# SAFE PASSAGE DURING THE SCHOOL COMMUTE

by

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#### ABSTRACT

Safe Passage during the School Commute

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This study builds upon the findings of recent research which suggests the trip to and from school may be the riskiest activity in America. The purpose of this study is to examine and quantify the different types of victimization, such as bullying behavior that pupils experience during their travel to and from school. Research on the daily movement and activities within a community reveals that a significant amount of victimization occurs during the hours prior to and immediately following school, when youths travel from a supervised environment to their destination. To illuminate the problem of victimization during the period immediately following school dismissal and determine the necessity of improving safety during the school commute, it is important to study the journey that students take after they leave home and school property. Utilizing survey data collected from a sample of 244 students across four districts, which include urban, suburban, and rural schools within the United States, the study explores the daily school commute of students and analyzes the relationship between the various modes of travel and the level and types of victimization experienced, fear of victimization, and offenses witnessed by the pupils. The study uses the Routine Activities Approach as a theoretical foundation for examining victimization during times when capable guardianship is minimal to nonexistent. Findings indicate that nearly half of the students in the study reported experiencing at least one incident of victimization during the school year. Relationships were found between modes of travel and victimization experienced, witnessed, and feared during the daily commute to and from school. The research also found that the majority of students felt safer in school than during their daily commute. When asked to describe locations perceived as risky, students in urban districts reported feeling unsafe during their commute through unoccupied streets and alleyways, whereas the students in the suburban and rural districts reported feeling unsafe in occupied settings, such as school buses and parking lots of businesses. This research suggests that working partnerships should be formed among all stakeholders involved in protecting students, which include school administrators, bus drivers, school resource officers, and parents.

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# **CHAPTER I. Introduction**

#### **Overview and General Findings**

Victimization of children is among the major concerns of policymakers and the general public. Whether the concern is justified or not, school violence and bullying are two types of offenses directed towards schoolchildren which receive extensive media coverage, and have evolved into social problems that policymakers at both the state and federal levels, and school administrators consider a priority. In 1998, the U.S. Department of Education passed the Safe Schools/Healthy Students Initiative Grant Awards, giving millions of dollars to school districts across the country to address school-related violence (DeRosier, 2007).

Schoolchildren are usually the victims of either violence or acts that are referred to generally as "bullying." The term "school violence" entered the school crime and victimization vocabulary in 1992 (Eisenbraun, 2007). School violence can be defined in many ways, and there is no one definition found within the research as final (Furlong, et al., 1997). Definitions of the term "bullying" also vary within the literature, and the definitions can even vary significantly between neighboring school districts. Similar to school violence, bullying can be physical, verbal, or social (Olweus, 2003). Despite the differences in definitions, school violence and victimization related to bullying normally fall along a continuum of offending, the scope of which can involve various forms of physical harm, psychological harm, and property theft or damage (Astor, et al., 2002).

The focus of school crime research has been limited primarily to within the walls of the school. Perhaps what drives a lot of this attention are the highly-publicized incidents of school shootings in the United States and Canada throughout the past two decades, which have certainly affected public perception of school security and the safety of schoolchildren. The resulting fear has contributed to the clamor for increasing school security measures, such as installing metal detectors, securing entrances to buildings, and assigning police officers to patrol school corridors (Esbensen, 2008).

Interestingly, whether or not any of these expenditures are justified based upon the threat to children's safety within the school is debatable. The media often portray a certain offense as more serious than reality. For example, school shootings are problems which receive extensive media attention, and can reinforce the need for action to address what could be a phantom epidemic (Best, 2002; Felson, 2002). Similar heightened concern about school crime and violence in the 1970s led to the US Congress' commissioning a study on school crime (National Institute of Education, 1978), which found that schools are actually relatively safe places for children.

Based upon an analysis of *The New York Times* and *USA Today* (Kupchik and Bracy, 2009), in 1998, the year before the violence at Columbine High School in Littleton, Colorado, there were around 150 stories about school-related violence. The number of stories in both newspapers jumped to 327 in 1999 following the shooting at Columbine. The researchers found that the newspaper reporters often used emotional language rather than objective data when reporting student victimization. The media often reported that the school environment was becoming increasingly unsafe while reported incidents of violence were actually decreasing. Interestingly, the articles often discussed the unpredictable nature of school children victimization, while at the same time blaming schools for not doing enough to predict the incidents.

