

# Contemporary Issues in Juvenile Justice

---

Volume 3 | Issue 1

Article 4

---

2009

## An Examination of Delinquency and Victimization Using Social Bonding and Routine Activities

Everette B. Penn

*University of Houston- Clear Lake*

Jennifer Tanner

*University of Houston- Clear Lake*

Follow this and additional works at: <https://digitalcommons.pvamu.edu/cojpp-contemporaryissues>



Part of the [Child Psychology Commons](#), [Criminology and Criminal Justice Commons](#), [Social Control, Law, Crime, and Deviance Commons](#), and the [Social Work Commons](#)

---

### Recommended Citation

Penn, Everette B. and Tanner, Jennifer (2009) "An Examination of Delinquency and Victimization Using Social Bonding and Routine Activities," *Contemporary Issues in Juvenile Justice*: Vol. 3 : Iss. 1 , Article 4. Available at: <https://digitalcommons.pvamu.edu/cojpp-contemporaryissues/vol3/iss1/4>

This Article is brought to you for free and open access by Digital Commons @PVAMU. It has been accepted for inclusion in Contemporary Issues in Juvenile Justice by an authorized editor of Digital Commons @PVAMU. For more information, please contact [hvkoshy@pvamu.edu](mailto:hvkoshy@pvamu.edu).

## An Examination of Delinquency and Victimization Using Social Bonding and Routine Activities

Everette B. Penn

*University of Houston- Clear Lake*

Jennifer Tanner

*University of Houston- Clear Lake*

### *Abstract*

The study examined the relationship between juvenile delinquency and juvenile victimization using an integration of social bond theory and routine activities perspectives. Data were obtained from the Monitoring the Future (MTF) series of surveys given annually to a nationally representative sample of students. The MTF survey is from the 2005 group of surveys given to tenth grade students. The version of the survey was administered to 5,577 tenth grade students. This research examined the link between a student's commitment to school and guardianship. Specifically, it determined the amount of delinquency to which a student is involved and the extent of victimization experienced. Results showed that students who had stronger bonds to school were less likely to be involved in delinquency and were less likely to experience victimization than students who had weaker bonds to school. Current research supported an integration of social bond and routine activities/lifestyle theories and also provided more empirical evidence to support the anecdotal beliefs concerning the relationship between delinquency and victimization.

According to the Uniform Crime Report (UCR), youth under the age of 18 made up 15.3% arrests in 2005; this report was compiled annually by the Federal Bureau of Investigation (FBI) (2005) using aggregated data from local police departments. Youth under 18 years were most likely to be arrested for larceny-theft, for which they made up 25.7% arrests in 2005. According to the 2005 UCR, youth under 18 accounted for almost 16% (15.8%) arrests for violent crime and 26% of property crime arrests in the United States (FBI).

If a few more years are added to the age range, to encompass more of the crime prone years, the percent-ages of arrests would be even more astounding. More-over, should the age group be expanded to those persons under the age of 25, the percent of arrests would more than double (from 15.3% to 44.3%) (FBI, 2005). People under the age of 25 accounted for nearly 44.5% arrests for violent crime and 53.9% for property crime (FBI).

Turning attention to victimization data for 2005, it was quite clear that the victimization rate for persons under 25 was much higher than the rate for persons over 25. The victimization rate increases as does the age range. The rate of victimization for youth 12 to 15 years of age was 44.0 per 1,000. For adolescents 16 to 19 years of age the victimization rate increased slightly to 44.2 per 1,000. The victimization rate increased again for individuals between 20 and 24 years of age (46.9 per 1,000). After this age group, the victimization rate decreased drastically to 23.6 per 1,000 for persons aged 25 to 34 years (Sourcebook of Criminal Justice Statistics, 2005).

One of the main theories that will be used to examine offending behavior is the social bond theory. Hirs-

chi's (1969) theory is different from previous theories, because he examined the reasons for people to refrain from committing a crime. According to Hirschi, there are four major aspects to the social bond; attachment, commitment, involvement, and belief. The element of attachment referred to ties that individuals formed with other people.

