a second questionnaire there were, however, associations between feeling unsafe and components linking decreased life satisfaction with other variables.

For females, the life satisfaction and relationship satisfaction second-order component was related to crime

perceptions in the larger sample. Lower scores on this component were related to perceptions of greater likelihood of distant victimization, but higher scores were associated with a belief in a neighborhood crime problem. There were no apparent relationships between crime perceptions and life satisfaction for the females who responded to the supplementary questionnaire.

Feelings of control were assessed in this study only for the subgroups supplying additional information. The instrument used, allowed distinctions between locus of control related to to social system, self-control, and fatalism. For males, the social system control and fatalism scales were related to the same component, which was largely unrelated to any crime perception component. The external locus of self-control scale was associated with a component which was correlated with feelings of unsafety, and with perceptions of increasing crime.

For females, there were correlations between a component highly associated with an external locus of self-control orientation and perceptions of increased likelihoods of distant and proximate crime. There were also associations of external social system control with components correlated with crime perception components indicating greater likelihood of distant crime and a general increase in crime. The component associated with this latter crime perception was, however, also related to a non-fatalistic control orientation.

Components linked to the social relationship first-order component relating greater involvement with relatives, organizations, and confidants, were correlated for both males and females with lowered feelings of unsafety. On the other hand, more contact with neighborhood friends was associated for males with perceptions of higher likelihood of neighborhood crime and for females with greater perceptions of neighborhood crime problems. For both males and females, being more embedded in the community was related to lowered perceptions of a neighborhood crime problem.

For those providing supplementary information, the above results generally apply with some additional indications of increased perceptions of various neighborhood crime problems and general crime increase associated with greater involvement with others.

The issue as to whether different results would pertain with respect to the relationship between crime perceptions and subjective perceptions of social support, as opposed to the other types of social relationship indices, was addressed in the supplementary information group. No relationship of either kind of perceived social support to crime perceptions was found for females. For males, there were associations of perceived support with perceptions of a general increase in crime, but also with lowered perceptions of neighborhood crime problems.

Discussion

Public perceptions of crime became a topic of interest to social scientists when it was discovered that measures of threat and concern were not related as expected to objective indices of crime occurrence. The introductory sections of this dissertation reviewed the attempts made to find other variables that were related to crime perceptions. Those efforts focused mainly on demographic and other cultural variables of primary interest to sociologically oriented researchers. While this enterprise was fruitful, only between fifteen and twenty-five percent of the variation in crime perception measures was accounted for with the variables typically studied, and most (ten to fifteen percent) of this was associated with gender. Clearly there was a need to identify additional variables associated with crime perceptions.

In the introduction it was proposed that there is a need to adopt a much broader conceptualization of factors related to crime perceptions, that includes psychological as well as sociological variables. Further, it was suggested that several psychological variables appeared to be good candidates for inclusion in analyses based on such a broader conceptualization of the relationship between crime perceptions and other aspects of peoples' lives. These variables were grouped within the categories of subjective well-being, feelings of control, and

social relationships. It was hypothesized that elevated levels of crime perceptions would be more prominent in association with lowered subjective well-being, feelings that control over life events resided outside of the individual, and diminished social relationship resources.

An important aspect of the investigation of these categories of variables was that they were not to be considered in isolation from one another or from the other variables previously related to crime perceptions. Analytical techniques were chosen which would allow a simultaneous assessment of the interrelationships among all of the variables that were to be related to crime perception measures. This approach was adopted as being more representative of the situation in the real world, where individual variables rarely act in isolation.

The sections which follow discuss the findings of three studies which investigated the associations between crime perceptions and measures of subjective well-being, feelings of control, and various aspects of social relationships, in the context of a number of other variables which have previously been related to crime perception indices. In the next section the data sources and analytical procedures will be summarized.

Summary of Data Sources and Analytical Procedures

Data sets were obtained from surveys that had been done in Edmonton/Winnipeg, Vancouver, and Delta, B.C. in the early 1980s. These data sets each contained a number of crime perception items, demographic variables, and items related to

the concerns of this research (subjective well-being, feelings of control, and social relationships).

Crime perception variables and social relationship items were entered into separate principal components analyses in each study in order to reduce the number of items and obtain uncorrelated components for further analysis.

The social relationship component scores were included in second-order principal components analyses along with all of the other variables that were to be related to crime perceptions. This process resulted in a series of uncorrelated components that simultaneously represented the interrelationships among all of the variables. These second-order components were subsequently correlated with the components developed within the sets of crime perception measures.

This statistical approach was particularly well-suited for exploratory studies involving a large number of measures. The total number of items involved in the analyses was effectively reduced to a comprehensible number of variables with little loss of information about the associations among the basic measures. The essence of the relationships between the crime perceptions and the other variables of interest was subsequently simply revealed in terms of the correlations between the principal components developed within the respective domains.

In addition to the benefits accrued through simplification, this analytical process also had notable advantages over the more traditional multiple regression approach in being better

able to represent the complexity of intervariable relationships as they exist in the real world. This complexity was reflected in the loadings of basic variables on the second-order components, representing the concurrent associations among those variables. Similar representations using a multiple regression approach would not usually be feasible due to the lack of a sufficient number of degrees of freedom needed to include many interaction terms in the regression equation.

One example of the better understanding available through use of the techniques used here concerns the association of crime perceptions with basic demographic characteristics of the respondents. As noted elsewhere herein, previous studies using multiple regression have found increased perceptions of threat to be associated with greater age, lesser educational attainment, and lower family income. Attempts to explain these findings have sometimes been based on the assumption that these characteristics co-exist as a function of lower socio-economic status. However, examination of the relationships of these demographic characteristics to the second-order components presented in several of the tables above, reveals that they frequently do not co-exist, and are often, in fact, relatively independent of one another. Such insights would not have been available if only multiple regression had been used in the analyses, as it is not well-suited for revealing the nature of the relationships between correlated predictor variables. Future examinations of crime perception data should also include

some form of concurrent analysis of the associations among "predictor" variables, as was done here.

Gender was not included in the second-order principal component analyses. The substantial relationship between gender and crime perceptions is well-known. Of more interest is the pattern of relationships between other variables and crime perceptions within the male and female subgroups. Therefore the second-order principal component analyses were done separately for males and females. As well, the correlations between second-order components and crime perception components were calculated separately for each group.

Similarities Among Crime Perception Indices Across Studies

Each of the studies reported in earlier sections used different crime perception variables and different samples of survey respondents. As a result of this, numerical methods for assessing the similarities of principal components identified within each set of data were essentially unavailable. However, examination of the patterns of loadings obtained in each study revealed several common themes which can best be understood in terms of the categorization of crime perceptions proposed by Cook et al. (1981), which was described previously. Those authors suggested that crime perceptions be divided into three types: 1) measures of threat which assess respondents' feelings about the possibilities of being victimized in the event that they were to be exposed in certain kinds of situations, 2) measures of risk which ask the respondents to estimate the

likelihood that they will actually be victimized, and 3) measures of concern which seek an expression of the relative seriousness of crime as a problem.

Each of the studies included a component which could be identified with the category of threat. These were characterized in the three studies respectively as unsafety (CP12), danger (CP21), and peril (CP33). Each of these components had notable loadings of questions specifically concerned with feelings of safety and the latter two included one or more items enquiring about the likelihood of victimization under hypothetical circumstances.

With respect to the category of concern about crime, all three studies had components (CP11, CP27, CP35) which related primarily to perceptions that crime had been increasing. In addition, two studies included components mainly reflecting perceptions that there were neighborhood crime problems (CP25, CP34). The second study also had a component (CP26) indicating respondents' belief that the seriousness of the crime problem was unappreciated by the media or by others.

Crime perception components were also found in two of the studies which could be related to the category of risk. These brought together items asking about the likelihood that the respondent or an acquaintance would be victims of specific types of crimes (CP22), and that certain types of victimization would occur at a distance (CP32), or in the neighborhood (CP31). Study 2 also included a component indicating a belief that the

chances of victimization had increased (CP23).

The ability to successfully apply principal components analysis within each of three separate sets of crime perception items, adequately representing the variability of the total set of items, as well as that of the individual items, in relatively few uncorrelated components, provided a sound basis for a consideration of the relationships between the different types of crime perceptions and the other variables of interest. The fact that the components were identifiable within Cook et al.'s categorization lends credence to that classification system, as well as providing a prior theoretical background within which to assess the associations of other variables to crime perceptions.

The relationships between the different crime perception components and variables previously examined by other researchers will now be examined.

Relationships Between the Crime Perception Indices and Previously Studied Variables

Several of the variables discussed in an earlier section as having been previously studied in association with crime perception measures were included in one or more of the studies done for this dissertation. In order to establish the findings of the studies reported here within the frame work of previous research results it is necessary to review the relationships between the crime perception components which were identified and those variables. Relationships between crime perception components and basic variables were not examined directly but

can be seen in terms of their loadings on second-order components which were associated with crime perception components.

Demographic Characteristics

All three of the studies included measures of the respondent's age, educational attainment, and family income level.

As was noted previously, age, income, and education have been related to crime perceptions by a number of researchers (Braungart, et al., 1980; Clemente & Kleiman, 1977; Garofalo, 1979; Hindelang, et al., 1978). The crime perceptions assessed in these earlier studies involved one or another measure of threat. The relationships previously found between indices of threat and demographic variables were such that increased levels of threat were usually associated with increased age, lesser educational attainment, and lower family income. Not all of the studies done before found strong associations between threat and all of the demographic variables, but where there were relationships they were as described.

In the new studies reported herein, age, education, and income were related to second-order components that were correlated with crime perception components identifiable as threat indices in a manner such that the overall relationships were consistent with those found in earlier studies. That is, increased levels of threat were associated with being older, less educated, and having lower income. This pattern of

relationships has been understood in terms of the effects of lifestyle (Corrado, Roesch, Glackman, Evans, & Leger, 1980; Hindelang, et al., 1978) and of vulnerability (Skogan & Maxfield, 1980). These conceptualizations propose that those who are less fortunate in terms of socioeconomic status are more likely, in the first instance, to be exposed to threat-inducing situations, or, in the second, to feel more vulnerable to criminal victimization should it occur. Either condition would be expected to result in elevated feelings of threat.

The studies which have produced findings supporting these conceptualizations have usually used multiple regression analyses and included demographic variables as individual predictors, without consideration of possible interactions among them or between demographic variables and other kinds of variables. An implicit assumption has been made that these demographics should covary in the patterns predicted by the theories, thus creating a lifestyle or vulnerability "syndrome." However, examination of the patterns of variable loadings in the second-order component analyses reveals that such a simple pattern is rarely the case. Demographic variables are often linked to second-order components along with other types of variables, and frequently not in association with the other demographic variables in patterns that would be expected in terms of the lifestyle or vulnerability formulations. Clearly, a more encompassing conceptualization must be developed to account for the kinds of relationships observed among the

demographic variables, and between the demographic variables and other categories of variables.

Exposure to Crime

In a previous section the results of studies looking at the relationships between experience with crime and crime perceptions were reviewed. In general, where relationships were found, having been criminally victimized, or knowing others who had been, were associated with greater feelings of threat and concern (Skogan, 1976; Skogan & Maxfield, 1980).

Studies 2 and 3 had indices measuring whether or not the respondents had been victimized, and also if they had known others who had been victimized. Study 3 had, in addition, an index of whether or not respondents had witnessed a criminal victimization event.

Having been victimized was found to be essentially unrelated to any of the second-order components that were correlated with threat crime components. Victimization was, however, linked through second-order components with risk perception components (likelihood of victimization, increased chances of victimization), and concern components (perceptions of neighborhood crime problems, and of increasing crime), this finding occurring more often for females than for males.

The lack of any evidence of increased feelings of threat associated with victimization experience could be a result of the relatively trivial nature of most of the kinds of victimization events experienced by these Canadian respondents.

