COMMUNITY STRUCTURE AND CRIMINAL VICTIMIZATION

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(ABSTRACT)

This research has attempted to better understand property crime victimization by studying the important role of community structures, while controlling for the following demographic variables: age, gender, race, and income. Three different types of analyses were used: (1) bivariate analysis; (2) multivariate analysis, and (3) path analysis.

Bivariate analysis was used in order to gain a better understanding of the following zero-order relationships: (1) the relationship between the structural characteristics of communities and property crime victimization; (2) the relationship between the structural variables and the mediating variables—guardianship and neighborhood cohesion; (3) the relationship between guardianship and property crime, and (4) the relationship between neighborhood cohesion and property crime. Most of these relationships were found to be in the expected direction.

The multivariate analysis was conducted by running three separate regression models. Model 1 included only the structural variables of community size, racial heterogeneity, and residential mobility. In Model 2, demographic variables were added in order to see how this addition would impact the effects of the structural variables on property crime victimization. Model 3 included both the structural and the demographic variables, along with guardianship and neighborhood cohesion. This additional regression model was used in an attempt to discover the effects of guardianship and neighborhood cohesion on property crime victimization.
Path analysis was used in order to find out the direct and indirect effects of the structural and demographic variables on property crime victimization.

Many of the findings of this research were not consistent with past research. There appears to be other important factors which were not included. For example, guardianship and neighborhood cohesion did not mediate the effects of the structural and demographic variables. The thesis concludes with alternative explanations for these and other inconsistent findings.
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CHAPTER I. INTRODUCTION

Criminal victimization has long been the subject of much debate and research, mostly because of the enormous personal and physical costs which result. It has been of particular interest to criminologists because these costs cannot avoid influencing patterns of social interaction. One method used by criminologists to understand criminal victimization is to examine the ways in which it is related to community structure. This method was used in many early studies in criminology (Shaw and McKay, 1942). However, more recent studies of victimization, for the most part, have neglected to include community structure as part of their analysis (Smith and Davidson, 1986; Steffensmeier et al., 1987; Hirschi and Gottfredson, 1983). These studies have concentrated instead on demographic characteristics, such as age, gender, race, and income, which are correlates of criminal victimization. This has been problematic because studies which fail to include structural or community characteristics are ignoring a large body of literature which demonstrates that the community context affects the relationships and lives of those living in them (Park, 1916; Wirth, 1938; Hawley, 1982; Keller, 1968; Suttles, 1968; Fischer, 1976).
The purpose of this thesis is to contribute to the literature on criminal victimization by combining these two research approaches. That is, this thesis will focus on the role of community characteristics, or structural variables, in making criminal victimization more or less likely, while controlling for demographic characteristics. Specifically, this thesis explores the effects of size of community, racial heterogeneity, and residential mobility on guardianship and neighborhood cohesion and their eventual effects on property crime victimization. The demographic characteristics included in the analysis are race, gender, age, and income.

Over the years there have been numerous attempts to collect data regarding criminal behavior. One such attempt, which was initiated by the Federal Bureau of Investigation in the 1930's, is the Uniform Crime Reports (U.C.R.). Between the 1930's and late 1960's, it was the major source of crime rate data for U.S. cities (Decker et al., 1982). It has, however, been severely criticized for not providing an accurate account of the number of crimes. Specifically, the U.C.R. has been criticized for not adequately dealing with the following: (1) the role of the victim in reporting crimes to the police; (2) the fact that there is inaccurate reporting as a result of organizational factors, and (3) the differential reporting of crime by the police (Decker et al., 1982).

Criminologists have attempted to compensate for the under-reporting of the U.C.R. by using victimization surveys. It was hoped that these would more accurately expose the frequency of crimes (Skogan, 1976). In general, a higher crime rate is reported in victimization surveys than in the (U.C.R.) (Booth et al., 1977). They have now been widely used for over twenty years.

One example is the National Crime Survey (N.C.S.), which is collected by the U.S. Bureau of the Census. Although it is a good source of crime data, it was not able to be used in this current research because it does not adequately address the specific question of the impact of community structure on criminal victimization. Consequently,
a different victimization survey was used which made it possible to address this research question. This survey examined the frequency of victimization among Virginia residents. The data were derived from a random sample of Virginia residents and were collected by Bryant and Shoemaker (1988).

This study should yield results consistent with past research. It should also have several public policy implications. For example, it should alert policy makers involved in crime prevention to the fact that they need to formulate policies which act to strengthen neighborhood cohesion and which encourage individuals to become involved in protecting their neighbor's property.
CHAPTER II. THEORY AND REVIEW OF LITERATURE

Structural Characteristics

The study of community has long been a prevalent research area within sociology. For example, studies of communities have included the effect of community on social stratification (Barber, 1961) and local friendship ties (Kasarda and Janowitz, 1974). One area which has generated a lot of research interest is the effect of community structure on crime rates.

This research tradition in sociology has been greatly influenced by the work of Emile Durkheim. Durkheim emphasized the need for integration within a mass, industrial society. He also emphasized the need for a moral order, which should result from integrated communities. He argued that to the extent that society is integrated—i.e., to the extent that its members feel morally bound to each other, are committed to common
societal goals, and share a collective conscience--deviant behavior such as crime will be controlled.

It was his belief that society exerts social control over the individual through custom, religious codes, laws, and tradition. When members of a society accepted and internalized these guidelines for behavior, conformity would exist. He was concerned that societies composed of intimate primary group relationships were being transformed as a result of increased urbanization. He perceived that more utilitarian, secondary groups were emerging to take the place of primary group relationships. The result of this would be a reduction in the strength of friendship bonds and the amount of community kinship. Essentially, individuals living in this environment would be "cut adrift" and left on their own in an inhumane, anonymous world. The importance of this for the study of property crime victimization is that these changes in community structure would lead to reductions in informal mechanisms of social control which result in increased property crime victimization.

Durkheim also perceived that an increase in population density would subsequently bring about an increase in competition, differentiation, diversity, and impersonal relations (Davis, 1975). Furthermore, he thought that these would lead to "a discordant medley of hundreds of thousands of individuals without any personal relations except in small selective groups" (Davis, 1975).

Durkheim's perspective greatly influenced the study of human ecology, which has its roots in the early sociological studies done at the University of Chicago. Human ecology is an offshoot of plant and animal ecology, and was guided by the work of such people as Park, McKenzie, Hawley, and Burgess. These early ecological theorists conceived of human communities as being quite similar to plant and animal communities.

Although human ecology has a background in plant and animal ecology, it branches off from its origins to be applied only to human populations. It was believed
by these early ecological theorists that interdependence plays a major role in human communities. According to McKenzie (1980: 29), "A community is an ecological distribution of people and services in which the spatial location of each unit is determined by its relation to all other parts." Communities, whether they be plant, animal, or human, were therefore seen as being a complex web of interdependent structures which are constantly involved in competition and cooperation.

According to Park (1936: 57), "Society is everywhere a control organization. Its function is to organize, integrate, and direct the energies resident in the individuals of which it is composed." It should therefore regulate each part of this complex web in order to preserve the balance among competing members (Park, 1936). As stated earlier, human ecology emphasizes that change is constantly occurring and is working to maintain stability within the community. That is, whenever a change occurs, instability will be the short-run effect. This, however, will give way to a new period of stability. Problems occur when the changes that occur are so rapid that society is unable to act as an effective stabilizer. The result of this is a prolonged period of community instability, which brings with it an increase in deviance among community members.

Overall, the ecological perspective assumes that rapid changes, such as increased population growth, racial heterogeneity, high rates of residential mobility, and industrialization, are seen as detrimental because these lead to community instability. When this occurs, members of the community will not be subject to regulation. Deviance will be the result.