The media-driven public perception that schools are unsafe is contradicted by other studies as well. Research on school violence indicates that school shootings are an extremely rare event, with the number of violent deaths against children at school declining since 1992 (Esbensen, 2008; Best, 2002; Vossekuli et al., 2000). Despite the overwhelming attention given to the school shooter, most offenses against children on school property are non-violent, with the most common forms of victimization being theft, non-serious forms of assault, and bullying (Esbensen, 2008). Fox and Burstein (2010) also suggest that children are safer in schools than they are on the sidewalk because of the increased risk of child abduction.

Within the UK, the safety of schoolchildren is an issue that moved higher on the public agenda because of concerns over childhood abductions, rather than concern over Columbine-style shootings. Following a spate of child abductions in Britain in the 1990s, there was an unprecedented concern over the safety of children in public spaces, culminating with a "stranger-danger" discourse in order to heighten the awareness of parents of risks and possible dangers that their children may encounter in public places (Valentine, 1997).

#### The Importance of Studying the School Commute

In contrast to the above examples of the focus on violent crime committed on campus, the latest research on school-related offenses against children actually identifies the commute to and from school as the riskiest activity in America (Lemieux, 2010). Surprisingly, despite the data illustrating the peak in juvenile offending occurring after school dismissal (OJJDP, 1999), few studies have focused on the less lethal types of victimization that occur in relation to the modes of travel and travel paths that juveniles take to and from school, with the only known studies to date being conducted from a European perspective (Moore, Maclean and Jefford, 2011).

One reason for the lack of data could be the ambiguous context of the school commute. Researchers may classify the victimization of schoolchildren during their commute to and from school within the context of school-related offenses; some may claim these offenses are related to crime within the community; while other researchers may consider the school commute as part of the family context of victimization (Meyer and Astor, 2002). Therefore, the uncertainty of the domain of responsibility during a child's commute to and from school could contribute to the significant gap in the research involving victimization of children during their daily journey.

Awareness of the risk and level of bullying-related victimization of schoolchildren during their daily school commute, and how this victimization relates to the students' typical modes of travel, length of commute, and routes, is critical for law enforcement, school administrators, parents, as well as pupils, in the development of initiatives to increase the safety and security of schoolchildren. Using survey data obtained from pupils within an urban middle school, this dissertation will identify and quantify the types of victimization that schoolchildren experience during their daily commute to and from school. In short, the dissertation results will provide information to school officials and law enforcement as to the risk and experience of student bullying-related victimization, in addition to fear and avoidance behavior based upon the pupils' modes of travel to and from school, attributes of travel routes taken, length of commute, types of offenses, and amount of adult supervision during the commute to and from school. In addition to recent research which has identified the trip to and from school as the riskiest activity in America (Lemieux, 2010), the study found that the school commute is twenty-four times more dangerous than other activities at home. The activity of being in transit likely exposes students to areas with a decreased level of capable guardianship, including walking alone on the street, taking a short cut through a park or playground, or standing at a bus stop.

Much of the research in schools focuses on the child as offender rather than as victim, and the present study will fill a necessary gap in the literature. Furthermore, while school survey data are available which suggest a majority of pupils felt safe in school, some research suggests that the school commute could reveal fear while during the school commute (Noaks and Noaks, 2000; Kingery, et al. 1998). While there is a growing body of literature related to bullying victimization and its prevalence and frequency within schools in the United States, this dissertation will address bullying-related victimization based upon the context of the school commute.

Along with the prior research identifying the daily commute to school as dangerous, there are also risk factors relating to the qualities of the physical space in which middle school students travel during their commute which impact victimization. These convergence settings fuel victimization as likely offenders locate their targets within the daily movement of their routine activities (Felson, 2008). The study will examine the types of offenses that are unique to the mode of travel, length of commute, and general location (e.g., at the school bus stop or on a playground). Furthermore, the study will address policy implications that address the risk factors for victimization along these

travel paths, which will, ideally, lead to improvements in the safety of schoolchildren as they travel to and from school.