Commitment referred to how invested a person was in conventional society. Involvement meant how much a person participated in conventional activities. While the last element of the social bond, belief, referred to the acceptance of conventional values and norms of society. According to the theory, when these elements of the social bond do not exist or are weakened individuals are free to commit deviant acts (Hirschi).

Several studies have found support for social bond theory. For example, an examination of the relationship between the elements of attachment and commitment and delinquency has shown the strongest support (see Costello & Vowell, 1999; Huebner & Betts, 2002; Junger & Marshall, 1997; Krohn & Massey, 1980; Rankin & Kern, 1994; Wiatrowski, Griswold, & Roberts, 1981). Results of studies that have examined the elements of involvement and belief have been less supportive (Agnew, 1993; Huebner & Betts; Jenkins, 1997).

Social bond theory has more explicative power when it comes to less serious forms of delinquency (Agnew, 1985; Friedman & Rosenbaum, 1988; Krohn & Massey, 1980). Krohn and Massey noted that it would be expected that social bond theory would be better at explaining minor forms of delinquency. The assumption that social bond is more explicative of less serious crime, also reinforces why it should be used to explain

youth crimes, as youth are most often arrested for non-violent crime (FBI, 2005).

The data used in this study included many questions regarding school, thus it is important to review previous research that had examined the elements of the social bond in regards to school. In her article, Jenkins (1997) used social bond theory to examine crime and misconduct in school, as well as school non-attendance. Results from a self report survey administered to 754 seventh and eighth grade students showed that the effect of each component of the social bond (i.e., attachment to school, commitment to school, involvement in school, and belief in school) varied by type of delinquency. She reported that of the four elements of the social bond the commitment element explained the most variance for all three types of delinquency measured. For school crime (i.e., drug and alcohol use, stealing from students or teachers, and damaging school property), both commitment and belief had strong inverse effects, while attachment and involvement had no significant effect (Jenkins).

For school non-attendance (i.e., cutting classes or school, being late for classes or school), Jenkins (1997) found that all of the social bond elements, except involvement, had inverse effects, but that commitment and attachment had the strongest effects. All of the elements, except involvement, are inversely related to school misconduct (i.e., frequently talking in class, using inappropriate language, cheating), but again the strongest relationship was with commitment. Jenkins found that the involvement element of the social bond had no significant effect on any of the three forms of delinquency; hence she agreed with Krohn and Massey (1980) that involvement should be part of the commitment element.

There has been a wide variety of studies which examined routine activities. Studies have looked at victimization on college campuses (Tewksbury & Mustaine, 2003), victimization in rural areas (Spano & Nagy, 2005), and victimization in different countries (Bennett, 1991; Bjarnason, Sigurdardottier, & Thor-lindsson, 1999; Messner, Lu, Zhang, & Liu, 2007). All have found support for the routine activities approach to explaining victimization risks. Support has been found for the routine activities theory for both property crime (Bennett; Cohen & Felson, 1979; Messner et al.) and violent crime (Schreck & Fisher, 2004; Schreck, Wright, & Miller, 2002).

Age, gender, and race have been identified as predictors that have a powerful effect on victimization rates (Hindelang, Gottfredson, Garofalo, 1978). Males more so than females, had a greater chance of being victimized and juveniles had a greater chance of being victimized than adults (Lauritsen, Sampson, & Laub, 1991; Esbensen & Huizinga, 1991; Sampson & Lauritsen, 1990). These same demographic characteristics have also been found to predict delinquency (Hindelang et al., 1978). There is a concordance to juvenile delinquency and victimization (Esbensen & Huizinga; Lauritsen et al.; Peterson, Taylor, & Esbensen, 2004). Based

on these findings it is evident that the more we learn about delinquency, the more we know about victimization and vice versa.

