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An Examination of Juvenile Delinquency and Victimization Using an Integrated Model Approach.

Kimberly Dawn Dodson
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An Examination of Juvenile Delinquency and Victimization Using an Integrated Model Approach

A Thesis

Presented to

the Faculty of the Department of Criminal Justice and Criminology

East Tennessee State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Criminal Justice and Criminology

by

Kimberly D. Dodson

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ABSTRACT

An Examination of Juvenile Victimization and Delinquency Using an Integrated Model Approach

by

Kimberly D. Dodson

The theories of social bond, differential association and routine activities were synthesized into one theoretical model to determine its predictive utility in the explanation of juvenile delinquency and victimization. Using cross-sectional data obtained from the Gang Resistance Education and Training (G.R.E.A.T.) survey, a sample of 1,555 middle school students was examined. The results of the Ordinary Least Squares (OLS) regressions indicate that the integrated model explains between 33% and 37% of the variation in delinquent behavior (i.e. property crime, violent crime and alcohol and illegal drug use). The analysis also indicates that the integrated model explains between 15% and 27% of the variation in victimization. This thesis concludes that theoretical integration is necessary in order to develop a more complete crime theory and to increase the current understanding of the crime-victimization relationship.
DEDICATION

In loving memory of Melanie Ann Knox, who gave me the greatest gift that anyone can ever give—friendship.
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CHAPTER 1

INTRODUCTION

Statement of the Problem

Many criminologists have expressed considerable dissatisfaction with existing theories of crime and deviance noting that single theories have failed to adequately explain deviant behavior. Elliott (1985, p.125) claims that, “the level of explained variance attributable to separate theories is embarrassingly low.” For example, social bond theory does a better job of explaining minor offenses than serious offenses; whereas, learning theories provide a more powerful explanation of serious than for nonserious offenses (e.g., Aultman, 1979; Burkett & White, 1974; Elliott, Ageton, & Canter, 1979; Johnstone, 1981; Meade & Marsden, 1981). As a result, many criminologists have turned to theoretical integration as a viable alternative to single theories in explaining criminality.

Purpose of the Study

The most frequent attempts at theoretical integration involve social control and social learning theories. To date, integrated models have been used to explain general delinquency (Colvin & Pauly, 1983; Joseph, 1995; Menard & Elliott, 1994), property offending (Robinson, 1999), violent offending (Menard & Elliott; Smith, Frazee, & Davison, 2000), gender differences in delinquency (Joseph), and various types of drug use (Joseph). Still other researchers have used integrated models in an attempt to explain sustained delinquent behavior.
Additional attempts at theoretical integration involve combining theories of victimization. Miethe and Meier (1993) merged routine activities and lifestyles perspectives into “structural choice” theory. Integrated models of victimization have been used to explain property (Rountree, Land, & Miethe, 1994) as well as violent victimization (Bjarnason, Sigurdardottir, & Thorlindson 1999; Smith et al., 2000). However, it has been suggested that the integration of theories of delinquency and victimization would substantially improve current understanding of both delinquency and victimization (Miethe & Meier, 1993). This thesis attempts to add to the current body of research by synthesizing Hirschi’s version of social control, called social bond, differential association, and routine activities into one theoretical model to determine its predictive utility in the explanation of juvenile delinquency and victimization.

**Methodology**

In order to develop a more complete crime theory and maximize explained variance, an examination of both offenders and victims is necessary. The primary purpose of crime theories is to determine what motivates the offender to commit a criminal act but they ignore the role of the victims in the criminal or delinquent events. Alternatively, theories of victimization seek to identify characteristics that increase an individual’s propensity for victimization but ignore the sources of criminal motivation. Therefore, the integration of theories of victimization and offending have the potential to substantially improve current understanding of crime and delinquency.
The first obstacle to the theoretical integration of social control and differential association is overcoming their assumptive differences. Agnew (1995) states that “criminal motives” are largely ignored in empirical research but their examination is critical in forming a more complete theory of crime. Researchers note that assumptive differences do not necessarily preclude the possibility of theoretical integration (Agnew; Elliott et al., 1979).

Both social control and differential association make opposing assumptions about the motivating processes or causes that lead to criminal behavior. Social control claims that individuals are naturally motivated to commit crime unless they are constrained. Differential association argues that individuals are “social blanks” and are socialized in to deviant or conforming roles. Agnew (1995) notes that these motivational processes may contribute to one another or interfere with one another. Both social control and differential association recognize the importance of early socialization. Control theory states that inadequate socialization will result in weakened bonds, freeing an individual from internal and external controls. When controls are absent or low, individuals are more likely to deviate. Differential association asserts that individuals exposed to criminal patterns are more apt to deviate and adopt definitions favorable toward law violation. The assumption of differential association appears to be a logical extension of those asserted in social control. Specifically, individuals with weakened bonds and the absence of restraints will not deviate unless they are exposed to criminal patterns and adopt beliefs favorable to crime (Sutherland, Cressey, & Luckenbill, 1992).
Additionally, according to Akers (1973, 1977), the concepts and propositions of social learning overlap and complement social bond/control. He asserts that these two theories can be integrated by “conceptual absorption.” Conceptual absorption is defined as “subsuming concepts from one theory as special cases of the phenomena defined by the concepts of another” (Akers, 1989; Akers & Cochran, 1985).

For example, the social bonding concept of “attachment” refers to the affectionate ties that an adolescent forms with significant others (i.e., parents, peers and others). Akers (2000) claims that the concept of attachment is subsumable under the concept of the modalities of differential association as one measure of “intensity” of association. Intensity refers to the significance attributed to the relationship and it is this relationship where individuals learn definitions favorable or unfavorable to law violation. Both social bond and differential association predict that attachments to conventional others will have a negative effect on criminal behavior.

One’s attachments ultimately affect his/her level of commitment. Commitment refers to one’s actual or anticipated investment in conventional society, including one’s reputation, educational and occupational aspirations, achievements, and expectations. Both theories claim that commitment is negatively related to criminal/deviant behavior. Agnew (1995) asserts that following the logic of differential association; individuals with high levels of commitment are more likely to associate with others who present definitions favoring conformity.
The integration of theories of criminality and victimization are not subject to what some criminologists see as inherent obstacles of combining theories of criminality. Theories of criminality and victimization do not make any incompatible assumptions about the nature of crime and delinquency. Additionally, theories of criminality do not make any explicit assumptions about victim processes nor do victim theories make any restrictive assumptions about offenders (Miethe & Meier, 1993). Therefore, combining theories of criminality and victimization is feasible. Additionally, their integration has the potential to greatly increase the current understanding of crime and delinquency.

The relationship between delinquency and victimization has received a lot of attention in empirical research. It is well documented that the factors that place an individual at increase risk for delinquency are the same factors that place an individual at risk of victimization. The relationship between delinquency and victimization seems to be the most logical point for the integration of crime and victim theories.

Routine activities/lifestyle perspective, social control, and differential association all appear to make complementary assertions with regards to one another. Specifically, Sutherland (1947) argues that exposure to or association with delinquent others increases the likelihood of that individual adopting beliefs favorable to crime. Similarly, Hirschi (1969) claims that individuals who form attachments to delinquent others are more likely to become delinquent. Both of these assertions are consistent with the views of Hindelang, Gottfredson, and Garofalo (1978) who claim that certain associations and activities may increase
Measuring Juvenile Delinquency and Victimization

When attempting to gauge the amount of juvenile delinquency and victimization in the United States, the two most commonly cited sources are the Federal Bureau of Investigation’s (FBI) Uniform Crime Reports (UCR) and the National Crime Victimization Survey (NCVS). The UCR compiles crime data annually from jurisdictions across the country. The FBI measures crimes it calls index offenses and divides serious crime into two groups: 1) personal offenses including murder, forcible rape, robbery, and aggravated assault and 2) property offenses consisting of burglary, larceny-theft, motor vehicle theft, and arson. However, a major disadvantage to the UCR is that it reflects only the crime known or reported to the police. Crimes that an individual fails or decides not to report to the police are excluded from the UCR figures. In addition, police and sheriff’s departments may underreport the amount of crime in their jurisdictions. As a result, the UCR may be a gross underrepresentation of the true level of crime. In 1995, the FBI decided that the UCR was outdated and began to phase out its use. In place of the UCR, the FBI created what has become known as the National Incident-Based Reporting System (NIBRS).

In 1972, the NCVS was created to complement the UCR and as a result both programs share some traits. For example, like the UCR, the NCVS also
tracks crimes of rape, sexual assault, robbery, aggravated and simple assault, residential burglary, personal and household larceny, and motor vehicle theft. Both programs also define rape, robbery, theft, and motor vehicle theft in a virtually identical manner.

However, the programs are designed to serve different purposes so there are also some significant differences. The primary purpose of the UCR is to provide a reliable set of criminal justice statistics for law enforcement administration, operation and management. The primary objective of the NCVS is to provide previously unavailable information about the crime, victims and the offenders.

The NCVS excludes, but the UCR includes incidents involving murder, arson, commercial crimes, and crimes against children under the age of 12. In addition, the UCR and NCVS differ on their definitions of some types of crimes. Burglary, for example, according to the UCR is “the unlawful entry or attempted entry of a structure with the intent to commit a felony or theft.” The NCVS defines burglary as the “entry or attempted entry of a residence by a person who had no right to be there.” The NCVS is not concerned with attempting to gauge the intentions of the offender at the time of the offense.

The most notable difference is that the NCVS recognizes incidents that are not reported to the police. This is seen as a major advantage to the NCVS because it routinely uncovers more crime than the UCR. As a result, NCVS is often accepted as a more reliable measure of crime.
However, Elliott (1994) claims that abandoning either self-report data or official statistics in favor of the other is shortsighted. He notes that ignoring the findings of either is dangerous, particularly when the two measures provide apparently contradictory findings (Elliott, 1994). He further asserts that a full understanding of the etiology and development of delinquent behavior is enhanced by using and integrating both self-report data and official research reports.

The Prevalence of Juvenile Delinquency in the United States

Incidents such as the school shootings in Jonesboro, Arkansas and Littleton, Colorado have heightened public awareness to the seriousness of juvenile crime and victimization in the United States. According to the UCR, from 1986-1995, juvenile arrests for Violent Crime Index offenses increased 67%. Violent Crime Index offenses included murder and non-negligent homicide, forcible rape, aggravated assault, and robbery. Specifically, arrests for murder and non-negligent homicide were up 90%, aggravated assault arrests up 78%, and robbery up 63%. The only category that reflected a decrease was that of forcible rape, which was down 4%.

Although males account for the most serious incidents of violence, statistical data revealed that females were increasingly involved in violent behavior. From 1991 to 1995 female arrests for Violent Index Offenses were up 34% compared to a 9% increase for males. Additionally, in 1995 females were responsible for 15% of the total number of arrests for Violent Index Offenses. Since 1987, African-Americans outnumbered Caucasians as homicide offenders.
and by 1994, 61% of juvenile homicide offenders were African-American compared to 36% Caucasian.

Juvenile arrests for Property Crime Index offenses (i.e., burglary, motor vehicle theft, and arson) declined overall between 1991 and 1997. However, larceny-theft remained constant, accounting for 70% of the Property Crime Index arrests. Although males account for the majority of arrests, female arrests were up for most property offenses (i.e., larceny-theft up 22%, vandalism up 42%, and motor vehicle theft up 36%).

The UCR also compiles information on drug violations. The UCR (Bureau of Justice Statistics, 1997) defines drug violations as “State or local offenses relating to the unlawful possession, sale, use, growing, manufacturing, and making of narcotic drugs including opium or cocaine and their derivatives, marijuana, synthetic narcotics, and dangerous nonnarcotic drugs such as barbiturates.” Between 1992 and 1997, the number of drug violations more than doubled for juveniles. During this same period, drug arrests by females represented the largest increase (131%) and drug arrests of females exceeded those of males.

The Prevalence of Juvenile Victimization in the United States

According to the 1993 NCVS, victimization rates for personal crimes declined for most age groups while the violent crime rates for young people continued to increase. American youths age 12 to 17 made up approximately 10% of the population in 1994, yet they were the victims in about one out of
every four crimes. Additionally, in 1994, an estimated 2.6 million violent crimes were committed against juveniles ages 12 to 17, which represents a 44% increase since 1984 (Kelly, Huizinga, Thornberry, & Loeber, 1997). Among 12 to 17 year olds, males were one and half times more likely to be the victim of a violent crime than females. Additionally, the number of juvenile murder victims increased 82% between 1984 and 1994. Of those, African-American juveniles were six times more likely to be homicide victims than Caucasian juveniles. It is also important to note that victims of both male and female juvenile crimes are predominantly other juveniles, approximately 70% (BJS, 1996).

Since 1993, juvenile property victimizations have declined 23%. However, individuals are more likely to become a victim of a property crime than a violent crime. In 1997, one in every six juveniles ages 12 to 17 was a victim of a property crime, which is a rate 40% higher than for adults. Property victimizations are particularly high for African-American juveniles and juveniles living in urban areas.

According to NCVS School Crime Supplement (BJS, 1997), public school students are more likely to be victims of a crime (9%) than private school students (7%). Approximately 54% of property crimes occur at school. Adolescents between the ages of 12 to 17 are the most likely to be victims of both violent and property crimes.
Conclusions

As these statistics indicate, juvenile offending and victimization appear to be serious problems in the United States. Adolescents between the ages of 12 to 17 are more likely to be the victim of a crime than any other age group. Additionally, black juveniles are more likely to be victims of violent and property crimes than juveniles from any other race. Males commit the majority of juvenile crimes and they are more likely to be crime victims. However, the amount of crime committed by juvenile females appears to be on the rise.

As a result of their systematic limitations, official statistics may underestimate the true scope of juvenile delinquency. Many juveniles who commit delinquent acts are never charged and many juvenile victims do not report instances of victimization. In addition, if a juvenile is charged and arrested, chances are he/she are not charged with or arrested for all of the delinquent acts he/she may have committed. Furthermore, the official processing of youthful offenders is often the result of racial and class bias (Farrington & Tarling, 1985; McCord, 1990; West, 1982). Due to these disadvantages, self-report data is preferential and is the most commonly employed source of information for deviance research. Therefore, the current analysis examines self-report data.
Limitations of the Study

The data used in this analysis were a non-random sample. Additionally, the sample was not geographically representative of the adolescent population across United States. As such, strong generalizations cannot be made to the adolescent population as a whole.

As with any public school-based survey, there are certain limitations. These limitations included the exclusion of private school students; truant, sick, and or tardy students; and the possible underrepresentation of “high-risk” youths.

As with any self-report data there is the possibility that some individuals may either exaggerate or conceal their acts of misconduct. Still others may inaccurately recall certain events, which poses a threat to the reliability of the data. The data used for this analysis are cross-sectional; therefore, this study is limited in its inferences about causality. Additionally, as a secondary analysis, the measures are limited in scope and breadth to the questions available in the Gang Resistance Education and Training (G.R.E.A.T.) questionnaire. For the purposes of this analysis, it is assumed that the respondents answered the questions truthfully.
CHAPTER 2

REVIEW OF THE LITERATURE

The Victim-Offender Relationship Throughout History

One aspect of the victim-offender relationship that has always been acknowledged is the injury, harm, or damage caused by the criminal to the victim (Schafer, 1964). But long before the existence of a formal criminal justice system, enforcement of “law and order” was the responsibility of each individual. During this early period, individuals made the law, decided on the punishment and carried it out. As a matter of security and survival, these early victims acted as the police, the prosecutor, the judge, and the executioner all in one (Viano, 1983). The punishments were based purely on revenge aimed at achieving two goals—deterrence (i.e., to preventing future transgressions) and compensation (i.e., making reparations for damages).

However, as primitive groups (i.e., families, tribes, and clans) became better established, the responsibility of carrying out the revenge and exacting compensation shifted from the individual to the collectivity. Any offense against an individual was now seen as an offense against an entire group. As a result, “blood-feuds” erupted as families assumed the positions of the victim and the offender. This concept of “collective responsibility” meant that any member of the group to which the victim belonged could retaliate against any member to which the offender belonged. At this time, the criminal-victim relationship was based purely on the struggle for power, the control of resources, and survival.
Early written codes also reflected the themes of retribution and compensation for the victim’s injury. The Code of Hammurabi, for example, was a compendium of earlier codes that emphasized retribution and was based on the principle of *lex talionis*. This maxim literally meant that the offender paid for his/her crimes with “an eye for an eye, a tooth for a tooth.” This law of retaliation was often carried to extremes. One illustration of this is that the law stated if a house fell on and killed the son of the owner, the son of the guilty builder was killed rather than the builder himself.

By the end of the Middle Ages, compensation, similar to what is known as restitution today, began to replace vengeful retaliation but the victim remained a central component in the administration of justice. In lieu of retaliation, if the victim was willing to accept compensation in the form of monetary reimbursement or something of economic value he or she could do so. Once the two parties had entered into an agreement, the victim was considered “whole” and the “criminal procedure” was considered complete.

However, two major events contributed to the end of the victim justice system. First, feudal barons made claim to any compensation paid to victims by the offender by redefining criminal acts as violations against the state. As noted by Schafer (1977, p.22), “In contrast to the understanding of crime as a violation of the victim’s interest, the emergence of the state developed another interpretation: the disturbance of society.” This interpretation gave rise to the dominance of the state and the rights of the injured were severed from the penal law.
Additionally, throughout the Middle Ages society was predominantly made up of rural, agrarian communities. This situation created interdependency between individuals for day-to-day survival. But as a result of the industrial revolution, society experienced rapid social change. Society became more urbanized as people moved away from rural communities and relocated into the cities. This meant that relationships became more depersonalized because increasingly people no longer knew their neighbors. The interpersonal relationships that once helped bind individuals together for the common good were severely diminished.

These societal changes made it obvious that the victim justice system was outdated, inadequate and no longer feasible. Crime was viewed as a threat to the social fabric of the community and the focus shifted away from restoring the victim to dealing with the criminal. The victim was no longer central to the administration of justice but had been reduced to a mere witness for the state. This redefinition of the victim's role in the criminal justice process has extended to modern American society.

The Pioneers of Victimology

For years, criminologists attempted to explain crime and criminal behavior by studying the criminal. However, pioneers such as Von Hentig (1948) and Mendelsohn (1956) began to investigate the victim's role in the criminal offense and to examine the interaction and interrelationship between the offender and the
victim. Up until this point, the victim was seen as an “object” that was acted upon by the offender but as criminologists began to take a closer look at the victim-offender relationship, a very different picture emerged. These early victimologists began to focus on how victims contributed—knowingly or unknowingly—to their own victimization.

Hans von Hentig: The Criminal and His Victim

Von Hentig was a criminologist who spent a great deal of time examining the factors that made an individual a criminal. However, he soon realized that studying only the criminal yielded an incomplete picture of crime. As a result, von Hentig began to focus on the factors that made an individual a victim.

In an early article, von Hentig (1940) asserted that the victim was often a contributing cause to the criminal act and that frequently the victim shared in the criminal responsibility of the wrongdoing. Therefore, he maintained that, “increased attention should be paid to the crime-provocative function of the victim” (von Hentig, 1948, p.450). He claimed that simply examining the outcome of a criminal event presented a distorted picture of who the “real” victim was and who the “real” offender was (Doerner & Lab, 1995). A closer examination of the circumstances surrounding the criminal act revealed that the victim often played a significant role in his or her own victimization.

Von Hentig developed 13 victim typologies based on social, biological, and psychological factors that he argued increased an individual’s propensity for victimization. He claimed that many victims became victims as a result of
characteristics or social positions beyond their control. Women, for example, “occupy a biologically determined victim status in sexual crimes” because men have the advantage of greater physical strength (von Hentig, 1948, p.442). Von Hentig also made distinctions between born victims and societal-made victims. Here, he categorized minorities and immigrants as “born victims” because they lacked legal equality with the majority and that cultural and racial prejudice might lead to increased victimization. Table 2.1 describes all 13 types of victims identified in von Hentig’s typology.

Von Hentig did not claim that all victims actively contributed to their own victimization nor did he claim that the victim is always the primary cause of his/her own victimization. However, what he suggested was that a victim’s characteristics may contribute to the victimization episode. According to von Hentig (1948, iii), “the victim is taken as one of the determinants, and that a nefarious symbiosis is often established between doer and sufferer.”