These research findings will have significant implications for school administrators, parents, as well as law enforcement. The more information we have about the problem of bullying-related behavior and other types of victimization that students experience to and from school, the more effectively we can formulate policies to address the issue. These approaches can focus on the specifics of the physical space, rather than targeting offenders through punitive measures such as zero tolerance, as the victims of bullying-related victimization are not always different from the offenders (Crews and Counts, 1997).

Additionally, the prevalence of victimization among youth in the United States is substantial. Most of the research on bullying is within the context of the school (e.g., Olweus, 1993), however, a significant amount of bullying occurs outside of the classroom and school (Milsom and Galo, 2006) emphasizing the importance of antibullying policies and training for all school staff (i.e., bus drivers) and providing supervision during non-class times (Olweus, 1991, 1999). Vernberg et al. (1995) suggest that adults greatly underestimate the amount of harassment, humiliation, and other types of violence that schoolchildren experience. Parents, teachers, and administrators are therefore likely to be unaware of incidents that occur to children during the daily commute.

Because of the well-documented behavioral and emotional difficulties associated with bullying behavior, the issue of bullying merits serious attention, "both for future research and preventive intervention" (Nansel et al, 2001: 2094). In addition to the negative impact bullying behavior can have on school attendance and scholastic achievement, bullying can significantly affect school safety. Victims of bullying- related behavior are far more likely than other students to bring a weapon to school to protect themselves (Crews and Counts: 1997).

According to the U.S. Department of Education (2010), students who experience harassment and

bullying may experience

- Lowered academic achievement and aspirations
- Increased anxiety
- Loss of self-esteem and confidence
- Depression and post-traumatic stress
- General deterioration in physical health
- Self-harm and suicidal thinking
- Feelings of alienation in the school environment, such as fear of other children, and
- Absenteeism from school

While there is no federal law that directly addresses bullying, it could, in some cases overlap with discriminatory harassment. When bullying and harassment overlap, federally-funded schools must step-in and address the behavior. Schools are obligated to address any behavior that is "severe, pervasive, or persistent." The United States Department of Education has issued what's known as a "Dear Colleague" letter reminding school districts across the U.S. of their obligations under the Department of Education's Office for Civil Rights (OCR). Under U.S. civil law, these obligations include taking prompt and effective steps to eliminate any hostile environment, and prevent its recurrence. Misconduct related to bullying could also violate one or more of the federal antidiscrimination laws enforced by the OCR. Schools may also become liable when bullying-related behavior is based on race, color, national origin, sex, or disability, and the harassment is encouraged, tolerated, not adequately addressed, or ignored by school staff (U.S. Department of Education, 2010).

Federal legislation under the No Child Left Behind Act (NCLB) requires the implementation and development of the Unsafe School Choice Option, which allows students who have been victims of violent crimes while on public school campuses to transfer to a "safe" school. California has defined "persistently dangerous" schools as those that for three consecutive fiscal years have had a violent criminal offense committed on campus or have expelled students for offenses such as assault, drug dealing, and possession of weapons (Morrison, et al., 2004). The reach of the legislation beyond the geographic limits of school property, however, is not entirely clear. Chapter 9 will discuss further implications of legislation to address persistently unsafe school commutes. This study, therefore, has relevance for both criminal justice and the field of education.

#### **Participants**

The study also addresses various forms of victimization related to bullying-related behavior experienced by middle school pupils during their daily commute. A sample of upper elementary and middle/early high school pupils were chosen for this study because of prior research has identified students within this age group (approximately 9-14 years) experiencing higher rates of assault, theft, and bullying than either of their counterparts in early elementary and high school (Kautt and Roncek, 2007; Wilcox et al., 2005; Whitney and Smith, 1993). One possible explanation could be the ability of offenders to drop out during their later high school years and increased likelihood of senior high school students travelling by personal automobiles. With early elementary pupils, higher levels of guardianship through the increased presence of adults throughout the day and parents who are more likely to drive to drop-off and pick-up younger children from school make this age group more supervised than older children. Among middle school students especially, the "community that surrounds the home and the school becomes more important as students may walk to and from school and become involved in community activities" (Swearer et al., 2006: 263).