Lauritsen et al. (1991) examined the effect of delinquency on criminal victimization among teenagers. They "consider[ed] three areas in examining the risk factors for victimization among juveniles and young adults: (1) demographic factors; (2) involvement in delinquent lifestyles; [and] (3) physical proximity to crime and social disorder" (p. 267). Therefore, Lauritsen et al. found that involvement in delinquent lifestyles increased a youth's risk of victimization.

Esbensen and Huizinga (1991) also examined how an adolescent's involvement in delinquent activities affected his/her risk of victimization. In their study of youth aged 11 to 15 years, who were living in high-risk neighborhoods, it was found that gender, age, family living arrangement, and type of neighborhood disorganization had a significant effect on the risk of victimization. They also reported that males were more likely to report being victimized than females. The youngest members of the study, those who were 11 years of age, reported less victimization than older members of the sample. Adolescents living with a single parent reported the highest levels of victimization. Those adolescents living in Black neighborhoods, which were "characterized by a high proportion of Blacks, high concentration of single-parent families, and high density per household" reported the highest level of personal victimization (Esbensen and Huizinga, p. 209). Adolescents living in dense neighborhoods, characterized by "high density, high rates of mobility, and a high concentration of single people," reported the highest levels of property victimization (p. 209). Esbensen and Huizinga found slight differences in reported rates of victimization by race, but these differences did not reach the level of statistical significance.

Based on the similarities that were found between offending and victimization, Schreck and Fisher (2004, p. 1023) used the routine activities/lifestyle theories as a framework to examine the roles that family and peers played in the violent victimization of adolescents. The routine activities/lifestyle theory suggests that, "the convergence in time and space of motivated offenders, attractive targets, and ineffective guardianship determines the risk of victimization." Schreck and Fisher hypothesized that a strong attachment to one's family made adolescents less likely to be victimized as the guardianship was more effective. It was also hypothesized that relationships with delinquent peers would increase an adolescent's risk of victimization. Using data from the National Longitudinal Study of Adolescent Health, Schreck and Fisher found that family climate and a parent's feelings toward his/her child were the strongest factors associated with victimization. Additionally, adolescents living in homes that had a warm climate and positive parental feelings were least likely to be victimized. They also found that relating with delinquent peers increased an adolescent's risk of being

victimized. Thus, due to the association that had been found between offending and victimization, it has been suggested that theories of crime and theories of victimization should be integrated to provide a better understanding of both crime and victimization (Miethe & Meier, 1990).

Integrated theories usually attempt to explain crime by combining assumptions or variables from two or more existing theories. The reasoning behind integrating theories was that each theory only explained a small part of the causes of crime and that if these theories were combined then it was possible to get a more complete picture of the causes (Lilly, Cullen, and Ball, 2002). According to Lilly et al., there were two main problems with integrating theories. The first was that the use of integrating theories assumed that integrating elements of existing theories was a faster way of advancing criminological knowledge than having competing perspectives. The second major problem was that this would have led to "sloppy theorizing," (p. 243), where theorists would simply choose elements of theories that they liked, but which did not necessarily combine well.

Based on the assumptions of the theories used in this paper there were three hypotheses made. The first, based on the social bond theory, was that students with higher scores on the commitment index would be less involved in delinquency. The second hypothesis, based on routine activities theory, was that students who have a low score on the routine activities index would have a lower score on the victimization index. The third hypothesis involves the integration of the theories being used. It was hypothesized that students with higher scores on the commitment index would have lower scores on the victimization index.

This research examined the link between delinquency and victimization by attempting to use an integration of social bond theory and routine activities theory. The focus was on the effect of guardianship on both victimization and delinquency. Guardianship was measured by how much time students spent away from their parents. This was a fairly narrow definition of the aspect of guardianship, however, as the research used secondary data it was constrained by the questions asked in the Monitoring the Future (MTF) survey. Prior research has shown that teenagers who spent more time participating in leisure activities outside of their homes reported higher levels of violent victimization (Schreck & Fisher, 2004; Schreck et al., 2002).