One of the earliest and most well-known studies in the area of community and crime, which uses this ecological framework, is the work of Shaw and McKay (1942). They analyzed juvenile delinquency rates based upon Burgess’s (1925) concentric zone model of urban development. The Burgess model was based on the assumption that the city is divided into distinct concentric zones, which extend outward from the central
business district. Shaw and McKay were interested in how the growth process of the city leads to an increase in the rates of juvenile delinquency. Using the concentric zone model, they plotted official delinquency rates for the city of Chicago. They found that the further out from the urban center the lower the delinquency rate. Similar findings were noted for adult crime and recidivism rates. Shaw and McKay then tried to determine what it was about these zones that might contribute to crime and delinquency. They noted that the zones with the highest rates of juvenile delinquency were found in areas of the city that were experiencing the greatest amounts of transition or residential mobility, low economic status, racial or ethnic heterogeneity, and overcrowded housing, among other factors. They called these factors social disorganization. They concluded, therefore, that "...the root problem of delinquency was social disorganization" (Thornton, Jr., et al., 1982: 117). Their most important finding was that regardless of what ethnic or minority group lived in a community, delinquency rates stayed constant, indicating that criminal behavior is a result of geographic location, not primarily a result of individual characteristics.

Shaw and McKay's work has been extended and elaborated by a number of researchers (Kornhauser, 1978; Crutchfield et al., 1982; Maccoby, 1958; Sampson, 1987; Sampson and Groves, 1989; Felson and Cohen, 1984). However, their work, along with the ecological perspective, has also been criticized. One criticism of this perspective is that it makes the assumption that the transition from rural agrarian societies to urban industrial societies has been accompanied by a great reduction in the amount of primary group relationships. This finding has not always been supported in more recent research. For example, Gans (1962) found that individuals in an urban community create local bonds within mass society and maintain friendship networks. Suttles (1968) also found a vital social order existing in a slum, consisting of many primary group relationships.
Another criticism of Shaw and McKay and the ecological perspective is that their finding that more crime exists in the central city may be flawed. The fact that there are usually more police on patrol in the central part of the city will lead to a higher reporting of crime (Vetter and Silverman, 1986).

A third criticism is that Shaw and Mckay relied too heavily on police and court records. This is problematic because police may refrain from arresting individuals in middle-class neighborhoods for offenses that would almost without exception lead to an arrest in the central city (Siegel, 1989).

Finally, Shaw and McKay's use of the concept, social disorganization, has been criticized (Vetter and Silverman, 1986). It has been said that this concept is far too vague for it to be used effectively to examine an entire society.

Although the research of Shaw and McKay and the ecological perspective have been criticized, we can not overlook the fact that these have provided theoretical justification and empirical support for the existence of an important relationship between community structure and criminal victimization. It has been argued within this research tradition that the structure of a community is able to determine the amount of criminal victimization which occurs in it because this structure will make the community an environment which is more or less conducive to criminal victimization. This argument is based on the belief that a major function of communities is to act as an agent of social control. This is thought to be an important function because criminal victimization is kept at a minimum when social control is performed successfully. It is also argued that this role is able to be performed most effectively when the structures within a community are relatively stable because informal mechanisms of social control are most likely to be operating. Conversely, when instability exists in the community, it is argued that criminal victimization will occur more frequently because the community is unable to effectively act as an agent of social control.

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In sum, this research tradition emphasizes that stability and social order must be maintained in order for the community to be able to perform its function as an agent of social control. Of particular interest for this research are the destabilizing effects of increased community size, a high degree of racial heterogeneity, and high rates of residential mobility. These effects are considered important because it is assumed that these impact the rates of property crime by affecting the concepts of guardianship and neighborhood cohesion. Therefore, studies that explore these concepts are included in this review.

**Community Size**

Researchers who study community characteristics often focus on community size and its effect on crime rates. Greater population density may lead to greater crime rates because greater anonymity among residents will exist. Also, a densely populated area will have a greater number of potential targets of crime. Skogan and Maxfield (1981) argue that community size affects crime rates by reducing neighborhood cohesion and decreasing the likelihood that guardianship will take place. The informal mechanisms of social control, which normally exist in communities in which neighborhood cohesion is high and where residents are engaging in guardianship, will tend to insulate residents from criminal victimization. Therefore, in communities in which neighborhood cohesion is low and the likelihood of guardianship taking place is reduced, victimization rates will tend to be higher.

It is argued that neighborhood cohesion will be reduced as the population of the community increases because there is a greater opportunity for alternative relationships. For example, in small, isolated, rural communities, individuals are friendly with their
neighbors because the possibility for other relationships is not great. Conversely, in urban, densely populated communities, there are many more opportunities for alternative relationships because there are many people, other than neighbors, with whom residents are able to interact (Fischer, 1976). In fact, it can be said that the larger the community, the greater the individual freedom not to neighbor. Furthermore, Fischer (1976: 120) states that "...the forces that overlay the neighborhood with primary ties are weakened in the city, thus revealing the neighborhood to be a secondary group." Overall, urbanization tends to decrease the unity and solidarity within neighborhoods and local communities because of the greater freedom of residents to choose alternative relationships. That is, the larger the community size, the less cohesive the neighborhood. Furthermore, the high population density found in large communities will tend to discourage intimate relationships among neighborhood residents because of the greater incidence of strangers.

Keller (1968) makes similar arguments. She states that the need for neighboring is reduced in urban areas. In addition, she posits that those neighboring relationships, which do occur, are much more segmental and less comprehensive. It is because of the segmental relationships and lack of dependence among urban residents that neighborhood cohesion is reduced.

Janowitz (1967) also addresses this issue by creating the concept, "community of limited liability", which he defines as a community in which residents have a limited amount of attachment. The reason for this is that the majority of the residents have friendship ties which lie outside the boundaries of their geographic community. Consequently, neighborhood cohesion is reduced in this type of community.

It was also found by Crutchfield et al. (1982) that large urban areas will be environments in which social integration is reduced. As a result, there will be a corresponding increase in the crime rate.
The size of community has also been shown to have an effect on guardianship. For example, residents of large, urban communities have been shown to be less likely to watch over each other’s property and to be less likely to intervene in local disturbances (Greenberg et al., 1982). These factors have an effect on risk of property crime victimization. This relationship exists because residents of large urban communities are less likely to know one another personally. Most of their neighbors are strangers to them.

The size of the community has therefore been shown to directly affect the amount of neighborhood cohesion and guardianship found in a community. This is very important for this current research because it suggests that larger communities will be less able to implement measures of informal mechanisms of social control. Victimization rates will therefore tend to be higher in these communities than in those communities which are less densely populated.

Racial Heterogeneity

Another important structural characteristic in explaining crime rates is the level of heterogeneity or racial composition. Individuals feel closer to those like themselves (Bogardus, 1926). Consequently, several things are present in a racially heterogeneous community: (1) great social distance among residents; (2) culture conflict; (3) a lack of understanding among neighborhood residents, and (4) racial conflict. Racial heterogeneity thus leads to the fragmentation of community values and efforts to achieve effective community controls. This will in turn lead to an increase in crime.

Empirical support is found for the relationship between racial heterogeneity and crime. For example, Bursik (1986) found that the rate of increase in the nonwhite pop-
ulation in Chicago’s local communities, between 1960 and 1970, led to a simultaneous increase in delinquency rates. Several other studies have found a positive relationship between the percentage of blacks in the population and the crime rate (Schuessler, 1962; Beasley and Antunes, 1974; Messner, 1982). Others have found that it is not necessarily the percentage of blacks, but the degree of heterogeneity which leads to an increase in crime rates. That is, if the community is all black or white, the crime rate will be low. Where there is a mix, crime rates tend to be high. For example, Lander (1954) found that delinquency rates in Baltimore were lowest in homogeneous black and white areas and highest in heterogeneous areas.