Von Hentig’s assertions were supported by statistical data, his professional experience, and unstructured observations. Therefore, his work was criticized because he failed to support his assumptions with empirical research. Even so, von Hentig’s work helped to highlight the importance of examining the role of the victim in understanding crime and criminal behavior.
<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Young</td>
<td>Children and infants</td>
</tr>
<tr>
<td>The Female</td>
<td>All women</td>
</tr>
<tr>
<td>The Old</td>
<td>Elderly persons</td>
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<tr>
<td>The Mentally Defective and Deranged</td>
<td>The feeble-minded, the insane, drug addicts, alcoholics</td>
</tr>
<tr>
<td>Immigrants</td>
<td>Foreigners unfamiliar with the culture</td>
</tr>
<tr>
<td>Minorities</td>
<td>Racially disadvantaged persons</td>
</tr>
<tr>
<td>Dull Normals</td>
<td>Simple-minded persons</td>
</tr>
<tr>
<td>The Depressed</td>
<td>Persons with various psychological maladies</td>
</tr>
<tr>
<td>The Acquisitive</td>
<td>The greedy, those looking for quick gains</td>
</tr>
<tr>
<td>The Wanton</td>
<td>Promiscuous persons</td>
</tr>
<tr>
<td>The Lonesome and Heartbroken</td>
<td>Widows, widowers and those in mourning</td>
</tr>
<tr>
<td>The Tormentor</td>
<td>An abusive parent</td>
</tr>
<tr>
<td>The Blocked, Exempted or Fighting</td>
<td>Victims of blackmail, extortion, confidence games</td>
</tr>
</tbody>
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**Benjamin Mendelsohn: Victimology**

Mendelsohn, a practicing attorney, has been credited by many as being the “father of victimology.” Like von Hentig, Mendelsohn examined the
relationship between the offender and the victim. He found that in most cases a
strong interpersonal relationship existed between the offender and the victim.
Mendelsohn (1956, p.108) examined the “correlation of culpability between the
victim and the delinquent.” Based on his findings, he developed a set of six victim
types that classified victims based on the “degree of guilt” that could be attributed
to the victim during the criminal act.

The first victim type was the “completely innocent victim” who exhibited no
provocative or contributory behavior prior to the offender’s attack. The second
type were “victims with minor guilt” or “victims due to ignorance.” These
individuals unwittingly did something that placed them in a position to be
victimized. Mendelsohn’s third category was the “victim as guilty as the offender”
and the “voluntary victim.” He classified suicide victims and individuals who are
injured while participating in vice crimes and other types of “victimless” crimes.

The next two categories were closely related. The “victim more guilty than
the offender,” which occurred when the victim provoked the criminal act. For
example, an individual who threw the first punch in a fistfight but ended up the
loser. The “most guilty victim” was an individual that was initially the aggressor
but due to circumstances beyond their control they ended up the victim. An
individual who attempted to rob a convenience store but was shot by the
storeowner instead is a good example. The last category was the “simulating or
imaginary victim.” Mendelsohn reserved this category for individuals who
pretended they had been victimized. These individuals might claim they have
been the victim of a robbery instead of admitting that they gambled away their paycheck.

Mendelsohn (1963) argued that victimology should be an independent field of study and a separate discipline from criminology. In Mendelsohn’s view, victimology is not a branch of criminology but is actually “the reverse of criminology.” Therefore, Mendelsohn proposed the following terminology for victimology: “penal-couple” as the criminal-victim relationship; “victimal” as the opposite of criminal; “victimity” as the opposite for criminality; and “potential of victimal receptivity” as meaning a victim’s unconscious propensity for being victimized.

Stephen Schafer: The Victim and His Criminal

Like von Hentig and Mendelsohn before him, Schafer examined the victim-criminal relationship. During the course of researching Florida homicide cases, Schafer (1964) discovered that official police records completely disregarded the victims’ participation in the crime. He believed that “the victim’s negligence, precipitative action, or provocation contributes to the genesis or performance of a crime” (Schafer, p.152).

Schafer conceptualized the idea of “functional responsibility.” He claimed that individuals in society have a functional role to “prevent a choice that results in criminal trespassing [and] that the victim’s role is to prevent his own victimization” (Schafer, 1964, p.144). Schafer also developed a victim typology that emphasized the culpability of the victim. Unlike von Hentig, who identified
potential victim risk factors, Schafer explicitly delineated the responsibility of the victim.

The first category was “unrelated victims,” which is a situation where the victim is simply the unfortunate target of the offender. According to Schafer, unrelated victims had no responsibility for their victimization. He also identified three other types of victims who were not responsible for their victimization—the “biologically” and “socially weak” and “political victims.” Schafer identified biologically weak individuals as the aged, the young, and any one who had a physical condition that would imply that they were appealing targets to the offender. The socially weak victims included immigrants, minorities, and/or individuals who are not well integrated into society and who may seem like “easy targets” to the offender. Political victims were persons who were victimized because they opposed those in power or were made victims in an effort to keep them in a subordinate social position. Slavery, for example, was an attempt by some to keep blacks in a subordinate social position.

Schafer also identified three types of victims who were at least partially culpable in their own victimization. The “precipitative victim” has some degree of responsibility because these victims left themselves open for victimization by being in the wrong place at the wrong time, dressing or acting in an inappropriate manner, or saying the wrong thing to the wrong person. The “provocative victims” share in the responsibility because the offender is reacting to some action or behavior of the victim. The last category is the “self-victimizing” individuals who
are involved with drug use, prostitution, gambling, or any criminal act that could be construed as self-destructive.

**Empirical Studies of Victim-Precipitation**

**Marvin Wolfgang: Patterns in Criminal Homicide**

One major criticism of victims’ theories was that criminologists had failed to present any empirical evidence to support their hypotheses. However, Wolfgang (1958) did just that in examining homicide data for Philadelphia between 1948 and 1952. He concluded that 26 percent of the homicides were victim-precipitated. Drawing on earlier victimologists, Wolfgang (1958, p.252) defined victim-precipitated homicides as those instances where the victim was:

> The first in the homicide drama to use physical force directed against his subsequent slayer. The victim-precipitated cases are those in which the victim was the first to show and use a deadly weapon, to strike a blow in the altercation—in short, the first to commence the interplay of resort to physical violence.

Wolfgang identified several conditions that were present during most victim-precipitated homicides. First, the victim and the offender were often familiar with one another or had some prior interpersonal relationship. The most common type of relationships included spouses, boyfriends or girlfriends, family members, close friends, and acquaintances. In short, victims were more likely to be murdered by someone they knew rather than by a stranger.
Additionally, Wolfgang (1958) found that alcohol consumption by the victim was a common component of victim-precipitated homicides. Wolfgang argued that alcohol may lead to lowered inhibitions by the victim and as a result render them more likely to voice their emotions or frustration. Further, intoxicated persons may, due to their impaired state, be unable to defend themselves during a physical confrontation.

Wolfgang (1958, p.265) summarized his findings by stating that:

Connotations of a victim as a weak and passive individual, seeking to withdraw from an assaultive situation, and of an offender as a brutal, strong, and overly aggressive person seeking out his victim, is not always correct.

Menachem Amir: Patterns in Forcible Rape

Several years after Wolfgang’s work, Amir (1971) embarked upon what has become known as one of the most controversial empirical analyses of rape. Amir applied Wolfgang’s concept of victim precipitation to rape incidents that took place in Philadelphia between 1958 and 1960. After examining the data, he concluded that 19 percent of all forcible rapes were victim-precipitated.

According to Amir (1971, p.266), victim precipitation is defined as:

Rape situations in which the victim actually, or so it was deemed, agreed to sexual relations but retracted before the actual act or did not object strongly enough when the suggestion was made by the offender(s). The term applies also to cases in risky situations marred with sexuality, especially when she uses what could be interpreted as indecency in language and gestures, or constitutes what could be taken as an invitation to sexual relations.

Amir outlined a variety of factors that contributed to rape precipitation. He found that seductive actions by the victim, wearing revealing clothing, using
risqué language, having a “bad” reputation, and being in the wrong place at the wrong time were all contributing factors to the rape scenario. According to Amir (1971), such behaviors by the victim could tantalize the offender to the point that he simply “misread” the victim’s intentions.

Amir also found that the use of alcohol, especially by the victim, was a primary element in precipitated rape. Further, he found that the risk of sexual victimization increased if both parties had been drinking.

Amir (1971, pp.275-276) concluded his findings by stating that:

> These results point to the fact that the offender should not be viewed as the sole “cause” and reason for the offense, and that the “virtuous” victim is not always the innocent and passive party. Thus, the role played by the victim and its contribution to the precipitation of the offense becomes one of the main interests of the emerging discipline of victimology.

**Summary**

The early works of von Hentig, Mendelsohn, and Schafer helped to highlight the importance of studying the behavior of the victim. Likewise, Wolfgang’s study of victim-precipitated homicide stressed the importance of the victim’s actions in explaining violent crime. His work also emphasized the more indirect ways in which individuals may contribute to their own victimization. And although Amir’s application of victim precipitation to the study of rape was received with less than favorable reviews, his research supported Wolfgang’s findings that victims sometimes indirectly contribute to their own victimization.

These early works provided the foundation for the analysis of victim-proneness, victim-precipitation, and victim-participation that is still evident in the
literature today. These early research efforts were influential in the emergence and development of current theories of victimization.

The Link between Victimization and Delinquency

Factors that Increase the Likelihood of Victimization

A significant body of research has been conducted in order to identify the demographic characteristics that are related to the risk of being victimized. Some of the most powerful predictors of victimization are age, race, and gender (Cohen, Kluegel, Land, 1981; Gottfredson, 1986; Hindelang, 1976; Hindelang et al., 1978). Contrary to public perceptions, adolescents are more likely to be victimized than elderly individuals (Bjarnason et al., 1999; Esbensen & Huizinga, 1991; Gottfredson, 1986; Lauritsen, Sampson, & Laub, 1991; Mawby, 1979; Miethe et al., 1987; Sampson & Lauritsen, 1990). In addition, researchers have consistently found that males are more likely to be victimized than females, especially by violent offenses (Bjarnason et al., 1999; Esbensen & Huizinga, 1991; Gottfredson, 1986; Hensley, Tung, Xu, Gray-Ray, & Ray, 1999; Mawby, 1979; Miethe, Stafford, & Long, 1987; Lauritsen, Sampson, & Laub, 1991; Sampson & Lauritsen, 1990). Additionally, non-whites consistently report higher rates of victimization than whites (Bjarnason et al., 1999; Gottfredson, 1986; Miethe et al., 1987; Singer, 1981). These demographic characteristics are also the most powerful predictors of crime and delinquency.
Lifestyle exposure theory and routine activity theory have been the most widely applied perspectives to account for individuals' risks and aggregate rates of criminal victimization. Both theories assert that one’s daily routine or lifestyle may increase the likelihood of victimization. Researchers using the British Crime Survey have measured lifestyles to include such things as the number of nights spent outside the home, the prevalence of alcohol use, the mode of transportation used, and the types of social entertainment one engages in (Gottfredson, 1984; Hough & Mayhew, 1983; Sampson & Lauritsen, 1990; Sampson & Wooldredge, 1987).

The “principle of homogamy” in lifestyle-exposure theory states that individuals who associate with, or come in contact with, members of demographic groups that contain a disproportionate number of offenders are more likely to be victimized (Hindelang et al., 1978). For example, adolescents are more likely to be victims of violent crime than elderly individuals because adolescents are more likely to associate with other young people, who are disproportionately involved in violent offending.

Other victimization factors that have been examined following the routine activity and lifestyles approaches include neighborhood characteristics (e.g., percent of single-parent households, density of multiple-unit housing) and residential opportunity structures (e.g., density of street activity). These factors have effects on victimization that cannot be explained by an individual’s demographic characteristics (Kennedy & Forde, 1990; Maxfield, 1987; Sampson & Wooldredge, 1987).
Jensen and Brownfield (1986) found that general deviance and violent offending may be considered a type of lifestyle conducive to an increased risk of victimization. Similarly, Bjarnason et al. (1999) found that adolescents who engage in delinquent and violent behaviors are disproportionately victimized. Additional studies support these findings that violent behavior has been consistently related to violent victimization (Esbensen & Huizinga, 1991; Lauritsen et al., 1991; Sampson & Lauritsen, 1990). Related research indicates that offenders and victims are often one and the same (Singer, 1981; Wolfgang, 1958). Stated another way, the factors that place one at risk for deviance and criminality are the same factors that place one at risk of victimization.

Individuals who drink excessively and use drugs are also more likely to become victims of a violent crime (Bjarnason et al., 1999; Sampson & Lauritsen, 1990). Alcohol and drug use may contribute to violent victimization in several ways. First, the mental and physical capacities of an intoxicated or impaired person are greatly diminished which may impair their ability to avoid dangerous situations or to defend themselves if the circumstance arises. Additionally, intoxicated individuals are more likely to engage in delinquent and violent behavior, which may result in their own victimization (Newcomb & McGee, 1989). Related research conducted by Jensen and Brownfield (1986) found a positive association between routine activities, such as “cruising” and going to parties and bars, and property and violent victimization among a high school sample.

Sparks (1982) suggests that offenders make the ideal victims because they may be victimized with relative impunity. Offenders are more likely to be
viewed by other potential offenders as exceptionally vulnerable since “offender-victims” are less likely to notify the police than “non-offender-victims” (Siegel, 1985). Offender-victims are also less likely to involve the police for fear of implicating themselves in criminal behavior. Further, many offender-victims feel that police will not believe that they have been victimized. Individuals whose lifestyles are characterized by violent offending increase their risk of victimization as a direct result of their own predatory offending and their association with other offenders (Sampson & Lauritsen, 1991).

Lersch and Sellers (2000) conducted a study of the impact of curfew on self-reported delinquency and victimization in Largo, Florida. The sample consisted of 1,029 middle school students and 625 high school students. The authors found that adolescents who violate curfew report higher involvement in minor rule-breaking activities and higher incidents of victimization than noncurfew violators.

The family and the relationship of its members has also been the focus of studies of victimization. A study conducted by Ladd and Kochenderfer-Ladd (1998) examined parental behaviors as predictors of peer victimization. First, the researchers examined intrusive demandingness, defined as the degree to which parents are intrusive and demanding in their interactions with their children. They also examined low unresponsiveness, which was defined as how quickly and consistently the parents tend to respond to their children’s behavior. Lastly, they looked at the closeness of the child-parent relationship, particularly intense closeness (i.e., emotionally intense engagement or overly close or enmeshed
relationships between the parent and child). Findings indicate that boys and girls were more likely to be victimized if they have parents who exhibited high intrusive demandingness or low responsiveness behaviors and that parent-child relationships characterized by intense closeness were associated with higher peer victimization in boys (Ladd & Kochenderder-Ladd, 1998). Similarly, Finnegan, Hodges, and Perry (1998) found that victimization for boys was related to perceived maternal overprotectiveness and that victimization was related to perceived maternal rejection for girls.

Factors that are Insulates to Victimization

Researchers have also studied the factors that act as insulates against victimization. Esbensen and Huizinga (1991), for example, found the lowest levels of victimization for juveniles who reported that they were not involved in delinquent behavior.

One study indicates that parental support is inversely related to violent victimization (Bjarnason et al). Stated another way, adolescents who have emotionally supportive parents are less likely to be victimized. Additionally, the educational level of the parent appears to be negatively related to victimization (Bjarnason et al., 1999). For example, adolescents whose parents have at least completed high school are less likely to be victimized than adolescents whose parents have not completed high school.

Having friends and being liked by one’s peers have also been found to insulate one against personal victimization (Hodges, Boivin, Vitaro, & Bukowski,
1999; Pellegrini, Bartini, & Brooks, 1999; Schwartz, Pettit, Dodge, & Bates, 2000). Conversely, students without a “best friend” were more likely to be victimized (Boulton, Trueman, Chau, Whitehead, & Amatya, 1999). Adolescents who have friends are seen as being accepted by others and are therefore less likely to be the targets of bullying, verbal abuse, and physical violence (Parker & Asher, 1987).

**Theoretical Integration**

Theoretical integration is defined as “the act of combining two or more sets of logically interrelated propositions into one larger set of interrelated propositions, in order to provide a more comprehensive explanation of a particular phenomenon” (Thornberry, 1989, p.52). However, criminologists and researchers have long debated whether theoretical integration truly increases our understanding of crime and criminal behavior. The present paper examines the question of whether theoretical integration is an efficient method to advance the understanding of delinquent behavior and victimization. The advantages and disadvantages of theoretical integration are discussed.

**Opposition to Theory Integration**

Theory integration has received some harsh criticism and opposition within the field of criminology. One of the most notable opponents is Hirschi, who points out that conventional theories of crime are by design oppositional. Hirschi
(1989, p.44) states that he does “…not favor efforts to link theories together unless it can be shown that they are for all intents and purposes the same theory.” Likewise, Akers (1989, p.24) asserts that integration is best suited for and should be limited to theories that “fit” together and warns that, “…integration of theories may result in mixing things that, like gas and water, simply won’t mix.” Additionally, some researchers have asserted that, “Since each integration theorist may use different criteria to construct his or her own comprehensive approach, what emerges in intergrational chaos” (Einstadter & Henry, 1995, p.309).

One major problem that integrated theories must overcome is the assumptive differences of the theories that are merged. For example, differential association and social control make very different assumptions about what motivates individuals to commit delinquent acts. Differential association assumes that individuals are “social blanks” until they are socialized into conforming or deviant behavior by significant others (i.e., parents and peers). Conversely, social control assumes that individuals are naturally motivated to commit criminal acts unless they are constrained. As a result, some type of compromise has to be reached before integrating such theories. The issue is whether to adopt one assumption over the other or to adopt both assumptions. Some researchers suggest that the latter solution is logically unsound and therefore inappropriate (Hirschi, 1979). However, the former solution introduces another problem—which assumption should be adopted. The dilemma lies in the fact that it is predictions derived from the theory that are tested, while the underlying assumptions remain
untested. Thus, whether we adopt a learning or control perspective, for example, evidence is not garnered to support or refute the blank slate versus deviance motivated state of nature.

The difficulty of integrating theories is further evident with respect to levels of explanation. Specifically, some theories explain delinquent or deviant behavior at the micro-level (i.e., individual level), while others do so at the macro-level (i.e., societal level). In order to overcome these explanatory differences, two alternatives are available. First, one may accept the differences and integrate across all levels. This approach is seen as one of the major advantages to theoretical integration. Secondly, one may chose to “translate” the theoretical concepts or measurements to a more common level. However, there is a fundamental problem with this approach in that the theoretical concepts and propositions have not been tested (Thornberry, 1989).

Another concern with regards to theoretical integration is what variables to include as representations of the different theories in the model. For example, if a comprehensive model utilizing psychological, biological, and sociological theories were integrated, the number of variables to test this model would be extremely large. To test such a theory, a very large sample would be required in order to account for the influence of each variable or group of variables in the model (Shoemaker, 1984).
Proponents of Theory Integration

Proponents of theoretical integration concede that integration is difficult but contend that the task is both worthy and feasible (Akers, 1987; Elliott, 1985; Meier & Miethe, 1990; Thornberry, 1989). Akers (1989) notes that the insistence by some on keeping theories separate and competing creates a whole new set of problems. First is the belief that the assumptions of every theory are oppositional when they are not. Most theories draw or borrow from previous theories; therefore, it could be argued that most theories are “integrated” or “synthesized” to a certain degree. Sutherland, for example, combined social disorganization and culture conflict in his theory of differential association. Matza’s theory of drift and neutralization expanded the theory of differential association. Hirschi drew from the works of Reiss, Nye, Toby, and Reckless in formulating his social bond theory. There have been several other attempts to present multiple theoretical descriptions of crime and criminal behavior (Aultman & Wellford 1979; Buikhuisen & Mednick, 1988; Empey, 1982; Pearson & Weiner 1985). Furthermore, even when the assumptions of theories (i.e., their motivational process) are very different, it does not necessarily preclude their integration (Elliott, 1985).

Agnew (1995) identifies four motivational processes from the leading theories of social control, social learning, differential association, and strain. He argues that all four motivational processes may be at work at any given time. For example, feelings of anger or disappointment (strain) may foster the belief that
crime is justified (learning) and may increase one’s sense of autonomy reducing concern with external and internal sanctions (control) (Agnew, 1995). Therefore, it is not necessary for the integrationist to choose one motivation over the other but to consider them all.

In further defense of integration, researchers note that theory competition suffers from several weaknesses. Elliott (1985) outlined a number of reasons why theory competition should be abandoned. First, single theory proponents claim that by limiting their efforts to one theory, a series of hypotheses can be developed for testing. If one theory’s hypotheses or predictions are accepted, the hypotheses of the competing theory are rejected. The obvious problem here is that important contributions made by the competing theory may be missed or ignored.

To further complicate matters, many competing theories often predict similar outcomes with regard to their individual hypotheses. Researchers have noted that the effect of some independent variables on crime can be explained in terms of more than one theory (Agnew, 1995). The different terminologies used by leading theories have led to the belief that they are focusing on different independent variables (Agnew, 1995). For example, control theory focuses on the absence of restraints and lack of controls as precursors to delinquency. Differential association emphasizes that one’s associations may lead to the adoption of criminal beliefs, which may lead to deviant behavior. However, both theories recognize that a breakdown in early socialization can lead to delinquent behavior. Therefore, a closer inspection of the different theories indicates that the
independent variables are often measuring the same or similar concepts (Agnew, 1995).