## Method

### *Participants*

Teachers and students from participating schools were visited by a local representative from the Survey Research Center two weeks prior to the administration date. At this first meeting potential participants were given a flyer which would tell them and their parents

about the study. Either active or passive parental consent was used depending on the policies of the school district. The actual administration of the survey was carried out by the local representative along with assistants. Questionnaires were usually administered during a regular class period in the classrooms that had been chosen to participate. For a more detailed explanation of the sampling procedures used in the MTF series see Johnston, Bachman, O'Malley, and Schulenberg (2005).

### *Instrument*

The questions on the MTF survey were combined into four different indices, commitment, delinquency, guardianship, and victimization. Since this study used a secondary data set the indices must be made from questions that were included in the MTF survey.

The commitment to school index was a five item index consisting of the following questions: 1) in the last year how often did you enjoy being in school; 2) in the last year how often did you try your best in school; 3) in the last year how often did you find your school work interesting; 4) how likely is it that you will graduate from high school; and 5) how likely is it that you will go to college. The scores on the commitment index ranged from 5 to 23. A score of 5 on the index corresponded with students who had the least amount of commitment to school. For instance, students who scored a 5 reported that they never enjoyed being in school, they never tried their best, they never found school work interesting, and that they definitely would not graduate from high school or go to college. The opposite was reported for those students that had a score of 23 on the index; thus these students had a high commitment to school.

The delinquency index included ten questions about students' drug use in the twelve months prior to the survey. Drugs included in the index were alcohol, marijuana, LSD, crack, cocaine, amphetamines, heroin, methamphetamines, and inhalants. The scores on the delinquency scale ranged from 10 to 55. A score of 10 on the index indicated that the students reported that they had not used any of the drugs in the previous twelve months. The highest score possible for the delinquency index was a 70 which would have meant that a student would have reported using every type of drug in the index forty or more times in the previous twelve months.

The guardianship index for the current research contained five items that pertained to the amount of time students spent away from their parents. This was not the most comprehensive measure of the guardianship aspect of the routine activities/lifestyle theory, but given the questions asked on the MTF survey it was the most comprehensive index that could be created from the data. Questions included in the index were: 1) how often do your parents allow you to go out with friends on school nights; 2) how often do you go to parties; 3) how

often do you go to the mall; 4) how often do you get together with friends informally in your free time; and 5) how often do you go to the movies. Scores on this index ranged from 5 to 24. A score of 5 on this index indicated that students reported that their parents never let them go out on school nights, they never went to parties, the mall, or the movies, and that they never got together with their friends informally in their free time. A score of 24 on this index meant that students reported that their parents allowed them to go out on school nights often, they got to go to parties, the mall, and movies almost daily, and that they got together with their friends informally in their free time almost daily.

The victimization index consisted of seven items regarding victimization experiences at school during the twelve months prior to taking the survey. The experiences that were asked included: having something worth less than \$50.00 stolen; having something worth more than \$50.00 stolen; having property deliberately damaged; being injured with a weapon; being injured without a weapon; being threatened with a weapon; and being threatened without a weapon. The scores ranged from 7 to 35. A score of 5 indicated that a student reported that they had not experienced any victimization at school during the previous twelve months. A score of 35 indicated that a student reported that they had experienced all the types of victimization five or more times in the previous twelve months.

#### *Design and Procedure*

Data from the MTF series (2005) were used in this study. The MTF study is a series of annual surveys that are administered by the University of Michigan's Institute for Social Research to a nationally representative sample of eighth, tenth, and twelfth grade students in both public and private schools. While there are many different versions of the MTF survey administered each year, this study used one version of the survey given to 5,577 tenth grade students in 2005.

The MTF series used a multistage sampling design to obtain the nationally representative sample. The first stage on the sampling design was the selection of geographic areas. In the second stage, schools within the chosen geographic areas were selected. The last stage was the selection of students from participating schools to respond to the survey. In large schools, a random sample of about 350 students were selected to participate in the study, while in smaller schools with less than 350 students all students were asked to participate.