This would be in sharp contrast with the kinds of events typically occurring in major U.S. cities where most findings of a relationship between victimization and threat level originated (e.g., Skogan and Maxfield, 1980; Hindelang, et al., 1978; Skogan and Maxfield, 1980). The overall rate of serious victimization in Canada is relatively low (cf., Corrado, Glackman, & Roesch, 1980) and may mask any effects associated with such events. The more wide-spread occurrence of less serious victimizations appears to have mainly elevated respondents' assessments of crime-related risk and concern.

Knowing others who had been victimized, or having witnessed a criminal victimization, were most notably related through second-order components with the perception of risk and concern components in Studies 2 and 3. It is not clear why these types of experience relate to risk and concern indices, while not to threat indices. Again, it is possible that the nature of the events involved might have been relatively unserious, thereby providing "data" for the adjustment of cognitively based likelihood estimates, but leaving threat levels unchanged.

Area Characteristics

Higher levels of crime occurring in an area have been associated with greater concern about crime (Conklin, 1975; Garofalo, 1979), but also with lower crime concern (Furstenberg, 1971).

Study 3 included measures of the number of reported break and enter and vandalism incidents occurring per number of

households in the areas where respondents resided. As would be expected, these variables formed a relatively "pure" factor which was nearly always free of any notable loadings of other kinds of variables.

Both of these crime occurrence indices were associated with feelings of threat for males and females. These indices were also, for females, related to risk components and to concern about increasing crime.

There is no apparent explanation for an association of crime occurrence indices with risk and concern measures for females but not for males. It might be hypothesized that women spend more time in the area of residence as a result of more often having the role of homemaker. This could result in their acquiring more differentiated assessments of area crime conditions.

It might also be proposed that perhaps women had more opportunity for contact with neighbors and could therefore acquire additional information about crime occurrences. As was noted above, however, the second-order components relating area crime indices were virtually independent of any of the social relationship variables to be discussed below.

Relationships Between Crime Perception Indices and Psychological Variables

A primary goal of the research reported herein was the broadening of the focus of the search for factors related to crime perceptions in accordance with a holistic

conceptualization of the individual as a functional system. Such a model implies consideration of responses to crime perception questions as expressions of the state of the overall system, including the effects of any actual crime-related information that the individual may have, the results of role-related statuses associated with demographically defined social positions, and more importantly, the effects of a wide range of psychological characteristics and states. A number of possibilities emerged from an examination of the literature which were included in the latter category of variables. These included subjective perceptions of well-being, feelings of control, and various aspects of social relationships.

Subjective Perceptions of Well-Being

Because there is considerable evidence of the pervasive effects of individuals' mental states on expressions of all kinds, it was proposed that the overall psychological well-being of individual survey respondents might affect the extent to which they provided answers to crime perception questions indicative of greater concern, risk, or feelings of threat. Ideas along these lines were also put forward by other researchers (Garofalo & Laub, 1978).

Different measures of subjective well-being were analyzed in the various studies reported herein. These included a rating of overall life satisfaction (Andrews and Withey, 1976), Bradburn's (1969) Affect Balance Scale, and a measure of psychological distress (Ilfeld, 1978).

The Affect Balance Scale measured the occurrence of various positive and negative affective experiences in the near past. Two scores from the scale were included in the analyses of Studies 1 and 2: The negative affect score, and the affect balance score, which reflects the relative amount of positive over negative affective experience. The psychological distress measure (Ilfeld, 1978) was mainly sensitive to the presence of symptoms of depression and anxiety.

Expectations regarding the relationship of subjective well-being to crime perceptions were only partially met. With respect to threat related components, findings were as anticipated only for females in Study 1, where lower life satisfaction, negative affect, and negative affect balance were linked to greater feelings of unsafety. It was also the case that lowered life satisfaction was associated with the two second-order components correlated with the threat component for a subgroup of males in Study 3. With those exceptions, measures of subjective well-being were unrelated to second-order components correlating with threat crime perception components.

In general, risk crime perception components were not correlated with any second-order components associated with subjective well-being variables. There were minor exceptions involving psychological distress and perceptions of greater likelihood of victimization for males in Study 2, and lowered life satisfaction and greater likelihood of distant victimization for females in Study 3.

The concern component reflecting perceptions of neighborhood crime problems in Study 2 was associated with second-order components related in the expected directions to the affect balance scale scores and psychological distress for both males and females.

Contrary to expectations, greater subjective well-being was associated with elevated perceptions that crime had been increasing for males in Study 1 and females in Study 2.

There is no clear explanation of the failure of many of the expected relationships of crime perception components to second-order components related to subjective well-being to appear. One possibility, based on an analysis of the characteristics of subjective well-being measures put forward by Campbell (1981), is that the life satisfaction index used in these studies is a relatively cognitive assessment of subjective well-being, as opposed to the more affectively oriented Affect Balance Scale. This difference could lead to associations between the second-order components which were more highly related to life satisfaction and the relatively cognitive risk and concern crime perception components on the one hand, and on the other, associations between the second-order components linked with the Affect Balance Scale scores and the more affectively toned threat crime perception components. This conjecture fits the pattern of findings fairly well, but its post hoc nature warrants caution in too quickly accepting such an explanation.

Feelings of Control

It was suggested that fear of crime might be related to individuals' perceptions of their ability to deal adequately with a victimization situation. It was noted that earlier research (Cohn, Kidder, & Harvey, 1978) indicated an association between greater feelings of control and lowered levels of threat. The general concept of feeling in control was identified with the locus of control construct (Phares, 1976).

Study 2 included a locus of control scale (Lefcourt, 1976) and a measure fo the closely related construct of self-efficacy (Ilfeld, 1978). Study 3 included a three-factor locus of control scale (Reid & Ware, 1974) which provided separate scores for social system control, self-control, and fatalism. This scale was completed by a subgroup of respondents who provided information additional to that obtained in the telephone interviews.

Findings with respect to the association of external locus of control and low self-efficacy to second-order components correlated with crime perception components were largely in the expected directions.

Threat components were associated with second-order components linked to external locus of control and self-efficacy for males and females in Study 1. External locus of self-control and fatalism were similarly related for males in Study 3.

There were few associations of locus of control with risk components. Greater likelihoods of neighborhood and distant victimizations were correlated for females with second-order components related to external locus of control and social system control.

There were several associations of crime concern components with second-order components related to locus of control and self-efficacy. These related perceptions of neighborhood crime problems and increases in crime with external locus of control, external locus of self-control, fatalism, and lower self-efficacy.

Findings of relationships between external locus of control and increased perceptions of threat and concern, are consistent with expectations that those who believe that control of important life events lies outside of themselves would also feel apprehensive about the possibility of being victimized by threatening outsiders, and also be concerned about any surrounding conditions which might suggest that such possibilities exist. Although evidence was not available in the data sets which were analyzed to confirm or deny it, there is also a possibility that the failure to find notable associations between locus of control indices and measures of perceived risk is consistent with an overall external locus of control orientation. Those who feel apprehensive about the possible results of venturing out may, paradoxically, exert a kind of passive control by reducing their exposure to situations which

they see as threatening. The end result of this (non)activity would be to reduce the objective risk of their being victimized. A cognitive appreciation of this effect would then result in reduced or nonexistent associations between locus of control and measures of perceived risk. As indicated, no evidence was available relating to such a sequence of cognitive events, so confirmation or refutation of such a hypothetical process must await further research.

Social Relationships

On the basis of previous research indicating the positive benefits of the availability of social support (Dohrenwend & Dohrenwend, 1974) it was proposed that those with more extensive social relationships would be less likely to express feelings of threat, risk, or concern related to crime.

A large number of variables tapping various aspects of social relating were included in the data sets analyzed in the three studies. In order to reduce the number of variables and concentrate their variation into fewer uncorrelated components, principal components analysis were applied to the items in each data set. This process resulted in a total of fourteen social relationship components across the three sets of data. Because many of the basic items differed in each data set, it was not expected that the same components would be discernible across studies. It was the case, however, that some of the components were quite similar across studies.

The various components were concerned with such entities as involvement with family, friends, or neighbors, embeddedness in the neighborhood, and the availability of assistance from relatives.

In addition to the social relationship components, three previously established scales relevant to social relationships were available for analysis. Srole's (1956) Anomia Scale, tapping individuals' perceptions that others are available for support, was included in the data of Study 1. Also contained in that data set was a Loneliness Scale (Russell, 1982). Respondents from Study 3 who completed a mail questionnaire also provided data from the Perceived Social Support scale (Procidano & Heller, 1983), which assesses the subjectively perceived adequacy of support provided by family and friends.

There were many findings consistent with the idea that more social relationship activity is related to decreased perceptions of crime, and also some findings supporting exactly the opposite view.

Threat indices across the three studies were correlated with second-order components associated with social relationship components and scales. Anomia, loneliness, lack of family, friend, neighbor, and relative support were all linked to increased perceptions of threat.

On the other hand, primarily among the associations with risk and concern components, there was evidence of increased social activity being related to increased perceptions of crime.

Such findings are understandable, as has been demonstrated by Skogan and Maxfield (1980), as the result of the movement of information about victimization events through social networks. Even relatively rare types of events may thus have some impact on a large number of people, resulting in modification of perceptual baselines for risk and concern.

The lifestyle model of victimization risk (Corrado, et al., 1980; Hindelang, et al., 1978) could well be expanded to include effects on perceptions of risk and concern. Those whose lifestyles involved greater social activity would be more likely to be exposed to higher risk situations, and they would thereby have perceptions that the likelihood of being victimized was greater (such views being consistent with reality). Those individuals would also have a greater number of social contacts which would facilitate the movement of information about victimization, as proposed by Skogan and Maxfield (1980).

It is clear that social relationships have relatively complex associations with crime perception measures. It seems likely that the supportive and informational aspects of such relationships have differential effects on various categories of crime perceptions. It would appear that the existence of adequately supportive relationships is linked with lower levels of feeling threatened by the possibility of criminal victimization. On the other hand, the existence of social relationships provides information of a kind or quantity not otherwise available, which is used to adjust estimates of the

seriousness of crime problems and the likelihoods of victimization of self and others.

Conclusion

This series of studies has provided information extending understanding of issues related to public crime perceptions in at least three ways. Better comprehension of the relationships among crime perception items will further effective research in subsequent studies. Adoption of a more holistic framework for consideration of factors associated with crime perceptions that includes psychological as well as sociological variables offers the promise of a more complete understanding of the genesis of crime perceptions. Initial attempts to apply such a framework have made apparent the extensive linkage between psychological and sociological variables, which constitutes a much more realistic approach to understanding the real world than is consideration of either type of variable in isolation from the other.

Researchers who wish to study crime perceptions in the future have been provided with the opportunity to see the results of the application of a mathematically explicit analytical technique (principal components analysis) to three separate sets of crime perception items. These results provide a basis for selecting items representative of the domains covered by the entire set of items, thus enabling efficient measurement within these domains. Alternatively, the results provide a calibrated description of the limitations of the

conceptual coverage of these sets of items, which is of importance to researchers desiring to locate or construct items tapping crime perceptions in other conceptual areas.

The exact nature of the findings are, of course, dependent on many subjective decisions made during the course of the analytical process. Other researchers might make different decisions, but within the framework of principal components analysis, these would be unlikely to substantially alter the form of the relationships revealed. Differences in findings resulting from different decisions with respect to numbers of components or rotational techniques should be in the form of relatively "coarser" or "finer" distinctions within similar basic structures, accounting for more or less variance of the set of items and of the individual items.