Additionally, the research designs used to test single theories/hypotheses are less than perfect. As a result, the acceptance or rejection of a hypothesis or theory is questionable at best. As noted by Elliott (1985, p.126):

Researchers came to recognize that these crucial tests rarely provided evidence that justified a conclusion that one hypothesis was correct and the other incorrect. At best, these tests provide evidence that one hypothesis was more plausible or more powerful than the other...The observation that both hypotheses might be correct and might account for independent portions of the variance in crime was typically overlooked by researchers focusing upon crucial tests, because the objective was to prove one theory right and the other one wrong.

Although testing integrated theories may be plagued by inherent problems, it can be argued that they are attempting to expand the focus of criminology by increasing the variance in crime that is explained. Single theories have failed to adequately explain deviant behavior. Specifically, Elliott (1985, p.125) claims that, “the level of explained variance attributable to separate theories is embarrassingly low.” Social bond theory, for example, does a better job of explaining minor offenses than serious ones; whereas, learning theories provide a more powerful explanation of serious than for nonserious offenses (Aultman, 1979; Burkett & White, 1974; Elliot et al., 1979; Johnstone, 1981; Meade & Marsden, 1981). Therefore, it seems that theory integration is a viable alternative to single theories in explaining criminality.
Methods of Theory Integration

One type of theory integration is the side-by-side method (i.e., the horizontal approach). This simplistic approach consists of listing types of deviant or criminal behavior by the theory that best explains the behavior in question (Liska, Krohn, & Messner, 1989). The side-by-side method relies heavily upon the use of typologies. Put another way, criminals are grouped into categories in an effort to avoid an infinite number of behaviors that are attached to various theories. However, one major problem with this method is that the categories are not mutually exclusive. For example, burglars and murderers may fit into more than one category and data suggests that there is considerable diversity among offenders.

The side-by-side approach has been criticized because of its failure to reconcile the incompatibilities between theories and that the gains in explanatory power are the result of using a more comprehensive definition of criminal behavior (Hirschi, 1979). However, Elliott (1985) argues that nothing precludes the integration of theories with disparate assumptions. Further, several studies refute Hirschi’s claim that increase in explained variance is the result of using a more inclusive definition of the criterion being measured (Akers & Cochran, 1985; Elliott, 1985; Meade & Marsden, 1981).

Another integrative approach is the end-to-end or sequential method, which describes a developmental sequence leading to delinquent or criminal behavior (Hirschi, 1979). Using this framework, theories are linked together by
conceiving the independent variable in one theory as the dependent variable in
the other. This type of integration requires specific causal factors to be ordered
on a continuum from most proximate to least proximate (Jessor & Jessor, 1973).
In other words, causal factors are ranked based on their direct and indirect
effects on delinquent or deviant behavior (Liska et al., 1989).

The problem with this type of integration is that when variables are placed
in sequential fashion in an effort to explain delinquency and/or criminal behavior,
the last factor examined may appear to be the only correct one. Specifically,
Hirschi (1979, p.34) notes that “an overall increase in the ability to account for the
final dependent variable is not expected because the last theory in the sequence
presumably absorbs the predictive power of those preceding it.”

The up-and-down model or deductive model of integration is yet another
option. Here, broad propositions of one theory are reduced in focus and are
compared to or used with other, more reduced individual perspectives. This type
of integration is called “theoretical reductionism” or “theoretical synthesis.” Hirschi
(1979, p.36) argues that the up-and-down model is defective because there is “a
marked tendency on the part of the integrationists to accept without question the
truth of any partial theory their general theory subsumes.”

The cross-level approach is similar to the up-and-down approach in that it
combines micro and macro level perspectives in an effort to increase explanatory
power. This type of theoretical integration is highly complex but is seen as a
necessary step towards improving our current understanding of deviance (Little,
1989).
However, Farnworth (1989, p.99) notes that, “prediction in itself is not a sufficient standard for good theory, or a convincing argument for theory integration.” As noted by Elliott (1985), successful theory integration should reproduce a reformulated model that (1) can be justified on logical grounds, and (2) preserves the major causal assumptions of the beginning theories.

Attempts at Integrating Criminological Theories

There have been several attempts at theoretical integration, especially since the 1970s. The following is a discussion of some of those approaches.

An Integrated Theoretical Perspective

Elliott et al. (1979) incorporate components of strain (anomie), social learning, and social control theories into a single explanatory model. This model “avoids the class bias inherent in traditional perspectives and takes into account multiple causal paths to sustained patterns of delinquent behavior” (Elliott et al., p.3). Central to this integrative approach is the assumption that the causes of crime and delinquency are multiple. Therefore, the causal processes leading to criminal behavior are viewed as more varied and complex than those posed by traditional explanations.

The theoretical model proposed by Elliot and his colleagues is an example of an end-to-end approach. First, Elliot and his colleagues combine strain and social control theories. They note that adolescents have different early socialization experiences, which results in varying “degrees of commitment to
and integration into conventional social groups” (Elliot et al., p.9). Specifically, children will develop varying levels of attachment to their parents, teachers and other adults. The strength of the attachment is related to the individual’s commitment to and involvement with conventional activities such as school, church, and community activities. Thus, early socialization determines whether or not individuals become integrated into conventional society. If individuals are inadequately socialized, this situation creates a source of strain. The authors argue that delinquency will be at its highest when an individual experiences strong strain and weak control. They claim that strain is one of the sources of weak social controls (i.e., strain weakens an individual’s bonds to conventional others).

Second, Elliott et al. (1979) integrate social learning and social control theories. The authors assert that individuals can form strong bonds to conventional or deviant groups. Deviant behavior is more likely to occur when individuals are bonded to deviant groups and have weak bonds to conventional groups. Conversely, individuals with strong bonds to conventional groups and weak bonds with deviant groups are less likely to participate in delinquent behavior.

Finally, the researchers integrate strain, social learning, and social control theories. Elliot and his colleagues propose a single line of causation that includes variables from all three theories. Strain, inadequate socialization, and social disorganization lead to weakened social bonds, leading to the formation of delinquent bonds, which leads to delinquent behavior.
An Integrated Structural-Marxist Theory

Colvin and Pauly (1983) present a theoretical model that attempts to explain serious patterned delinquent behavior. The authors examine the effects of a capitalist economy on work situations, family socialization processes, and delinquency. Colvin and Pauly argue that delinquency is more directly caused by the patterns of parental socialization, family relationships, and subsequently in adolescent peer associations. Family relations are directly shaped by the occupational positions of parents, which are influenced by the economic system or capitalism.

Individuals in the workplace develop different attitudes toward authority. Workers may accept and respect authority or they may come to resent it, which results in alienation. Individuals who perceive power structures as extremely coercive may experience feelings of intense alienation. What the worker experiences in the work place is carried over into the home and consequently affects the socialization process of the children within the family, school, and peer group. Colvin and Pauly (1983, pp.514-515) explain that:

...Family compliance structures are class differentiated and that the parent-child relations are profoundly shaped by parents' encounters with workplace compliance structures. The relations of workplace control, which take various class-related forms under capitalism shape...the behavior of parents...who reproduce control relations with children. The child does not arbitrarily enter a peer group but selects, and is selected for entry, based on the previous socialization experiences. Peer groups...can reinforce either conventional or delinquent behavior.
Other Scholarly Efforts at Integration

Over the years, there have been several other notable approaches to theoretical integration. Braithwaite (1989) proposed a theory of reintegrative shaming, which drew on labeling, subcultural, opportunity, control, differential association, and social learning theories. He argues that reintegrative shaming occurs when a violator is shamed into knowing what he/she has done is wrong but is ultimately accepted back into the conforming group.

He claims that individuals who are bonded to conventional society are easy to shame back into conforming behavior. Conversely, if individuals are labeled, that is, not accepted back into the group, he or she is more likely to participate in a deviant subculture, which leads to delinquent behavior. Braithwaite also examines delinquency from a structural level. He asserts that urbanization and mobility have led to the decline of communitarianism (i.e., interdependency among individuals in a culture), which leads to a lack of stigmatization. If there is a lack of stigmatization, reintegrative shaming will not occur because it is ineffective. This results in blocked opportunities, formation of subcultures, presence of illegitimate opportunities, and higher crime rates.

Tittle (1995) proposed a general theory of deviance known as control balance theory that integrates components of anomie, differential association, control, Marxian conflict, labeling, deterrence, and routine activities theory. The key assertion of control balance theory is that “the amount of control to which an individual is subject, relative to the amount of control he or she can exercise, determines the probability of deviance occurring as well as the type of deviance
likely to occur” (Tittle, p.135). Individuals with a “balance ratio” are more likely to engage in conforming behavior and avoid involvement in deviant behavior.
Attempts at Integrating Victimization Theories

Structural-Choice

Miethe and Meier (1993) integrated lifestyle-exposure and routine activity theories into a “structural-choice” theory of victimization that emphasizes both macro-level and micro-level processes. Two primary propositions were derived from the lifestyle-exposure and routine activity theories. First, one’s lifestyle or routine activity patterns help to create a “criminal opportunity structure” by increasing the contact between the offender and victim. Second, the level of guardianship and the subjective value of the potential victim help to determine the crime target. Here, proximity and exposure are conceptualized as structural features because they help pattern the social interactions and may predispose certain individuals to potentially dangerous situations. Attractiveness and guardianship represent the “choice” aspect because they help to determine the selection of a suitable crime target. Structural-choice theory states that in order for victimization to occur these four factors (i.e., proximity, exposure, attractiveness, and guardianship) must be present (Miethe & Meier, 1993).

This model of victimization makes a distinction between “predisposing” and “precipitating” factors. Both factors assume that living in particular areas may result in increased exposure to dangerous situations. However, whether or not a person becomes a victim is the result of their perceived subjective utility over alternative targets. Stated another way, the offender’s perception is a key factor
when he or she makes decision that one victim is a more suitable target than another.

The structural-choice perspective emphasizes context-specific effects on the risk of predatory crime (Miethe & Meier, 1993). For example, target attractiveness and guardianship may have a relatively small impact on the risk of victimization for individuals living in areas with low criminal opportunity structure (i.e., few offenders) because these areas are not favorable to criminal offending. Conversely, if an area has a high criminal opportunity structure all residents may be at increased risk for victimization regardless of their perceived target attractiveness or level of guardianship.

The Prospects of Integrating Theories of Victimization and Offending

The advancement of theories of victimization necessitates the advancement of theories of offending (Miethe & Meier, 1993). However, up until now these two domains have been viewed as separate even though they are attempting to fulfill the goal of explaining criminality. Miethe and Meier (1993, p.492) state that, “The theoretical objective of criminology should be identified as the development of defensible theories of crime, not just theories of victimization or just theories of offending.”

Previous efforts at theoretical integration in criminology have received mixed reviews. There are those that are opposed to integration and still others that embrace the idea. Many of those who are opposed to integration cite the “irreconcilable differences” of the theories as the primary reason for their
opposition. However, this argument is less than convincing with respect to integrating theories of victimization and criminality. Specifically, theories of criminality and victimization make no incompatible assumptions about the nature of crime or social reality. Further, theories of criminality do not make any explicit assumptions about victim processes nor do victim theories make any restrictive assumptions about offenders (Miethe & Meier, 1993). Thus, theories of victimization and offending do not have to overcome the obstacles inherent in integration of some combinations of theories of criminality.

In order to develop a more complete crime theory and maximize explained variance, it is necessary to examine both the offenders and the victims. The primary purpose of crime theories has been to determine what motivates the offender to commit a criminal act but they ignore any contributory actions of the victims. Alternatively, theories of victimization have sought to identify characteristics that increase an individual’s propensity to be victimized but have ignored the sources of criminal motivation. Therefore, the integration of theories of victimization and offending have the potential to facilitate and substantially improve current understanding of crime and delinquency.

The Present Study

The integrated theoretical model proposed here includes components of social control, differential association, routine activities, and lifestyle-exposure theories. Following is a discussion about the history of each theory and their underlying assumptions. The current study asserts that the integration of these
theories will yield a more complete explanation of both delinquency and the victimization of juveniles.

Theories of Delinquency

Social Control Theories

Unlike learning theorists, control theorists assert that humans are rationally calculating individuals who seek to satisfy their own self-interest. Control theories also assume that people are motivated to commit deviant acts to obtain these interests, unless constrained. Thus, for control theory it is not deviance and crime that needs to be explained but conformity.

Early Control Theories

Reiss (1951) presented a theory of “personal” and “social controls.” He defined personal control as “the ability of the individual to refrain from meeting needs in ways which conflict with the norms and rules of the community” (Reiss, p.198). Social control was defined as “the ability of institutions to make norms or rules effective” (Reiss, p.198). He claimed that primary groups were the basic institution for the development of personal controls and the exercise of social control over the child.

Toby (1957) argued that everyone has a natural inclination towards delinquency. He went on to say that the greater someone’s “stake in conformity”
(i.e., an investment in something they did not want to lose) he/she would be less likely to deviate. For example, an individual who has invested a great deal of time building a career may lose their job if they were to steal from the company. The costs of possibly losing their investment may not be worth the risk.

Nye (1958) emphasized the importance of the socialization process in the development of conscience as a feature of internalized control over deviant behavior. He also stressed the importance of affectional identification with significant others such as parents. Nye focused on the family as the primary agent of social control. If the family was adequately providing for all of the individual's needs, only a minimal amount of control would be necessary because the individual would have no need to violate the law to fulfill his/her needs. Nye's assertions were similar to those of Reiss (1951) who advocated a psychological emphasis on an individual's internal dynamics as the basic source of control.

Reckless (1961) developed the theory of containment in an effort to explain all crime. Reckless believed that containment theory had a distinct advantage over subculture and learning theories in that it explained conformity as well as deviance. Reckless (1961) identified four types of containments: 1) outer (social pressures or pulls); 2) external; 3) inner containment; 4) inner (psychological) pushes. External pressures are those circumstances or situations beyond the control of the individual. Inner pushes are those that are those within the individual. Factors that push an individual into deviance must be balance by containments. Reckless believed that it was the dynamics involved in the
interaction of these forces that determined whether or not delinquent behavior would result.

**Social Bond Theory**

In his book, *Causes of Delinquency*, Hirschi (1969) reversed the question that some theorists had been posing about the causes of crime. In the past, theorists asked, “Why do people commit crimes?” Hirschi posed the question, “Why do people conform?” (1969, p.34). Hirschi adopted a Hobbesian view of human nature in the formulation of his social bond theory (i.e., the assumption that people are naturally inclined to nonconformity unless they receive protective socialization in the form of controls.) According to Hirschi, conformity is achieved through socialization or the formation of a bond between the individual and society that is comprised of four elements: attachment, commitment, involvement and belief.

Hirschi (1969, p.18) states that, “The essence of internalization of norms...lies in the attachment of individuals to others.” Attachment is the affectionate ties that an individual forms to significant others and their concern about other’s feelings and the expectations of their own behavior. Hirschi notes that individuals form attachments to three primary groups: peers, school, and parents, the latter attachment having the greatest importance. Parents act as primary role models and teach their children sociably acceptable behavior. If a child is affectionately attached to his/her parents, he/she will not want to do anything to disappoint them.
Commitment refers to the degree to which an individual’s self-interest has been invested in a conventional activity. Hirschi’s concept of commitment has also been called one’s “stakes in conformity.” Hirschi argued that the greater one’s stakes in conformity the more one has to lose and as a result these individuals are less likely to deviate from conventional norms.

Involvement refers to participation in conventional activities and the investment one has in conventional lines of action (i.e., time and energy spent in pursuit of conventional activities). Involvement may take the form of recreational activities, school athletics, or spending time with family. The assumption here is that individuals who are involved in conventional activities are less likely to deviate from societal norms because they are left little time to deviate.

Belief is the acceptance of the validity of moral rules of the central social-value system. Acceptance of social rules is a central component of social control theory because individuals who hold beliefs that are similar to those of the conventional norms of society are less likely to become delinquent. Hirschi (1969, p.26) argues that, “delinquency is not caused by beliefs that require delinquency, but is rather made possible by the absence of beliefs that forbid delinquency.” In other words, if someone’s beliefs in societal rules are not strong, or are weakened, individuals are more apt to commit delinquent acts. Consequently, the strength of belief is a measure of the acceptance of conformity.
Social Learning Theories

Learning theorists assume that individuals are rational, goal-seeking actors. Social learning and differential association theories also assume that individuals start out as “blank slates” until they are socialized into conforming social roles or into deviant roles. In addition, neither theory makes a distinction between offenders and nonoffenders in the process of learning (i.e., individuals learn criminal as well as noncriminal behavior in the same manner).

Differential Association

Central to the development of differential association theory is that Sutherland was attempting to explain all crime and delinquency. Sutherland rejected psychological and biological explanations of crime and opted for a sociological account in the form of learning.

Sutherland drew upon three major perspectives in forming his theory of differential association. First, he drew from George Herbert Mead’s symbolic interactionism, which is based on three premises: 1) human beings act toward things on the basis of the meanings that the things have for them, 2) the meanings of such things is derived from the social interaction that one has with peers and; 3) meanings are handled in, and modified through an interpretative process used by the persons in dealing with things he or she encounters (Blumer, 1969). Mead argued that it is the “meanings” that people derive from
their experiences that determine behavior. He claimed that these “meanings” help people to “define” their particular situation. It is due to these definitions that people in very similar circumstances may act in very different ways. Drawing from Mead’s work, Sutherland argued that the key factor in determining whether or not people will violate the law is the meaning they give to the social conditions they experience, not the actual conditions. Therefore, whether or not a person violates the law is dependent upon how they define their circumstances.

Sutherland also drew from Thorsten Sellin’s culture conflict theory. Like Sellin, Sutherland argued that different groups within society have different value systems and beliefs about the way people ought to behave and these differences lead to culture conflict. In turn, culture conflict leads to social disorganization, a term Sutherland borrowed from Clifford Shaw and Henry McKay. He later amended the term “social disorganization” to “differential social organization.” According to Sutherland, “…crime is rooted in the social organization and is an expression of that social organization” (1947, p.8). In other words, Sutherland and Sellin conceptualized modern society as being permanently disorganized due to a lack of common values, the result being culture conflict (Kornhauser, 1978).

There are two central components to differential association theory: the content or what one learns and the process or how one learns. Sutherland asserts that the process of learning is the same for all behaviors, but that the content may be very different. In his book, *Principles of Criminology*, Sutherland (1947) specifically outlines the principles of differential association:
1.) “Criminal behavior is learned” (Sutherland, 1947, p.6). Sutherland’s assertion distinguishes differential association from earlier biological perspectives that he was attempting to dismiss. He argues that criminal behavior is learned in the same manner as any other behavior or activity.

2.) “Criminal behavior is learned in interaction with other persons in a process of communication.” This means that learning moves far beyond imitation and that others must be actively involved with the individual if he/she is to learn criminal behavior. Therefore, a person does not become criminal by merely being exposed to a criminogenic environment.

3.) “The principle part of the learning of criminal behavior occurs within intimate personal groups.” This assumption emphasizes the role of significant others (i.e., parents and peers) in learning criminality. Due to the closeness of the relationship, parents and peers impact the behavior of an individual more than outside sources such as the cinema or media.

4.) When criminal behavior is learned, the learning includes (a) “techniques of committing the crime, (b) the specific direction of the motives, drives, rationalizations, and attitudes.” Assuming that criminal behavior is learned, it would be logical to conclude that the “techniques” for committing a crime are learned in a similar manner. Additionally, individuals must learn how to neutralize
and/or rationalize their criminal behavior and the skills necessary to carry out deviant acts.

5.) “The specific direction of motives and drives is learned from definitions of the legal codes as favorable or unfavorable.” Individuals interact with people and are exposed to situations that support acceptance of the existing legal codes or reject them in support of law violation. As a result, individuals experience “culture conflict.”

6.) “A person becomes delinquent because of an excess of definitions favorable to violation of the law over definitions unfavorable to the violation of the law.” The assumption here is that individuals become criminal because definitions favorable to violation of the law exceed the number of definitions unfavorable to violation of the law.

7.) “Differential association may vary in frequency, duration, priority and intensity.” As the frequency of exposure to criminal definitions increases, so does a person’s propensity to become criminal. Similarly, as the duration of the exposure increases, criminality increases. Priority and intensity refer to the age at which the exposure to criminality occurs and the significance attributed to each definition. The assumption here is that the younger the individual and the greater the status of the deviant role model, the
chances of violating the law increase. Overall, if these factors are high, then the probability of choosing the behavior is also high.

8.) “The process of learning criminal behavior by association with criminal and anti-criminal patterns involves all of the mechanisms that are involved in any other learning.” Individuals that participate in both conventional and criminal primary groups use the same process to learn behavior in both.