#### *Results*

The majority of the students who responded to this survey were White females over the age of 16 years that lived in a town or city. The demographic characteristics reported for the students in this sample were consistent with the demographic characteristics presented in the

2000 US Census. For example, females accounted for 50.8% of the students surveyed, while males accounted for 49.2%, which was consistent with the US population in 2000 (50.9% females and 49.1% males) (United States Census Bureau, 2000). The racial composition of this sample was also fairly consistent with the racial composition of the United States in 2000. The racial composition of the students in this sample was 16.6% Black, 69.3% White, and 14.1% Hispanic, while the racial composition of the United States in 2000 was 12.3% Black, 75.1% White, and 12.5% Hispanic (United States Census Bureau).

A series of One-Way ANOVA were conducted to determine whether there was a significant effect between any of the indices used (commitment, delinquency, guardianship, and victimization) and the demographic characteristics of the respondents. The results of the One-Way ANOVAs are presented in Table 1.

Table 1.  
*Results of One-Way ANOVA's*

Variables Compared	df	F	Sig.
Commitment/Age	1	8.130	.004
Delinquency/Age	1	7.263	.007
Guardianship/Age	1	2.683	.102
Victimization/Age	1	.006	.938
Commitment/Gender	1	143.254	.000
Delinquency/Gender	1	2.682	.102
Guardianship/Gender	1	9.556	.002
Victimization/Gender	1	72.166	.000
Commitment/Race	2	9.000	.000
Delinquency/Race	2	24.387	.000
Guardianship/Race	2	.708	.907
Victimization/Race	2	1.693	.184
Commitment/Live	2	13.357	.000
Delinquency/Live	2	1.571	.208
Guardianship/Live	2	15.805	.000
Victimization/Live	2	4.978	.007

Students who responded to the survey were 16 years or older and slightly more likely to have had a higher score on the delinquency index while those students under 16 years were more committed to attending school. Guardianship and victimization did not have a significant relationship with age. This finding may be explained by the fact that all of the student's in the sample were fairly close in age and that age was dichotomized into under and over 16 years.

There was a significant relationship found between gender and all of the variables, except delinquency, for

this sample of students. Females tended to be more committed to school, with a mean score on the commitment index of 17.84 as compared at the mean score for males of 16.97. Females also tended to experience less victimization, with a mean score of 9.03 on the victimization index as compared to the mean score of 9.93 for males.

Johnston et al. (2005) recommended interpreting racial differences in the MTF surveys with caution. The combination of a stratified clustered sample and the fact that on any given survey Blacks and Hispanics were only represented by about 700 respondents led to a greater margin of sampling error for Blacks and Hispanics than for Whites. The findings presented were based on the race variable because the racial composition of the students sampled closely mirrored that of the general population. The two indices used to measure social bond theory (commitment and delinquency) were found to be significantly related to race, while the two indices that were used to measure the routine activities/lifestyle theory (guardianship and victimization) were not found to be significantly related to race. In this sample, Black students were most committed to school, with a mean score of 17.76 on the commitment index, followed by Hispanic and White students with mean scores of 17.39 and 17.31, respectively. The results from the analysis of delinquency and race were to be expected given the results of the relationship between race and commitment to school. Black students reported the least amount of delinquency (mean score of 11.76), followed by Hispanic and White students (with mean scores of 12.66 and 12.95, respectively).

The Pearson Correlation Coefficient ( $r$ ) was calculated for each of the relationships that were being examined. The results of the analysis are shown in Table 2. These results were all in the directions that were expected, but were not as strong as expected. There was an inverse correlation between commitment to school and self-reported delinquency ( $-.295$ ), which supported the assumption of social bond theory. The correlation between guardianship and victimization ( $.033$ ) supported the routine activities/lifestyle theory; in that, as the amount of time spent away from parents increased so would the amount of victimization reported. There was also an inverse correlation between commitment to school and victimization ( $-.188$ ) and a positive correlation between guardianship and self-reported delinquency ( $.234$ ).