It is expected that the greater the amount of racial heterogeneity, the lower the degree of guardianship. When there is a fragmentation in community values, community residents will care less about protecting their neighbors because they will not know one another very well. Therefore, surveillance is less likely to occur. It is also less likely that residents will ask their neighbors to watch their homes and take care of their property while they are away from the community. Because of these factors, community residents will be more vulnerable to property crime victimization.

It is also expected that a greater degree of racial heterogeneity will lead to a reduction in neighborhood cohesion. Friendship ties will be less likely to exist among community residents in racially heterogeneous communities for several reasons (as stated above): (1) culture conflict; (2) lack of shared understanding, and (3) social distance will be greater among community residents.

Racially heterogeneous communities will therefore tend to be communities in which neighborhood cohesion and the level of guardianship are not high. The result of this will be an increase in crime.
Residential Mobility

A third community characteristic which has been shown to have direct effects on crime rates is residential mobility. Studies have generally indicated that communities characterized by high residential mobility have higher crime levels than those communities which have more stable, less mobile populations (Longmoor and Young, 1936; Shaw and McKay, 1942; Clinard, 1964). Within Shaw and McKay’s theoretical framework, residential mobility was considered an important cause of delinquency. Mobility was hypothesized to lead to community instability and weak social controls which, in turn, accounted for delinquency. Also, when there is a high population turnover, there will be a large percentage of strangers in the community. Residents will therefore be less likely to have the ability to distinguish residents from non-residents. Shaw and McKay showed that official delinquency rates in Chicago were correlated with the percentage decrease in population, with rates being highest in areas with a declining population. Sullenger (1950) analyzed intraurban mobility in Omaha and its suburbs and found that tract mobility rates, as measured by number of moves out and moves into dwellings for owners and renters in the area, were related to tract delinquency rates.

A relationship between residential mobility and guardianship has been found. That is, the greater the residential mobility, the lower the level of guardianship. Greenberg et al. (1982) found that a type of guardianship behavior--intervening and assuming responsibility in a public disturbance within one’s community--is linked with how familiar one is with those in their community. This is significant because, when residential mobility rates are high, there is a high proportion of strangers in the population. Consequently, individuals who live among strangers are less likely to intervene in public disturbances. In addition, when the population of a community is unstable,
residents will not have enough time to get to know one another well enough to request that others in their community watch their property while they are away from the community.

A strong relationship is also assumed to exist between residential mobility and neighborhood cohesion, i.e., the greater the residential mobility, the lower the level of neighborhood cohesion. When the population is unstable, there will not be enough time for community residents to form friendship ties. Residents will not attempt to form these ties because they realize that their neighbors will not remain in the community for a long period of time. Communities with an unstable population are therefore likely to be composed of a population of strangers because the percentage of people who stay in the community for long periods of time is not very high.

There are several studies which have found a direct causal relationship between residential mobility and neighborhood cohesion. Kasarda and Janowitz (1974), for instance, did a study of community attachment in mass society, and found that length of residence is a more appropriate measure of community attachment than either population size or density. They also found that the length of residence is an important mediating force in the formation of friendship ties. Sampson (1988) learned that length of residence greatly influences individual-level local friendships, attachment to community, and whether or not one will participate in local social activities. Likewise, Stark et al. (1983) found that neighborhood cohesion is undermined by a substantial population turnover. A relationship between residential mobility and neighborhood cohesion was also found by Crutchfield et al. (1982:pp). They state that, "...larger urban environments and those with higher rates of geographic mobility will manifest weaker social integration and thus higher crime rates."

CHAPTER II. THEORY AND REVIEW OF LITERATURE
The rate of residential mobility has thus been shown to have strong, direct effects on neighborhood cohesion and guardianship which in turn leads to increases in victimization rates.

**Neighborhood Cohesion / Guardianship**

From an ecological perspective, the argument developed thus far is that structural characteristics of communities, such as large community size, a high degree of racial heterogeneity, and a high degree of residential mobility, have a direct effect on crime rates. However, many authors suggest that these variables are important because they directly impact informal mechanisms of social control, such as neighborhood cohesion and guardianship. Neighborhood cohesion and guardianship, in turn, are directly related to crime rates. Therefore, when the above structural characteristics serve to weaken neighborhood cohesion and lessen the amount of guardianship, crime rates within a community are likely to be increased.

It is assumed that the lower the level of guardianship, the greater the amount of criminal victimization of community residents. When guardianship is not occurring, prospective residents can move freely throughout the community without fear of being detected by community residents. Likewise, when guardianship is not occurring, many more opportunities to victimize residents are made available.

There are numerous studies which demonstrate the direct relationship between guardianship and criminal victimization. For example, Maccoby et al. (1958) found a strong relationship between the lack of guardianship and the rise in juvenile delinquency rates. These researchers studied two urban areas which had similar characteristics but different rates of juvenile delinquency. They attempted to discover the elements within
the neighborhood which led to an increased juvenile delinquency rate. Their results revealed that a reduction in guardianship leads to increases in juvenile delinquency. Sampson (1986) and Clinard and Abbott (1973) also found that guardianship was an important factor in reducing the crime rate. Specifically, (Clinard and Abbott, 1973) found that property crime could be controlled by having a highly cohesive neighborhood which emphasizes, “(a) a general tendency to reject stealing from neighbors, (b) the belief that neighbors should help informally to guard one another’s property, (c) that strangers can readily be identified, and (d) that residents will help if someone is attacked” (Clinard and Abbott, 1973: 44). In addition, the findings of Walsh (1980) indicate that a high rate of neighborhood cohesion lead to a reduction in property crime victimization.

It is assumed that the lower the level of neighborhood cohesion, the higher the rate of property crime victimization for community residents. There are several possible reasons for this. First, when neighborhood cohesion is reduced, individuals do not care about their neighbors. They will therefore be less likely to protect them from property crime. Second, when community residents do not care about the well-being of their neighbors, they give potential criminals more opportunities to victimize them. Third, when neighborhood cohesion is low, residents will be more isolated in their geographic community. As a result, they will become easier targets of crime than those individuals living in cohesive communities, surrounded by friends. Fourth, in communities with low neighborhood cohesion, residents will be less attached to their community and will therefore be less concerned about factors, such as crime, which impinge upon it.

There are numerous studies which highlight the direct relationship between neighborhood cohesion and crime rates. Crutchfield et al. (1982) found that the lack of social integration is a key factor in crime rates, especially property crimes. They also found that a lack of neighborhood cohesion leads to higher crime rates because a context which is supportive of crime is produced.
Demographic Characteristics

While the focus of this study was on structural characteristics, it would have been an over-simplification to say that demographic characteristics are not important. There is a large body of theory and research which shows that race, income, gender, and age are common correlates of crime and victimization. In this current research, the lifestyle/exposure hypothesis, which was developed by Hindelang et al. (1978), was applied to these demographic variables in order to understand better the ways in which these variables are related to property crime victimization.

One positive contribution of this hypothesis is that it points out that demographic characteristics are important because they structure the relationships of individuals. In general, this hypothesis states that demographic groups have different lifestyles which expose them to greater or lesser degrees of victimization. Victimization rates are thought to differ among various demographic groups because members of certain demographic groups place themselves in "high opportunity situations" (Hindelang, et al., 1978: 121), while members of other demographic groups avoid these situations.