9.) “While criminal behavior is an expression of general needs and values, it is not explained by those general needs and values since non-criminal behavior is an expression of the same needs and values.” Sutherland’s assertion refutes social structural theories of crime causation. Sutherland asserts that attempts to explain criminal behavior in regards to “general drives and values” is pointless since they explain both criminal and non-criminal behavior (Sutherland, 1947, p.8). For instance, all individuals may strive for “social status” and “money” but these drives do not explain why some people seek to attain these goals through legitimate means and others seek them through illegitimate means.
The origins of routine activities theory can be traced to the human ecology theory of Hawley. Ecology was originally a branch of biology that was applied to the study of the relationships between plants and animals in their natural environment (Vold, Bernard, & Snipes, 1998). Plants and animals were seen as being interrelated and dependent upon one another. Hawley extended the concept of ecology in an effort to explain human behavior.

Hawley’s theory was based on how social structure in a given community functioned and interacted with all other components within the community. Prior to the work of Hawley, criminologists had focused on the spatial aspects of crime. He hypothesized that the interaction between individuals not only occurs in space but also in time. Thus, his theory of human ecology included spatial and temporal aspects of human activity.

Hawley theorized that within any structured community there are three interrelated conditions which account for temporal sequences: 1) rhythm or the pattern in which events generally occur; 2) tempo which refers to the quantitative number of events which occur in a given time; and 3) timing which is the interdependent order in which activities occur (Hawley, 1950). This work provided the foundation for future research in the area of human ecology by elevating the
traditional view of society to that of a spatial and temporal analysis of communities.

According to Cohen and Felson (1987), three factors must be present in order for predatory crime (i.e., offenses involving direct contact between the offender and victim/target) to occur: 1) a motivated offender; 2) a suitable target; and 3) the absence of capable guardians. This approach “considers how everyday life assembles these three elements in space and time” (Felson & Cohen, 1980, p.391). When these three elements are present, crime occurs.

Individuals (i.e., offenders) are seen as rational and calculating. The role of perception on the part of the potential offender plays a significant part in whether or not crime will occur. For example, if an offender has a low perception of the probability of apprehension and punishment a criminal outcome is likely. The belief that punishment is uncertain, negotiable, or of low severity also increases the likelihood of a criminal act. Additionally, if individuals have relatively low expectations of gains from legitimate work and high expectations of gains from illegitimate activities crime will likely result.

A suitable target is someone or something that has a perceived value from the viewpoint of the offender. The visibility of the potential target may increase or decrease the likelihood of victimization. Individuals who are highly visible to others may draw attention to themselves as possible targets. A target must also be accessible in order for a criminal act to take place. If an individual is highly accessible, the greater the chance he/she will become a target. Therefore, the
The most suitable target is someone or something of high value, high visibility, and ready accessibility (Felson, 1998).

The third component, capable guardians, is usually “ordinary citizens” who protect one another or property as they go about their daily routine activities. As noted by Felson (1998), the most subtle of the three minimal elements of predatory crime is guardianship, because it occurs accidentally when people engage in daily routines together or when people are in close proximity to their possessions.

Therefore, a predatory crime is most likely to take place when a perpetrator converges in time and space with a target/victim in the absence of a guardian (Felson, 1998). The convergence of the offender and victim is a function of their routine structure of everyday life. According to Felson (1998, p.21), the routine activity approach “broadens criminology to consider not only the offenders but also the nonoffenders as crucial participants in crime production and prevention.”

**Lifestyles-Exposure Theory**

Hindelang et al. (1978) developed the lifestyle-exposure approach as one of the first systematic theories of criminal victimization. The primary assumption of lifestyles-exposure theory is that demographic differences in the probability of victimization are associated with differences in lifestyles. According to Hindelang et al., one’s lifestyle is a major determinant in the risk of criminal victimization. Here, lifestyle refers to “routine daily activities, both vocational activities (i.e.,
work, school, house keeping, etc.) and leisure activities” (Hindelang et al., p.
242).

Each individual is subject to certain role expectations and social structural
constraints that largely determine his/her lifestyle. Hindelang et al. (1978) note
that both ascribed and achieved status characteristics (i.e., age, gender, race,
income, martial status, education, and occupation) carry with them common
expectations of appropriate and inappropriate behaviors. Children, for example,
are not expected to exhibit the same level of emotional maturity as an adult.

Structural constraints prevent and/or limit the number of behavioral
choices available to each person. Acceptance of these cultural and structural
expectations leads to established routine activities and associations with others
who are in similar circumstances (Miethe & Meier, 1993). Individual lifestyles and
associations may lead to increased exposure to dangerous situations and the
likelihood of victimization.

Individuals learn skills and attitudes in order to operate within their role
expectations and social constraints. This means that people also learn and adopt
attitudes and beliefs about crime and the fear of crime. Once these attitudes are
learned, individuals incorporate them into their routine activities, which
sometimes lead to limiting certain risky behaviors. For example, if a person
believes he/she is more likely to be assaulted at night, he/she may choose not to
go out at night.

Hindelang et al. (1978) lists several conditions that must be met before a
personal victimization can occur. First, the victim and offender must intersect in
time and space. Second, a dispute/claim must arise between the victim and offender in which the offender sees the victim as a suitable target of the criminal act. Third, the perpetrator must be willing and able to use force or stealth to accomplish his/her desired goal. Last, the offender must view the situation as beneficial to use or threaten force (or stealth) in order to accomplish his/her goal. The probability of all of these circumstances being met is associated with the behavioral patterns or routine activities of the individual members of society.

Lifestyle-exposure theory has many similarities with the routine activity perspective. Both emphasize how patterns of routine activities or lifestyles in conventional society provide opportunity structure for crime. Both theories also minimize the role of the offender and other aspects of criminality in understanding one's risk of victimization (Miethe & Meier, 1993). Additionally, these theories represent the wider “criminal opportunity” perspective because they both emphasize how criminal opportunities are created by the routine activity patterns of everyday life (Cohen, 1981; Cohen & Land, 1987).

One of the most fundamental differences between the two theories is that routine activity was developed to account for changes in crime rates over time whereas lifestyles-exposure theory was developed to account for differences in victimization across social groups. Additionally, there are notable differences in the operationalization of the independent variables. Empirical tests of the routine activity focus on guardianship (i.e., working outside the home, living alone, etc.) and target attractiveness (i.e., family income, ownership of expensive property, etc.) The third variable of “motivated offenders” is difficult to operationalize
because victims' surveys include very little, if any information about offenders. Therefore, many researchers have accepted offender motivation as a constant when testing routine activities. Additionally, empirical tests of the lifestyle perspective have examined a number of factors as lifestyle indicators such as nights spent outside the home, the types of social entertainment engaged in (e.g., going to restaurants, the movies, and sporting events), the modes of transportation used, and the extent of alcohol use (Gottfredson, 1984; Hough & Mayhew, 1983; Sampson & Lauritsen, 1990; Sampson & Wooldredge, 1987).
CHAPTER 3
METHODOLOGY

An Integrated Model of Delinquency and Victimization

An Examination of Criminal Motivation

A major obstacle to theoretical integration of control and differential association theory is their assumptive differences. These theories make opposing assumptions about the motivating processes or causes leading to criminal behavior. Researchers have noted that these differences do not necessarily preclude their theoretical integration (Agnew, 1995; Elliott et al., 1979). Additionally, research indicates that “criminal motives” have been largely ignored in empirical research but their examination is critical in forming a more complete theory of crime (Agnew).

Agnew (1995) identifies four motivational processes from the leading crime theories that may lead to deviant/criminal behavior: rational evaluation of crime (learning), moral evaluation of crime (differential association), negative affect (strain), and level of freedom (control). Additionally, he offers a possible solution for their integration. Specifically, he notes that:

If the leading crime theories are correct, we would expect all four motivational processes to play some role in explaining the effect of these independent variables on crime, although the importance of these processes might vary by independent variable, crime type, and perhaps by group (Agnew, p. 390).

In other words, some processes may contribute to one another and/or interfere with one another. For example, individuals experiencing frustration (strain) may
feel crime is justified (differential association) and as a result, feel free to ignore internal and external controls (social control).

This model argues that the motivational processes of both social control and differential association theory may be operating in conjunction with one another. The focus of control theory is effectiveness of early socialization. Specifically, control theory claims that inadequate socialization (i.e., failure to internalize conventional norms) will result in weakened bonds, freeing the individual from internal and external controls. When internal and external controls are absent or low, individuals feel free to commit delinquent acts. However, a major criticism of control theory is that weakened bonds and the absence of restraints cannot alone account for why some people participate in delinquent behaviors and others do not (Elliott et al., 1979). As a result, other motivational processes should be considered.

Like control theory, differential association emphasizes the importance of early socialization. However, differential association goes a step further than control theory, noting the importance of both the content and effectiveness of early socialization. Sutherland (1947) argues that individuals who are exposed to criminal patterns are more apt to adopt beliefs favorable to crime. Therefore, the assumptions of differential association seem a logical extension of those espoused in control theory. Specifically, individuals with weakened bonds and the absence of restraints will not deviate unless they are exposed to criminal patterns and adopt beliefs favorable to crime (Sutherland et al., 1992).
An Integrated Control-Differential Association Perspective

According to Hirschi, the formation of “bonds” between the individual and society is an essential component of conformity. The formation of bonds begins within the family environment in the form of attachment. Hirschi defines attachment as the affectionate ties that an adolescent forms with significant others. Individuals attach to three primary groups: parents, peers, and school. However, parental attachment is the most important because parents act as role models from whom adolescents learn societal values and norms (Wiatrowski, Griswold, & Roberts, 1981). Additionally, early socialization experiences will affect with whom adolescents form subsequent attachments (Elliott et al., 1979; Hirschi, 1969).

Attachment has a negative effect on crime because individuals who are significantly attached to others do not want to hurt or disappoint those for whom they care. Therefore, individuals who form strong, positive parental attachments increase the likelihood of attaching to prosocial peers and school. Conversely, weakened attachment to one’s parents may result in attachment to delinquent peers and involvement in deviant behavior and a dislike of school.

Like control theory, differential association focuses on attachments to conventional others and predicts that such attachments have a negative effect on criminality. Akers (2000) asserts that Hirschi’s concept of attachment can be subsumed under the concept of “intensity” of association specified in differential association theory. Intensity refers to the significance attributed to each association. This assumption emphasizes the role of significant others (i.e.,
parents and peers) in learning criminal and noncriminal behaviors. Due to the closeness of the relationship, parents and peers impact the behavior of an individual more than other outside sources do. Individuals with strong attachments are more likely to be exposed to, and adopt definitions favorable to conformity; whereas, those with weak attachments are likely to be exposed to definitions favorable to crime (Agnew, 1995). This assertion is consistent with Hirschi’s argument that individuals will either attach to conforming or nonconforming peers based on the strength of their parental attachments (i.e., the closeness of their relationship to their parents).

Early attachments will subsequently affect one’s level of commitment to conventional pursuits. Control theory defines commitment as one’s actual or anticipated investment in conventional society, including one’s reputation, educational and occupational aspirations, achievements, and expectations. Individuals who form strong parental attachments are more apt to form prosocial peer attachments and are more likely to be committed to conventional pursuits. Control theory predicts that commitment will have a negative effect on crime because criminal behavior may threaten one’s investments. Similarly, differential association theory also claims that commitment will have a negative effect on crime. Following the logic of differential association, individuals with high levels of commitment are more likely to associate with others who present definitions favoring conformity (Agnew, 1995).

This model proposes that parental attachment is causally prior to involvement in or commitment to conventional social groups/activities (i.e., peers
and school). Additionally, parental attachment is crucial to the transmission of societal values and norms and the internalization of those norms. However, as adolescents mature, peers become increasingly influential (Verhegge, 2001; Warr, 1993) and they become the significant group from whom conforming and deviant behaviors are learned.

The Integration of Routine Activities Theory

Theories of offending and victimization are not subject to what some criminologists believe to be inherent impediments of combining theories of criminality. Specifically, theories of criminality and victimization make no incompatible assumptions about the nature of crime and delinquency. Additionally, theories of criminality do not make any explicit assumptions about victim processes nor do victim theories make any restrictive assumptions about offenders (Miethe & Meier, 1993). The most logical point for the integration of routine activity/lifestyle perspective with differential association and control theories seems to be with regards to the association between delinquency and victimization. The relationship between crime/delinquency and victimization is well documented. Specifically, studies have found that victims are more likely to report involvement in delinquent behavior than non-victims (Gottfredson, 1984; Jensen & Brownfield, 1986; Sampson & Lauritsen, 1990). Related research indicates that offenders and victims are often one and the same (Lauritsen et al., 1991; Singer, 1981; Wolfgang, 1958). Therefore, the factors that place one at risk for involvement in delinquent behavior are the same factors that place one at risk of being victimized.
Sutherland (1947) suggests associations with delinquent peers may lead individuals to learn definitions favorable toward law violation and increases the likelihood of delinquent behavior. Likewise, control theory claims that attachment to delinquent peers increases the likelihood of delinquent or deviant behavior. Both of these assertions are consistent with the claims of Hindelang et al. (1978) that certain associations and activities may increase one’s exposure to dangerous situations and the likelihood of victimization. Therefore, consistent with prior research, this model proposes that individuals who associate with or attach to delinquent peers are more likely to participate in delinquent behaviors and adopt delinquent lifestyles. All of these factors increase the likelihood of one’s participation in delinquency and increases their risk of victimization.

Following prior research, this study considered nine sets of variables as factors determinant of delinquent behavior and victimization. They were gender, race, socioeconomic status (i.e., level of parental education), parental attachment, parental supervision, commitment (i.e., control), pro-social and antisocial peers (i.e., differential association) and hours spent hanging out with friends (i.e. routine activity/lifestyle). The variables from the theories of social control, differential association, and routine activity/lifestyle were combined into an integrated model of delinquent behavior and victimization, which is illustrated in Figure 3.1.
Figure 3.1 Integrated causal model of delinquency and victimization.
Summary of the Integrated Model

This proposed model asserts that parental attachment and supervision are positively related to school commitment. In other words, juveniles who have formed strong attachments to their parents and who have parents who supervise them closely are more likely to be committed to school. Adolescents who have strong parental attachments are also more likely to associate with peers who are involved in conventional activities/pursuits. As a result, adolescents who associate with prosocial peers are unlikely to adopt delinquent lifestyles, therefore, lowering the likelihood of involvement in delinquent/deviant behavior, and lowering their risk of victimization.

Conversely, adolescents who fail to form attachments to their parents and receive little or no supervision are less likely to be committed to school. These individuals are more likely to associate with delinquent/deviant peers and to adopt delinquent lifestyles. All of these factors increase the likelihood that these youths will be involved in delinquency and places them at an increased risk of being victimized.

Sample

Records provided by the Bureau of Alcohol, Tobacco, and Firearms, the federal agency responsible for overseeing the Gang Resistance Education and Training (G.R.E.A.T.) program, were used to identify prospective sites in which two or more officers had been trained to teach the G.R.E.A.T. curriculum prior to
1994 (Esbensen & Osgood, 1999). After making some exploratory inquiries to more than 30 different law enforcement agencies, 11 of the sites met the qualifications for inclusion and agreed to take part in the evaluation. The 11 cross-sectional sites included Las Cruces, NM; Omaha, NE; Phoenix, AZ; Philadelphia, PA; Kansas City, MO; Milwaukee, WI; Orlando, FL; Will County, IL; Providence, RI; Pocatello, ID; and Torrance, CA which provided a diversified sample.

At the individual sites, schools that had offered the G.R.E.A.T. program during the previous two years were selected and questionnaires were administered in groups to all eighth graders in attendance on that specific day. The attendance rates varied from a low of 75% at one Kansas City middle school to a high of 93% at several schools in Will County and Pocatello.

Passive-consent procedures (i.e., parents were asked to respond only if they did not want their children to participate in the research study) were approved at all of the sites with the exception of Torrance. The number of parental refusals ranged from 0 to 2% at each school. The overall participation rates (the percentage of students attending school that completed questionnaires) was between 98 to 100% at sites where passive-consent procedures were employed. At the Torrance site where active-consent procedures were required, between 53% and 75% of all eighth-grade students at the four high schools completed questionnaires. A final sample consisted of 5,935 eighth-grade students representing 315 classrooms and 42 different schools.
For the current study, data from Will County, Illinois, Orlando, Florida and Philadelphia, Pennsylvania were included. Will County represented a rural community in which more than 80% of the student population was white. Orlando represented a medium-sized city with a substantial amount of racial and/or ethnic heterogeneity. Philadelphia represented a large, urban area where a majority of students belonged to a racial or ethnic minority. These sites were included because they provided a diverse sample.

Sample Characteristics

There were 1,555 respondents. Of those individuals, 48% were male and 52% were female. The sample was 46% white and 54% non-white. The majority of the adolescents lived with both their parents (59%). The majority of respondents reported that their parents had some college (62%). The mean age of the sample was 13.8 years.

Dependent Variables

Researchers have suggested that separate scales should be used to assess the types of delinquent behaviors individuals report being involved in and the level of that involvement (Thornberry & Krohn, 2000). For instance, just because an individual has reported involvement in assaultive behavior, it cannot be assumed that he or she has been involved in theft and drug use. Additionally, tests of any theoretical model should include “a wide range of criminal and
deviant acts” (Sorenson & Brownfield, 1995). Therefore, three separate scales were created for this investigation.

Three constructs were investigated as dependent variables in this analysis. They were composed of various scales that tap into the behaviors under investigation. The first group of measures were self-reported property and violent offenses. The second scale elicited self-reported alcohol and illegal drug use. Property and violent victimization were tapped in the final scale.

Self-Reported Property and Violent Delinquency

Using an integrated model of social control, social learning, and strain theories, Menard and Elliott (1994) examined delinquency using two separate scales as indicators of less serious and more serious illegal behavior. The first scale consisted of “Minor Offending” which included buying stolen goods, theft of less than $50, carrying a hidden weapon, prostitution, public disorder, joyriding, sale of marijuana and use of “hard” drugs. The second scale examined “Index Offending” which included aggravated assault, gang fighting, sexual assault, robbery, burglary, theft of more than $50, and motor vehicle theft. However, as noted by Thornberry and Krohn (2000), a better measurement could be achieved by separating violent and property offenses into distinct categories.

Sampson and Lauritsen (1990) examined self-reported delinquency using one scale for self-reported violence and another for self-reported total offending. Their self-reported violence scale asked respondents to note whether they had ever been in a physical fight with someone outside their family and whether they
had ever deliberately injured someone outside their family. The self-reported total offending scale included questions relating to self-reported violence, theft, and vandalism. Here again, violent and non-violent offenses should be examined separately (Thornberry & Krohn, 2000).

The first group of items and scales in this study examined the respondent’s rates of self-reported delinquent property and violent offenses. Two separate scales designed to examine self-reported property and violent delinquency were constructed and items were selected that measured respondent’s reports of property and violent offending.

The items comprising the self-reported delinquency scales asked respondents about a variety of behaviors they may have participated in the preceding 12 months. Respondents were asked to note the number of times they had participated in such behaviors. The specific behaviors included were: damaging property, stealing, auto theft (see Table 3.1) using force or aggression, threatening someone, and assaulting someone (see Table 3.2).

The selected variables for the self-reported delinquency scales were analyzed to determine the reliability and inter-item correlations for the scales. Each item had a sufficient number of cases and a correlation matrix of the items revealed that all the items were significantly correlated and in the predicted direction. For widely used scales, the reliability should not fall below .80 (Carmines & Zeller, 1979). A reliability analysis of the scales used in this study revealed standardized alphas of .9085 (property offending scale) and .8205.
(violent offending scale), which indicates that these scales are reliable measures of self-reported delinquency.

Table 3.1

Self-Reported Property Offense Scale

Survey Questions/Items

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported property offenses</td>
<td>.9085</td>
</tr>
<tr>
<td>In the past 12 months have you:</td>
<td>Number of times:</td>
</tr>
<tr>
<td>Illegally spray painted a wall or building?</td>
<td>____</td>
</tr>
<tr>
<td>Purposely damaged or destroyed property that did not belong to you?</td>
<td>____</td>
</tr>
<tr>
<td>Stolen or tried to steal something worth less than $50?</td>
<td>____</td>
</tr>
<tr>
<td>Stolen or tried to steal something worth more than $50?</td>
<td>____</td>
</tr>
<tr>
<td>Gone into or tried to go into a building to steal something?</td>
<td>____</td>
</tr>
<tr>
<td>Stolen or tried to steal a motor vehicle?</td>
<td>____</td>
</tr>
</tbody>
</table>

Table 3.2

Self-Reported Violent Offense Scale

Survey Questions/Items

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported violent offenses</td>
<td>.8205</td>
</tr>
<tr>
<td>In the past 12 months have you:</td>
<td>Number of times:</td>
</tr>
<tr>
<td>Hit someone with the idea of hurting them?</td>
<td>____</td>
</tr>
<tr>
<td>Attacked someone with a weapon?</td>
<td>____</td>
</tr>
<tr>
<td>Used a weapon or force to get money or things from people?</td>
<td>____</td>
</tr>
<tr>
<td>Carried a hidden weapon for protection?</td>
<td>____</td>
</tr>
<tr>
<td>Shot at someone because you were told to do so by someone else?</td>
<td>____</td>
</tr>
</tbody>
</table>
Alcohol and Illegal Drug Use

Past research has also examined alcohol and illegal drug use. Akers and Lee (1999) examined self-reported marijuana use through an integrated model of age, social control and social learning. They used one item that asked respondents how often they used marijuana on a scale that ranged from “abstinence” through five levels of to use up to “nearly every day.” Bjarnason et al. (1999) examined the frequency of both alcohol and marijuana use among a sample of Icelandic youth as it related to the risk of violent victimization. However, research using multiple item measures has been viewed as more desirable (Elliott, 1985; Hirschi, 1969; Thornberry & Krohn, 2000).