Safety also moves to the forefront at the upper elementary school level and older for both students and parents, with prior research indicating that parental concerns about safety is significant when their children enter middle school (Arowsafe and Irvin, 1992; Garvin, 1998). A national study of middle school programs and practices concluded that "the chief school-related concern of students is the disruptive and inappropriate behavior of other students (bullies, thieves, etc.), not academic success. Both principals and parents underestimate student concerns for personal safety" (Keefe, et al., 1983: 72). In addition to U.S. civil law previously mentioned, under which school safety is an educational right, a safe school minimizes the incidents of threats and reduces violence, fostering growth of student potential. Morrison, et al. (2004), note that in addition to physical safety, school districts should address their students' developmental safety whereby students have an environment that is safe from threat of harm, harassment, or humiliation. This study bridges the disciplines of both Criminal Justice and Education. Morrison et al. (2004) argue that safety of schoolchildren is more than the absence of violent crime, but that it is also an educational right. In addition to protecting students from harm, a safe environment allows for their growth and development. "Safety"—defined within the context of schoolchildren—can mean the "freedom from danger, harm or loss" (Morrison et al, 2004: 259). "Harm" is commonly associated with physical harm resulting from a violent act. Within the context of this study, however, harm can be attributed to anxiety or apprehension about an impending harm.

## **Psychological Harm**

Victimization or the fear of victimization during the daily school commute can constitute *psychological* harm, which goes beyond the victims, but can affect the bystanders as well. With the discovery of the school commute as the riskiest activity in America (Lemieux, 2010), the concept of safety needs to extend beyond the absence of physical harm, and allow for the psychological safety and developmental growth of youth. Similar to the negative outcomes reported by the U.S. Department of Education (2010) earlier in this chapter, a review of research which included cross-sectional surveys, retrospective studies, and longitudinal studies (Rigby, 2003), found that bullying victims often reported low self-esteem, psychological distress, such as anxiety, depression, fear, and suicidal ideation, and poor social adjustment.

According to Klomek et al. (2007), there is a link between being the victim of bullying and depression. Within the study, 10 percent of the victims reported being victims of bullying outside of school. Of these students, 8.1 percent were victims of bullying less than weekly, and 2.3 percent were victimized frequently. In comparisons to the students who reported no victimization, students who reported experiencing bullying (both as victim and offender) were at higher risk of depression, suicidal ideation, and suicide attempts. Stein, Dukes, and Warren (2007) found that students who were victims of bullying were at significantly higher risk for negative attitudes about school, negative psychological health, problem behavior, and physical injury. In addition to the negative psychological effects of being a victim of bullying-related behavior, there are also physical risks.

#### **Physical Harm**

Previous studies have explored the relationship between bullying-related victimization and physical harm. The U.S. Department of Education (2010) mentioned earlier in this chapter reported a "general deterioration in physical health." According to Gruber and Fineran (2007), middle and high school students who were bullied reported more trouble sleeping, stomachaches, headaches, dizziness, and substance abuse than students who were not bullied.

Explorations of individual, peer, family, school, and community variables recognize early adolescence as a critical period in understanding the socioecological framework of bullying and victimization (Swearer et al., 2006). During middle school, students are entering a new and transitioning environment where peer group influences are more pronounced, teachers tend to be less connected to pupils, academic responsibilities increase, and biological changes occur within the students. The family tends to play less of a dominant role. Students may become more aggressive and bully peers in order to establish dominance in a social hierarchy (Swearer et al.). Therefore, it would seem intuitive that this age group should be the focus of a study on the school commute.

#### Conceptual Framework

The dissertation attempts to address four primary areas: First, it explores what is currently known about the risk of victimization during the school commute and students' perception of fear while travelling to and from school. Previous research (Olweus, 1993, 1994) has found that bullying tends to decrease significantly among students in high school; therefore, this study will focus on students within the middle school age range (approximately 10 to 13). This age group tends to be the group with increased bullying victimization because of the strong influence of peers (Tusinski, 2008).

Data for this dissertation will come from survey data that will explore the schoolcommute victimization experiences of pupils from both urban and rural areas. The survey instrument format is similar to other bullying surveys (e.g., Olweus, 1994), but has been modified to address the student's experiences with bullying based upon their mode of travel, length of commute, and place of victimization. While there are some data that have examined student perceptions of safety related to their routes to and from school (Kaufman et al., 2000), no existing data sets currently explore student experiences with bullying or explore risk of victimization specifically oriented within the context of their commute to and from school (A. Lemieux, personal communication, November 18, 2012; D. May, personal communication, April 29, 2011; Lemieux, 2010; Meyer and Astor, 2002).