The major contribution of the work reported here comes from the example of the adoption of a more holistic framework for use in the search for factors associated with public crime perceptions. Going beyond simple consideration of individual demographic and contextual variables, this framework assumes that expressions of concern about crime are statements arising out of the current state of the individual, which results from the reciprocal interrelationships among psychological and status characteristics. Three specific classes of psychological variables (subjective well-being, feelings of control, and social support resources) were investigated in this regard, in conjunction with more traditional status characteristics

(demographics, crime experience, etc.). The magnitudes of the relationships found for the psychological variables were generally of the same order as those found for the more frequently studied demographic and crime-related variables.

It is obvious after consideration of the tables of findings that the variables included in these studies were not powerfully related to the crime perception indices. Prior research into the relationships between crime perceptions and other variables used analytical techniques differing from those employed here. As a result of this, it is not possible to make direct comparisons between the magnitudes of relationships previously found and those reported in the three studies described above. As noted before, prior research using multiple regression techniques has been able to account for only about five to ten percent of the variance in crime perception measures in terms of sets of variables other than gender. The sets of variables studied here had relationships with crime perception measures of about the same magnitude, as evidenced by the sizes of the correlations between the second-order components and the crime perception components, those correlations being equivalent to standardized regression weights for predicting the latter from the former. Without doubt, relationships of such magnitude are quite small and it is questionable whether pursuit of additional variables similarly related is worth the cost. A decision to carry on further research of this type can only be made in conjunction with a value judgement as to the urgency of the need

to obtain additional understanding of the dynamics surrounding public perceptions of crime.

From a purely subjective viewpoint, it seems reasonable to speculate that it is unlikely that any relatively small set of variables, measuring either objective crime-related factors, or individual differences, will ever be identified which will "account for" a large proportion of crime perception indices, and which, more importantly, is also generalizable across time, place, and populations.

Such a state of affairs is common to other fields of research, for example, in the study of personality. In that area, a controversy has long been underway as to the validity of the construct of "personality." One side argues in favor of the existence of enduring individual traits (Bowers, 1973; Cattell, 1970), while the other side asserts that the apparent existence of stable personality characteristics is an artifact of measurement operations, and is actually due to consistency of related situational factors (Mischel, 1968). It has become apparent that the truth of the matter likely includes both kinds of components, a position which has been labelled interactionism (Magnusson & Endler, 1977).

The interactionist viewpoint can be seen as a rediscovery of older formulations which include both personal and situational components, such as that of Murray (1938). Murray's theory included objectively verifiable forces acting from outside of the individual ("alpha press"), as well as influences

operating from within the individual ("beta press"), together resulting in particular patterns of behaviors. Some kinds of internal influences were seen by Murray as being shared by more than one individual, and these were termed "common beta press."

Conceptual categories similar to those proposed by Murray could be considered as components of the processes which generate public crime perceptions. Objectively measurable indices of crime occurrence and neighborhood conditions would be similar to alpha press influences. The kinds of factors considered in the studies reported herein would be analogous to Murray's common beta press components. The interaction of these would result in overt crime perception responses. A model of this type would allow for the kind of individually idiosyncratic responses to crime perception items that have often been obtained. Within this type of formulation it would not be surprising to find a great deal of variation between individuals existing within the same objective environment, as well as vice versa.

It is quite likely that crime perception indices are largely determined through small relationships with many other kinds of variables, some personal, and many which would be peculiar to specific instances, so that it will never be possible to exhaustively catalog and specify all of them. There is a need, however, to continue to take a broader, more inclusive, approach in the search for additional variables reliably related to crime perceptions. It is particularly

important to identify variables having causal and modifiable links to crime perception indices. Three such possibilities were considered in the studies reported here.

The findings have some implications for efforts intended to modify public crime perceptions. In particular, procedures designed to change feelings of control with respect to crime would appear to offer some benefits in the form of reduced fear. In the event that such procedures could also be linked to providing greater social support resources, additional decrements in fear should be realized. It must be noted, however, that promoting social interaction may also result in elevated perceptions that crime is increasing, and may additionally increase awareness of particular kinds of crime problems not before appreciated by the participants.

An important advance in understanding factors associated with crime perceptions which arises out of the adoption of a more encompassing model, is the increased emphasis placed upon the relationships among the variables. Such a focus tends to force an increase in the sophistication of understanding of the processes involved.

For example, income has frequently been identified as a correlate of crime perceptions. Having lower income has usually been associated with feeling more threatened. In the studies reported herein, this was also the case, as seen through the linkage of income to second-order components correlated with threat indices. However, and this is the main point, income was

never the only variable loading on a second-order component associated with threat. Invariably, the second-order component included other subjective well-being, locus of control, social relationship, or demographic variables. Lower income may be a proxy variable for greater social vulnerability resulting in elevated threat levels, as has been proposed by Skogan and Maxfield (1980), but the evidence indicated that it does not operate alone and that it is often linked with other categories of variables not easily included among those used to define social vulnerability.

As a result of being confronted with these and other similar demonstrations of the relatively complex relationships among the variables associated with crime perception indices, researchers will have to develop more complex theories and better differentiated models.

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APPENDIX A

ITEMS ANALYZED FROM

THE 1981 EDMONTON/WINNIPEG AREA STUDY

The following items from the 1981 Edmonton/Winnipeg Area Study were used in the analyses of Study I. The item numbers are those used in the documentation provided by the Population Research Laboratory at the University of Alberta. The symbol "M" indicates response codes that were treated as missing values. The symbol "X" indicates response codes that did not occur in the data set but which were allowed for in the original coding scheme.

018. Including yourself, how many persons altogether live here, related to you or not?

a) Code number of adults

022. Age Respondent

a) Code actual age in years

057. How many of the adults in this neighbourhood would you know by name if you met them on the street? (READ RESPONSES)

a) None	1
b) Almost none	2
c) Less than half	3
d) About half	4
e) More than half	5
f) Almost all	6
g) All of them	7
h) NR	X

058. How often do you get together with any of these neighbours just for a chat? (READ RESPONSES)

a) Daily or almost every day	5
b) 1 - 3 times a week	4
c) 1 - 3 times a month	3
d) Less than once a month	2
e) Never	1
f) NA	M
g) NR	M

059. How often do you get together with your friends, either in your home or their home? (READ RESPONSES)

a) Daily or almost every day	5
b) 1 - 3 times a week	4
c) 1 - 3 times a month	3
d) Less than once a month	2
e) Never	1
f) NA	M

g) NR M

In the past two years or so, have you received any of the following kinds of help from your RELATIVES? (READ RESPONSES)

		Yes	No	NA	NR
060.	Advice on decision you had to make	1	0	M	M
061.	Help on special occasions, such as childbirth, sickness, personal crisis etc.	1	0	M	M
062.	Help with caring for your children such as babysitting	1	0	M	M
063.	Financial assistance, such as money or a loan to meet everyday expenses	1	0	M	M
064.	Financial assistance to meet mortgage/ rent payments	1	0	M	M
065.	Gifts, other than birthdays, Christmas, etc.	1	0	M	M

066. How often do you get together with relatives? (READ RESPONSES)

a) Daily or almost every day 5
b) 1 - 3 times a week 4
c) 1 - 3 times a month 3
d) Less than once a month 2
e) Never 1
f) NR X

(CARD A) Now, for each area of life I am going to name, tell me the number that shows how much satisfaction you get from that area.

070. Your family life

Very Dissatisfied						Very Satisfied	DK	NR
1	2	3	4	5	6	7	8	M

073. Your friendships

Very Dissatisfied						Very Satisfied	DK	NR
1	2	3	4	5	6	7	8	M

076. (CARD A) All in all how satisfied with life are you these days?

Very Dissatisfied						Very Satisfied	DK	NR
1	2	3	4	5	6	7	8	M

Compared to two years ago would you say that crime has increased, remained the same or decreased in this:

	Increased	Same	Decreased	DK	NA	NR

077.	Neighbourhood	3	2	1	8	M	M
078.	City	3	2	1	8	M	M
079.	Country	3	2	1	8	M	M

080. (CARD B) How safe do you feel walking alone in your neighbourhood at night? Which number comes closest to how safe you feel?

Very unsafe		unsafe		safe	very safe	DK	NR
5		4	3	2	1	8	M

081. What is your current marital status? (READ RESPONSES)

a) Single - never married	1
b) Now married	2
c) Common-law	3
d) Divorced	4
e) Separated	5
f) Widowed	6
g) NR	0

Here is a sheet which we would like you to fill out to describe Edmonton/Winnipeg as it appears to you. [Followed by an example.]

149.	Safe 1	2	3	4	5	6	7	DK	NR	Unsafe
	[Code 1	2	3	4	5	6	7	8	M]	

428. In total, how many years of schooling do you have? This includes total of grade school, high school, vocational, technical and university.

453. (CARD K) Looking at this card, would you tell me which number comes closest to the total income of all the members of this household for this past year before tax and deductions?

Under 5,000	01	28,000-28,999	25
5,000- 5,999	02	29,000-29,999	26
6,000- 6,999	03	30,000-30,999	27
7,000- 7,999	04	31,000-31,999	28
8,000- 8,999	05	32,000-32,999	29
9,000- 9,999	06	33,000-33,999	30
10,000-10,999	07	34,000-34,999	31
11,000-11,999	08	35,000-35,999	32
12,000-12,999	09	36,000-36,999	33
13,000-13,999	10	37,000-37,999	34
14,000-14,999	11	38,000-38,999	35
15,000-15,999	12	39,000-39,999	36
16,000-16,999	13	40,000-40,999	37
17,000-17,999	14	41,000-41,999	38
18,000-18,999	15	42,000-42,999	39

19,000-19,999	16	43,000-43,999	40
20,000-20,999	17	44,000-44,999	41
21,000-21,999	18	45,000-45,999	42
22,000-22,999	19	46,000-46,999	43
23,000-23,999	20	47,000-47,999	44
24,000-24,999	21	48,000-48,999	45
25,000-25,999	22	49,000-49,999	46
26,000-26,999	23	50,000 +	47
27,000-27,999	24	DK	88
		NR	M

APPENDIX B

DISTRIBUTIONAL PROPERTIES OF ITEMS AND SCALES ANALYZED FROM THE 1981 EDMONTON/WINNIPEG AREA STUDY

VAR077R INCR CRIME IN NEIGHBORHOOD

MEAN	2.292	STD ERR	.020	MEDIAN	2.000
MODE	2.000	STD DEV	.550	KURTOSIS	-.556
SKEWNESS	.016	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 736 MISSING CASES 0

- -

VAR078R INCR CRIME IN CITY

MEAN	2.825	STD ERR	.015	MEDIAN	3.000
MODE	3.000	STD DEV	.408	KURTOSIS	3.990
SKEWNESS	-2.182	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 736 MISSING CASES 0

- -

VAR079R INCR CRIME IN COUNTRY

MEAN	2.698	STD ERR	.018	MEDIAN	3.000
MODE	3.000	STD DEV	.494	KURTOSIS	.485
SKEWNESS	-1.269	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 736 MISSING CASES 0