The application of this hypothesis is suitable in this current research because those individuals, who have lifestyles which frequently take them away from home, should experience a greater amount of property crime victimization than those individuals who have a more sedentary lifestyle. The reason for this is that the majority of property crimes occur when homes are not occupied (Walsh, 1980). Specifically, in the case of burglary, Bennett and Wright (1984) found that those convicted burglars, whom they interviewed, emphasized that their most important criteria for choosing potential houses to burglarize was whether or not the occupants were present. Cohen and Cantor (1981) also noted that homes which are frequently left unoccupied are more often chosen.
as targets of burglary than those which are rarely left unoccupied. Likewise, larceny is more apt to occur when homes are left unoccupied because it is a crime of opportunity which is engaged in by individuals who are concerned about escaping detection (Mannle and Hirschel, 1988).

**Gender**

Gender is a demographic characteristic which greatly determines an individual's lifestyle. In our society both sex role expectations and structural constraints directly impact the lifestyle and day-to-day experiences of individuals. These factors tend to encourage females to spend more of their time in the home (Hindelang, et al., 1978). Thus, according to the lifestyle/exposure hypothesis, females should experience less property crime victimization than males because their lifestyle to a greater extent involves being at home. When they are at home they are able to deter persons who are potential property crime offenders. Empirical support for this has been shown. For example, Allen et al. (1981) found that males are victimized by crime to a much greater extent than females. In fact, they are victimized almost three times as often.

**Age**

Age is a second demographic characteristic which structures the relationships of individuals and in turn directly affects their property crime victimization experiences. One reason for this is that there are distinct role expectations for different ages (Hindelang et al., 1978). Because of this, different age groups have very diverse lifestyles.
It is assumed that older individuals experience less property crime victimization because in general they leave their homes for shorter periods of time than younger people (Hindelang et al., 1978). Findings from the President’s Commission on Law Enforcement and Administration of Justice (1967) indicate that individuals between the ages of 30-39 have the highest risk of victimization.

Race

A third demographic characteristic which mediates an individual’s risk of property crime victimization is race. This occurs because different races have unique lifestyles. More specifically, the percentage of the population that is black has been shown to have a strong effect on crime rates (Carroll and Jackson, 1983; Messner, 1982). Blacks are also more likely to become victimized by crime. According to Skogan and Maxfield (1981), Blacks are 2.5 times as likely as whites to be victimized by robbery.

Income

Income is another demographic characteristic that influences an individual’s risk of property crime victimization by structuring a lifestyle which is supportive to a greater or lesser degree of victimization. Individuals with higher incomes have greater opportunities to adjust their lifestyle according to their wishes (Hindelang et al., 1978). As such, they are able to take measures to protect themselves from property crime victimization. For example, having security devices installed on their property. Re-
search concerning the poor, however, reveals that they are three times as likely as others in higher income levels to be robbed (Skogan and Maxfield, 1981).

In sum, this perspective emphasizes that demographic characteristics directly impact individuals by structuring their relationships and experiences. In addition, those individuals who have lifestyles which cause them to be away from home often should have the highest rates of property crime victimization. Those individuals which should suffer from the greatest amounts of property crime are poor, young, nonwhite males.

For a more through review of this literature see Hindelang et al. (1978) and Maxfield and Skogan (1981).

**HYPOTHESES**

From an ecological perspective, it has been argued that such community structures as size of community, racial heterogeneity, and residential mobility, directly influence property crime victimization. It has also been suggested that the direct influences of these community structures are mediated by mechanisms of informal social control, such as guardianship and neighborhood cohesion. Accordingly, several hypotheses are generated from this literature on community structure and crime. Figure 1 presents a graphic representation of these expected relationships. These hypotheses are summarized below.

**HYPOTHESIS I.** Each of the three major components from the human ecology perspective--community size, racial heterogeneity, and residential mobility--should have a significant, direct effect on individual's victimization experiences.

CHAPTER II. THEORY AND REVIEW OF LITERATURE 20
1. Persons who live in urban communities should have a greater risk of property crime victimization.

2. Persons who live in communities which are racially heterogeneous should have a greater risk of property crime victimization.

3. Persons who live in communities which have high rates of residential mobility should have a greater risk of property crime victimization.

HYPOTHESIS II. Each of the three major components from the human ecology perspective --community size, racial heterogeneity, and residential mobility--should be negatively related to guardianship and neighborhood cohesion.

1. increased community size should be negatively related to guardianship and neighborhood cohesion.

2. greater degrees of racial heterogeneity should be negatively related to guardianship and neighborhood cohesion.

3. greater rates of residential mobility should be negatively related to guardianship and neighborhood cohesion.

HYPOTHESIS III. Guardianship should be negatively related to property crime victimization.

HYPOTHESIS IV. Neighborhood cohesion should be negatively related to property crime victimization.
Sample

The data for this study used to measure demographic characteristics is comprised of a sample of 1324 randomly selected Virginia residents. Possible candidates for the sample were those Virginia residents who owned motor vehicles which were registered in Virginia. Another criteria for sample selection was that the license plates, which had been issued to these Virginia residents, must only have six-characters on them. This criterion was used because it served to exclude those Virginia residents whose license plates were connected to educational establishments, governmental enterprises, and businesses. Other Virginia motor vehicle operators who were excluded from the sample include those who had license plates for rental vehicles, trucks, tractors, or trailers, personalized plates, and bicentennial plates. The data were gathered through the use of a mail questionnaire (Bryant and Shoemaker, 1988).
As shown in Table 1, the sample is composed primarily of several groups. These include individuals who are, (1) male (60.1%); (2) white (89.9%); (3) married (75.3%), and (4) between the ages of 30-49 (47.3%).

The data that was used to measure the structural community characteristics were gathered from U.S. Census data which contains characteristics of counties in Virginia.

OPERATIONAL DEFINITIONS

INDEPENDENT VARIABLES

Structural Characteristics

Community Size

Community size (URBAN) was measured by the response to the question: "Where do you live?" (a) in a rural area, (b) in a town of less than 2,500 people, (c) in a town of 2,500 to 9,999 people, (d) in a small city of 10,000 to 24,999 people, (e) in a city of 25,000 to 49,999 people, and (e) in a large city of 50,000 people and above. It was then recoded as (a and b = 0) and (c through e = 1).
Table 1. Characteristics of the Sample Compared with Virginia Residents

<table>
<thead>
<tr>
<th></th>
<th>Sample</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
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<tr>
<td></td>
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<td>Percent</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>629</td>
<td>60.1</td>
<td>48.2</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>395</td>
<td>37.8</td>
<td>51.8</td>
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<td>2.1</td>
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<tr>
<td>Total</td>
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<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-29</td>
<td>170</td>
<td>16.3</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>256</td>
<td>24.5</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>238</td>
<td>22.8</td>
<td>10.6</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>189</td>
<td>18.1</td>
<td>10.1</td>
<td></td>
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<tr>
<td>60 +</td>
<td>163</td>
<td>15.6</td>
<td>13.6</td>
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<tr>
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<td>2.9</td>
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<td>Total</td>
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<td></td>
</tr>
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<td>Race</td>
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<tr>
<td>White</td>
<td>940</td>
<td>89.9</td>
<td>81.0</td>
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</tr>
<tr>
<td>Black</td>
<td>79</td>
<td>7.6</td>
<td>17.6</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>.9</td>
<td>1.4</td>
<td></td>
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<tr>
<td>Missing Data</td>
<td>18</td>
<td>1.7</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>1046</td>
<td>100.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>577</td>
<td>55.5</td>
<td>66.9</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>431</td>
<td>41.2</td>
<td>33.1</td>
<td></td>
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<tr>
<td>Missing Data</td>
<td>38</td>
<td>3.6</td>
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<td>Total</td>
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<td></td>
</tr>
<tr>
<td>Marital Status</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>120</td>
<td>11.5</td>
<td>21.1</td>
<td></td>
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<tr>
<td>Married</td>
<td>788</td>
<td>75.3</td>
<td>61.8</td>
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<tr>
<td>Separated or Divorced</td>
<td>83</td>
<td>7.9</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>39</td>
<td>3.7</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td>Missing Data</td>
<td>16</td>
<td>1.5</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>1046</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Racial Heterogeneity

The data for this variable were obtained by using census data for each county in Virginia. Racial heterogeneity (PERBLACK) was measured by the percentage of blacks in the county in which the subjects lived. When the percentage of blacks in a county exceeded 50%, the variable was recoded by subtracting the percentage from 100%. This was done because 50% black in a county is considered to be the highest degree of heterogeneity. Beyond this point, the county is moving toward being more homogeneous. Therefore, counties which have a population with less than 10% black or more than 90% black are considered to be homogeneous.