Erickson, Crosnoe, and Dornbusch (2000), in a test of social bonding, used a 5-item scale as an indicator of both legal and illegal substance use. Adolescents were asked whether they had smoked cigarettes or used chewing tobacco, bought beer or liquor, used alcohol excessively, smoked marijuana, or used a drug other than marijuana in the past school year. The researchers noted a scale reliability of .86.

Other researchers have used integrated models of social control and self-control in order to determine its predictive utility in explaining adolescent drug use (Sorenson & Brownfield, 1995). The researchers constructed an index from several categories of drug use including alcohol (i.e. beer and wine), marijuana, barbiturates (i.e., downers), methedrine (i.e., downers), angel dust, LSD, mescaline, and cocaine. Joseph (1995) integrated components of social control,
structural strain, and differential association in order to determine its predictive power in the explanation of drug use. She measured drug use as including alcohol and narcotics use.

For this investigation similar measures were used to determine the respondents’ experiences with alcohol and illegal drugs. The alcohol and illegal drug use scale was composed of five items that asked respondents how many times in the past 12 months they had used alcohol, marijuana, cocaine, conadol, drugs you can sniff (paint or glue), and a residual category of “other” illegal drugs (see Table 3.3). A correlation of the five items composing the alcohol and illegal drug scale revealed that the items were significantly and positively correlated (at the 01 level). Researchers have recommended that the reliability of a scale should not be below .80 (Carmines & Zeller, 1979). However, reliabilities above .60 have also been accepted (Mitchell & Jolley, 2000). Accordingly, this scale was found to be a reliable measure, with a standardized alpha of .8084.

Table 3.3
Self-Reported Alcohol/Illegal Drug Use Scale

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
<th>Alpha = .8084</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Reported Drug Use</td>
<td></td>
</tr>
<tr>
<td>In the past 12 months have you:</td>
<td>Number of times:</td>
</tr>
<tr>
<td>Used alcohol?</td>
<td>_____</td>
</tr>
<tr>
<td>Used marijuana?</td>
<td>_____</td>
</tr>
<tr>
<td>Used Conadol?</td>
<td>_____</td>
</tr>
<tr>
<td>Used paint, glue, or other things to inhale to get high?</td>
<td>_____</td>
</tr>
<tr>
<td>Used other illegal drugs?</td>
<td>_____</td>
</tr>
</tbody>
</table>
Self-Reported Victimization

Rountree et al. (1994) examined a sample of 5,090 Seattle residents and their risk of violent crime and burglary victimization using an integrated model of routine activity, personal lifestyle, and contextual factors. They measured violent crime as being physically attacked or threatened or being robbed of something by force (i.e., mugging, pickpocket, purse snatching). The authors included both attempted and completed home burglaries in their measurement of burglary. Rountree et al's study utilized prevalence measures (i.e., respondents were asked whether they had been the victim of a violent crime or a burglary within the preceding two years, responses were coded 0 = no and 1 = yes).

Lauritsen et al. (1991) examined longitudinal data using the first five waves of the National Youth Survey. They were interested in assessing the effects of a delinquent lifestyle on the risk of both personal (violent) and property victimization. Like Rountree et al. (1994), Lauritsen et al. used prevalence measures. The violence measures asked respondents whether they had been the victim of an assault, an attempted assault, or robbery. The property victimization measures asked respondents whether they had been the victim of larceny (i.e., theft of a bicycle or motorbike, something stolen from a bicycle or motorbike, and something stolen in a public place) and vandalism (i.e., property was purposely damaged). The use of separate scales for personal and property victimization has been encouraged (Lauritsen et al). For example, many research studies have found that involvement in violent offending increases the likelihood of violent victimization (Bjarnason et al. 1999; Esbensen & Huizinga, 1991;
Lauritsen et al.; Sampson & Lauritsen, 1990). However, research has indicated that victims of property crime are at an increased risk for violent victimization (Bjarnason et al.; Jensen & Brownfield, 1986; Lauritsen et al).

For the current analysis, a scale to examine self-reported victimization was constructed and items were selected that measured respondent's reports of being the victim of a violent or property crime. However, separate scale construction was not possible because the measures were limited in scope and breadth to the questions available in the G.R.E.A.T questionnaire. Specifically, there were three items that measured violent victimization (assaults, threats, robbery) but only one measure for property victimization (i.e., stolen property) (see Table 3.4). Single item measures have been criticized as inadequate (Elliott, 1985; Elliott et al., 1979; Hirschi, 1969; Short & Nye, 1958; Spector, 1981). Therefore, violent and property victimizations comprised the same scale.

However, when ever possible, the use of frequency measures has been encouraged over the use of prevalence measures (Thornberry & Krohn, 2000). The current study examined frequency items and asked how many times in the past 12 months the respondents had: “Been hit by someone trying to hurt you?” “Had someone use a weapon or force to get things from you?” “ Been attacked by someone with a weapon or by someone trying to seriously hurt or kill you?” and “Had some of your things stolen from you?”

These selected items were analyzed to determine the reliability and inter-item correlations for the scale. Each item had a sufficient number of cases and a correlation matrix of the items revealed that all the items were significantly
correlated (at the .01 level) and in the predicted direction. As suggested by Carmine and Zeller (1979), a reliability standard of .80 is preferable. Here, the victimization scale had a standardized alpha of .8354, which is considered a reliable measure.

Table 3.4

Self-Reported Victimization Scale

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
<th>Alpha = .8354</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported victimization</td>
<td></td>
</tr>
<tr>
<td>In the past 12 months have you:</td>
<td>Number of times:</td>
</tr>
<tr>
<td>Been hit by someone trying to hurt you?</td>
<td>_____</td>
</tr>
<tr>
<td>Had someone use a weapon or force to get things from you?</td>
<td>_____</td>
</tr>
<tr>
<td>Been attacked by someone with a weapon or by someone trying to seriously hurt or kill you?</td>
<td>_____</td>
</tr>
<tr>
<td>Had some of your things stolen from you?</td>
<td>_____</td>
</tr>
</tbody>
</table>

Independent Variables

The scales used as independent variables measure components of social control, differential association and routine activity/lifestyle perspective. Demographic variables incorporated in this study were gender, race, and socioeconomic status (i.e., level of parental education).
Social Control Measures

Parental Attachment.

In his examination of the relationship between attachment to parents and delinquency, Hirschi (1969) used measures of parental supervision, intimacy of communication between adolescents and parents, and the adolescent’s affectional identification with the parents. Hirschi (1969) argues that individuals who form strong parental attachments are less likely to participate or be involved in deviant and/or delinquent behavior. Here, parental attachment and parental supervision were investigated separately as has been done in other research (Akers & Lee, 1999; Aseltine, 1995; Massey & Krohn, 1986; Matsueda & Heimer, 1987; Smith & Paternoster, 1987; Warr, 1993; Warr & Stafford, 1991).

Sorensen and Brownfield (1995) used a single item, “Would you like to be the kind of person your father is?” as a measure of parental attachment. This measure was insufficient because it only measured feelings that respondents had about their fathers; therefore, by excluding feelings about one’s mother, it failed to accurately tap parental attachment. Likewise, Bjarnason et al. (1999) used a single measure of “parental support” that asked respondents if it was easy for them to get warmth, caring, and mental support from their mother and father. However, researchers have criticized single item measures as insufficient measures (Hirschi, 1969; Nye & Short, 1958; Thornberry & Krohn, 2000).

Erickson et al. (2000) used two items to assess the extent to which adolescents identified with their parents: 1) “When I become a parent, I’m going
to treat my children in exactly the same way that my parents have treated me” and 2) “I try to have the same opinion as my parents do.” Additionally, they attempted to measure the level of the parent-child communication by asking respondents to indicate their level of agreement from 1 = strongly agree to 4 = strongly disagree to the following questions: 1) “My parents spend time just talking to me” and 2) “My family does fun things together.” Erickson et al. (2000) reported a standardized alpha of .65 for their parental attachment scale.

In another study, Joseph (1995) measured parental attachment using a 5-item scale that asked respondents to rate their feelings of closeness to their parents. Akers and Lee (1999) used measures of attachment by combining four items on closeness and satisfaction with the child-parent relationship. However, the reliabilities for these scales were not reported. The scales used by Akers and Lee and Joseph are at least conceptually superior measurements because they used multiple items to tap parental attachment.

In this study, the parental attachment scale consisted of 12 items (see Table 3.5). To measure parental attachment, respondents were asked a variety of questions about their relationship with their parents and asked to rate the quality of that relationship (i.e., closeness, openness, and trust) based on seven ordinal measures for both their mother/mother-figure and father/father-figure. Scores of 1 represented low levels of parental attachment on each measure, while scores of 7 represented high levels of parental attachment. For example, respondents were asked to note whether their parents “always trusts” them or “never trusts” them with values ranging from 7 (always trusts me) to 1 (never
trusts me). It is important to note that the coding scheme employed in the present study did not allow for differentiation between respondents who were referring to their biological mother and father and those who were referring to a stepparent and/or some other adult parental figure in their responses to these items.

Even so, the parental attachment scale used in the current analysis was a better measure when compared to many measures used in prior research. First, the parental attachment measure used a 12-item scale, which was much more inclusive scale than previously employed. Researchers have often employed single item measures, thus failing to adequately tap into the behavior under investigation (Elliott, 1985; Elliott et al. 1979; Hirschi, 1969; Short & Nye, 1958). Second, a comparison of the scales’ reported inter-item correlations revealed that its reliability was consistent with scales utilized in other research. Third, although researchers do not have a consensus when gauging scale reliability, Carmines and Zeller (1979) have noted that the alpha level should not fall below .80. Therefore, the parental attachment scale used here was found to be a reliable measure, with a standardized alpha of .8786. Finally, the conceptualization of parental attachment used in this investigation more closely resembles Hirschi’s original conceptualization. Specifically, the current analysis included questions designed to measure both the respondents’ attachment to their mother and father where other studies have limited their questions to either mother or father.
Table 3.5

Parental Attachment Scale

Survey Questions/Items

The following are a few questions about your family. First think about your mother or mother-figure/father or father-figure and circle the number that best represents your attitude. The closer the number is to the phrase, the more you think that is the case. If you don’t have a mother or a mother-figure/father father-figure leave this question blank.

Parental attachment  Think about your mother or mother-figure/ father or father-figure.

Alpha = .8786

Can talk about anything  7  6  5  4  3  2  1  Can't talk about anything

Always trusts me  7  6  5  4  3  2  1  Never trusts me

Knows all my friends  7  6  5  4  3  2  1  Does not know any of my friends

Always understands me  7  6  5  4  3  2  1  Never understands me

Always ask her advice  7  6  5  4  3  2  1  Never ask her advice

Always praises me when I do well  7  6  5  4  3  2  1  Never praises me when I do well

Parental Supervision.

Hirschi (1969) claimed that adolescents are less likely to participate in deviance when they think that their parents know their whereabouts. Hirschi originally conceptualized parental supervision as a property of attachment;
however, many researchers have treated it as a distinct and separate variable in research (Akers & Lee, 1999; Aseltine, 1995; Massey & Krohn, 1986; Matsueda & Heimer, 1987; Smith & Paternoster, 1987). The current analysis also treats measures of parental attachment and parental supervision separately.

Bjarnason et al. (1999) measured parental monitoring/supervision by asking the respondents if their parents knew where they were when they were not home and whom they are with in the evenings. Erickson et al. (2000) used a 4-item scale to assess parental supervision. The respondents were asked, “How much do your parents really know: Who your friends are, where you go at night, what you do with your free time, and where you are most afternoons after school?” Responses were coded 1 = don’t know 2 = know a little and 3 = don’t know. The researchers reported a standardized alpha of .74.

Miller et al. (1999) using data obtained from the G.R.E.A.T. survey used a 4-item scale to assess parental supervision with a reported standardized alpha of .73. The current investigation used the parental supervision scale employed by Miller et al. However, the sample size for the current study was considerably smaller. The items used to assess parental supervision were: “When I go someplace, I leave a note for my parents or call them to tell them where I am.” “My parents know where I am when I am not at home or at school.” “I know how to get in touch with my parents if they are not at home.” and “My parents know who I am with if I am not at home.” The responses were coded 1 = Strongly Disagree 2 = Disagree 3 = Neither Agree or Disagree 4 = Agree 5 = Strongly Agree. Carmines and Zeller (1979) recommend that the alpha not fall below .80.
However, other researchers believe that if a scale has an alpha above .60, it is usually considered to be internally consistent (Mitchell & Jolley, 2000). A standardized alpha of .7184 indicates that the parental supervision scale is a reliable, albeit, marginal measure falling between the two recommended standards. Additionally, the reliability of the current scale was comparable to that of scales used by other researchers. Specifically, the alpha of .7184 for the parental supervision scale is only slightly below Miller et al. (1999) at .73 and Erickson et al. (2000) reported alpha of .74.

Table 3.6

Parental Supervision Scale

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
<th>Alpha = . 7184</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Supervision</td>
<td>How much do you agree or disagree with these statements?</td>
</tr>
<tr>
<td>Alpha = . 7184</td>
<td>When I go someplace, I leave a note for my parents or call them to tell them where I am.</td>
</tr>
<tr>
<td></td>
<td>My parents know where I am when I am not at home or at school.</td>
</tr>
<tr>
<td></td>
<td>I know how to get in touch with my parents if they are not at home.</td>
</tr>
<tr>
<td></td>
<td>My parents know who I am with if I am not at home.</td>
</tr>
</tbody>
</table>

Responses coded as 1 = Strongly Disagree 2 = Disagree 3 = Neither Agree or Disagree 4 = Agree 5 = Strongly Agree

School Commitment.

Bjarnason et al. (1999) used a single measure to assess school commitment. They asked respondents to note “How good do you think you are at school work, compared to other people your own age?” The item options ranged
from 1 = poor, I am probably one of the worst to 7 = excellent, I am probably one of the very best. Akers and Lee (1999) operationalized school commitment as the commitment to conventional lines of activity (i.e., schoolwork, athletics, musical groups, and other activities, grades, and educational aspirations). Similarly, Joseph (1995) measured school commitment using a 5-item scale that included positive experiences at school, positive attitudes toward teachers, involvement in school activities, and the desire for high academic achievement. As an indicator of school commitment, Jenkins (1997) used a 10-item scale that asked respondents a variety of questions regarding academic achievement, the importance of homework, and their classes. For example, individuals were asked, “Does it matter a lot to you what your grades are?” “Do you think most of your classes are a waste of time?” and “Do you care if your homework is done correctly?” Jenkins (1997) reported a scale reliability of .71. Erickson et al. (2000) operationalized school commitment using three achievement-related indicators: time spent on homework, grade-point average, and educational expectations, with a reported scale reliability of .66.

For the data set employed in this study, a 5-item scale was constructed from a variety of questions related to the respondents’ level of school commitment (see Table 3.7). The items asked were: “I try hard at school,” “Education is so important that it’s worth it to put up with things about school that I don’t like,” “In general, I like school,” “Grades are very important to me,” and “I usually finish my homework.” Responses were coded 1 = Strongly Disagree 2 = 
Disagree 3 = Neither Agree nor Disagree 4 = Agree 5 = Strongly Agree. These items were significantly and positively correlated (at the .01 level).

According to Carmines and Zeller (1979), scale reliability should be above .80 but .60 has also been an accepted standard (Mitchell & Jolley, 2000). The school commitment scale was found to be a reliable measure with a standardized alpha of .7766. Additionally, when compared to the reliability of the scales used in similar research, the current scale exceeds those reported. Specifically, the current reliability of the school commitment scale is .7766, which is considerably higher when compared to Jenkins (1997) of .71 and Erickson et al. (2000) of .66.

Table 3.7

School Commitment Scale

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
<th>School Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alpha = .7766</td>
</tr>
<tr>
<td>I try hard at school.</td>
<td></td>
</tr>
<tr>
<td>Education is so important that it’s worth it to put up with things about school that I don’t like.</td>
<td></td>
</tr>
<tr>
<td>In general, I like school.</td>
<td></td>
</tr>
<tr>
<td>Grades are very important to me.</td>
<td></td>
</tr>
<tr>
<td>I usually finish my homework.</td>
<td></td>
</tr>
<tr>
<td>Responses coded as 1 = Strongly Disagree 2 = Disagree 3 = Neither Agree or Disagree 4 = Agree 5 = Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>
Differential Association Measures

Anti-Social Peers.

Sutherland (1947) conceptualized a precise mathematical ratio of weighted definitions favorable and unfavorable toward violations of the law as determining a person’s proclivity for conformity versus law violation. Specifically, he noted that the “proper measurement of ‘excess association’ would require summing up all associations with definitions favorable and unfavorable toward crime, weighing their frequency, duration, priority, and intensity, to create a ratio of favorable and unfavorable associations” (Sutherland & Cressey, 1978, p. 36). However, as noted by Cressey “a person’s ratio of learned behavior patterns could not be determined accurately” (Sutherland & Cressey, 1978, p. 91). Therefore, tests of differential association have generally examined the correlation between self-reported delinquency and the number of delinquent friends (De Li, 1999). This association has been one of the strongest predictors of delinquency (Agnew, 1995; Akers & Cochran, 1985; Matsueda; Paetsch, Betrand & Betrand 1997; Tittle, Burke, & Jackson, 1986; Warr & Stafford). However, some researchers have argued that a better measurement would be to ask individuals about the types of delinquency their friends have participated in or have committed (Menard & Elliott, 1994; Matsueda, 1982; Warr & Stafford, 1991). According to Erickson et al. (2000), two problems are associated with this measure. First, adolescent’s perceptions of their peers’ behavior may be inaccurate because adolescents often misjudge the degree of similarity between themselves and their friends. Secondly, Matsueda (p. 285) claimed that this
operationalization does not directly measure the central construct in Sutherland's theory, “learned definitions of law violation.” This type of measure has led researchers to assume that adolescents adopt beliefs or attitudes favorable to crime through deviant peer associations. Although this assumption has been made many times in empirical research, it is important to note that this measure does not allow for a direct test of the primary construct of differential association. Therefore, it has been argued that inaccurate measures have led researchers to erroneous conclusions regarding the strength of peer influence (Aseltine, 1995, Erickson et al., 2000; Wilcox & Udry, 1986).

Matsueda (1982) has contended that a ratio of weighted definitions favorable and unfavorable to delinquency could be determined in a precise way as anticipated by Sutherland due to advances in modern statistics. He used “definitions” as a latent construct variable to measure definitions of the legal code that he specified as indicators of the underlying theoretical construct of definitions favorable toward violation of the law (Matsueda). Costello and Vowell (1999) used a similar measure in a replication of Matsueda’s research.

However, few researchers have attempted to measure peer delinquency in the same manner as Matsueda and have opted instead to look to sources outside the adolescent to achieve better indicators of peer delinquency. For example, Wright, Cullen, and Williams (1997) in their investigation of the relationship between adolescent employment and delinquency asked the parents of their adolescent sample to indicate whether their children had been involved in a variety of delinquent behaviors. Still other researchers have asserted the best
measurement of peer delinquency/deviance would be to investigate the types of delinquency that one’s peers report being involved in (Erickson et al., 2000).

Erickson et al. (2000) used a 7-item scale ([alpha] = .80) as an indicator of delinquent peer associations (i.e., anti-social peers). Adolescents closest friends were asked to indicate whether, in the past school year, they had used phony identification, taken something of value from another person, ran away from home, got in trouble with the police, carried a weapon to school, started a physical fight at school, or purposely damaged school property.

The current study cannot meet the requirements as specified by Matsueda because the data did not contain information on the beliefs of the adolescents’ peers. Therefore, it is assumed, as others have (e.g., Aseltine, 1995; Marcos, Bahr, & Johnson 1986; Warr & Stafford, 1991), that adolescents receive and adopt differential beliefs about delinquency/deviance within the context of their peer associations. The purpose of the current study was not to directly test the competing predictions made by individual theories but to integrate important concepts from each into a single theoretical model of juvenile delinquency and victimization.