- -

VAR080R NIGHT (UN)SAFETY

MEAN	2.395	STD ERR	.044	MEDIAN	2.000
MODE	2.000	STD DEV	1.188	KURTOSIS	-.604
SKEWNESS	.560	MINIMUM	1.000	MAXIMUM	5.000

VALID CASES 736 MISSING CASES 0

- -

VAR149 (UN)SAFETY OF CITY

MEAN	3.462	STD ERR	.055	MEDIAN	4.000
MODE	4.000	STD DEV	1.483	KURTOSIS	-.326
SKEWNESS	.274	MINIMUM	1.000	MAXIMUM	7.000

VALID CASES 736 MISSING CASES 0

- -

VAR018 ADULTS IN HOUSEHOLD

MEAN	2.069	STD ERR	.034	MEDIAN	2.000
MODE	2.000	STD DEV	.921	KURTOSIS	2.950
SKEWNESS	1.371	MINIMUM	1.000	MAXIMUM	6.000

VALID CASES 736 MISSING CASES 0

- -

VAR057 NEIGHBOURHOOD ADULTS KNOWN BY NAME

MEAN	2.955	STD ERR	.051	MEDIAN	3.000
MODE	3.000	STD DEV	1.384	KURTOSIS	.327
SKEWNESS	.760	MINIMUM	1.000	MAXIMUM	7.000

VALID CASES 736 MISSING CASES 0

- -

VAR058R FREQ: CHAT WITH NEIGHBORS

MEAN	3.043	STD ERR	.042	MEDIAN	3.000
MODE	3.000	STD DEV	1.143	KURTOSIS	-.721
SKEWNESS	-.030	MINIMUM	1.000	MAXIMUM	5.000

VALID CASES 736 MISSING CASES 0

VAR059R FREQ: GET TOGETHER WITH FRIENDS

MEAN	3.355	STD ERR	.034	MEDIAN	3.000
MODE	4.000	STD DEV	.929	KURTOSIS	-.351
SKEWNESS	-.342	MINIMUM	1.000	MAXIMUM	5.000

VALID CASES 736 MISSING CASES 0

- -

VAR060R HELP FROM RELATIVES: ADVICE

MEAN	.330	STD ERR	.017	MEDIAN	.000
MODE	.000	STD DEV	.471	KURTOSIS	-1.480
SKEWNESS	.724	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 736 MISSING CASES 0

- -

VAR061R HELP FROM RELATIVES: ON SPEC OCCASIONS

MEAN	.360	STD ERR	.018	MEDIAN	.000
MODE	.000	STD DEV	.480	KURTOSIS	-1.663
SKEWNESS	.584	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 736 MISSING CASES 0

- -

VAR063R HELP FROM RELATIVES: $$ FOR EXPENSES

MEAN	.148	STD ERR	.013	MEDIAN	.000
MODE	.000	STD DEV	.355	KURTOSIS	1.947
SKEWNESS	1.985	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 736 MISSING CASES 0

VAR064R HELP FROM RELATIVES: $$ FOR MORTGAGE

MEAN	.043	STD ERR	.008	MEDIAN	.000
MODE	.000	STD DEV	.204	KURTOSIS	18.177
SKEWNESS	4.486	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 736 MISSING CASES 0

- -

VAR065R HELP FROM RELATIVES: GIFTS

MEAN	.319	STD ERR	.017	MEDIAN	.000
MODE	.000	STD DEV	.467	KURTOSIS	-1.400
SKEWNESS	.777	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 736 MISSING CASES 0

- -

VAR066R FREQ: GET TOGETHER WITH RELATIVES

MEAN	3.173	STD ERR	.040	MEDIAN	3.000
MODE	4.000	STD DEV	1.076	KURTOSIS	-.887
SKEWNESS	-.078	MINIMUM	1.000	MAXIMUM	5.000

VALID CASES 736 MISSING CASES 0

- -

VAR070 FAMILY LIFE SATISFACTION

MEAN	5.990	STD ERR	.047	MEDIAN	6.000
MODE	7.000	STD DEV	1.270	KURTOSIS	2.915
SKEWNESS	-1.626	MINIMUM	1.000	MAXIMUM	7.000

VALID CASES 736 MISSING CASES 0

- -

VAR073 FRIENDSHIP SATISFACTION

MEAN	5.803	STD ERR	.046	MEDIAN	6.000
MODE	7.000	STD DEV	1.249	KURTOSIS	1.250
SKEWNESS	-1.169	MINIMUM	1.000	MAXIMUM	7.000

VALID CASES 736 MISSING CASES 0

- -

MARITAL STATUS

MEAN	.526	STD ERR	.018	MEDIAN	1.000
MODE	1.000	STD DEV	.495	KURTOSIS	-1.910
SKEWNESS	-.309	MINIMUM	.000	MAXIMUM	1.000

VALID CASES	736	MISSING CASES	0		

- -

VAR076 OVERALL LIFE SATISFACTION

MEAN	5.618	STD ERR	.047	MEDIAN	6.000
MODE	6.000	STD DEV	1.284	KURTOSIS	1.370
SKEWNESS	-1.143	MINIMUM	1.000	MAXIMUM	7.000

VALID CASES	736	MISSING CASES	0		

- -

NEGATIVE AFFECT SCORE

MEAN	11.308	STD ERR	.125	MEDIAN	11.000
MODE	12.000	STD DEV	3.398	KURTOSIS	.105
SKEWNESS	.385	MINIMUM	5.000	MAXIMUM	23.000

VALID CASES	736	MISSING CASES	0		

- -

AFFECT BALANCE SCORE

MEAN	4.861	STD ERR	.188	MEDIAN	5.000
MODE	6.000	STD DEV	5.096	KURTOSIS	.591
SKEWNESS	-.355	MINIMUM	-15.000	MAXIMUM	19.000

VALID CASES	736	MISSING CASES	0		

- -

SROLE ANOMIA SCALE

MEAN	19.098	STD ERR	.222	MEDIAN	19.000
MODE	20.000	STD DEV	6.030	KURTOSIS	-.215
SKEWNESS	.270	MINIMUM	5.000	MAXIMUM	35.000

VALID CASES	736	MISSING CASES	0		

- -

LONELINESS SCALE

MEAN	4.900	STD ERR	.075	MEDIAN	5.000
MODE	5.000	STD DEV	2.043	KURTOSIS	-.081
SKEWNESS	.185	MINIMUM	1.000	MAXIMUM	12.000

VALID CASES 736 MISSING CASES 0

- -

VAR022 AGE OF RESPONDENT

MEAN	41.455	STD ERR	.622	MEDIAN	37.000
MODE	23.000	STD DEV	16.873	KURTOSIS	-.709
SKEWNESS	.601	MINIMUM	17.000	MAXIMUM	86.000

VALID CASES 736 MISSING CASES 0

- -

VAR428 YEARS SCHOOLING - RESPONDENT

MEAN	12.418	STD ERR	.130	MEDIAN	12.000
MODE	12.000	STD DEV	3.513	KURTOSIS	.672
SKEWNESS	-.193	MINIMUM	1.000	MAXIMUM	25.000

VALID CASES 736 MISSING CASES 0

VAR453 TOTAL HOUSEHOLD INCOME PAST YEAR - GROSS

MEAN	22.114	STD ERR	.490	MEDIAN	21.000
MODE	21.000	STD DEV	13.285	KURTOSIS	-.686
SKEWNESS	.378	MINIMUM	1.000	MAXIMUM	47.000

VALID CASES 736 MISSING CASES 0

APPENDIX C

ITEMS ANALYZED FROM THE

1981 CRIME AS A STRESSFUL LIFE EVENT SURVEY

The following items from the 1981 survey of Crime as a Stressful Life Event
were used in the analyses of Study II. The item numbers are those used in the documentation available from the Criminology Research Centre at Simon Fraser University.

5. In the last year or two, do you think that crime has increased, decreased or remained about the same in your neighbourhood?

1. increased
2. decreased
3. same
4. don't know

6. What about in Greater Vancouver?

1. increased
2. decreased
3. same
4. don't know

7. How safe do you feel, or would you feel, walking alone in your neighbourhood after dark? Would you feel...

1. very safe
2. reasonably safe
3. somewhat unsafe
4. very unsafe
5. don't know

8. How do you think your neighbourhood compares with the rest of the Greater Vancouver region in terms of the amount of crime? Would you say your neighbourhood has ...

1. much more crime?
2. more crime?
3. about the same?
4. less crime?
5. much less crime?
6. don't know?

9. Do you think there is a serious crime problem in your neighbourhood?

1. don't know
2. no
3. yes

11. Is it very likely, likely, unlikely, or very

unlikely that a house or apartment would be broken into?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

12. How likely is it that a car parked on the street (road) at night would be broken into?
(Repeat categories if respondent does not remember them.)

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

13. How likely is it that a woman would be threatened if she were walking alone on the street (road) at night?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

14. How likely is it that a person would be held up and robbed?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

15. If you were to walk alone on the residential streets of your neighborhood each night for a month, how likely is it that you would be the victim of a serious crime?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

16. If a child were to play alone in a park each day for a month, how likely is it that that he or she would be the victim of a violent crime?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

17 If you were to walk by yourself in a park close to your home each night for a month, how likely is it that you would be the victim of a serious crime?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

18. How likely is it that you, or someone you know well who is living in the Greater Vancouver region such as a member of your family or one of your close friends, might be the victim of an assault during the next year?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

19. How likely do you think it is that you or one of your close friends would have their home broken into during the next year?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

20. Is there any area around your home within a mile where you would be afraid to walk alone at night?

1. Yes
2. No
3. Don't know

21. How likely do you think it is that you or one of your close friends would have their property vandalized during the next year?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely

5. Don't know

22. How likely do you think it is that you or someone you know would be the victim of a sexual assault during the next year?

1. Very Likely
2. likely
3. Unlikely
4. Very Unlikely
5. Don't know

Now, I would like you to tell me if you think your chances of being a victim of each of the following crimes has gone up, gone down or remained about the same in recent years.

23. Break and Enter

1. Gone up
2. Gone down
3. Remained the same
4. Don't know

24. Vandalism

1. Gone up
2. Gone down
3. Remained the same
4. Don't know

25. Assault

1. Gone up
2. Gone down
3. Remained the same
4. Don't know

26. Sexual Assault

1. Gone up
2. Gone down
3. Remained the same
4. Don't know

27. Have you been the victim of any crime during the last year?

1. Yes 2. No

34. Do you personally know of anyone else who has been the victim of a crime during the past

year?

1. Yes 2. No

Now I would like you to tell me if you strongly agree, agree, disagree, or strongly disagree with the following statements.

41. I worry a lot about becoming a victim of crime

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Don't know

42. I have limited or changed my activities in the past year because of fear of crime

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Don't know

43. The extent of crime is one of my major concerns

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Don't know

44. Many people don't seem to realize how serious the crime problem has become in this city

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Don't know

45. Crime in Vancouver is more serious than newspapers, radio and television let on.

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Don't know

137. On the whole, how happy are you with living there; would you say you're very happy, pretty happy, or not

too happy with your neighborhood?

1. Very happy
2. Pretty happy
3. Not too happy
4. Don't know

138. Do you think of your community as your real home -- the place where you really belong, or do you think of it as just a place where you happen to be living?

1. Really belong
2. Just a place
3. Don't know

139. Do you have any plans to move within the next year?

1. yes
2. no
3. don't know

140. Do most of your friends live in your neighborhood or do most of them live further away?

1. Neighborhood
2. Half and half
3. Further away
4. Don't know

141. How often do you visit in the homes of people who live near you?

1. very often
2. fairly often
3. just once in a while
4. not at all
5. Don't know

142. On the whole, would you say that the people who live in your neighborhood are pretty much the same sort of person you are, or are they different from you in important ways?

1. pretty much the same
2. different
3. don't know

144. Thinking of visits, telephone calls, or letters, were you in touch with any relatives during the past two weeks, not counting any who live with you?

1. yes

2. no

147. Now how about friends other than relatives? During the past few weeks how many times did you get together with friends -- I mean things like going out together or visiting in each others' homes ?

1. not at all
2. once
3. twice
4. three times
5. four times
6. five or more times

149. On the average during the past few weeks, how many times a day did you chat with friends on the telephone?

1. none
2. less than once a day
3. once a day
4. twice a day
5. three times a day
6. four or more

150. Thinking of people including relatives whom you consider really good friends -- that is people you feel free to talk with about personal things -- about how many such friends would you say you have?

151. How many organizations such as church and school groups, labor unions, or social, civic, and fraternal clubs do you belong to?