Residential Mobility

The data for residential mobility (PERMOVE) were obtained by using census data for each county in Virginia. This variable was operationalized as the percentage of the county population that had moved during a five year period (1975-1980). An index was created which was composed of three parts: (1) the percentage of the population which had moved within the same county; (2) the percentage of the population which had moved to another county but has remained in the same state, and (3) the percentage of the population which had moved outside their county to another state or abroad.

Guardianship Index

Guardianship (GUARDSHP) was defined as whether or not individuals attempted to protect their neighbors from being victimized by property crime. It was
measured by the response to the following four questions, referring to the measures taken by community residents to protect themselves and their property: (1) "Arrange for a neighbor to watch your home and property when you are out-of-town;" (2) "Arrange to have mail, milk, or newspaper deliveries taken care of by a neighbor or friend when the house is vacant for more than one day;" (3) "Arrange to have the grass mowed and yard maintained when the house is vacant for an extended length of time," and (4) "Would you say that you and your neighbors watch out for each other?" Responses for questions 1-3 were as follows: (a) always; (b) frequently; (c) occasionally, and (d) never. These responses were scored as: (a = 3); (b = 2); (c = 1), and (d = 0). For question 4, the responses included: (a) often; (b) sometimes; (c) rarely, and (d) never. These responses were scored as: (a = 3); (b = 2); (c = 1), and (d = 0).

By adding the four items, a twelve-point scale was constructed, with a score of twelve being the highest amount of guardianship, and a score of zero being the lowest amount of guardianship. Validity of this index was ascertained by looking at the correlations between the four items (see Table 2). Cronbach's alpha was used to test the reliability of the index. The alpha value was .65.

**Neighborhood Cohesion Index**

Neighborhood cohesion (NEIGHCOH) is defined as the degree to which friendship ties and networks exist between neighbors within a geographic community. It was measured by combining six items. The following questions were included as items in the index (responses to which are, (a) often (b) sometimes (c) rarely (d) never): "Would you say that you and your neighbors," (1) "Visit each other;" (2) "Go places together;" (3) "Talk about your problems;" (4) "Entertain one another in your homes;" (5) "Borrow things from each other," and (6) "Ask each other for advice." In the resulting scale, the
Table 2. Zero-order Correlations Among the Components of the Guardianship Index

<table>
<thead>
<tr>
<th></th>
<th>NWATCH</th>
<th>NADEL</th>
<th>GRASS</th>
<th>LOOKOUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWATCH</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NADEL</td>
<td>.458</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRASS</td>
<td>.256</td>
<td>.345</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>LOOKOUT</td>
<td>.487</td>
<td>.320</td>
<td>.183</td>
<td>1.000</td>
</tr>
</tbody>
</table>

N=738
All correlations are significant at the .0001 level
higher the number, the higher the degree of friendship ties among neighbors. Responses were coded in the following way: (a = 3), (b = 2), (c = 1), and (d = 0).

An eighteen-point scale was created by combining these six items. The high score of eighteen means that the items occur often, and the low score of zero means that the items in the index never occur. Validity of the neighborhood cohesion index was determined by examining inter-item correlations (see Table 3). Cronbach's alpha was used as a test of reliability. The alpha value of the index was .91.

Demographic Characteristics

Race

This variable was measured by the response to the question: "What is your race?" (1) white, (2) black, and (3) other. It was recoded as 1 = 1 and 2 and 3 = 0.

Gender

This variable was measured by the response to the following question: What is your sex? (a) male and (b) female. This was then coded: a = 1 and b = 0."

Income

The measurement of this variable was done by asking the following question: "What was the total family income from all sources during the past twelve months?" (1)
Table 3. Zero-order Correlations Among the Components of the Neighborhood Cohesion Index

<table>
<thead>
<tr>
<th></th>
<th>VISIT</th>
<th>GOWITH</th>
<th>TALK</th>
<th>ENTHOME</th>
<th>BORROW</th>
<th>ADVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISIT</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOWITH</td>
<td>.665</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TALK</td>
<td>.624</td>
<td>.603</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENTHOME</td>
<td>.667</td>
<td>.711</td>
<td>.597</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BORROW</td>
<td>.613</td>
<td>.561</td>
<td>.578</td>
<td>.567</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>ADVICE</td>
<td>.550</td>
<td>.532</td>
<td>.691</td>
<td>.560</td>
<td>.643</td>
<td>1.000</td>
</tr>
</tbody>
</table>

N=738
All correlations are significant at the .0001 level
Less than $5,000, (2) $5,000 to $9,999, (3) $10,000 to $14,999, (4) $15,000 to $19,999, (5) $20,000 to $24,999, (6) $25,000 to $29,999, (7) $30,000 to $34,999, (8) $35,000 to $39,999, (9) $40,000 and over. Therefore, the higher the score, the higher the income.

*Age*

This demographic variable was measured according to the response to the question: “How old are you?”

**DEPENDENT VARIABLE**

*Property Crime Victimization Index*

Property crime (PROPCR) is defined as crimes which involve property, such as vandalism, breaking and entering, and motor vehicle theft. Measurement of this index entailed combining six items of property crime. These six items were chosen because they involve property crimes which have taken place around the respondent’s home. The responses ranged from no = 1 to yes = 0. All of these questions were prefaced by the phrase, “During the past twelve months...” The first of these items is, “Did anyone damage, destroy, or attempt to destroy your home or any property around your home?” Second, “Did anyone steal anything from inside your home, such as a stereo, T.V., jewelry, gun, or purse, etc.?“ Third, “Did anyone steal anything that is kept outside your home such as a bicycle, a garden hose, farm tools, or livestock?” Fourth, “Did anyone
steal parts attached to a car, truck, or farm machinery owned by any members of your household, such as a battery, hub-caps, or tape deck?” Fifth, “Did anyone break into or somehow illegally get into your home, apartment, garage, or another building on your property?” Sixth, “Did you find a door jimmied, a lock forced, or any other signs of an attempted break in?”

A six-point scale was created by combining the six separate items. A high score of six means that the respondent has experienced all six types of property crimes over the past twelve months. A low score of zero means that the respondent has not experienced any of the six types of property crimes over the past twelve months. Validity of the property crime index was established by looking at the correlations among the variables which comprise it (see Table 4). Reliability was determined by using Cronbach’s alpha. The alpha of this index is .52.