The anti-social peer scale used to operationalize associations favorable to crime consists of eight items (see Table 3.8). The respondents were asked whether their friends had participated in a variety of behaviors in the past year such as: “Purposely damaged or destroyed property that did not belong to them?” “Stolen something worth less than $50?” “Stolen something worth more than $50?” “Gone into a building to steal something?” and “Stolen or tried to steal
a motor vehicle?” Additional questions included: “Hit someone with the idea of hurting them?” “Attacked someone with a weapon?” and “Used a weapon or force to get money or things from people?” The respondents options to these questions were coded 1 = none of them, 2 = few of them, 3 = half of them, 4 = most of them, and 5 = all of them. A correlation matrix of these items revealed that they were all correlated in the predicted direction. The anti-social peer scale was found to be a reliable measure with a standardized alpha of .9130, which was well above the .80 standard set forth by Carmines and Zeller (1979).

Table 3.8

**Anti-Social Peer Scale**

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-social peers</td>
</tr>
<tr>
<td>During the last year, how many of your current friends have done the following?</td>
</tr>
<tr>
<td>Purposely damaged or destroyed property that did not belong to them?</td>
</tr>
<tr>
<td>Stolen something worth less than $50?</td>
</tr>
<tr>
<td>Stolen something worth more than $50?</td>
</tr>
<tr>
<td>Gone into a building to steal something?</td>
</tr>
<tr>
<td>Stolen or tried to steal a motor vehicle?</td>
</tr>
<tr>
<td>Hit someone with the idea of hurting them?</td>
</tr>
<tr>
<td>Attacked someone with a weapon?</td>
</tr>
<tr>
<td>Used a weapon or force to get money or things from people?</td>
</tr>
<tr>
<td>Responses coded as 1 = None of them 2 = Few of them 3 = Half of them 4 = Most of them 5 = All of them</td>
</tr>
</tbody>
</table>

Table 3.8

**Anti-Social Peer Scale**

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-social peers</td>
</tr>
<tr>
<td>During the last year, how many of your current friends have done the following?</td>
</tr>
<tr>
<td>Purposely damaged or destroyed property that did not belong to them?</td>
</tr>
<tr>
<td>Stolen something worth less than $50?</td>
</tr>
<tr>
<td>Stolen something worth more than $50?</td>
</tr>
<tr>
<td>Gone into a building to steal something?</td>
</tr>
<tr>
<td>Stolen or tried to steal a motor vehicle?</td>
</tr>
<tr>
<td>Hit someone with the idea of hurting them?</td>
</tr>
<tr>
<td>Attacked someone with a weapon?</td>
</tr>
<tr>
<td>Used a weapon or force to get money or things from people?</td>
</tr>
<tr>
<td>Responses coded as 1 = None of them 2 = Few of them 3 = Half of them 4 = Most of them 5 = All of them</td>
</tr>
</tbody>
</table>
Prosocial Peers.

Tests of differential association have generally examined the correlation between self-reported delinquency and the number of delinquent friends. Researchers have assumed that adolescents receive and adopt differential beliefs about delinquency/deviance within the context of their peer associations (e.g., Aseltine, 1995; Marcos et al., 1986; Warr & Stafford, 1991). However, to date, most research has only tested one side of the differential association dyad—delinquent peer associations (i.e., a proxy measure for definitions favorable to delinquency/crime). A better test of Sutherland’s theory should include a measure for testing prosocial peer associations (i.e., definitions favorable to delinquency/crime).

Therefore, in the current study, there are eight items comprising the prosocial peer scale that serve as the proxy for associations unfavorable to crime (see Table 3.9). These items asked respondents how many of their friends had participated in a variety of legitimate activities in the past year. The specific items asked how many of their friends “Have been involved in school activities or school athletics?” “Got along well with teachers and adults at school?” “Have been thought of as good students?” and “Have been involved in community activities such as scouts, athletic league, or others?” Additional questions asked respondents if their friends “Have been regularly involved in religious activities?” “Regularly took part in their own family activities?” “Have been generally honest and told the truth?” and “Almost always obeyed school rules?” The respondents options to these questions were coded 1 = none of them, 2 = few of them, 3 =
half of them, 4 = most of them, and 5 = all of them. A correlation matrix of these items revealed that they were all correlated (at the .01 level) and in the predicted direction. The prosocial peer scale was found to be a reliable measure with a standardized alpha of .8496.

Table 3.9

Prosocial Peer Scale

<table>
<thead>
<tr>
<th>Survey Questions/Items</th>
<th>Pro-social Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>During the last year, how many of your friends have done the following?</td>
</tr>
<tr>
<td>Alpha = .8496</td>
<td>Have been involved in school activities or school athletics?</td>
</tr>
<tr>
<td></td>
<td>Got along well with teachers and adults at school?</td>
</tr>
<tr>
<td></td>
<td>Have been thought of as good students?</td>
</tr>
<tr>
<td></td>
<td>Have been involved in community activities such as scouts, athletic league, or others?</td>
</tr>
<tr>
<td></td>
<td>Have been regularly involved in religious activities?</td>
</tr>
<tr>
<td></td>
<td>Regularly took part in their own family activities?</td>
</tr>
<tr>
<td></td>
<td>Have been generally honest and told the truth?</td>
</tr>
<tr>
<td></td>
<td>Almost always obeyed school rules?</td>
</tr>
</tbody>
</table>

Responses coded as 1 = None of them 2 = Few of them 3 = Half of them 4 = Most of them 5 = All of them

Routine Activities/Lifestyles

Past research has indicated that one’s lifestyle or routine activities are associated with the likelihood of personal victimization. Researchers using data from the British Crime Survey have examined such measures as the number of
nights spent outside the home, the types of social entertainment engaged in (e.g., going to restaurants, the movies, and sporting events), the modes of transportation used, and the extent of alcohol use as lifestyle indicators (Gottfredson, 1984; Hough & Mayhew, 1983; Sampson & Lauritzen, 1990; Sampson & Wooldredge, 1987). Lauritsen et al. (1991) used the time spent with peers as an indicator of a delinquent lifestyle. Lauritsen et al. study asked respondents, “On the average, how many afternoons, evenings, weekends during the school week have you spent with your friends?”

The current analysis used a single item measure as a delinquent lifestyle indicator. The item stated: “Do you ever spend time hanging around with your current friends not doing anything in particular where no adults are present?” The respondents were asked to indicate how many hours that they spent engaging in this behavior during an average week. This measure is a conceptually better measure than that used by Lauritsen et al. (1991) because it attempts to measure the actual number of hours respondents spent in an average week without any type of adult supervision. Using the Lauritsen et al. measure, it is not known how much actual time adolescents are spending together only that they have either spent an afternoon, evening or weekend together.
Other Independent Variables

Gender, Race, and Socioeconomic Status

Additional variables used in this analysis include gender and race (see Table 3.10). Demographic variables have been commonly used in order to determine racial and gender differences in rates of offending and victimization. Two of the most powerful predictors of delinquency and victimization are race and gender (Cohen et al., 1981; Gottfredson, 1986; Hindelang, 1976; Hindelang et al., 1978). Past research indicates that males are more likely to be victimized than females, especially by violent offenses (Bjarnason et al., 1999; Esbensen & Huizinga, 1991; Gottfredson, 1986; Lauritsen et al., 1991; Mawby, 1979; Miethe et al., 1987; Sampson & Lauritsen, 1990). Likewise, males have reported higher rates of offending than females (Esbensen & Huizinga; Gottfredson; Heimer & DeCoste, 1999; Lauritsen et al.; Mawby; Miethe et al.; Sampson & Lauritsen).

Research has also indicated that rates of delinquency and victimization vary according to race. For example, non-whites consistently report higher rates of victimization than whites (Bjarnason et al., 1999; Gottfredson, 1986; Miethe et al., 1987; Singer, 1981). However, whites have reported higher levels of involvement in delinquent/criminal behavior than non-whites. Therefore, consistent with prior studies, the current analysis examined race and gender. Race was coded as 1 = white and 0 = nonwhite. Gender was coded as 1 = male and 0 = female.
Previous studies have explored the relationship between socioeconomic status and rates of offending and victimization. For example, Joseph (1995) relied upon occupation and education of the head of household (i.e., person earning the highest income) as family socioeconomic indicators in a study of juvenile delinquency among a sample of African-American adolescents. However, some researchers have used multiple indicators representing socioeconomic status such as father’s occupation, the level of education of the head of household, and annual household income, the latter being the best indicator (Heimer & De Coster, 1999).

For the current study, data did not have any information regarding annual household income. Therefore, parental education was used in this analysis as a proxy indicator of socioeconomic status (see Table 3.10), as it has been used in prior research (Bjarnason et al., 1999; Erickson et al., 2000; Miller, Esbensen, & Freng, 1999). Parental education ranged from grade school or less to more than high school and was identified by the highest reported level of parental educational attainment for the respondent’s mother or father. The parental education variable was coded as 1 = Less than high school 2 = Completed high school and 3 = More than high school.
Summary of Methods

Nine sets of variables were considered determinants of delinquent behavior (i.e., property offending, violent offending and alcohol and illegal drug use) they were parental attachment, parental supervision, school commitment, anti-social peers, prosocial peers, the number of hours spent hanging out with peers, gender, race, and level of parental educational attainment (i.e., a proxy measure for socioeconomic status. The same variables were also used in the investigation of victimization; however, the dependent delinquency measures were conceptualized as independent variables in the victimization models.

The integrated model proposed here incorporated components of social bond, differential association and lifestyles theories in an attempt to explain delinquency and victimization. Parental attachment was conceptualized as being
positively related to attachment to prosocial peers and positively related to school commitment. According to Hirschi (1969), individuals who have formed strong attachments to their parents tend to be strongly attached to prosocial peers and school; therefore, decreasing the likelihood of being involved in delinquent behavior. Parental supervision was also conceptualized as being positively related to the formation of attachments to prosocial peers and school commitment. As a result, individuals who reported higher levels of parental supervision should report less involvement in delinquent behavior.

Sutherland (1947) claimed that anti-social peer associations were positively related to involvement in delinquent behavior. Similarly, lifestyle theory has asserted that individuals who become exposed to dangerous situations, such as being involved in delinquency, were at an increased risk of victimization. Therefore, consistent with prior research this model argues that individuals who form delinquent associations are more likely to report being involved in delinquent behavior and will also report higher incidents of victimization.

**Multiple Regression Analysis**

Multivariate linear regression was the primary statistical analysis used in the examination of these data. Multiple regression determines the strength and direction of the linear relationship among a set of independent variables on a single dependent variable. The assumptions of multiple regression include:

1. The data are randomly selected.
2. The dependent variables are normally distributed in the population.
3. The data are continuous (i.e. they are measured at the interval/ratio level).

4. The nature of the relationship between the dependent variable and each of the independent variables is linear.

5. The error term is independent of and uncorrelated with each of the independent variables, that it is normally distributed, and has an expected value of zero and constant variance across all levels of the independent variable(s).

The current sample was not normally distributed and contained several outlying observations that had the potential to skew the estimated regression coefficients. Therefore, it was necessary to use the logarithm of the dependent variables (i.e. property crime, violent crime, alcohol and illegal drug use, and victimization). For this investigation, 7 Ordinary Least Squares regression analyses were performed in order to determine the strength, direction, and predictive power of the relationship between the independent variables and logarithms of the dependent variables.
CHAPTER 4

ANALYSIS OF DATA

Univariate Analysis

Table 4.1 shows the descriptive statistics for the three-city set of G.R.E.A.T. data deployed in this study. Males accounted for 48% of the sample and females 52%. The sample was 46% white and 54% non-white. The majority of respondents reported that their parents had graduated from high school or had more than a high school education (63%). The mean age of the sample was 13.8 years.

Table 4.1

Descriptive Statistics for Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum/Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Bond Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>12</td>
<td>84</td>
<td>56.99</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>4</td>
<td>20</td>
<td>14.88</td>
</tr>
<tr>
<td>School commitment</td>
<td>5</td>
<td>25</td>
<td>18.97</td>
</tr>
<tr>
<td><strong>Differential Association Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antisocial peers</td>
<td>8</td>
<td>40</td>
<td>14.47</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>8</td>
<td>40</td>
<td>23.69</td>
</tr>
<tr>
<td><strong>Lifestyle Measure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours with peers</td>
<td>0</td>
<td>144</td>
<td>9.30</td>
</tr>
<tr>
<td><strong>Demographic variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0 = female</td>
<td>1 = male</td>
<td>.48</td>
</tr>
<tr>
<td>Race</td>
<td>0 = nonwhite</td>
<td>1 = white</td>
<td>.47</td>
</tr>
<tr>
<td>SES</td>
<td>1 = &gt; H. S.</td>
<td>2 = H.S.</td>
<td>3 = &lt; H.S.</td>
</tr>
</tbody>
</table>
An examination of the variables revealed that of the five delinquent property offenses (i.e., purposely spray painted something, stolen something worth less than $50, stolen something more than $50, gone into a building to steal something, and stolen a motor vehicle) on which data were gathered, respondents reported committing an average of 20 (mean = 19.99) property offenses in the previous year. Of the five violent crimes (i.e., carried a hidden weapon for protection, hit someone with the idea of hurting them, attacked someone with a weapon, used a weapon or force to get money or things from people, or shot at someone because you were told to by someone else), respondents reported committing an average of 20 (mean = 19.59) acts of violence in the preceding year. Additionally, the adolescents in this sample reported using alcohol/illegal drugs (i.e., marijuana, cocaine, conadol, inhalants, “other” illegal drugs) an average of 23 times (mean = 22.91) in the previous year. Respondents also reported that in the preceding year they had been the victim of a property (i.e., theft) and/or violent crime (i.e., been hit by someone trying to hurt you, had someone use a weapon or force to get money or things from you, and been attacked by someone with a weapon trying to seriously hurt or kill you) an average of 13 times (mean = 13.00).

It is important to note that an examination of data plots raised concerns about outlying observations possibly skewing the estimation of the regression coefficients. Therefore, for the current analysis it was necessary to use the logarithm of the number of delinquent acts (self-reported property crime, self-
reported violent crime, and alcohol and illegal drug use) and victimization as the dependent variables.

Bivariate Analysis

Tables 4.2 through 4.4 represent the Pearson product-moment correlation coefficients for the independent and dependent variables. Although correlation does not indicate causation, it does indicate how two variables relate to one another in terms of significance, magnitude and direction of effect. It is useful to correlate variables within the data set for three reasons. First, significant correlations establish the statistical validity of the data. As the following tables indicate, significant correlations are present among numerous variables with in the data set and are consistent with past research. These findings increase the level of confidence in the statistical validity of the measures. Secondly, correlations are conducted in order to identify potential problems associated with multicollinearity. Multicollinearity reduces the reliability of the regression analyses due to the presence of highly correlated independent variables (Blalock, 1979). The issue of multicollinearity arises when variables are correlated above .70. As a result, problems with the causal interpretation and sensitivity of the measurement to sampling errors may occur due to high inter-correlations. However, an examination of the bivariate correlations revealed that multicollinearity was not a concern for the current analysis. Finally, correlations allow for an examination of the results at a bivariate level. Specifically, this type of
analysis allows one to determine whether initial support exists for the proposed models/hypotheses.

The Pearson product-moment correlations for the independent variables with self-reported property and violent offenses appear in Table 4.3. Consistent with theoretical expectations, parental attachment was significantly and negatively related to both property (r = -.263) and violent offending (r = -.204). Likewise, parental supervision was significantly and negatively related to self-reports of both property (r = -.276) and violent delinquency (r = -.306). School commitment was also significantly and negatively related to self-reported property (r = -.357) and violent offending (r = -.294).

The differential association measures also comported with theoretical expectations. Antisocial peers are significantly and positively related to self-reported property (r = .526) and violent offending (r = .526). Conversely, having prosocial peers is significantly and negatively related to self-reported property (r = -.259) and violent delinquency (r = -.294). The number of hours spent with peers, considered a routine activity/lifestyle measure was consistent with theoretical expectations, being significantly and positively related to property (r = .106) and violent offenses (r = .113).

Of the other independent variables used in this analysis, gender was significantly related to reports of both property offenses (r = .202) and violent offenses (r = .190), with males more associated with each offense category. Race was also significantly related to reports of property offenses (r = .078) and violent offenses, although in the opposite direction (r = -.067), indicating that
whites were more involved in property delinquency and nonwhites were more involved in violent delinquency. SES (i.e., level of parental education) was not significantly related to property (r = .031) or violent offending (r = .013).

Table 4.2

Pearson Product-Moment Correlations Between Independent Variables and Self-Reported Delinquency

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Property Offending</td>
</tr>
<tr>
<td>Parental Attachment</td>
<td>-.263*</td>
</tr>
<tr>
<td>Parental Supervision</td>
<td>-.276*</td>
</tr>
<tr>
<td>School Commitment</td>
<td>-.357*</td>
</tr>
<tr>
<td>Antisocial Peers</td>
<td>.526*</td>
</tr>
<tr>
<td>Prosocial Peers</td>
<td>-.259*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>.106*</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>.202*</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>.078*</td>
</tr>
<tr>
<td>SES (1 = &gt; H.S. 2 = H.S. 3 = &lt; H.S.)</td>
<td>.031</td>
</tr>
</tbody>
</table>

*significant at .01 or less

Table 4.3 represents the Pearson product-moment correlations for the independent variables with alcohol and illegal drug use. As expected, the social control measures were significantly and negatively related to both alcohol and illegal drug use as follows: parental attachment (r = -.285), parental supervision (r = -.297), and school commitment (r = -.391).

The differential association measures conformed to theoretical expectations by significantly and positively correlating with the anti-social peer scale (r = .480), while significantly and negatively correlating with prosocial peer
scale \((r = -.346)\). Likewise, the routine activity/lifestyle measure met theoretical expectations, as hours spent with peers significantly and positively correlated with the alcohol and illegal drug use scale \((r = .197)\).

In addition, gender was significantly related to the alcohol and illegal drug use scale \((r = .121)\), with males being associated with more usage. Race related with was significantly related to the alcohol and illegal drug use scale \((r = .131)\), with whites associated with greater alcohol and illegal drug use. SES, however, was not significantly associated with the substance abuse indicator.

Table 4.3

**Pearson Product-Moment Correlations Between Independent Variables and Alcohol and Illegal Drug Use**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Attachment</td>
<td>Alcohol and Illegal Drug Use</td>
</tr>
<tr>
<td>.285*</td>
<td></td>
</tr>
<tr>
<td>Parental Supervision</td>
<td></td>
</tr>
<tr>
<td>.297*</td>
<td></td>
</tr>
<tr>
<td>School Commitment</td>
<td></td>
</tr>
<tr>
<td>.391*</td>
<td></td>
</tr>
<tr>
<td>Antisocial Peers</td>
<td>.480*</td>
</tr>
<tr>
<td>Prosocial Peers</td>
<td>.346*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>.197*</td>
</tr>
<tr>
<td>Gender ((0 = \text{female} 1 = \text{male}))</td>
<td>.121*</td>
</tr>
<tr>
<td>Race ((0 = \text{nonwhite} 1 = \text{white}))</td>
<td>.131*</td>
</tr>
<tr>
<td>SES ((1 = &gt; \text{H.S.} 2 = \text{H.S.} 3 = &lt; \text{H.S.}))</td>
<td>-.005</td>
</tr>
</tbody>
</table>

*significant at .01 or less

The Pearson product-moment correlations for the independent variables and the self-reported victimization scale are reported in Table 4.4. The social control measures were significantly and negatively correlated with the self-
reported victimization scale, parental attachment ($r = -0.160$), parental supervision ($r = -0.202$) and school commitment ($r = -0.188$). Likewise, the differential association measures were significantly correlated with the victimization scale. The anti-social peer scale was positively related to victimization ($r = 0.309$) and the prosocial peer scale was negatively related to victimization ($r = -0.163$). The routine activity/lifestyle measure, time spent with peers, was not related to self-reported victimization scale ($r = 0.014$). Consistent with past research, gender was significantly related to the victimization scale ($r = 0.152$), indicating that males experience more victimization. Neither race nor SES was significantly related to the victimization scale.

Table 4.4

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Attachment</td>
<td>$-0.160^*$</td>
</tr>
<tr>
<td>Parental Supervision</td>
<td>$-0.202^*$</td>
</tr>
<tr>
<td>School Commitment</td>
<td>$-0.188^*$</td>
</tr>
<tr>
<td>Antisocial Peers</td>
<td>$0.309^*$</td>
</tr>
<tr>
<td>Prosocial Peers</td>
<td>$-0.163^*$</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>0.014</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>0.152*</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>-0.035</td>
</tr>
<tr>
<td>SES (1 = &gt; H.S. 2 = H.S. 3 = &lt; H.S.)</td>
<td>-0.002</td>
</tr>
</tbody>
</table>

*significant at .01 or less
Multivariate Analysis

Delinquency Models

Table 4.5 shows the results of the OLS regression of the logarithm of self-reported property delinquency on each of the independent variables. The significance of the overall model for self-reported property crime was \( F = 61.54, p < .01 \). The model explains approximately 37\% of the variation \( (R^2 = .366) \) in self-reported property offending. Results indicate that six of the independent variables were significant independent predictors of self-reported property delinquency.