162. In what year were you born?

163. Note respondent's sex:

1. Male
2. Female

164. What is your marital status?

1. Never married
2. Married/common-law
3. Widowed
4. Separated
5. Divorced
6. Married, spouse absent but not estranged

165. What is the highest grade or level of education you ever completed? (Mark only one)

1. No Schooling

2. Elementary Grades 1 - 6
3. Secondary Grades 7 - 9
4. High School Grades 10 - 12/13
5. Community or Technical College,
6. CEGEP, Nurse's Training
7. University or Teacher's Training
8. Post-Graduate University Studies

163. In which of the following ranges did your total family income fall, for the calendar year 1980? Include all income before taxes and deductions, of all members of your family. (Read ranges)

1. Less than 4,000
2. 4,000 - 6,999
3. 7,000 - 9,999
4. 10,000 - 14,999
5. 15,000 - 19,999
6. 20,000 - 29,999
7. 30,000 and over
8. Don't know

APPENDIX D

DISTRIBUTIONAL PROPERTIES OF ITEMS AND SCALES ANALYZED FROM THE 1981 CRIME AS A STRESSFUL LIFE EVENT SURVEY

V5 CRIME INCREASE IN NEIGHBORHOOD

MEAN	2.368	STD ERR	.039	MEDIAN	2.000
MODE	2.000	STD DEV	.578	KURTOSIS	-.715
SKEWNESS	-.258	MINIMUM	1.000	MAXIMUM	3.000
VALID CASES	220	MISSING CASES	0		

V6 CRIME INCREASE IN GREATER VANCOUVER

MEAN	2.700	STD ERR	.034	MEDIAN	3.000
MODE	3.000	STD DEV	.507	KURTOSIS	.984
SKEWNESS	-1.399	MINIMUM	1.000	MAXIMUM	3.000
VALID CASES	220	MISSING CASES	0		

V7 UNSAFETY WALKING ALONE IN NEIGHBORHOOD AT NIGHT

MEAN	2.191	STD ERR	.062	MEDIAN	2.000
MODE	2.000	STD DEV	.922	KURTOSIS	-.607
SKEWNESS	.424	MINIMUM	1.000	MAXIMUM	4.000
VALID CASES	220	MISSING CASES	0		

V8 AMOUNT OF CRIME IN NBORHOOD COMPARED WITH GT VANCOUVER

MEAN	2.273	STD ERR	.054	MEDIAN	2.000
MODE	2.000	STD DEV	.804	KURTOSIS	.754
SKEWNESS	.741	MINIMUM	1.000	MAXIMUM	5.000
VALID CASES	220	MISSING CASES	0		

V9 SERIOUS NEIGHBORHOOD CRIME PROBLEM

MEAN	.282	STD ERR	.030	MEDIAN	.000
MODE	.000	STD DEV	.451	KURTOSIS	-1.056
SKEWNESS	.977	MINIMUM	.000	MAXIMUM	1.000
VALID CASES	220	MISSING CASES	0		

V11 LIKELIHOOD HOME B & E IN NEIGHBORHOOD

MEAN	2.632	STD ERR	.054	MEDIAN	3.000
MODE	3.000	STD DEV	.796	KURTOSIS	-.403
SKEWNESS	-.111	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES	220	MISSING CASES	0		

V12 LIKELIHOOD CAR B & E IN NEIGHBORHOOD

MEAN	2.616	STD ERR	.056	MEDIAN	2.750
MODE	2.000	STD DEV	.824	KURTOSIS	-.646
SKEWNESS	.192	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES	220	MISSING CASES	0		

V13 LIKELIHOOD WOMAN THREATENED ON STREET AT NIGHT

MEAN	2.416	STD ERR	.051	MEDIAN	2.000
MODE	2.000	STD DEV	.758	KURTOSIS	-.061
SKEWNESS	.511	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES	220	MISSING CASES	0		

V14 LIKELIHOOD PERSON ROBBED

MEAN	1.925	STD ERR	.047	MEDIAN	2.000
MODE	2.000	STD DEV	.691	KURTOSIS	.772
SKEWNESS	.566	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES	220	MISSING CASES	0		

V15 LIKELIHOOD VICTIM ON STREET AT NIGHT

MEAN	2.200	STD ERR	.050	MEDIAN	2.000
MODE	2.000	STD DEV	.738	KURTOSIS	.167
SKEWNESS	.387	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES	220	MISSING CASES	0		

V16 LIKELIHOOD CHILD VICTIM IN PARK

MEAN	2.120	STD ERR	.041	MEDIAN	2.000
MODE	2.000	STD DEV	.603	KURTOSIS	.992
SKEWNESS	.394	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES	220	MISSING CASES	0		

V17 LIKELIHOOD RESPONDENT VICTIM IN PARK

MEAN	2.425	STD ERR	.051	MEDIAN	2.000
MODE	2.000	STD DEV	.757	KURTOSIS	-.180

SKEWNESS	.225	MINIMUM	1.000	MAXIMUM	4.000
VALID CASES	220	MISSING CASES	0		

V18 LIKELY RESPONDENT OR ACQUAINTANCE VICTIM OF ASSAULT

MEAN	2.532	STD ERR	.047	MEDIAN	2.500
MODE	2.000	STD DEV	.692	KURTOSIS	-.074
SKEWNESS	.261	MINIMUM	1.000	MAXIMUM	4.000
VALID CASES	220	MISSING CASES	0		

V19 LIKELY RESPONDENT OR ACQUAINTANCE VICTIM OF B & E

MEAN	2.959	STD ERR	.048	MEDIAN	3.000
MODE	3.000	STD DEV	.719	KURTOSIS	.098
SKEWNESS	-.358	MINIMUM	1.000	MAXIMUM	4.000
VALID CASES	220	MISSING CASES	0		

V20 AREA NEAR HOME WHERE AFRAID TO WALK

MEAN	.564	STD ERR	.034	MEDIAN	1.000
MODE	1.000	STD DEV	.497	KURTOSIS	-1.951
SKEWNESS	-.258	MINIMUM	.000	MAXIMUM	1.000
VALID CASES	220	MISSING CASES	0		

V21 LIKELY RESPONDENT OR ACQUAINTANCE VICTIM OF VANDALISM

MEAN	3.007	STD ERR	.051	MEDIAN	3.000
MODE	3.000	STD DEV	.750	KURTOSIS	-.328
SKEWNESS	-.318	MINIMUM	1.000	MAXIMUM	4.000
VALID CASES	220	MISSING CASES	0		

V22 LIKELY RESPONDENT OR ACQUAINTANCE VICTIM OF SEX ASSAULT

MEAN	2.414	STD ERR	.044	MEDIAN	2.000
MODE	2.000	STD DEV	.649	KURTOSIS	.111
SKEWNESS	.275	MINIMUM	1.000	MAXIMUM	4.000
VALID CASES	220	MISSING CASES	0		

V23 CHANCES OF B & E GONE UP

MEAN	2.632	STD ERR	.037	MEDIAN	3.000

MODE	3.000	STD DEV	.546	KURTOSIS	.296
SKEWNESS	-1.136	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V24 CHANCES OF VANDALISM GONE UP

MEAN	2.618	STD ERR	.036	MEDIAN	3.000
MODE	3.000	STD DEV	.532	KURTOSIS	-.219
SKEWNESS	-.944	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V25 CHANCES OF ASSAULT GONE UP

MEAN	2.359	STD ERR	.040	MEDIAN	2.000
MODE	2.000	STD DEV	.599	KURTOSIS	-.663
SKEWNESS	-.340	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V25 CHANCES OF SEXUAL ASSAULT GONE UP

MEAN	2.350	STD ERR	.044	MEDIAN	2.000
MODE	2.000	STD DEV	.648	KURTOSIS	-.684
SKEWNESS	-.492	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V41 WORRY ABOUT BECOMING VICTIM

MEAN	2.291	STD ERR	.043	MEDIAN	2.000
MODE	2.000	STD DEV	.632	KURTOSIS	.666
SKEWNESS	.664	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 220 MISSING CASES 0

V42 LIMITED OR CHANGED ACTIVITIES BECAUSE OF CRIME

MEAN	2.218	STD ERR	.037	MEDIAN	2.000
MODE	2.000	STD DEV	.555	KURTOSIS	.434
SKEWNESS	.364	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 220 MISSING CASES 0

V43 CRIME MAJOR CONCERN

MEAN	2.405	STD ERR	.041	MEDIAN	2.000
MODE	2.000	STD DEV	.608	KURTOSIS	-.162
SKEWNESS	.249	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 220 MISSING CASES 0

V44 PEOPLE DON'T REALIZE SERIOUSNESS OF CRIME

MEAN	2.611	STD ERR	.041	MEDIAN	3.000
MODE	3.000	STD DEV	.608	KURTOSIS	-.196
SKEWNESS	.179	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 220 MISSING CASES 0

V45 CRIME MORE SERIOUS THAN MEDIA LET ON

MEAN	2.705	STD ERR	.042	MEDIAN	3.000
MODE	3.000	STD DEV	.617	KURTOSIS	.064
SKEWNESS	.123	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 220 MISSING CASES 0

V137 HAPPY LIVING THERE

MEAN	2.395	STD ERR	.043	MEDIAN	2.000
MODE	3.000	STD DEV	.643	KURTOSIS	-.614
SKEWNESS	-.590	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V138 THINK OF YOUR COMMUNITY AS REAL HOME

MEAN	2.309	STD ERR	.064	MEDIAN	3.000
MODE	3.000	STD DEV	.948	KURTOSIS	-1.575
SKEWNESS	-.654	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V139 PLANS TO MOVE WITHIN NEXT YEAR

MEAN	2.550	STD ERR	.055	MEDIAN	3.000
MODE	3.000	STD DEV	.818	KURTOSIS	-.177
SKEWNESS	-1.325	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V140 DO FRIENDS LIVE IN NEIGHBORHOOD

MEAN	1.627	STD ERR	.054	MEDIAN	1.000
MODE	1.000	STD DEV	.798	KURTOSIS	-.996
SKEWNESS	.774	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V141 FREQUENCY VISIT PEOPLE NEAR YOU

MEAN	2.305	STD ERR	.053	MEDIAN	2.000
MODE	2.000	STD DEV	.784	KURTOSIS	-.371
SKEWNESS	.151	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 220 MISSING CASES 0

V142 PEOPLE IN NEIGHBORHOOD SAME OR DIFFERENT

MEAN	2.182	STD ERR	.065	MEDIAN	3.000
MODE	3.000	STD DEV	.967	KURTOSIS	-1.837
SKEWNESS	-.372	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 220 MISSING CASES 0

V144 CONTACT WITH RELATIVES PAST TWO WEEKS

MEAN	1.850	STD ERR	.024	MEDIAN	2.000
MODE	2.000	STD DEV	.358	KURTOSIS	1.913
SKEWNESS	-1.974	MINIMUM	1.000	MAXIMUM	2.000

VALID CASES 220 MISSING CASES 0

V147 CONTACT FRIENDS OTHER THAN RELATIVES

MEAN	4.577	STD ERR	.108	MEDIAN	5.000
MODE	6.000	STD DEV	1.601	KURTOSIS	-.489
SKEWNESS	-.821	MINIMUM	1.000	MAXIMUM	6.000

VALID CASES 220 MISSING CASES 0

V149 TIMES A DAY CHAT WITH FRIENDS

MEAN	3.064	STD ERR	.077	MEDIAN	3.000
MODE	3.000	STD DEV	1.145	KURTOSIS	.364
SKEWNESS	.795	MINIMUM	1.000	MAXIMUM	6.000

VALID CASES 220 MISSING CASES 0

V150 HOW MANY GOOD FRIENDS DO YOU HAVE

MEAN	4.941	STD ERR	.321	MEDIAN	4.000
MODE	3.000	STD DEV	4.757	KURTOSIS	11.001
SKEWNESS	2.945	MINIMUM	.000	MAXIMUM	30.000

VALID CASES 220 MISSING CASES 0

V151 ORGANIZATIONS YOU BELONG TO

MEAN	1.032	STD ERR	.095	MEDIAN	1.000
MODE	.000	STD DEV	1.403	KURTOSIS	7.686
SKEWNESS	2.158	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 220 MISSING CASES 0