Table 2.  
*Pearson Correlation Coefficient Results for Variables*

	f	%	f	%
Commitment		-.295*		-.188
Delinquency	-.295*		.234*	
Guardianship		.234*		.033**
Victimization	-.188		.033**	

\* $p < .01$ , \*\* $p < .05$

Almost 40% (39.8%) of the students who responded to the MTF survey used in this research scored a 10 on the delinquency index; in that, they had not used any of the drugs in the index in the previous twelve months. Slightly more than 40% (41.6%) of students scored a 7 on the victimization index; thus in the previous twelve months they had not experienced any of the victimization experiences that were included in the index.

The commitment index was found to have a significant relationship with all four of the demographic variables used (age, gender, race, and where live). The other three indices were each only significantly related to two of the demographic variables. There was an inverse correlation between commitment and delinquency; in that, that as students became more committed to school, they became less likely to be involved in delinquency. There was a positive correlation between guardianship and victimization; that is, students who spent more time away from their parents reported more victimization. There was also an inverse correlation between commitment and victimization; therefore, the more committed a student was to school the less likely they were to be victimized. The correlation between guardianship and delinquency was positive, meaning that as students spent more time away from their parents they also reported more delinquency.

## Discussion

The current research examined the effects that commitment to school and guardianship may have had on delinquency and victimization for tenth grade students in a nationally representative survey. Parental involvement, specifically in a child's education, cannot be overlooked as an important protective factor. An education consultant, Kunjufu (1995) noted that as the age of the child increased the involvement of parent(s) decreased. Thus, the very ages when more risk factors converge are the time when parental involvement in school activities reduces (Greene and Penn, 2006). The results of this study were generally consistent with previous literature. Although the relationships were not as strong as some previous literature indicated, they do provide support for both theories used and for the integration of the theories.

As the commitment to school increases delinquency decreases, as well as the likelihood of crime victimization. Contrary to traditional findings about race, commitment to school, and delinquency, Blacks showed the highest commitment to school as well as the least amount of delinquency. This supports a belief that commitment to school can overcome social ills, risk factors and participation in delinquency activities. Thus the key to reduce delinquency as well as victimization is an increased affiliation, association, and bonding to school.

Logically, the commitment to school becomes such an important protective factor because of the volume of time and influence that peers, teachers, and school have

on the youth. Further research on the prevention of juvenile delinquency should also incorporate victimization research. Prevention strategies such as restorative justice provide promising tools because they infuse the victim, community and the offender into the process. In the current adversarial justice system, little is done to restore to a condition before the offense took place, which provides support that demographically speaking offenders are often victims. By reducing one, a profound reduction can be made on the other. The results are significant for the at-risk youth practitioner because now he/she is in the business of delinquency prevention as well as victim services.

This study examined one aspect of each theory (commitment for social bond theory and guardianship for routine activities/lifestyle theory). In order to fully test the integration theory to better understand juvenile offending and victimization, there is a need for a more comprehensive study in the future that can look at the other variables of each theory.

One of the limitations to social bond theory is that it does not examine the order between delinquency and weak bonds. In other words, Hirschi's (1969) study did not look at whether the boys committed delinquent acts because they had weak social bonds, or if their social bonds were weakened because they committed delinquent acts. This study has a similar limitation, in that, based on the questions in the MTF survey, it could not be determined if delinquency occurred before or after victimization. The MTF survey that was used was a cross-sectional study. Future research should use longitudinal data in an attempt to examine the temporal process of the variables. A further limitation is that the MTF surveys were administered to students during the school day. Students who had dropped out of school or who were absent on the day the survey was administered were not included. Nevertheless, Johnston et al. (2005) noted that the drop out rate among tenth grade students was less than 5% and absent students comprised 12% of the tenth graders in 2005. Hence, the number of students not participating in the survey did not have had a significant effect on the results.