**STATISTICAL ANALYSIS**

Bivariate analysis was performed in order to demonstrate the following zero-order relationships: (1) the relationship between the structural variables and property crime; (2) the relationship between the structural variables and the mediating variables—guardianship and neighborhood cohesion; (3) the relationship between guardianship and property crime, and (4) the

Multiple regression was used in order to discover the simultaneous effect of all the independent variables on the dependent variable. Three regression models were used. Model I included only the structural variables as independent variables; Model II used both structural and demographic variables as independent variables, and Model
<table>
<thead>
<tr>
<th></th>
<th>HOMDAM</th>
<th>THEFHOME</th>
<th>THEFOUT</th>
<th>THEFCAR</th>
<th>BURGHOME</th>
<th>FORCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOMDAM</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEFHOME</td>
<td>.118</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>THEFOUT</td>
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<td>.111</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEFCAR</td>
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<td>.049</td>
<td>.276</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BURGHOME</td>
<td>.180</td>
<td>.388</td>
<td>.130</td>
<td>.087</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>FORCE</td>
<td>.193</td>
<td>.224</td>
<td>.127</td>
<td>.098</td>
<td>.543</td>
<td>1.000</td>
</tr>
</tbody>
</table>

N=738
3 included both structural and demographic variables as well as guardianship and neighborhood cohesion. The first two models were used in order to discover the specific impact of the addition of demographic variables into the regression equation. The third model was included in order to discover the effect on the structural and demographic variables when controlling for guardianship and neighborhood cohesion.

In order to demonstrate the direct and indirect effects of the independent variables on the dependent variable, a path model was created, and path analysis was conducted. This made it possible to test the direct effects of all variables on property crime victimization. It also made it possible to test the indirect effects of community size, racial heterogeneity, residential mobility, and the demographic characteristics on property crime victimization via guardianship and neighborhood cohesion.
CHAPTER IV. RESULTS OF THE STUDY

This chapter is composed of three sections: (1) bivariate findings; (2) multivariate findings, and (3) path analysis. Summary statistics for the variables used in the analyses are displayed in Table 5.

BIVARIATE FINDINGS

The first series of hypotheses posits a positive correlation between the structural characteristics of communities and property crime victimization. More specifically, these hypotheses are, (1) Persons who live in urban communities should have a greater risk of property crime victimization; (2) Persons who live in communities which are racially heterogeneous should have a greater risk of property crime victimization, and (3) Persons who live in communities which have high rates of residential mobility should have a greater risk of property crime victimization. The zero-order correlations of these variables are shown in Table 6.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
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</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
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<td></td>
</tr>
<tr>
<td>PROPCR</td>
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<td>.792</td>
<td>0.0-6</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
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<td></td>
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<tr>
<td>URBAN</td>
<td>.581</td>
<td>.484</td>
<td>0.0-1</td>
</tr>
<tr>
<td>PERBLACK</td>
<td>13.845</td>
<td>12.503</td>
<td>0.0-62.5</td>
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<tr>
<td>PERMOVE</td>
<td>48.047</td>
<td>11.480</td>
<td>7.5-67.1</td>
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<tr>
<td>AGE</td>
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<td>MALE</td>
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<td>.486</td>
<td>0.0-1</td>
</tr>
<tr>
<td>GUARDSHP</td>
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<td>0.0-12</td>
</tr>
<tr>
<td>NEIGBCOH</td>
<td>8.966</td>
<td>4.595</td>
<td>0.0-18</td>
</tr>
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</table>

N=738

**CHAPTER IV. RESULTS OF THE STUDY**
Table 6. Zero-order Correlations Between Structural Characteristics and Property Crime Victimization

<table>
<thead>
<tr>
<th></th>
<th>PROPCR</th>
<th>URBAN</th>
<th>PERBLACK</th>
<th>PERMOVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPCR</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URBAN</td>
<td>.102*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERBLACK</td>
<td>.050</td>
<td>-.118*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>PERMOVE</td>
<td>.031</td>
<td>.444**</td>
<td>-.408**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

N=738
**p<.0001
*p<.01
The relationship between community size (URBAN), racial heterogeneity (PERBLACK), residential mobility (PERMOVE) and property crime victimization (PROPCR) are all in the expected, positive direction. However, the correlations are all very small, and community size (URBAN) was the only structural characteristic found to be statistically significant.

The next series of hypotheses suggest a negative relationship between the structural characteristics and the two mediating variables—guardianship and neighborhood cohesion. These hypotheses are, (1) Increased community size should be negatively related to guardianship and neighborhood cohesion; (2) Greater degrees of racial heterogeneity should be negatively related to guardianship and neighborhood cohesion, and (3) Greater rates of residential mobility should be negatively related to guardianship and neighborhood cohesion. The zero-order correlations between these variables are displayed in Table 7.

The results of this analysis reveal several results which are inconsistent with expectations. For example, size of community (URBAN) and residential mobility (PERMOVE) had a positive significant relationship with guardianship (GUARDSHP). In addition, racial heterogeneity (PERBLACK) was found to be positively related to neighborhood cohesion (NEIGBCOH). The only statistically significant relationship which occurred in the expected direction involved racial heterogeneity (PERBLACK) and guardianship (GUARDSHP).

The third set of hypotheses makes the assumptions that both guardianship and neighborhood cohesion are negatively related to property crime victimization. Specifically, these hypotheses state: (III) Guardianship is negatively related to property crime victimization, and (IV) Neighborhood cohesion is negatively related to property crime victimization. The zero-order correlations among these variables are displayed in Table
Table 7. Zero-order Correlations Between Structural Characteristics and Guardianship and Between Structural Characteristics and Neighborhood Cohesion

<table>
<thead>
<tr>
<th></th>
<th>GUARDSHP</th>
<th>NEIGBCOH</th>
<th>URBAN</th>
<th>PERBLACK</th>
<th>PERMOVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUARDSHP</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEIGBCOH</td>
<td>.423***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URBAN</td>
<td>.150***</td>
<td>- .058</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERBLACK</td>
<td>-.070*</td>
<td>.035</td>
<td>-.118**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>PERMOVE</td>
<td>.154***</td>
<td>-.038</td>
<td>.444***</td>
<td>-.408***</td>
<td>1.000</td>
</tr>
</tbody>
</table>

N=738

***p<.0001
**p<.01
*p<.05
8. Findings indicate that both of these relationships occurred in the expected direction and were statistically significant.

**MULTIVARIATE FINDINGS**

In this portion of the analysis, multiple regression was performed in order to determine the effect of each of the variables while controlling for the others. Three regression equations were used. In the first of these, property crime (PROPCR) was dependent on the structural characteristics of communities. In the second, demographic variables were included in the analysis. In the third regression equation, property crime (PROPCR) was dependent on both the structural and demographic variables, while controlling for guardianship (GUARDSHP) and neighborhood cohesion (NEIGBCOH).

The use of these different models was an attempt to bridge the gap between early crime research, which emphasized the importance of structural characteristics, and more recent crime research, which has concentrated on demographic characteristics.

**Model 1**

Model 1 in Table 9 is composed of the structural characteristics of communities and their effects on property crime victimization. Controlling for the effects of the other two structural characteristics, size of community (URBAN) was found to have the greatest net impact on property crime victimization ($B=.104$), followed by racial heterogeneity (PERBLACK) ($B=.067$) and residential mobility (PERMOVE) ($B=.012$).
Table 8. Zero-order Correlations Between Guardianship, Neighborhood Cohesion, and Property Crime Victimization

<table>
<thead>
<tr>
<th></th>
<th>PROPCR</th>
<th>GUARDSHP</th>
<th>NEIGBCOH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPCR</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GUARDSHP</td>
<td>-.072*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>NEIGBCOH</td>
<td>-.088**</td>
<td>.423***</td>
<td>1.000</td>
</tr>
</tbody>
</table>

N=738
***p<.0001
**p<.01
*p<.05
Both size of community and racial heterogeneity were found to be statistically related to property crime victimization.

These results differed somewhat from the bivariate analysis because racial heterogeneity (PERBLACK) was found to be statistically related to property crime victimization. One similarity, however, was found: the direction of the relationships for all the structural characteristics were the same, along with the ordering of importance.