MARITAL STATUS

MEAN	.518	STD ERR	.034	MEDIAN	1.000
MODE	1.000	STD DEV	.501	KURTOSIS	-2.013
SKEWNESS	-.073	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 220 MISSING CASES 0

POSAFF POSITIVE AFFECT SCALE

MEAN	3.452	STD ERR	.098	MEDIAN	4.000
MODE	4.000	STD DEV	1.447	KURTOSIS	-.209
SKEWNESS	-.829	MINIMUM	.000	MAXIMUM	5.000

VALID CASES 220 MISSING CASES 0

NEGAFF NEGATIVE AFFECT SCALE

MEAN	1.609	STD ERR	.095	MEDIAN	1.000
MODE	1.000	STD DEV	1.403	KURTOSIS	-.205
SKEWNESS	.782	MINIMUM	.000	MAXIMUM	5.000

VALID CASES 220 MISSING CASES 0

AFFBAL AFFECT BALANCE SCALE

MEAN	1.843	STD ERR	.134	MEDIAN	2.000
MODE	2.000	STD DEV	1.991	KURTOSIS	-.419
SKEWNESS	-.402	MINIMUM	-4.000	MAXIMUM	5.000

VALID CASES 220 MISSING CASES 0

LOWSE LOW SELF-EFFICACY

MEAN	19.064	STD ERR	.160	MEDIAN	19.000
MODE	19.000	STD DEV	2.375	KURTOSIS	1.815
SKEWNESS	-.351	MINIMUM	11.000	MAXIMUM	28.000
VALID CASES	220	MISSING CASES	0		

EXTLOC EXTERNAL LOCUS OF CONTROL

MEAN	2.482	STD ERR	.067	MEDIAN	2.250
MODE	2.000	STD DEV	.991	KURTOSIS	.200
SKEWNESS	.332	MINIMUM	.000	MAXIMUM	6.000
VALID CASES	220	MISSING CASES	0		

PSYDIST PSYCHOLOGICAL DISTRESS

MEAN	3.318	STD ERR	.219	MEDIAN	3.000
MODE	.000	STD DEV	3.242	KURTOSIS	1.909
SKEWNESS	1.254	MINIMUM	.000	MAXIMUM	16.000
VALID CASES	220	MISSING CASES	0		

AGE

MEAN	40.255	STD ERR	1.177	MEDIAN	34.000
MODE	21.000	STD DEV	17.464	KURTOSIS	-.704
SKEWNESS	.674	MINIMUM	18.000	MAXIMUM	86.000
VALID CASES	220	MISSING CASES	0		

EDUC EDUCATION OF RESPONDENT

MEAN	4.791	STD ERR	.095	MEDIAN	4.000
MODE	4.000	STD DEV	1.405	KURTOSIS	-.624
SKEWNESS	.786	MINIMUM	2.000	MAXIMUM	8.000
VALID CASES	220	MISSING CASES	0		

INCOMLVL FAMILY INCOME LEVEL

MEAN	5.227	STD ERR	.093	MEDIAN	5.000
MODE	5.000	STD DEV	1.386	KURTOSIS	.077
SKEWNESS	-.622	MINIMUM	1.000	MAXIMUM	7.000
VALID CASES	220	MISSING CASES	0		

VICTIM OF ANY CRIME LAST YEAR

MEAN	.268	STD ERR	.030	MEDIAN	.000
MODE	.000	STD DEV	.444	KURTOSIS	-.898
SKEWNESS	1.054	MINIMUM	.000	MAXIMUM	1.000
VALID CASES	220	MISSING CASES	0		

OTHRVICT KNOW OTHER VICTIMS OF CRIMES LAST YEAR

MEAN	.564	STD ERR	.034	MEDIAN	1.000
MODE	1.000	STD DEV	.497	KURTOSIS	-1.951
SKEWNESS	-.258	MINIMUM	.000	MAXIMUM	1.000
VALID CASES	220	MISSING CASES	0		

APPENDIX E

ITEMS ANALYZED FROM

THE 1982 DELTA CRIME PERCEPTION SURVEY

The following items from the 1982 Delta Crime Perception Survey were used in the analyses of Study III. The item numbers are those used in the documentation available from the Criminology Research Centre at Simon Fraser University.

002. Do you think your neighbourhood is an area with a high amount of crime, an average amount of crime or a low amount of crime?

1. High
2. Average
3. Low
4. Don't know

003. In the last year or two, do you think that crime has increased, decreased, or remained about the same in your neighborhood?

1. Increased
2. Decreased
3. Same
4. Don't know

004. What about in the Greater Vancouver Region?

5. Increased
6. Decreased
7. Same
8. Don't know

005. How safe do you feel or would you feel walking alone in your neighborhood during the day?

1. Very safe
2. Reasonably safe
3. Somewhat unsafe
4. Very unsafe
5. Don't know

006. How about after dark?

1. Very safe
2. Reasonably safe
3. Somewhat unsafe
4. Very unsafe
5. Don't know

007. How do you think your neighbourhood compares with the rest of the Greater Vancouver Region in terms of the

amount of crime? Would you say your neighbourhood has...

1. Much more crime?
2. More crime?
3. About the same?
4. Less crime?
5. Much less crime?
6. Don't know

008. Do you think there is a serious crime problem of any kind in your neighborhood?

1. Don't know
2. No
3. Yes

Now I'm going to ask you some questions about how likely you think it is that certain crimes will happen in your community. I would like you to give me answers on a scale going from zero to ten. For example, if you feel there is ABSOLUTELY NO CHANCE of a particular crime happening, you will say "zero". If you feel a particular crime is EXTREMELY LIKELY TO HAPPEN, you will say "ten". Otherwise, you will pick a number between zero and ten, which best indicates how likely it is that the crime would happen.

In your neighborhood...

011. How likely is it that a house or apartment would be broken into?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

012. How likely is it that a car parked on the street (road) at night would be broken into? (Repeat response options if necessary)

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

013. How likely is it that a car parked on the street (road) at night would be stolen?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

014. How likely is it that a woman would be threatened if she were walking alone on the street (road) at night?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

015. How likely is it that a person would be held up and robbed?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

016. How likely is it that your residence would be broken into?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

017. If you were to walk alone on the streets of your neighborhood each night for a month, how likely is that you would be the victim of a serious crime?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

018. How likely is it that a serious crime will occur in a public park over the next year or so?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

019. How likely is it that crime will occur in a shopping area?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

020. How likely is it that someone will be the victim of a crime while occupying a private motor vehicle?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

021. How likely is it that crime will occur on public transportation?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

022. How likely is it that crime will occur in undeveloped areas?

0 1 2 3 4 5 6 7 8 9 10 (11 DK)

075. Do you think of Delta as your real home -- the place where you really belong, or do you think of it as just a place where you happen to be living?

1. Really belong
2. Just a place
3. Don't know

076. Do you have any plans to move within the next year?

1. Yes
2. No
3. Maybe
4. Don't know

077. Are you able to recognize the neighbors on either side of you and across the street?

1. Yes
2. No
3. Some of them

078. Do most of your friends live in your neighborhood or do most of them live further away?

1. Neighborhood
2. Half and half
3. Further away
4. Don't know

079. How often do you visit in the homes of people who live near you?

1. Very often
2. Fairly often
3. Just once in a while
4. Not at all
5. Don't know

080. On the whole, would you say that the people who live in your neighborhood are pretty much the same sort of person you are, or are they different from you in important ways?

1. Pretty much the same
2. Different
3. Don't know

081. Thinking of visits, telephone calls, or letters, were you in touch with any relatives during the past two weeks, not counting any who live with you?

1. Yes

2. No

082. Now how about friends other than relatives? During the past few weeks how many times did you get together with friends -- I mean things like going out together or visiting each others' homes?

1. Not at all
2. Once
3. Twice
4. Three times
5. Four times
6. Five or more times

084. Thinking of people including relatives whom you consider really good friends -- that is people you free to talk with about personal things -- about how many such friends would you say you have?

085. How many organizations such as church and school groups, labor unions, or social, civic, and fraternal clubs do you take an active part in?

Now I would like you to tell me how satisfied you are with your community and the quality of your life in general by giving me ratings on a scale going from 0 to 10. For example, if you are not at all satisfied with Delta as a place to live, you would say "zero". If you are completely satisfied, you would say "ten". If you are somewhere between not at all satisfied and completely satisfied, you would give me a number between zero and ten.

100. All things considered, how satisfied are you with your friendships-- with the time you can spend with friends, the things you do together, the number of friends you have, as well as the particular people who are your friends?

0 1 2 3 4 5 6 7 8 9 10

103. All things considered, how satisfied are you with your family life -- the time you spend and the things you do with members of your family?

0 1 2 3 4 5 6 7 8 9 10

104. In general, how satisfied or dissatisfied are you with your life as a whole as it is right now?

0 1 2 3 4 5 6 7 8 9 10

107. Interviewer check item A:
(Note respondent's sex)

1. Male
2. Female

108. In what year were you born?

109. What is the highest grade or level of education you ever completed? (Mark only one, do not read list)

01. No schooling
02. Some Elementary
03. Completed Elementary
04. Some High School
05. Completed High School
06. Some Community or Technical College
07. Completed Community or Technical College
08. Some University or Teacher's College
09. Completed University or Teacher's College
10. Some Post-graduate University studies
11. Completed Post-graduate University studies
12. Other eduction or training
(specify)

111. In which of the following ranges did your total family income fall, for the calendar year 1981? Include all income, before taxes and deductions, of all members of your family. Stop me when I get to the right category.
(READ)
1. Less than 9,000
2. 9,000 - 14,999
3. 15,000 - 19,999
4. 20,000 - 24,999
5. 25,000 - 29,999
6. 30,000 - 39,999
7. 40,000 and over
8. Don't know

Now I would like to ask you some questions about your experience with crime from the beginning of 1981 until now.

118. Since the beginning of last year, that is January of 1981, were you the victim of any serious crimes such as an assault or a robbery?

1. No

2. Yes

123. Did anyone break into or illegally enter your (home/apartment), garage or any other building on your property?

1. No

2. Yes

126. Since the beginning of 1981, did anyone find a door jimmied, a lock forced or any other signs of attempted illegal entry?

1. No

2. Yes

129. Did anyone steal or try to steal any motor vehicles owned by any members of your household since the beginning of 1981?

1. No

2. Yes

132. Did anyone steal or try to steal part of any motor vehicles owned by members of your household such as a battery, hubcap, a tapedeck or radio?

1. No

2. Yes

135. Since the beginning of 1981, did anyone steal anything that belonged to you personally from inside any car, truck or boat, such as packages or clothing?

1. No

2. Yes

138. Was anything stolen that was normally kept outside your home, such as a bicycle or lawn furniture?

1. No

2. Yes

141. Did anyone deliberately damage or destroy any property belonging to you or any member of your household, such as a window in your home, a fence in your yard, or a motor vehicle?