### Conclusion

It was found that as a student's commitment to school increased, his/her likelihood of being involved in delinquent acts decreased as does his/her chances of being victimized. The amount of time students spend away from his/her parents increased so did his/her likelihood of being victimized and involved in delinquent acts. The correlations between victimization and commitment to school and guardianship and self-reported delinquency supported the idea that the routine activities and social bond theories could be used together to better understand crime and victimization among adolescents. This is a fruitful area of research for future studies.

The correlations between delinquency and victimization that are supported by this research have impor-

tant implications for prevention policies. Prevention programs should be viewed as ways to prevent both delinquency and victimization. Social bond theory would seem to support programs that attempt to improve an individual's bonds, especially attachment to family and school and commitment to school. Social bond theory also emphasizes the importance of early intervention programs to help strengthen family bonds.

Routine activity theory proposes that delinquency could be prevented by reducing the opportunity to commit delinquent acts. The routine activity theory has posited that in order for delinquency to occur, motivated offenders must come in contact with attractive targets that lacked guardianship. This argument was supported by the current research, because juveniles who spent more time away from their parents were more likely to report being victimized. Therefore, it would seem that programs that could increase the ties of a juvenile to their family or some other entity that could act as a guardian would be supported by the routine activity theory.

The types of programs that would be supported by the two theories used in this research are similar. Hence evidence that the integration of these two theories would prove useful in preventing or reducing both delinquency and victimization. It is important that youth practitioners understand that they play a dual role. Not only could their programs help prevent or reduce delinquency, but they could also help prevent or reduce victimization.

For the juvenile justice practitioner as well as anyone who works with children and youth, this study is important because they reinforce the need for mentorship, after school, and summer programs. These initiatives by themselves are important, but when reinforced with strong parental participation the protective factors against juvenile delinquency as well as victimization could be maximized. Policy at the local and national level should not only focus on juvenile delinquency prevention but also victimization. With the combination of these two elements the stakeholder net is widened in order to make juvenile delinquency prevention, a public safety and public health issue that requires national attention.

### References

- Agnew, R. (1985). Social control theory and delinquency: A longitudinal test. *Criminology*, 23, 47-61.
- Agnew, R. (1993). Why they do it? An examination of the intervening mechanisms between "social control" variables and delinquency. *Journal of Research on Crime and Delinquency*, 30, 245-266.
- Bennett, R. R. (1991). Routine activities: A cross-national assessment of a criminological perspective. *Social Forces*, 70, 147-163.
- Bjarnason, T., Sigurdardottir, T. J., & Thorlindsson, T. (1999). Human agency, capable guardians, and structural constraints: A lifestyle approach to the study of violent victimization. *Journal of Youth and Adolescence*, 28, 105-119.

- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activities approach. *American Socio-logical Review*, 44, 588-608.
- Costello, B. J., & Vowell, P. R. (1999). Testing control theory and differential association: A reanalysis of the Richmond youth project data. *Criminology*, 37, 815-842.
- Esbensen, F., & Huizinga, D. (1991). Juvenile victimization and delinquency. *Youth and Society*, 23, 202-228.
- Federal Bureau of Investigations (FBI). (2005). *Crime in the United States 2005*. Retrieved October 30, 2007, from [http://www.fbi.gov/ucr/05cius/data/table\\_41.html](http://www.fbi.gov/ucr/05cius/data/table_41.html).
- Friedman, J., & Rosenbaum, D. P. (1988). Social control theory: The salience of the components of age, gender, and type of crime. *Journal of Quantitative Criminology*, 4, 363-381.
- Greene, H., & Penn, E. (2006). Reducing juvenile delinquency: Lessons learned. In E. Penn, H. Greene, & S. Gabbidon (Eds.), *Race and juvenile justice* (pp. 223-241). Durham, NC: Carolina Academic Press.
- Hindelang, M. J., Gottfredson, M. R., & Garofalo, J. (1978). *Victims of personal crime: An empirical foundation for a theory of personal victimization*. Cambridge, MA: Ballinger Publishing Company.
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.
- Huebner, A. J., & Betts, S. C. (2002). Exploring the utility of social control theory for youth development: Issues of attachment, involvement, and gender. *Youth and Society*, 34, 123-145.
- Jenkins, P. (1997). School delinquency and the school social bond. *Journal of Research in Crime and Delinquency*, 34, 337-367.
- Johnston, L. D., Bachman, J. G., O'Malley, P. M., & Schulenberg, J. E. (2005). *Monitoring the future: A continuing study of American youth (8th- and 10th-grade surveys), 2005*. Ann Arbor, MI: University of Michigan, Institute for Social Research, Survey Research Center.
- Junger, M., & Marshall, I. H. (1997). The interethnic generalizability of social control theory: An empirical test. *Journal of Research in Crime and Delinquency*, 34, 79-112.
- Krohn, M. D., & Massey, J. L. (1980). Social control and delinquent behavior: An examination of the elements of the social bond. *Sociological Quarterly*, 21, 529-544.
- Kunjuju, J. (1995). *Countering the conspiracy to destroy Black boys* (Vol. 4). Chicago, IL: African American Images.
- Lauritsen, J. L., Sampson, R. J., & Laub, J. H. (1991). The link between offending and victimization among adolescents. *Criminology*, 29, 265-292.
- Lilly, J. R., Cullen, F. T., & Ball, R. A. (2002). *Criminological theory: Context and consequences* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Messner, S. F., Lu, Z., Zhang, L., & Liu, J. (2007). Risks of criminal victimization in contemporary urban China: An application of lifestyle/routine activities theory. *Justice Quarterly*, 24, 496-522.
- Miethe, T. D., & Meier, R. F. (1990). Opportunity, choice, and criminal victimization: A test of a theoretical model. *Journal of Research in Crime and Delinquency*, 27, 243-266.
- Peterson, D., Taylor, T. J., & Esbensen, F. (2004). Gang membership and violent victimization. *Justice Quarterly*, 21, 793-815.
- Rankin, J. H., & Kern, R. (1994). Parental attachments and delinquency. *Criminology*, 34, 495-515.
- Sampson, R. J., & Lauritsen, J. L. (1990). Deviant lifestyles, proximity to crime, and the offender-victim link in personal violence. *Journal of Research in Crime and Delinquency*, 27, 110-139.
- Schreck, C. J., & Fisher, B. S. (2004). Specifying the influence of family and peers on violent victimization: Extending routine activities and lifestyle theories. *Journal of Inter-personal Violence*, 19, 1021-1041.
- Schreck, C. J., Wright, R. A., & Miller, J. M. (2002). A study of individual and situational antecedents of violent victimization. *Justice Quarterly*, 19, 159-180.
- Spano, R., & Nagy, S. (2005). Social guardianship and social isolation: An application and extension of the life-style/routine activities theory to rural adolescents. *Rural Sociology*, 70, 414-437.
- Sourcebook of Criminal Justice Statistics. (2005). *Estimated rate (per 1,000 persons age 12 and older) of personal victimization*. Retrieved October 29, 2007, from <http://www.albany.edu/sourcebook/pdf/t342005.pdf>.
- Sourcebook of Criminal Justice Statistics. (2005). *Estimated rate (per 1,000 persons age 12 and older) of personal victimization*. Retrieved October 29, 2007, from <http://www.albany.edu/sourcebook/pdf/t342005.pdf>.
- Tewksbury, R., & Mustaine, E. E. (2003). College students' lifestyles and self protective behaviors: Further consideration of the guardianship concept in routine activity theory. *Criminal Justice and Behavior*, 30, 202-227.
- United States Census Bureau. (2000). *Table DP-1. Profile of general demographic characteristics: 2000*. Retrieved December 31, 2007, from <http://www.census.gov>.
- Wiatrowski, M. D., Griswold, D. B., & Roberts, M. K. (1981). Social control theory and delinquency. *American Socio-logical Review*, 46, 525-541.