The coefficient of determination was .01 for Model 1. Thus, the model was able to explain only about 1 percent of the variation in property crime victimization.

**Model 2**

Model 2, as shown in Table 9, is a combination of the structural and demographic variables.

After the demographic variables were controlled, several changes occurred in the structural variables. First, although the effect of community size (URBAN) remained the same (B = .104), the level of statistical significance increased from .05 to .01. Second, the impact of racial heterogeneity (PERBLACK) increased from (B = .067) to (B = .088). Third, the effect of residential mobility (PERMOVE) increased from (B = .012) to (B = .039). The relationship between residential mobility and property crime remained insignificant, however.

Although several statistical changes occurred because of the addition of demographic variables, substantively, these changes are of little importance. For example, despite an increased level of significance, the relationship between community size and property crime is essentially the same. Likewise, the small increase in the standardized

CHAPTER IV. RESULTS OF THE STUDY
Table 9. Standardized Regression Coefficients of Property Crime Victimization with Structural and Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>.104*</td>
<td>.104**</td>
<td>.106**</td>
</tr>
<tr>
<td>PERBLACK</td>
<td>.067*</td>
<td>.088*</td>
<td>.089*</td>
</tr>
<tr>
<td>PERMOVE</td>
<td>.012</td>
<td>.039</td>
<td>.039</td>
</tr>
<tr>
<td>WHITE</td>
<td></td>
<td>.088**</td>
<td>.091**</td>
</tr>
<tr>
<td>MALE</td>
<td></td>
<td>-.024</td>
<td>-.027</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td>-.122***</td>
<td>-.106**</td>
</tr>
<tr>
<td>INCOME</td>
<td></td>
<td>-.070*</td>
<td>-.063*</td>
</tr>
<tr>
<td>GUARDSHP</td>
<td></td>
<td></td>
<td>-.039</td>
</tr>
<tr>
<td>NEIGBCOH</td>
<td></td>
<td></td>
<td>-.055</td>
</tr>
<tr>
<td>N</td>
<td>738</td>
<td>738</td>
<td>738</td>
</tr>
<tr>
<td>R2</td>
<td>.01</td>
<td>.04</td>
<td>.04</td>
</tr>
</tbody>
</table>

***p<.0001
**p<.01
*p<.05
regression coefficient of residential mobility has left this relationship basically unchanged.

Several significant relationships among the added demographic variables were revealed. Of these variables, age (AGE) had the largest effect on property crime victimization ($B = -0.122$). It was therefore the most important predictor of property crime victimization in Model 2. The direction of this relationship was negative, meaning that the greater a person’s age, the less likely they are to be victimized by property crime. Income (INCOME) was also found to significantly influence property crime ($B = -0.070$).

The effect of race (WHITE) on property crime ($B = 0.088$) was also significant, meaning that whites are more likely to be victimized by property crimes than non-whites. This finding was unexpected because past research has found the opposite to be true.

Another unexpected finding among the demographic variables in Model 2 was the negative relationship between gender (MALE) and property crime ($B = -0.024$). An interpretation of this relationship is that females have a greater risk of property crime than males. However, the standardized regression coefficient is so small and insignificant, for all practical purposes it is zero. It is interesting, though, that it is insignificant when most research has noted that males have a greater likelihood of being victimized.

Although the emphasis lately in criminal research has been on demographic characteristics, such as age, gender, income, and race, the inclusion of these in Model 2 has not resulted in a great improvement over Model 1. In fact, the result of an F-test has revealed that, although several demographic variables were found to be significantly related to property crime, these two models are not significantly different.

Overall, the fit of the model was slightly improved from Model 1 to Model 2 because the coefficient of determination was increased from (.01) to (.04).

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Model 3

As indicated in Table 9, this model is composed of the structural and demographic variables, along with guardianship and neighborhood cohesion. It appears that controlling for these two additional variables has had very little impact on the rest of the independent variables. One possible significant change occurred in age (AGE). Its effect on property crime was reduced from (-.122) to (-.106), and it became less statistically significant.

This lack of statistical support for the addition of demographic variables should not, however, deter researchers from including them in the analysis of property crime victimization. It must be realized that victimization is a very complex and intricate phenomenon and that models which exclude the analysis of demographic variables will be mis-specified.

PATH ANALYSIS

After conducting bivariate and multivariate analysis, a path model was constructed in order to ascertain the direct and indirect effects of structural characteristics of communities and demographic factors on property crime victimization. The path model is displayed in Figure 2. The total, direct, and indirect effects of the structural and demographic variables are depicted in Table 10.

We hypothesized that the structural characteristics would be negatively related to guardianship and neighborhood cohesion. As is shown in the path model and in the
Figure 2. Path Diagram of the Model of Structural and Demographic Characteristics, Along with Guardianship and Neighborhood Cohesion, on Property Crime Victimization.

- **p < .0001
- ***p < .001
- **p < .01
- *p < .05
Table 10. The Total, Direct, and Indirect Effects of Structural and Demographic Characteristics, Along with Guardianship and Neighborhood Cohesion on Property Crime Victimization

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Correlation</th>
<th>Total Effect</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPCR</td>
<td>URBAN</td>
<td>.105</td>
<td>.097</td>
<td>.106</td>
<td>-.009</td>
</tr>
<tr>
<td></td>
<td>PERBLACK</td>
<td>.055</td>
<td>.088</td>
<td>.089</td>
<td>-.001</td>
</tr>
<tr>
<td></td>
<td>PERMOVE</td>
<td>.035</td>
<td>.039</td>
<td>.039</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>AGE</td>
<td>-.135</td>
<td>-.122</td>
<td>-.106</td>
<td>-.016</td>
</tr>
<tr>
<td></td>
<td>WHITE</td>
<td>.050</td>
<td>.088</td>
<td>.091</td>
<td>-.003</td>
</tr>
<tr>
<td></td>
<td>INCOME</td>
<td>-.016</td>
<td>.068</td>
<td>-.063</td>
<td>-.005</td>
</tr>
<tr>
<td></td>
<td>MALE</td>
<td>-.039</td>
<td>-.024</td>
<td>-.027</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>GUARDSHIP</td>
<td>-.068</td>
<td>-.039</td>
<td>-.039</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>NEIGBCOH</td>
<td>-.096</td>
<td>-.055</td>
<td>-.055</td>
<td>----</td>
</tr>
</tbody>
</table>

CHAPTER IV. RESULTS OF THE STUDY
bivariate analysis, none of these are significantly related in the predicted direction with guardianship or neighborhood cohesion.

While the demographic characteristics are not the focus of this thesis, we do find that several of them are significantly related to guardianship and neighborhood cohesion. The most significant of these relationships occurred between age (AGE) and guardianship (GUARDSHP) (.258). The meaning of this is that the older the age of the respondent, the more likely they are to engage in guardianship. A significant relationship was also found between age (AGE) and neighborhood cohesion (NEIGBCOH) (.101). These two findings appear to lend support to the assumptions of the lifestyle/exposure hypothesis. That is, because older persons are more likely to stay near their home, they are more likely to establish good relations with their neighbors. The relationship between racial heterogeneity (PERBLACK) and neighborhood cohesion was also shown to be significant (.089). In addition, a significant negative relationship was shown between gender (MALE) and guardianship (GUARDSHP) (-.097). This finding indicates that females are more likely to engage in guardianship behavior.

Looking at the direct effects of the structural variables on property crime victimization, we find that including guardianship and neighborhood cohesion does not change the relationships. That is, even with the additional controls of guardianship and neighborhood cohesion, only size of community (URBAN) and racial heterogeneity (PERBLACK) have significant effects in the predicted directions. This is the same conclusion that was reached without controlling for either guardianship or neighborhood cohesion.