1. No

2. Yes

144. Since the beginning of 1981, did any other crimes happen to you?

1. No (go to 157)

2. Yes

162. Have you ever witnessed a serious crime?

1. No

2. Yes

163. Have you ever known anyone personally who was the victim of a serious crime?

1. No

2. Yes

APPENDIX F

DISTRIBUTIONAL PROPERTIES OF ITEMS AND SCALES ANALYZED FROM THE 1982 DELTA CRIME PERCEPTION SURVEY

V2 CRIME RATE IN NEIGHBORHOOD

MEAN	1.399	STD ERR	.024	MEDIAN	1.000
MODE	1.000	STD DEV	.578	KURTOSIS	.290
SKEWNESS	1.134	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 597 MISSING CASES 0

V3 CHANGE CRIME RATE NEIGHBORHOOD

MEAN	2.229	STD ERR	.023	MEDIAN	2.000
MODE	2.000	STD DEV	.555	KURTOSIS	-.296
SKEWNESS	.034	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 597 MISSING CASES 0

V4 CHANGE CRIME RATE GREATER VANCOUVER

MEAN	2.824	STD ERR	.016	MEDIAN	3.000
MODE	3.000	STD DEV	.398	KURTOSIS	3.015
SKEWNESS	-2.022	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 597 MISSING CASES 0

V5 SAFETY WALKING ALONE - DAY

MEAN	1.198	STD ERR	.019	MEDIAN	1.000
MODE	1.000	STD DEV	.453	KURTOSIS	8.049
SKEWNESS	2.552	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 597 MISSING CASES 0

V6 SAFETY WALKING ALONE - NIGHT

MEAN	2.028	STD ERR	.039	MEDIAN	2.000
MODE	1.000	STD DEV	.946	KURTOSIS	-.688
SKEWNESS	.533	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 597 MISSING CASES 0

V7 COMPARE NEIGHBORHOOD WITH GREATER VAN

MEAN	1.891	STD ERR	.027	MEDIAN	2.000
MODE	2.000	STD DEV	.648	KURTOSIS	1.143
SKEWNESS	.517	MINIMUM	1.000	MAXIMUM	5.000

VALID CASES 597 MISSING CASES 0

V8 SERIOUS CRIME PROBLEM IN NEIGHBORHOOD

MEAN	.340	STD ERR	.019	MEDIAN	.000
MODE	.000	STD DEV	.474	KURTOSIS	-1.547
SKEWNESS	.677	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 597 MISSING CASES 0

V11 LIKELIHOOD HOUSE BROKEN INTO

MEAN	5.174	STD ERR	.106	MEDIAN	5.000
MODE	5.000	STD DEV	2.594	KURTOSIS	-.595
SKEWNESS	.217	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V12 LIKELIHOOD CAR BROKEN INTO NIGHT

MEAN	4.727	STD ERR	.107	MEDIAN	5.000
MODE	5.000	STD DEV	2.602	KURTOSIS	-.671
SKEWNESS	.307	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V13 LIKELIHOOD CAR STOLEN NIGHT

MEAN	3.023	STD ERR	.093	MEDIAN	3.000
MODE	2.000	STD DEV	2.273	KURTOSIS	.733
SKEWNESS	.895	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V14 LIKELIHOOD WOMAN THREATENED AT NIGHT

MEAN	3.114	STD ERR	.095	MEDIAN	3.000
MODE	2.000	STD DEV	2.332	KURTOSIS	.415
SKEWNESS	.894	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V15 LIKELIHOOD PERSON HELD UP ROBBED

MEAN	2.193	STD ERR	.082	MEDIAN	2.000
MODE	1.000	STD DEV	2.005	KURTOSIS	1.176

SKEWNESS	1.175	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V16 LIKELIHOOD RESIDENXCE BROKEN INTO

MEAN	3.868	STD ERR	.107	MEDIAN	4.000
MODE	5.000	STD DEV	2.615	KURTOSIS	-.283
SKEWNESS	.598	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

- -

V17 LIKELIHOOD VICTIM OF SERIOUS CRIME

MEAN	2.300	STD ERR	.098	MEDIAN	2.000
MODE	.000	STD DEV	2.395	KURTOSIS	1.516
SKEWNESS	1.356	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

- -

V18 LHOOD SERIOUS CRIME IN PARK

MEAN	4.333	STD ERR	.104	MEDIAN	4.000
MODE	5.000	STD DEV	2.552	KURTOSIS	-.481
SKEWNESS	.402	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

- -

V19 LHOOD CRIME IN SHOPPING CENTER

MEAN	5.633	STD ERR	.108	MEDIAN	5.000
MODE	5.000	STD DEV	2.645	KURTOSIS	-.780
SKEWNESS	-.143	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V20 LHOOD CRIME WHILE IN MVH

MEAN	3.025	STD ERR	.093	MEDIAN	3.000
MODE	1.000	STD DEV	2.268	KURTOSIS	.358
SKEWNESS	.829	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

- -

V21 LHOOD CRIME ON PUBLIC TRANS.

MEAN	3.030	STD ERR	.095	MEDIAN	3.000

MODE	5.000	STD DEV	2.332	KURTOSIS	.245
SKEWNESS	.775	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V22 LHOOD CRIME IN UNDEVELOP. AREAS

MEAN	4.549	STD ERR	.101	MEDIAN	5.000
MODE	5.000	STD DEV	2.465	KURTOSIS	-.552
SKEWNESS	.179	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V75 FEEL YOU BELONG

MEAN	1.871	STD ERR	.014	MEDIAN	2.000
MODE	2.000	STD DEV	.330	KURTOSIS	3.001
SKEWNESS	-2.219	MINIMUM	1.000	MAXIMUM	2.000

VALID CASES 597 MISSING CASES 0

V76 HAVE PLANS TO MOVE

MEAN	3.647	STD ERR	.036	MEDIAN	4.000
MODE	4.000	STD DEV	.883	KURTOSIS	4.464
SKEWNESS	-2.448	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 597 MISSING CASES 0

V77 RECOGNIZE NEIGHBORS?

MEAN	2.834	STD ERR	.019	MEDIAN	3.000
MODE	3.000	STD DEV	.454	KURTOSIS	7.214
SKEWNESS	-2.803	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 597 MISSING CASES 0

V78 WHERE DO FRIENDS LIVE

MEAN	1.568	STD ERR	.032	MEDIAN	1.000
MODE	1.000	STD DEV	.771	KURTOSIS	-.717
SKEWNESS	.917	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 597 MISSING CASES 0

V79 VISIT N'BORS HOW OFTEN

MEAN	2.338	STD ERR	.036	MEDIAN	2.000
MODE	2.000	STD DEV	.869	KURTOSIS	-.512
SKEWNESS	.335	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 597 MISSING CASES 0

V80 DO PEOPLE DIFFER

MEAN	1.807	STD ERR	.016	MEDIAN	2.000
MODE	2.000	STD DEV	.385	KURTOSIS	.504
SKEWNESS	-1.554	MINIMUM	1.000	MAXIMUM	2.000

VALID CASES 597 MISSING CASES 0

- -

V81 IN TOUCH WITH RELATIVES PAST TWO WKS

MEAN	.918	STD ERR	.011	MEDIAN	1.000
MODE	1.000	STD DEV	.275	KURTOSIS	7.344
SKEWNESS	-3.053	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 597 MISSING CASES 0

- -

V82 HOW OFTEN MEET FRIENDS PAST TWO WEEKS

MEAN	4.209	STD ERR	.071	MEDIAN	5.000
MODE	6.000	STD DEV	1.729	KURTOSIS	-1.114
SKEWNESS	-.463	MINIMUM	1.000	MAXIMUM	6.000

VALID CASES 597 MISSING CASES 0

- -

V84 HOW MANY GOOD FRIENDS

MEAN	7.159	STD ERR	.284	MEDIAN	5.000
MODE	6.000	STD DEV	6.930	KURTOSIS	17.255
SKEWNESS	3.356	MINIMUM	.000	MAXIMUM	60.000

VALID CASES 597 MISSING CASES 0

V85 MEMBERSHIP IN ORGANIZATIONS

MEAN	1.347	STD ERR	.059	MEDIAN	1.000
MODE	.000	STD DEV	1.438	KURTOSIS	.992
SKEWNESS	1.132	MINIMUM	.000	MAXIMUM	8.000

VALID CASES 597 MISSING CASES 0

- -

V100 SATISFACTION FRIENDSHIP

MEAN	8.295	STD ERR	.068	MEDIAN	9.000
MODE	10.000	STD DEV	1.656	KURTOSIS	1.935
SKEWNESS	-1.222	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V103 SATISFACTION FAMILY LIFE

MEAN	8.544	STD ERR	.070	MEDIAN	9.000
MODE	10.000	STD DEV	1.704	KURTOSIS	2.501
SKEWNESS	-1.486	MINIMUM	1.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

V104 SATISFACTION WITH LIFE

MEAN	8.332	STD ERR	.065	MEDIAN	8.000
MODE	8.000	STD DEV	1.580	KURTOSIS	3.394
SKEWNESS	-1.455	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 597 MISSING CASES 0

AGE

MEAN	39.131	STD ERR	.548	MEDIAN	37.000
MODE	36.000	STD DEV	13.399	KURTOSIS	.273
SKEWNESS	.736	MINIMUM	17.000	MAXIMUM	90.000

VALID CASES 597 MISSING CASES 0

V109 EDUCATION

MEAN	6.072	STD ERR	.084	MEDIAN	5.000
MODE	5.000	STD DEV	2.058	KURTOSIS	-.412
SKEWNESS	.828	MINIMUM	2.000	MAXIMUM	11.000

VALID CASES 597 MISSING CASES 0

V111 INCOME

MEAN	5.551	STD ERR	.059	MEDIAN	6.000
MODE	6.000	STD DEV	1.440	KURTOSIS	1.194
SKEWNESS	-1.310	MINIMUM	1.000	MAXIMUM	7.000

VALID CASES 597 MISSING CASES 0

VANEXP VANDALISM EXPOSURE INDEX - REPORTED CRIMES

MEAN	25.870	STD ERR	.206	MEDIAN	24.000
MODE	31.064	STD DEV	5.044	KURTOSIS	-1.653
SKEWNESS	-.163	MINIMUM	19.276	MAXIMUM	31.064

VALID CASES 597 MISSING CASES 0

BEEXP B & E EXPOSURE INDEX - REPORTED CRIMES

MEAN	10.500	STD ERR	.261	MEDIAN	4.833
MODE	17.468	STD DEV	6.372	KURTOSIS	-1.951
SKEWNESS	.153	MINIMUM	4.276	MAXIMUM	17.468

VALID CASES 597 MISSING CASES 0

- -

VICTIM

MEAN	.469	STD ERR	.020	MEDIAN	.000
MODE	.000	STD DEV	.499	KURTOSIS	-1.991
SKEWNESS	.125	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 597 MISSING CASES 0

- -

WITVICT

MEAN	.121	STD ERR	.013	MEDIAN	.000
MODE	.000	STD DEV	.326	KURTOSIS	3.468
SKEWNESS	2.336	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 597 MISSING CASES 0

- -

KNOWVICT

MEAN	.380	STD ERR	.020	MEDIAN	.000
MODE	.000	STD DEV	.486	KURTOSIS	-1.761
SKEWNESS	.495	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 597 MISSING CASES 0

APPENDIX G

DISTRIBUTIONAL PROPERTIES OF ITEMS AND SCALES ANALYZED FROM THE 1981 DELTA CRIME PERCEPTION SURVEY: MAIL RESPONDENTS

V2 CRIME RATE IN NEIGHBORHOOD

MEAN	1.338	STD ERR	.047	MEDIAN	1.000
MODE	1.000	STD DEV	.559	KURTOSIS	1.104
SKEWNESS	1.427	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 139 MISSING CASES 0

- -

V3 CHANGE CRIME RATE NEIGHBORHOOD

MEAN	2.201	STD ERR	.053	MEDIAN	2.000
MODE	2.000	STD DEV	.628	KURTOSIS	-.561
SKEWNESS	-.178	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 139 MISSING CASES 0

- -

V4 CHANGE CRIME RATE GREATER VANCOUVER

MEAN	2.835	STD ERR	.033	MEDIAN	3.000
MODE	3.000	STD DEV	.392	KURTOSIS	3.864
SKEWNESS	-2.180	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 139 MISSING CASES 0