This study will attempt to increase the understanding of how the student's mode of travel to and from school is related to incidents of bullying-related victimization. While a significant amount of literature addresses the problem of bullying and other offenses within school, little is known about how this offense manifests itself outside of a school facility (Raskauskas, 2005). The present research contributes to the bullying literature by exploring this important yet unexplored area of a juvenile's day during the school year. The study will explore the types of offenses related to bullying, such as verbal taunts, mean comments, physical assaults, in addition to the frequency with which these offenses occur. The research will also explore the frequency of the offenses over the previous school year, and whether the offense happened once or twice, two or three times, or more than three times.

The research will also explore fear and avoidance behavior of the students during their commute to and from school, and if they avoid any locations during the commute because of the perception of danger or concern about personal safety. It would appear logical that the particular mode of transportation to and from school would likely affect the level of fear during their commute. Very little research has been conducted that addresses the perception of danger among juveniles, but existing studies using a nationally representative sample of over 10,000 junior high and high school students identified factors which contributed to levels of fear of assault while commuting to and from school (Alvarez and Bachman, 1997). The present research contributes to this literature by: 1) analyzing the relationship between the various modes, routes, and length

of travel and victimization; 2) investigating the different types and amount of victimization that pupils experience during their commute to and from school; and 3) making policy recommendations that will address security of students within the context of the school commute; and 3) addressing directions for future research.

## **Chapter Organization**

Chapter 2 of the study will provide an overview of the research on victimization of children during the commute to and from school. Several studies identified the specific variables (such as modes of transportation) that need to be examined. Also discussed is the important issue of the challenges created by how bullying-related victimization is defined and measured. Chapter 3 will orient the study within the context of the Routine Activities Approach (Cohen and Felson, 1979), which explains victimization as a possible intersecting point of suitable targets, likely offenders, and absence of guardianship. Chapter 4 discusses the significant challenges to conducting research within the school setting and argues for changes within the institutional structure of the school to allow for researcher access. Chapter 5 contains data from a pilot study of the research that was conducted within an urban middle school. Chapter 6 describes the methodology to be used in the study, including a discussion of the sample, instrumentation, and analytical techniques used in the research. Chapter 7 presents the descriptive results of the main study utilizing frequencies involving the sample during their daily commute. Chapter 8 contains a summary of the bivariate and multivariate results, including cross-tabulation summaries, chi-square analyses and binomial

regression results. This chapter explores the relationships between independent variables and the dependent variable incidents of bullying-related victimization. The research questions and hypotheses proposed in Chapter 6 are revisited in Chapter 9. Chapter 9 also discusses implications for enhancing safety during the school commute, limitations of the study, and suggestions for future research examining the risk of victimization during the school commute.

#### **CHAPTER II.** The Dangerousness of the School Commute

This chapter has two goals: First, this chapter provides an overview of the research on the safety and victimization of children during the school commute. This will include a discussion of the potential harm as a result of being a victim of persistent bullying-related behavior. Second, the chapter will include an overview of the studies that have been conducted on school children's perception of safety related to their school commute, which could lead to fear and avoidance of areas of undefined space. It will include a discussion of how this research will address a significant gap in the literature.

#### **Dangerousness of the School Commute**

There is a significant amount of research on violence against children within the school and home, as well as studies on school violence abroad. A number of studies have also been conducted on risk factors for juvenile offending and victimization within the school and home context. Nonetheless, research has failed to properly address the context of juvenile victimization during the school commute, with the only extant research coming mainly from the European perspective (Ofsted, 2007, 2008; Howard League, 2007; MPA, 2008; Moore, et al., 2011). Research conducted by Lemiux (2010) determined the relative risk of going to and from school to other everyday activities in which Americans participate. By quantifying the relative risk for various activities using data from the American Time Use Survey (ATUS) and the National Crime Victimization Survey (NCVS), the findings using time-based rates of violence for nine everyday activity in America as well as the most dangerous in-transit activity" (Lemieux, 2010: p. 321).