As was noted in the interpretations of Model 3, the direct relationships between the demographic variables and property crime are not significantly changed by introducing the additional controls of guardianship and neighborhood cohesion.
Although significant negative relationships between guardianship and property crime and between neighborhood cohesion and property crime were found in the bivariate analysis, these were not found when other independent variables were controlled. These findings are quite different from previous research. However, the inclusion of community size, age, race, and income is important.
CHAPTER V. SUMMARY AND DISCUSSION

The area of community structure and criminal victimization has had a long research tradition in sociology. It has appeared, however, that many more recent studies of criminal victimization have failed to incorporate the factor of community structure into the analysis. This seems to be an important oversight because it has been shown in countless studies that community structures impact directly upon the relationships and the lives of community residents.

This study was constructed in a manner in which the community structure would consume a major part of the analysis. An attempt was made to study this structure by decomposing major factors within it. Specifically, this study was interested in the effects of size of community, racial heterogeneity, and residential mobility on guardianship and neighborhood cohesion and their eventual effects on property crime victimization. Although community structure was the focus of this study, demographic characteristics, such as age, gender, race, and income were also included in the analysis. This was done for three reasons. First, there is also a vast amount of theory and past research which has demonstrated the importance of these factors in property crime victimization. Second, these demographic characteristics were included in order to discover their effect on
the structural characteristics when they were included in the regression model. Third, the most important reason for including them in the analysis is that property crime victimization has innumerable causes. The addition of these variables has helped us to better understand this complex phenomenon.

A strength of this research is that it makes an attempt to examine the important role that the community plays in the lives of individual residents. While it is important to acknowledge that certain demographic groups are more vulnerable to property crime victimization, we must also understand that there are certain characteristics of communities which serve to increase the possibility that residents will be victimized by property crime. Thus it has been shown that characteristics of communities directly impact upon the lives of individual residents.

**SUMMARY OF FINDINGS**

Many of the findings of this thesis are consistent with those of past research. First, it was found that residents of urban communities will experience more property crime than residents of rural communities. Second, results indicate that racial heterogeneity contributes significantly to an increase in property crime. Third, the relationship between income and property crime victimization was shown to be negative. That is, individuals with higher incomes are likely to experience less property crime than individuals with lower incomes. Fourth, the findings clearly indicate the important effects of age on guardianship, neighborhood cohesion, and property crime.

There were also several findings which were inconsistent with expectations. First, increased community size was found to be significantly related to an increase in the fre-
quency of guardianship behavior in the community. Second, greater degrees of racial heterogeneity were shown to lead to increased neighborhood cohesion. Third, results suggest a positive relationship between residential mobility and guardianship. Fourth, it was found that the likelihood of property crime victimization is nearly the same for males and females. Fifth, these findings indicate a significant positive relationship between being white and experiencing property crime victimization. Finally, a finding which is very inconsistent with theory and past research is that the inclusion of guardianship and neighborhood cohesion in the analysis has had very little effect on other variables.

**LIMITATIONS AND IMPLICATIONS FOR FURTHER RESEARCH**

There are numerous possible reasons for receiving results which were unexpected. One of these is that there is a significant relationship between guardianship and neighborhood cohesion ($r = .42$). A possible explanation for this is that these two variables are tapping essentially the same thing. For instance, it seems likely that if persons have friendship ties with their neighbors, they will also engage in guardianship behavior. Another possibility is that a causal relationship exists between the two. That is, neighborhood cohesion may influence guardianship or vice versa. For example, it is probable that guardianship behavior might encourage the strengthening of friendship ties among neighbors. However, even if these variables are measuring the same concept, the failure of these variables to mediate the other relationships was not anticipated.
Another potential problem in this research, which may have influenced the results, is that there was relatively little variance in the dependent variable. Specifically, the items which composed the property crime index had very little variance. The percentage of those respondents who had not experienced the property crimes used in the property crime index is as follows: (1) vandalism around the home (89.0%); (2) theft inside the home (96.1%); (3) theft around the home (84.8%); (4) theft of parts attached to a car (81.6%); (5) home broken into (96.5%), and (6) attempted break in (96.4%).

An additional limitation is that the use of counties as proxies for communities did not make it possible to adequately tap the structures of the specific communities being studied. Because of this it was not possible to discover if individuals were directly impacted by high rates of residential mobility or racial heterogeneity. The reason for this is that, although an individual may live in a racially homogeneous community, which has a low rate of residential mobility, this information was not included in the analysis because only the county-level data was used. An individual's length of residence in a community was also omitted from the analysis. It is probable that individuals who just recently moved into a community will not experience much neighborhood cohesion and will refrain from guardianship behavior.

Another possible reason for inconsistent results is that there may have been an interaction between rural and urban communities. After running two separate regression models, using only rural communities in one and only urban communities in the other, it was found that no such interaction was occurring. Although the structural and demographic variables varied considerably, the fact that victimization was a relatively rare outcome may have adversely affected the ability of the statistical model to explain differences in victimization experiences across persons.

Measurement error may also have been partially responsible for inconsistent results. For example, guardianship was defined as whether or not individuals attempt to
protect their neighbors from being victimized by property crime. Two of the questions used to measure this asked if the respondents had arranged to have their neighbors pick up their deliveries and mow their lawn while they were away from their community. These questions may not adequately tap the meaning of guardianship.

Another possible reason for inconsistent results is that mixing variables from the individual and the county level may have caused some confounding results. For example, changes in community structure (e.g. increasing population, racial heterogeneity, and residential mobility) may have effects on the community crime rate which are different from an individual's risk of victimization. However, this study was limited to the cross-level effect of community structure on individual's likelihood of victimization because aggregate crime data by residence was not available.

A bias in the sample is another possible cause for inconsistent results. Specifically, the sample used in this research is under-representative of the following groups: females, 14-29 year olds, blacks, urban residents, and unmarried persons. There may also be a bias because of missing data. Of the 1046 in the sample who answered the victimization questions, only 738 could be used in the analysis because many respondents had failed to answer all the questions.

Lastly, there is a strong possibility that the importance of guardianship could not be adequately addressed using this sample. This could explain why guardianship was found to be insignificant. GUARDSHP had a very high mean (8.44 in a range of 0.0-12), meaning that most people in the sample were engaging in guardianship behavior. Because of this high level of guardianship, it was not possible to accurately predict what would happen if guardianship were not occurring.

There are several ways in which this research could be improved and expanded. One way is to collect data for each specific community being studied. This would enable
researchers to more accurately see the impact of size of community, residential mobility, and racial heterogeneity on the lives of community residents.

A second way that this research could be improved is to include additional structural characteristics of communities in the analysis. A few possibilities are unemployment rates, average socioeconomic status of residents, and proxies for family instability.

Finally, the use of a different model of community structure might also improve this research. A possible alternative is social area analysis, which was conceptualized by Shevky and Bell. This is a much more systematic approach, and one which uses census tract data. It is a deductive model of social change which is based upon the idea of interdependence and increasing scale (Johnston, R.J., 1982). This model is derived from Durkheim's perception of the division of labor and Louis Wirth's suggestions that increasing population density leads to a change in social forms. It was believed that industrial society experiences three major trends: (1) a change in the range and intensity of relation experiences, which leads to a change in the intersectoral division of labor; (2) the differentiation of functions, which leads to a reduction in the importance of the household as an economic unit, and (3) a change in the complexity of organization, which leads to increasing population mobility and density (Johnston, R.J., 1982). When applied to the study of crime, this theoretical orientation would predict outcomes similar to those of the human ecological perspective, but the causal mechanisms, linking social trends and victimization, would be slightly different.
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