The strongest predictor of self-reported property delinquency was anti-social peers \( (B = .481) \). Individuals who reported more associations with anti-social peers also reported higher rates of involvement in property violations. Other research studies have also found this association to be one of the strongest predictors of delinquency (e.g., Agnew, 1995; Akers & Cochran, 1985; Matsueda, 1982; Paetsch et al., 1997; Tittle et al., 1986; Warr & Stafford, 1991). This finding indicates that individuals who associate with anti-social peers may be learning and adopting definitions favorable to law violation, which indicates support for differential association theory.

The second strongest predictor of self-reported property delinquency was race \( (B = .106) \), meaning that whites were more likely to report being involved in property crime. Other studies have supported this finding that whites were more likely to report involvement in property offending (e.g., Joseph, 1995; Lauritsen et al., 1991; Sampson & Lauritsen, 1990). Researchers have suggested that it is
important to consider the demographic characteristics delinquents in order to generate more accurate profiles (Joseph; Lauritsen et al).

Parental attachment ($B = -.089$) was ranked third as a significant predictor of self-reported property delinquency, indicating that high levels of parental attachment are related to a decrease in property violations. Additionally, the number of hours spent hanging out with peers, the indicator for lifestyle, was a significant predictor of self-reported property offending ($B = .068$). This means that individuals who reported spending more time hanging out with their peers without adult supervision reported higher levels of involvement in property offending. Additionally, this finding supports prior research that found family supervision is inversely related to delinquent behaviors (Junger & Marshall, 1997). Related research by Warr (1993) found that the amount of time youths spent with their family had the potential of reducing, and in some cases, eliminating peer influence.

The final predictor of property delinquency was gender ($B = .062$), with males reporting more involvement in property crime. Many studies have supported this finding that males were more likely to report involvement in delinquent behavior than females (e.g., Joseph, 1995; Lauritsen et al., 1991; Sampson & Lauritsen, 1990). Thus, in terms of demographic profiles, both race and gender hold as predictors, albeit weak, of delinquent property offenses. This is consistent with prior research.
Table 4.5

OLS Regression of the Logarithm of Self-Reported Property Delinquency on the Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>-.089</td>
<td>-2.83</td>
<td>.005*</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>-.030</td>
<td>-.896</td>
<td>.371</td>
</tr>
<tr>
<td>School commitment</td>
<td>-.086</td>
<td>-2.60</td>
<td>.010*</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>.000</td>
<td>-.002</td>
<td>.999</td>
</tr>
<tr>
<td>Anti-social peers</td>
<td>.481</td>
<td>15.0</td>
<td>.000*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>.068</td>
<td>2.57</td>
<td>.011**</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>.062</td>
<td>2.25</td>
<td>.025**</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>.106</td>
<td>3.84</td>
<td>.000*</td>
</tr>
<tr>
<td>SES (1 = &gt;H.S. 2 = H.S. 3 = &lt;H.S.)</td>
<td>-.003</td>
<td>-.106</td>
<td>.916</td>
</tr>
<tr>
<td>Self-reported property delinquency</td>
<td></td>
<td>R² = .366</td>
<td>F = 61.54</td>
</tr>
</tbody>
</table>

*R significant at .01 or less
**significant at .05 or less

The results regressing the logarithm of self-reported violent delinquency on each of the independent variables are presented in Table 4.6. This model significantly predicted self-reported violent delinquency (F = 51.93, p < .01). It explains approximately 33% of the variance (R² = .328), meaning that the set of independent variables explains 33% of the variation in violent delinquency. Results also indicate that five of the independent variables were significant predictors of violent delinquency. The strongest predictor of self-reported violent delinquency, as with property offenses, was anti-social peers (B = .428). Those
individuals who reported more anti-social peer associations more often reported being involved in violent offenses as well as property violations. Involvement with anti-social/delinquent peers has been one of the strongest predictors of involvement in delinquent behavior (Agnew, 1995; Akers & Cochran, 1985; Matsueda, 1982; Paetsch et al., 1997; Tittle et al., 1986; Warr & Stafford, 1991), which supports the assertions espoused in differential association theory. One additional study conducted by Lockwood (1997) found that when peers are present during a physical confrontation, they encourage violent resolutions; thereby, escalating the violence.

The second strongest predictor of self-reported violent delinquency was prosocial peers (B = -.149), indicating that individuals who reported being involved with prosocial peers were less likely to report involvement in violent offending. Victimization was added to the model because other researchers have noted the interrelationship between delinquency and victimization and that causal order cannot be clearly established. For example, victims may become offenders as a result of retaliating during a physical altercation (Sampson & Lauritsen, 1990). Conversely, offenders may become victims because they initiate violence confrontations to resolve disputes. In the current analysis, when victimization was controlled for, the effects of prosocial peers disappeared.

Another strong predictor of violent delinquency was the number of hours spent hanging out with peers without adult supervision (B = .095). This means that individuals who reported spending more time hanging out with peers without adult supervision also reported higher levels of being involved in violent
delinquency. Junger and Marshall (1997) found family supervision was negatively related to delinquent behavior. Additionally, a study by Warr (1993) found that the amount of time youths spent with their family was associated with reducing and even eliminating peer influence. A related finding in the current investigation indicates that parental supervision was also a predictor of violent offending (B = - .091), meaning that increased parental supervision was related to a decrease in violent activity.

The final predictor of violent crime was gender (B = .072), meaning that males reported committing more violent acts. However, it should be noted that gender was significant at the .05 level. Other researchers have also consistently found that males report involvement in violent offending and delinquent behavior (e.g., Bjarnason et al., 1999; Esbensen & Huizinga, 1991; Gottfredson, 1986; Lauritsen et al., 1991; Mawby, 1979; Miethe et al., 1987; Sampson & Lauritsen, 1990). Gender has been found to be one of the most powerful predictors of victimization (Lauritsen et al.; Sampson & Lauritsen).
Table 4.6

**OLS Regression of the Logarithm of Self-Reported Violent Delinquency on the Independent Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>-.048</td>
<td>-1.49</td>
<td>.138</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>-.091</td>
<td>-2.65</td>
<td>.008*</td>
</tr>
<tr>
<td>School commitment</td>
<td>-.023</td>
<td>-.684</td>
<td>.494</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>-.149</td>
<td>-5.06</td>
<td>.000*</td>
</tr>
<tr>
<td>Anti-social peers</td>
<td>.428</td>
<td>13.0</td>
<td>.000*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>.095</td>
<td>3.45</td>
<td>.001*</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>.072</td>
<td>2.52</td>
<td>.012**</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>-.049</td>
<td>-1.74</td>
<td>.082</td>
</tr>
<tr>
<td>SES (1 = &gt;H.S. 2 = H.S. 3 = &lt;H.S.)</td>
<td>.016</td>
<td>.599</td>
<td>.549</td>
</tr>
<tr>
<td>Self-reported violent delinquency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$R^2 = .328$</td>
<td></td>
<td>$F = 51.93$</td>
</tr>
</tbody>
</table>

*significant at .01 or less  
**significant at .05 or less

Table 4.7 shows the OLS regression of the logarithm of self-reported alcohol and illegal drug use on the independent variables. This equation was also significant ($F = 56.56, p > .01$) and explained approximately 35% of the variation in alcohol and illegal drug use ($R^2 = .345$). Six of the independent variables in the model were significant predictors of alcohol and illegal drug use.

The strongest predictor of alcohol and illegal drug use, once again, was anti-social peers ($B = .352$), indicating that as the number of anti-social peers increases so does alcohol and illegal drug use. This finding was consistent with
prior research, which has found antisocial/delinquent peers are significantly associated with alcohol and illegal drug use (Joseph, 1995). Many other studies have also found anti-social/delinquent peer association to be one of the strongest predictors of delinquency (e.g., Agnew, 1995; Akers & Cochran, 1985; Matsueda, 1982; Paetsch et al., 1997; Tittle et al., 1986; Warr & Stafford, 1991). This finding indicates support for differential association (i.e., individuals who associate with anti-social/delinquent peers learn and adopt definitions favorable to crime, which increases the likelihood of delinquent behavior).

The second strongest predictor of self-reported alcohol and illegal drug use was race (B = .163), indicating that whites were more likely to report using alcohol and illegal drugs. Joseph (1995) also found that whites reported using alcohol and illegal drugs more often than non-whites. Akers and Lee (1999) reported higher levels of marijuana use among white juveniles. In order to more fully understand alcohol and illegal drug use, some researchers have suggested that one must consider the demographic characteristics of the offender (Joseph, 1995).

The predictive ability of race was followed by prosocial peers (B = -.139), meaning that prosocial peers decrease the likelihood of one’s use of alcohol and illegal drugs. This finding along with that of the relationship between anti-social peers and alcohol and illegal drug use indicates that both sides of the learning (i.e., differential association) equation predicted alcohol and illegal drug use. Additionally, an investigation of both sides of the dyad of differential association, helps to determine factors that are likely to lead to delinquent behavior as well as
the factors that may reduce delinquent behavior. Other researchers have noted the importance of investigating prosocial relationships as they related to delinquent behavior (Lauritsen et al., 1991).

Research indicates that there is an interrelationship between delinquency and victimization. Individuals who consume alcohol and use drugs are more likely to be victimized (Bjarnason et al., 1999; Sampson & Lauritsen, 1990). As a result of their offender status (i.e., under age drinking and illegal drug use), the mental and physical capacities of an intoxicated/impaired person may be greatly diminished, which may impair their ability to avoid dangerous situations or to defend themselves if the circumstance were to arise. Therefore, victimization was added to the model to investigate this relationship. The findings indicate that even when victimization was controlled for, prosocial peers remained a significant predictor of delinquency (B = -.138). Once again, this suggests that individuals who associate with prosocial peers are less likely to report using alcohol and illegal drugs.

Additionally, school commitment (B = -.110) was a significant predictor of the use of alcohol and illegal drugs, meaning that individuals who were committed to school were less likely to report alcohol and illegal drug use. This finding was consistent with Hirschi’s conceptualization of commitment within social bond theory. Specifically, Hirschi (1969) argued that individuals who were committed to conventional pursuits/activities were less likely to report involvement in delinquent behavior.
Parental attachment ($B = -0.075$) was significant at the .05 level and was ranked fifth as a predictor of the use of alcohol and illegal drugs, indicating that individuals that were attached to their parents were less likely to be involved with alcohol and illegal drug use. Joseph (1995) also found a negative relationship between parental attachment and alcohol and illegal drug use. However, the relationship reported here was very weak when compared to the learning measures.

The final predictor of alcohol and illegal drug use was the number of hours spent hanging out with peers with no adult supervision ($B = 0.097$). This means as the number of hours spent hanging out with peers without adult supervision increases so does the use of alcohol and illegal drugs. This finding supports the findings of Junger and Marshall (1997) who also found family supervision to be inversely related to delinquent behaviors. Related research by Warr (1993) found that the amount of time youths spent with their family was capable of reducing and even eliminating peer influence.
Table 4.7

**OLS Regression of the Logarithm of Self-Reported Alcohol and Illegal Drug Use on the Independent Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>-.075</td>
<td>-2.36</td>
<td>.018**</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>-.057</td>
<td>-1.70</td>
<td>.089</td>
</tr>
<tr>
<td>School commitment</td>
<td>-.110</td>
<td>-3.28</td>
<td>.001*</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>-.139</td>
<td>-4.00</td>
<td>.000*</td>
</tr>
<tr>
<td>Anti-social peers</td>
<td>.352</td>
<td>10.8</td>
<td>.000*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>.097</td>
<td>3.61</td>
<td>.000*</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>-.032</td>
<td>-1.13</td>
<td>.260</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>.163</td>
<td>5.84</td>
<td>.000*</td>
</tr>
<tr>
<td>SES (1 = &gt;H.S. 2 = H.S. 3 = &lt;H.S.)</td>
<td>-.004</td>
<td>-1.53</td>
<td>.879</td>
</tr>
</tbody>
</table>

Self-reported alcohol/illegal drug use  

\[ R^2 = .345 \]

\[ F = 56.56 \]

*significant at .01 or less  
**significant at .05 or less

**Victimization Models**

The next model regressed the logarithm of the victimization scale on a set of nine predictor variables (see Table 4.8). Overall it was significant (\( F = 18.81, p > .01 \)) and explains approximately 15% (\( R^2 = .151 \)) of the variation in victimization. Four of the nine independent variables were significant predictors of victimization. As found in prior research (Bjarnason et al., 1999), the strongest predictor of victimization was association with antisocial peers (\( B = .281 \)). Stated
another way, association with anti-social peers increases the likelihood of participation in delinquent behavior as well as increasing the risk of victimization.

Parental attachment ($B = -.082$) and parental supervision ($B = -.076$) were both significant (.05 level) predictors of victimization. According to Hirschi (1969), parental attachment has a negative effect on crime. Following the logic of social bond theory, strong parental attachments and parental supervision should have a negative effect on victimization. Originally, Hirschi (1969) conceptualized parental supervision as part of parental attachment. Here, the effects of parental attachment and parental supervision were investigated separately but both were inversely related to victimization. However, it should be noted that the effect size was small, which indicates weak support for the relationship between parental attachment and supervision and victimization.

Gender was also a significant (.05 level) predictor of victimization ($B = .073$), indicating that males are more likely to be victimized than females. Prior studies indicate that males are more likely to be victimized than females (e.g., Bjarnason et al., 1999; Esbensen & Huizinga, 1991; Gottfredson, 1986; Lauritsen et al., 1991; Mawby, 1979; Meithe et al., 1987; Sampson & Lauritsen, 1990). The findings here were consistent with lifestyle theory which asserts that persons are more likely to be victimized when they come into contact with members of demographic groups that contain a disproportionate number of offenders. It is argued that males are more likely to become victims of a crime because are more likely to be involved in delinquency and to associate with other adolescent males who themselves are disproportionately involved in delinquent
behavior. This concept also supported the assertion of differential association, which suggests that delinquent associations increase the likelihood of adopting beliefs favorable to crime, leading to increased participation in delinquent behaviors.

Table 4.8

Model 1: OLS Regression of the Logarithm of Self-Reported Victimization on the Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>-.082</td>
<td>-2.27</td>
<td>.024**</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>-.076</td>
<td>-1.97</td>
<td>.049**</td>
</tr>
<tr>
<td>School commitment</td>
<td>-.016</td>
<td>-.423</td>
<td>.672</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>.011</td>
<td>.267</td>
<td>.790</td>
</tr>
<tr>
<td>Anti-social peers</td>
<td>.281</td>
<td>7.63</td>
<td>.000*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>-.027</td>
<td>-.879</td>
<td>.379</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>.073</td>
<td>2.28</td>
<td>.023**</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>-.062</td>
<td>-1.93</td>
<td>.054</td>
</tr>
<tr>
<td>SES (1 = &gt;H.S. 2 = H.S. 3 = &lt;H.S.)</td>
<td>.004</td>
<td>.115</td>
<td>.908</td>
</tr>
<tr>
<td>Self-reported victimization</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*R significant at .01 or less
**R significant at .05 or less

Delinquent Behavior and the Risk of Victimization

The association between delinquent behavior and victimization has been well established in empirical research. For example, individuals whose lifestyles are characterized by violent offending increase their risk of victimization as a
direct result of their own predatory offending (Sampson & Lauritsen, 1991). Additionally, individuals who use alcohol and illegal drugs are also at an increased risk of victimization. Therefore, in order to study the association between delinquent behavior and victimization, delinquency measures were added to the last three victimization models.

Table 4.9 displays the results of OLS regression of the logarithm of the victimization scale on the nine independent variables. Model 2 was altered to include self-reported property delinquency as an additional independent variable. The overall model was significant \((F = 20.52, \ p > .01)\) and explained approximately 18% \((R^2 = .179)\) of the variation in victimization, not substantially different from Model 1.

The strongest predictor of self-reported victimization in Model 2 was self-reported property offending \((B = .206)\), indicating that involvement in property crime substantially impacts the likelihood of being victimized. This finding supports prior research studies that have found that victims are more likely to report involvement in delinquent behavior than non-victims (Gottfredson, 1984; Jensen & Brownfield, 1986; Sampson & Lauritsen, 1990). This finding also lends support to related research, which indicates that offenders and victims are often one and the same (Lauritsen et al., 1991; Singer, 1981; Wolfgang, 1958). Therefore, individuals who report involvement in property offending were more likely to report being victimized.

The self-reported property delinquency measure was closely followed by antisocial peers \((B = .176)\) as a predictor of victimization. Thus, anti-social peers
remained a strong predictor, though declining with the introduction of control for property offending. This indicates that anti-social peers increase the likelihood of victimization. This finding was consistent with lifestyle theory which states that individuals who associate with, or come in contact with, members of demographic groups that contain a disproportionate number of offenders are more likely to be victimized (Hindelang et al., 1978). Jensen and Brownfield (1986) found that association with delinquent peers was conducive to an increased risk of victimization. However, related research indicates that offenders and victims are often one and the same (Singer, 1981; Wolfgang, 1958). In other words, the factors that place one at risk for deviance and criminality are the same factors that place one at risk of victimization.

In addition, race was found to be a significant predictor of self-reported victimization (B = -.086), indicating that non-whites were more likely to be the victimized. Other researchers have found that non-whites consistently report higher rates of victimization than whites (Bjarnason et al., 1999; Gottfredson, 1986; Miethe et al., 1987; Singer, 1981).

Parental supervision was also found to be a significant predictor of victimization (B = -.074), indicating that increased levels of parental supervision were related to a decrease in victimization. Warr (1993) found that the amount of time youths spent with their family was capable of reducing and even eliminating peer influence. A study conducted by Junger and Marshall (1997) found that family supervision was inversely related to delinquent behaviors. However, in the current investigation parental supervision had a small effect in explaining
victimization, which indicated a weak relationship between parental supervision and victimization.

Table 4.9

Model 2: OLS Regression of the Logarithm of Self-Reported Victimization on the Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>-.054</td>
<td>-1.51</td>
<td>.131</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>-.078</td>
<td>-2.07</td>
<td>.038**</td>
</tr>
<tr>
<td>School commitment</td>
<td>-.003</td>
<td>-0.90</td>
<td>.928</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>.009</td>
<td>.223</td>
<td>.824</td>
</tr>
<tr>
<td>Anti-social peers</td>
<td>.176</td>
<td>4.31</td>
<td>.000*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>-.043</td>
<td>-1.39</td>
<td>.165</td>
</tr>
<tr>
<td>Property delinquency</td>
<td>.206</td>
<td>5.53</td>
<td>.000*</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>.059</td>
<td>1.85</td>
<td>.065</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>-.086</td>
<td>-2.69</td>
<td>.007*</td>
</tr>
<tr>
<td>SES (1 = &gt;H.S. 2 = H.S. 3 = &lt;H.S.)</td>
<td>-.002</td>
<td>-.056</td>
<td>.955</td>
</tr>
<tr>
<td>Self-reported victimization</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² = .179  F = 20.52

*significant at .01 or less
**significant at .05 or less

The logarithm of the victimization scale was regressed on the independent variables, replacing self-reported property offenses with self-reported violent delinquency, and the results are shown in Table 4.11. The overall model was significant (F = 34.21, p > .01) and the model explains approximately 27% (R² = .266) of the variation in victimization. Three of the independent variables were found to be significant predictors of victimization. The strongest predictor of victimization was self-reported violent delinquency (B = .403), meaning that
increased involvement in violent delinquency was related to increased victimization. The effect of involvement in violent delinquency was twice that of involvement in property offending. As noted by Jensen and Brownfield (1986), violent offending may be considered a type of lifestyle conducive to an increased risk of victimization. Similarly, Bjarnason et al. (1999) found that adolescents who engage in delinquent and violent behaviors are disproportionately victimized. Additional studies support these findings that violent behavior has been consistently related to victimization (Esbensen & Huizinga, 1991; Lauritsen et al., 1991; Sampson & Lauritsen, 1990). Related research by Gottfredson (1981) has suggested that similar processes may produce both offenders and victims. Other studies have supported Gottfredson’s claim that offender and victim status is often shared (Lauritsen et al., 1991; Singer, 1981; Wolfgang, 1958).

The current study also found support for the idea that offenders and victims heavily overlap. One consistent finding throughout the victimization models was that those reporting involvement in delinquent behavior (i.e., property and violent offending and alcohol and illegal drug use) were more likely to report being victimized. Individuals whose lifestyles are characterized by violent offending increase their risk of victimization as a direct result of their own predatory offending and their association with other offenders (Sampson & Lauritsen, 1991).