- -

V5 SAFETY WALKING ALONE - DAY

MEAN	1.180	STD ERR	.037	MEDIAN	1.000
MODE	1.000	STD DEV	.438	KURTOSIS	11.980
SKEWNESS	2.960	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 139 MISSING CASES 0

V6 SAFETY WALKING ALONE - NIGHT

MEAN	1.888	STD ERR	.081	MEDIAN	2.000
MODE	1.000	STD DEV	.958	KURTOSIS	-.174
SKEWNESS	.876	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 139 MISSING CASES 0

- -

V7 COMPARE NEIGHBORHOOD WITH GREATER VAN

MEAN	1.849	STD ERR	.061	MEDIAN	2.000
MODE	2.000	STD DEV	.721	KURTOSIS	2.682
SKEWNESS	1.058	MINIMUM	1.000	MAXIMUM	5.000

VALID CASES 139 MISSING CASES 0

V8 SERIOUS CRIME PROBLEM IN NEIGHBORHOOD

MEAN	.424	STD ERR	.042	MEDIAN	.000
MODE	.000	STD DEV	.496	KURTOSIS	-1.933
SKEWNESS	.309	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 139 MISSING CASES 0

V11 LIKELIHOOD HOUSE BROKEN INTO

MEAN	4.914	STD ERR	.203	MEDIAN	5.000
MODE	5.000	STD DEV	2.394	KURTOSIS	-.181
SKEWNESS	.418	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

V12 LIKELIHOOD CAR BROKEN INTO NIGHT

MEAN	4.432	STD ERR	.219	MEDIAN	5.000
MODE	5.000	STD DEV	2.588	KURTOSIS	-.553
SKEWNESS	.274	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

V13 LIKELIHOOD CAR STOLEN NIGHT

MEAN	2.676	STD ERR	.175	MEDIAN	2.000
MODE	1.000	STD DEV	2.061	KURTOSIS	.483
SKEWNESS	.882	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

V14 LIKELIHOOD WOMAN THREATENED AT NIGHT

MEAN	2.892	STD ERR	.201	MEDIAN	2.000
MODE	1.000	STD DEV	2.367	KURTOSIS	1.365
SKEWNESS	1.284	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

V15 LIKELIHOOD PERSON HELD UP ROBBED

MEAN	2.007	STD ERR	.173	MEDIAN	2.000
MODE	1.000	STD DEV	2.034	KURTOSIS	2.696

SKEWNESS	1.610	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

V16 LIKELIHOOD RESIDENXCE BROKEN INTO

MEAN	3.921	STD ERR	.205	MEDIAN	4.000
MODE	5.000	STD DEV	2.414	KURTOSIS	-.140
SKEWNESS	.546	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

- -

V17 LIKELIHOOD VICTIM OF SERIOUS CRIME

MEAN	2.036	STD ERR	.189	MEDIAN	1.000
MODE	1.000	STD DEV	2.231	KURTOSIS	1.996
SKEWNESS	1.500	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

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V18 LHOOD SERIOUS CRIME IN PARK

MEAN	3.849	STD ERR	.199	MEDIAN	4.000
MODE	5.000	STD DEV	2.343	KURTOSIS	-.364
SKEWNESS	.527	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

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V19 LHOOD CRIME IN SHOPPING CENTER

MEAN	5.367	STD ERR	.212	MEDIAN	5.000
MODE	5.000	STD DEV	2.494	KURTOSIS	-.883
SKEWNESS	.156	MINIMUM	1.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

V20 LHOOD CRIME WHILE IN MVH

MEAN	2.820	STD ERR	.181	MEDIAN	2.000
MODE	2.000	STD DEV	2.134	KURTOSIS	.932
SKEWNESS	.978	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

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V21 LHOOD CRIME ON PUBLIC TRANS.

MEAN	2.799	STD ERR	.179	MEDIAN	2.000

MODE	1.000	STD DEV	2.107	KURTOSIS	-.122
SKEWNESS	.695	MINIMUM	.000	MAXIMUM	9.000

VALID CASES 139 MISSING CASES 0

V22 LHOOD CRIME IN UNDEVELOP. AREAS

MEAN	4.230	STD ERR	.195	MEDIAN	4.000
MODE	5.000	STD DEV	2.304	KURTOSIS	-.754
SKEWNESS	.053	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

V75 FEEL YOU BELONG

MEAN	1.881	STD ERR	.027	MEDIAN	2.000
MODE	2.000	STD DEV	.322	KURTOSIS	3.777
SKEWNESS	-2.383	MINIMUM	1.000	MAXIMUM	2.000

VALID CASES 139 MISSING CASES 0

V76 HAVE PLANS TO MOVE

MEAN	3.712	STD ERR	.061	MEDIAN	4.000
MODE	4.000	STD DEV	.715	KURTOSIS	8.086
SKEWNESS	-2.897	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 139 MISSING CASES 0

V77 RECOGNIZE NEIGHBORS?

MEAN	2.892	STD ERR	.028	MEDIAN	3.000
MODE	3.000	STD DEV	.334	KURTOSIS	9.768
SKEWNESS	-3.131	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 139 MISSING CASES 0

V78 WHERE DO FRIENDS LIVE

MEAN	1.568	STD ERR	.065	MEDIAN	1.000
MODE	1.000	STD DEV	.762	KURTOSIS	-.676
SKEWNESS	.913	MINIMUM	1.000	MAXIMUM	3.000

VALID CASES 139 MISSING CASES 0

V79 VISIT N'BORS HOW OFTEN

MEAN	2.360	STD ERR	.078	MEDIAN	2.000
MODE	2.000	STD DEV	.917	KURTOSIS	-.677
SKEWNESS	.308	MINIMUM	1.000	MAXIMUM	4.000

VALID CASES 139 MISSING CASES 0

V80 DO PEOPLE DIFFER

MEAN	1.806	STD ERR	.033	MEDIAN	2.000
MODE	2.000	STD DEV	.392	KURTOSIS	.486
SKEWNESS	-1.562	MINIMUM	1.000	MAXIMUM	2.000

VALID CASES 139 MISSING CASES 0

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V81 IN TOUCH WITH RELATIVES PAST TWO WKS

MEAN	.914	STD ERR	.024	MEDIAN	1.000
MODE	1.000	STD DEV	.282	KURTOSIS	6.969
SKEWNESS	-2.978	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 139 MISSING CASES 0

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V82 HOW OFTEN MEET FRIENDS PAST TWO WEEKS

MEAN	4.324	STD ERR	.147	MEDIAN	5.000
MODE	6.000	STD DEV	1.737	KURTOSIS	-1.040
SKEWNESS	-.561	MINIMUM	1.000	MAXIMUM	6.000

VALID CASES 139 MISSING CASES 0

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V84 HOW MANY GOOD FRIENDS

MEAN	7.669	STD ERR	.623	MEDIAN	6.000
MODE	6.000	STD DEV	7.340	KURTOSIS	18.639
SKEWNESS	3.351	MINIMUM	.000	MAXIMUM	60.000

VALID CASES 139 MISSING CASES 0

V85 MEMBERSHIP IN ORGANIZATIONS

MEAN	1.496	STD ERR	.126	MEDIAN	1.000
MODE	.000	STD DEV	1.481	KURTOSIS	.729
SKEWNESS	1.052	MINIMUM	.000	MAXIMUM	6.000

VALID CASES 139 MISSING CASES 0

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V100 SATISFACTION FRIENDSHIP

MEAN	8.424	STD ERR	.132	MEDIAN	9.000
MODE	10.000	STD DEV	1.556	KURTOSIS	2.889
SKEWNESS	-1.416	MINIMUM	2.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

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V103 SATISFACTION FAMILY LIFE

MEAN	8.604	STD ERR	.130	MEDIAN	9.000
MODE	10.000	STD DEV	1.530	KURTOSIS	1.304
SKEWNESS	-1.216	MINIMUM	3.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

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V104 SATISFACTION WITH LIFE

MEAN	8.453	STD ERR	.122	MEDIAN	9.000
MODE	8.000	STD DEV	1.436	KURTOSIS	9.016
SKEWNESS	-2.119	MINIMUM	.000	MAXIMUM	10.000

VALID CASES 139 MISSING CASES 0

AGE

MEAN	38.504	STD ERR	1.075	MEDIAN	37.000
MODE	31.000	STD DEV	12.679	KURTOSIS	-.239
SKEWNESS	.575	MINIMUM	17.000	MAXIMUM	71.000

VALID CASES 139 MISSING CASES 0

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V109 EDUCATION

MEAN	6.324	STD ERR	.182	MEDIAN	5.000
MODE	5.000	STD DEV	2.151	KURTOSIS	-.556
SKEWNESS	.831	MINIMUM	4.000	MAXIMUM	11.000

VALID CASES 139 MISSING CASES 0

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V111 INCOME

MEAN	5.647	STD ERR	.124	MEDIAN	6.000
MODE	6.000	STD DEV	1.464	KURTOSIS	.677
SKEWNESS	-1.182	MINIMUM	1.000	MAXIMUM	7.000

VALID CASES 139 MISSING CASES 0

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VANEXP VANDALISM EXPOSURE INDEX - REPORTED CRIMES

MEAN	25.585	STD ERR	.429	MEDIAN	24.000
MODE	31.064	STD DEV	5.062	KURTOSIS	-1.684
SKEWNESS	-.056	MINIMUM	19.276	MAXIMUM	31.064

VALID CASES 139 MISSING CASES 0

BEEXP

MEAN	10.069	STD ERR	.543	MEDIAN	4.833
MODE	17.468	STD DEV	6.401	KURTOSIS	-1.931
SKEWNESS	.292	MINIMUM	4.276	MAXIMUM	17.468

VALID CASES 139 MISSING CASES 0

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VICTIM

MEAN	.482	STD ERR	.043	MEDIAN	.000
MODE	.000	STD DEV	.501	KURTOSIS	-2.024
SKEWNESS	.073	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 139 MISSING CASES 0

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WITVICT

MEAN	.158	STD ERR	.031	MEDIAN	.000
MODE	.000	STD DEV	.366	KURTOSIS	1.606
SKEWNESS	1.893	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 139 MISSING CASES 0

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KNOWVICT

MEAN	.496	STD ERR	.043	MEDIAN	.000
MODE	.000	STD DEV	.502	KURTOSIS	-2.029
SKEWNESS	.015	MINIMUM	.000	MAXIMUM	1.000

VALID CASES 139 MISSING CASES 0

ELOCSSC

MEAN	6.065	STD ERR	.222	MEDIAN	6.000
MODE	4.000	STD DEV	2.613	KURTOSIS	-.833
SKEWNESS	.032	MINIMUM	.000	MAXIMUM	12.000

VALID CASES 139 MISSING CASES 0

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ELOCSC

MEAN	3.374	STD ERR	.162	MEDIAN	3.000
MODE	3.000	STD DEV	1.905	KURTOSIS	-.620
SKEWNESS	.356	MINIMUM	.000	MAXIMUM	8.000

VALID CASES 139 MISSING CASES 0

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ELOCF

MEAN	3.144	STD ERR	.193	MEDIAN	3.000
MODE	1.000	STD DEV	2.270	KURTOSIS	-.219
SKEWNESS	.532	MINIMUM	.000	MAXIMUM	9.000

VALID CASES 139 MISSING CASES 0

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PSSFR

MEAN	14.129	STD ERR	.386	MEDIAN	16.000
MODE	18.000	STD DEV	4.554	KURTOSIS	.134
SKEWNESS	-1.028	MINIMUM	2.000	MAXIMUM	19.000

VALID CASES 139 MISSING CASES 0

PSSFA

MEAN	14.777	STD ERR	.423	MEDIAN	17.000
MODE	19.000	STD DEV	4.986	KURTOSIS	.206
SKEWNESS	-1.122	MINIMUM	1.000	MAXIMUM	20.000

VALID CASES 139 MISSING CASES 0