Once again, the second strongest predictor of victimization was anti-social peers (B = .115), indicating that involvement with anti-social peers increases the likelihood of victimization. Researchers have found association with anti-social
peers to be one of the strongest predictors of both delinquency and victimization (Bjarnason et al. 1999; Lauritsen et al. 1991; Matsueda, 1982; Sampson & Lauritsen, 1990; Warr, 1993). This association is also consistent with the “principle of homogamy” in lifestyle theory states that individuals who associate with, or come in contact with, members of demographic groups that contain a disproportionate number of offenders are more likely to be victimized (Hindelang et al., 1978). Another study indicates that individuals whose lifestyles are characterized by violent offending increase their risk of victimization as a direct result of their own predatory offending and their association with other offenders (Sampson & Lauritsen). Stated another way, adolescents are more likely to be victims of violent crime because they are more likely to associate with other young people, who are disproportionately involved in violent offending.

The final predictor of self-reported victimization was the number of hours the respondents reported they spent hanging out with peers without adult supervision ($B = -.067$). The number of hours spent hanging out with peers not doing anything in particular without adult supervision is inversely related to victimization when controlling for self-reported violent delinquency. This finding highlights the importance of what type of activity the respondents were involved in at the time of their victimization. If the youths reported they were just hanging out “not doing anything in particular,” they were less likely to report being victimized than if they reported participating in violent delinquency while hanging out with their peers.
Table 4.10

Model 3: OLS Regression of the Logarithm of Self-Reported Victimization on the Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>-.053</td>
<td>-1.56</td>
<td>.118</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>-.047</td>
<td>-1.30</td>
<td>.192</td>
</tr>
<tr>
<td>School commitment</td>
<td>-.008</td>
<td>-0.235</td>
<td>.814</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>.019</td>
<td>.518</td>
<td>.605</td>
</tr>
<tr>
<td>Anti-social peers</td>
<td>.115</td>
<td>3.07</td>
<td>.002*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>-.067</td>
<td>-2.32</td>
<td>.021**</td>
</tr>
<tr>
<td>Violent delinquency</td>
<td>.403</td>
<td>11.8</td>
<td>.000*</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>.042</td>
<td>1.41</td>
<td>.160</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>-.045</td>
<td>-1.50</td>
<td>.135</td>
</tr>
<tr>
<td>SES (1 = &gt;H.S. 2 = H.S. 3 = &lt;H.S.)</td>
<td>-.009</td>
<td>-.321</td>
<td>.748</td>
</tr>
<tr>
<td>Self-reported victimization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R² = .266</td>
<td>F = 34.21</td>
<td></td>
</tr>
</tbody>
</table>

*significant at .01 or less  
**significant at .05 or less

Table 4.11 shows the OLS regression of the logarithm of the victimization scale on the set of independent variables, substituting alcohol and illegal drug use as the delinquent predictor for victimization. The overall model is significant (F = 24.42, p >.01), and explains nearly 21% (R² = .205) of the variation in victimization. Four of the independent variables were found to be significant predictors. The strongest predictor in this equation was self-reported alcohol and illegal drug use (B = .277). This means that as the respondents’ use of alcohol and illegal drugs increase, the likelihood of being victimized also increases.
Bjarnason et al. (1999) obtained similar results in their study that found frequency of alcohol use to be a strong predictor of victimization and violent victimization in particular. Sampson and Lauritsen (1990) also found that alcohol consumption increases one’s risk of victimization. Still other researchers have found alcohol consumption increases one’s likelihood of becoming a victim of sexual assault and/or homicide (Amir, 1971; Wolfgang, 1958).

Prior research indicates that individuals who drink excessively and use drugs are also more likely to become victims of a violent crime (Bjarnason et al., 1999; Sampson & Lauritsen, 1990). Alcohol and drug use may contribute to violent victimization in several ways. First, the mental and physical capacities of an intoxicated or impaired person are greatly diminished which may impair their ability to avoid dangerous situations or to defend themselves if the circumstance arises. Additionally, intoxicated individuals are more likely to engage in delinquent and violent behavior, which may result in their own victimization (Newcomb & McGee, 1989).

Following self-reported alcohol and illegal drug use as a predictor of victimization, once again, was anti-social peers (B = .185), meaning that association with anti-social peers increases the likelihood of victimization. Researchers have found association with anti-social peers to be one of the strongest predictors of both delinquency and victimization (Bjarnason et al. 1999; Lauritsen et al. 1991; Matsueda, 1982; Sampson & Lauritsen, 1990; Warr, 1993). This finding was consistent with lifestyle theory, which states that individuals who
associate members of demographic groups that contain a disproportionate number of offenders are more likely to be victimized (Hindelang et al., 1978).

Race (B = -.106) and gender (B = .82) were also significant predictors of victimization, indicating that non-whites and males were more likely to be victimized. Researchers have consistently found that males are more likely to be victimized than females, especially by violent offenses (Bjarnason et al., 1999; Esbensen & Huizinga, 1991; Gottfredson, 1986; Lauritsen et al., 1991; Lockwood, 1997; Mawby, 1979; Meithe et al., 1987; Sampson & Lauritsen, 1990). It is argued that males are more likely to become victims of a crime because are more likely to associate with other adolescent males who themselves are disproportionately involved in delinquent behavior (Hindelang et al., 1978). Additionally, non-whites consistently report higher rates of victimization than whites (Bjarnason et al.; Gottfredson; Miethe et al.; Singer, 1981).
Table 4.11

Model 4: OLS Regression of the Logarithm of Self-Reported Victimization on the Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta</th>
<th>t-statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental attachment</td>
<td>-.054</td>
<td>-1.54</td>
<td>.124</td>
</tr>
<tr>
<td>Parental supervision</td>
<td>-.068</td>
<td>-1.83</td>
<td>.068</td>
</tr>
<tr>
<td>School commitment</td>
<td>.015</td>
<td>.404</td>
<td>.686</td>
</tr>
<tr>
<td>Prosocial peers</td>
<td>.049</td>
<td>1.26</td>
<td>.209</td>
</tr>
<tr>
<td>Anti-social peers</td>
<td>.185</td>
<td>4.89</td>
<td>.000*</td>
</tr>
<tr>
<td>Hours with peers</td>
<td>-.054</td>
<td>-1.79</td>
<td>.073</td>
</tr>
<tr>
<td>Alcohol/Illegal drugs</td>
<td>.277</td>
<td>7.79</td>
<td>.000*</td>
</tr>
<tr>
<td>Gender (0 = female 1 = male)</td>
<td>.082</td>
<td>2.62</td>
<td>.009*</td>
</tr>
<tr>
<td>Race (0 = nonwhite 1 = white)</td>
<td>-.106</td>
<td>-3.36</td>
<td>.001*</td>
</tr>
<tr>
<td>SES (1 = &gt; H.S. 2 = H.S. 3 = &lt;H.S.)</td>
<td>-.003</td>
<td>-.095</td>
<td>.924</td>
</tr>
<tr>
<td>Self-reported victimization</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Self-reported victimization \( R^2 = .205 \) \( F = 24.42 \)

*significant at .01 or less

Summary of the Analyses

Across the models of delinquency there were some consistent findings. First, the learning variables (i.e., anti-social peers and prosocial peers) were stronger predictors of delinquent behavior than the social control/bond variables (i.e., parental attachment, parental supervision and school commitment). Specifically, in all of the delinquency models, anti-social peers were found to be
one of the strongest predictors of delinquent behavior. Additionally, support was found for both sides of the learning equation (i.e., prosocial peers). In two of the delinquency models (i.e., violent delinquency and alcohol and illegal drug use, prosocial peers were a significant predictor of delinquent behavior. This finding indicates that individuals who report more associations with prosocial peers were less likely to report involvement in violent offending and alcohol and illegal drug use.

Weak support was found for the social control measures (i.e., parental attachment, parental supervision, and school commitment) and delinquency. Parental attachment was a weak predictor of self-reported property delinquency and alcohol and drug use, indicating that individuals who report high levels of parental attachment reported less involvement in these behaviors. However, parental supervision was only a significant predictor for violent delinquency, meaning that individuals who report high levels of parental supervision report less involvement in violent behaviors. Finally, a related finding indicates that the number of hours spent hanging out with peers without adult supervision, use here as a lifestyle indicator, was a significant predictor of all three of the delinquent behaviors investigated here (i.e., property delinquency, violent delinquency, and alcohol and illegal drug use). This finding was consistent with lifestyle theory, which states that risky or delinquent lifestyles increase the likelihood of becoming involved in delinquent behavior.

The strongest predictor of victimization was involvement in delinquent behavior and this was a consistent finding across the victimization models. A
study conducted by Jensen and Brownfield (1986) found that general deviance and violent offending to a type of lifestyle conducive to an increased risk of victimization. Similarly, Bjarnason et al. (1999) found that adolescents who engage in delinquent and violent behaviors are disproportionately victimized. Additional studies support these findings that violent behavior has been consistently related to violent victimization (Esbensen & Huizinga, 1991; Lauritsen et al., 1991; Sampson & Lauritsen, 1990). Related research indicates that offenders and victims are often one and the same (Singer, 1981; Wolfgang, 1958).

In addition, individuals who drink excessively and use drugs are also more likely to become victims of a violent crime (Bjarnason et al., 1999; Sampson & Lauritsen, 1990). Intoxicated individuals are more likely to engage in delinquent and violent behavior, which may result in their own victimization (Newcomb & McGee, 1989). The findings of the current investigation also found that those who reported using alcohol and illegal drugs reported higher incidents of victimization. Stated another way, the factors that place one at risk for deviance and criminality are the same factors that place one at risk of victimization.

The findings also indicate that association with anti-social peers was predictive of victimization, meaning that those who reported associations with anti-social peers reported higher incidents of victimization. This finding was consistent with lifestyle theory that claims that individuals who associate with, or come in contact with members of demographic groups that contain a
A disproportionate number of offenders are more likely to be victimized (Hindelang et al., 1978).
CHAPTER 5

DISCUSSION

Gottfredson (1981) has suggested that similar processes may produce both offenders and victims. Related research has supported Gottfredson’s claim noting that offenders and victims were often one and the same (Lauritsen et al., 1991; Singer, 1981; Wolfgang, 1958). The current study also found support for the idea that offender and victim populations overlap substantially. That is, a consistent finding throughout the victimization models was that those reporting involvement in delinquent behavior (i.e., property and violent offending and alcohol and illegal drug use) were more likely to report being victimized. These findings were also consistent with the findings of Jensen and Brownfield (1986) that general deviance and violent offending were part of a lifestyle conducive to an increased risk of victimization. Similarly, Bjarnason et al. (1999) found that adolescents who engage in delinquent and violent behaviors are disproportionately victimized. Additional studies support these findings that violent behavior has been consistently related to violent victimization (Esbensen & Huizinga, 1991; Lauritsen et al.; Sampson & Lauritsen, 1990). Still other studies have found that individuals who drink excessively and use drugs are also more likely to become victims of a violent crime (Bjarnason et al.; Sampson & Lauritsen). In other words, those most likely to be victims of a crime are those who have been the most involved as perpetrators of crime or delinquency.
As expected, association with anti-social peers was consistently one of the strongest predictors of both delinquent/criminal behavior and victimization. This association has been found to be one of the strongest predictors of both delinquency and victimization by other researchers (e.g., Lauritsen et al., 1991; Matsueda, 1982; Sampson & Lauritsen, 1990; Warr, 1993; Warr & Stafford, 1999). This finding was also consistent with lifestyle theory that states that individuals who associate with, or come in contact with members of demographic groups that contain a disproportionate number of offenders are more likely to be victimized (Hindelang et al., 1978). Another finding that is consistent with lifestyle theory is as the number of hours spent hanging out with peers without adult supervision increases, so does the number of self-reported delinquent acts. However, one unexpected finding indicates that the number of hours spent hanging out with friends without adult supervision was negatively related to victimization. This finding would seem to be in opposition to that proposed in routine activities theory that lack of guardianship increases the risk of victimization.

According to prior research, demographic characteristics play an important role in delinquent behavior and victimization. Specifically, researchers have found that the some of the most powerful predictors of delinquency and victimization are race and gender (Cohen et al., 1981; Gottfredson, 1986; Hensley et al., 1999; Hindelang, 1976; Hindelang et al., 1978). Researchers have consistently found that males are more likely to be victimized than females and are more likely to be involved in delinquent behavior (e.g., Bjarnason et al., 1999;
Esbensen & Huizinga, 1991; Gottfredson, 1986; Mawby, 1979; Miethe et al., 1987; Lauritsen et al., 1991; Sampson & Lauritsen, 1990). Lifestyle theory asserts that persons are more likely to be victimized when they come into contact with members of demographic groups that contain a disproportionate number of offenders. Males, for example, are more likely to become victims of a crime because are more likely to associate with other adolescent males who themselves are disproportionately involved in delinquent behavior. This concept is also consistent with differential association, which suggests that delinquent associations increase the likelihood of adopting beliefs favorable to crime.

In this investigation, race was found to be related self-reported property delinquency and alcohol and illegal drug use, indicating that whites reported higher levels of involvement in property crime and alcohol and illegal drug use. These findings are consistent with other research studies that have found that whites report higher levels of alcohol consumption and illegal drug use (Akers & Lee, 1999; Joseph, 1995) and more involvement in property crime (Lauritsen et al., 1991; Sampson & Lauritsen, 1990). However, nonwhites were more likely to be involved in violent delinquency, which is another consistent finding in prior studies. In addition, prior research indicates that non-whites have consistently reported higher rates of victimization than whites (Bjarnason et al., 1999; Gottfredson, 1986; Miethe et al., 1987; Singer, 1981). The current research also concludes that non-whites reported higher rates of victimization. These findings indicate that crime-victimization relationship cannot be understood without considering the demographic characteristics of the offenders and victims.
Hirschi (1969) argued that parental attachment has a negative effect on crime. Some weak to moderate support was found for Hirschi’s claim that parental attachment is inversely related to delinquent behavior. In two of the three models that examined delinquent behavior, parental attachment was negatively associated with delinquency (i.e., property crime and alcohol and illegal drug use). Additionally, in one of the victimization models, parental attachment was negatively associated with reports of being victimized. However, when the delinquency measures were added to the models, parental attachment failed to reach significance. Parental supervision was negatively related to self-reported violent crime. Similarly, Junger and Marshall (1997) found that family supervision was inversely related to delinquent behaviors. In related research, Warr (1993) found that the amount of time youths spent with their family was capable of reducing and even eliminating peer influence. Taken together, these findings highlight the importance of parent-child relationship as a deterrent to criminal/delinquent behavior and in some instances, victimization.

Also in support of social bond theory was the association between school commitment and crime and delinquency. School commitment was related to involvement in property crime and alcohol and illegal drug use, indicating that those who reported high levels of school commitment reported low levels of involvement in property offending. This was consistent with Hirschi’s claim that individuals who were involved in and committed to conventional pursuits such as school were less likely to be delinquent behavior.
The purpose of the current research was to synthesize social bond, differential association, and lifestyles/routine activities into one theoretical model to determine its predictive utility in the explanation of juvenile delinquency and victimization. The results of the current investigation yielded consistent support for the integrated model used. When compared to other studies that have utilized integrated models, the explained variance in the present model is comparable to, and in some cases considerably above those used by other researchers. Of course, the differences in the explained variance of the models may be partly the result of the theories that the researchers chose to integrate. For example, when social control and social learning theories were combined, there was more explained variance. It is also important to note that the explained variance may be partly attributed to the dependent variable (i.e., what the researcher was attempting to explain). However, the primary goal of theoretical integration is to maximize the explained variance. Table 5.1 is a comparison of some of the research studies that have used integrated models to explain crime/delinquency and victimization.
Criminologists have continued to debate the merits of theoretical integration in the explanation of crime. Some theorists have argued against integration claiming that “successful integration would destroy the healthy competition among ideas” (Hirschi, 1979, p.37). Still others have argued that theoretical integration is necessary because the causes of crime are multiple in nature; therefore, a complete range of relevant causal variables must be examined (Elliott et al., 1979; Liska et al., 1985). Additionally, many

<table>
<thead>
<tr>
<th>Authors</th>
<th>Theoretical Model</th>
<th>Explained Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hensley et al. (1999)</td>
<td>Subculture of violence &amp; self-control</td>
<td>Violent offending $R^2 = .12$ to $R^2 = .16$</td>
</tr>
<tr>
<td>Joseph (1995)</td>
<td>Differential association, social control, &amp; strain</td>
<td>Delinquent behavior $R^2 = .22$ to .27</td>
</tr>
<tr>
<td>Menard &amp; Elliott (1994)</td>
<td>Social learning, social control, &amp; strain</td>
<td>Minor offending $R^2 = .42$ to .48 Index offending $R^2 = .34$ to .45</td>
</tr>
<tr>
<td>Bjarnason et al. (1999)</td>
<td>Routine activities &amp; structural constraints</td>
<td>Violent victimization $R^2 = .19$ to .22</td>
</tr>
<tr>
<td>Dodson (2001)</td>
<td>Social control, differential association &amp; lifestyles</td>
<td>Delinquent behavior $R^2 = .33$ to .37 Victimization $R^2 = .15$ to .27</td>
</tr>
</tbody>
</table>
criminologists have criticized single theories because of their lack of explanatory power (Elliott, 1985; Sorensen & Brownfield, 1995). For example, social bond theory does a better job of explaining minor offenses than serious ones; whereas, learning theories provide a more powerful explanation of serious than for nonserious offenses (Aultman, 1979; Burkett & White, 1974; Elliot et al.; Johnstone, 1981; Meade & Marsden, 1981). Nevertheless, most researchers admit that nearly every theory, or at least certain propositions of every theory, has received some level of empirical support (Liska et al). However, the level of empirical support for single theories ranges from being modest to weak. Therefore, if theoretical integration moves us toward a more complete explanation of crime and delinquency, then it should be viewed as a worthwhile endeavor (Akers, 1989).

Policy Implications

Although the current investigation was not intended to be an evaluation of the Drug Awareness Resistance Education (D.A.R.E.) or the Gang Resistance Education and Training (G.R.E.A.T.) programs, the findings here have implications for both of these programs. Both the D.A.R.E. and G.R.E.A.T. programs emphasize positive peer pressure as a deterrent to delinquent/deviant behavior. Additionally, both programs teach adolescents the importance of avoiding anti-social peers who might encourage them to participate in delinquency or place them in a position to victimized. The findings suggest support for the association of delinquent behavior (i.e., violent delinquency and
alcohol and illegal drug use) and prosocial and anti-social peers. In other words, individuals who report involvement with prosocial peers reported lower involvement in violent offending and alcohol and illegal drug use. Conversely, individuals who reported associations with anti-social peers were more likely to report higher involvement in violent offending and alcohol and illegal drug use. Although these findings are not conclusive, there seems to be some support for programs that are designed to address both prosocial and anti-social peer associations.

**Limitations and Future Research**

The data used in this analysis were a non-random sample and were not geographically representative of the adolescent population across United States. As such, strong generalizations cannot be made to the adolescent population as a whole.

The data used in this analysis were obtained from a public school-based survey and, therefore, subject to certain limitations. These limitations included the exclusion of private school students; truant, sick, and or tardy students; and the possible underrepresentation of “high-risk” youths. As with any self-report data there is the possibility that some individuals may either exaggerate or conceal their acts of misconduct. Still others may inaccurately recall certain events, which poses a threat to the reliability of the data.

It is also important to note that the data used in this analysis were cross-sectional; therefore, this study is limited in its inferences about causality.
Additionally, as a secondary analysis, the measures are limited in scope and breadth to the questions available in the G.R.E.A.T. questionnaire.

Another limitation to the study is with regards to criminal motivation (i.e., motivational process or causes leading to crime). The role of criminal motivation has been largely ignored in empirical research (Agnew, 1995). In order for researchers to determine which assumption(s) to adopt, questions about what motivates an individual to commit crime would need to be included on the survey instrument. For example, control theorists would focus on measurements dealing with the internal and external costs of crime (Agnew). Theorists attempting to measure definitions favoring crime (i.e., differential association) would focus on the respondents' moral beliefs. The measurement of one's beliefs can be very involved and to date, most studies have failed to accurately measure moral beliefs. Items that ask respondents to rate their approval or disapproval for committing certain types of crime are insufficient (Agnew; Elliott, 1985). One should also consider “techniques of neutralization” and “the degree of moral pressure exerted by beliefs” in order to achieve a complete measurement of one's moral beliefs (Agnew). The current investigation could not state which motivational processes were operating because the items on the G.R.E.A.T. survey did not address this issue.

Future research should also investigate what Sutherland (1947) conceptualized as “definitions unfavorable toward crime.” To date, researchers testing models of differential association have limited their test to delinquent/anti-social peers (i.e., definitions favorable to crime) and have largely ignored
prosocial peers (i.e., definitions unfavorable to crime). However, the findings of this study extend current research by finding that association with prosocial peers is negatively related to involvement in reported violent crime and alcohol and illegal drug use. It is important to investigate both sides of the dyad of differential association, not only to determine factors that are likely to lead to delinquent behavior, but also to determine the factors that are likely to reduce delinquent behavior. In addition, other researchers have noted the importance of investigating prosocial relationships, which may act as protective factors that reduce the risk of victimization (Lauritsen et al., 1991).
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