Lemieux posits that this exposure to risk while commuting to and from school can be explained by the commute involving people of prime offending age, combined with lower levels of formal guardianship off school property. This section closely follows the Moore, et al (2011) dichotomization of victimization of young people into victims of "violence" (i.e. "criminal acts") and victims of "less serious offenses" (i.e. "bullying").

"Victims of violence" would include youth who are killed, robbed, sexually assaulted, or victims of gang-related violence. The "less serious offenses" (i.e. "bullying") tend to be the majority of offenses which schoolchildren encounter while in school, with the risk of violent victimization in school being minimal (Vossekuil, et al., 2002).

Nonetheless, the two types of victimization often parallel each other, overlapping at times. For example, a state law in New Jersey known as the "Anti-Bullying Bill of Rights," which is considered the toughest legislation against bullying in the United States, could result in bullies being reported to the police by their classmates (Hu, 2011). The increasing volume of research on bullying-related behavior within school has advanced our knowledge and awareness of the problem. As previously observed, while the likelihood of pupils suffering serious injury or death while at school is very low, bullying offenses, such as nonfatal physical aggression, verbal taunting, name-calling, and other forms of emotional abuse can be quite high (Orpinas, et al, 2003). Bullying behavior is normally viewed as a form of aggression and can generally be defined as when a pupil is exposed, over time, to negative actions on the part of one or more pupils (Olweus, 1993). This behavior forms a continuum of offenses, from verbal threats to robbery and assault. This study, though, will attempt to address these victimizations within the context of the mode of travel and length of commute to and from school.

#### Victims of Violence

During the past two decades, school shootings have contributed to a significant concern among the public about school safety. Perhaps because of the large amount of media coverage of the incidents, polls report that school violence and bullying are among the greatest fears related to the safety of schoolchildren within the United States (Regoli, Hewitt, and Delisi, 2010). While school shootings and school-associated violent deaths remain extremely rare, there is apparently cause for concern for the safety of schoolchildren during their commute to and from school. Research on urban violence in Philadelphia conducted by Savitz et al., (1977) found that male students in Philadelphia considered the risk of assault or robbery to be greater during the commute to and from school rather than in school. According to the 2008 Indicators of School Crime and Safety study, children were more than 50 times more likely to be killed away from school than at school (Dinkes, et al., 2008). Fox and Burstein (2010) recognized the safety of schools "compared to sidewalks, yards, playgrounds, and parking lots" (124).<sup>1</sup> According to Gottfredson, et al (2005), youths are more likely to be the victims of violence outside of school rather than in school.

Kachur et al. (1996) collected data over a two-year period on school-associated violent deaths, obtaining detailed information on each case of violent death from police reports, medical examiners' records, and interviews with police and school officials in an effort to quantify the risk of school-associated violent death. The study revealed that while 29.5

<sup>&</sup>lt;sup>1</sup> Fox and Burstein (2010) further elaborate upon the incidents and risks of child abduction—most often by noncustodial fathers—during the child's commute to and from school.

percent of the violent deaths occurred inside school buildings, 35.2 percent of victims were in transit to or from school.

#### Exposure to Violence in Urban Areas

Nationwide surveys conducted on pupils suggest that children experience the highest level of violence victimization and are also witnesses of violence within urban areas (Meyer & Astor, 2002). According to Richters and Martinez (1993), violent victimization of schoolchildren near Washington, DC schools became so common that many school administrators felt compelled to install metal detectors, as well as ban students from wearing coats or carrying book bags. National studies conducted by the Centers for Disease Control and Prevention (CDC) in collaboration with the U.S. Departments of Education and Justice identified students at greatest risk of homicide near school were racial or ethnic minority males who attended public high schools in urban neighborhoods. The study also found that there were many victims of violent crimes near school grounds (Kachur, et al., 1996). Bell and Jenkins (1993) conducted an exploratory survey of schoolchildren that examined children's witnessing of violence in Chicago. Their research found evidence suggesting that violence among children in inner-city areas occurred disproportionately in public areas (i.e., street, alley, or park).

Fox and Burstein (2010) argue that a school's problems relating to gang conflict within the perimeter of a school is largely a reflection of a spillover effect from the street. The implications of the research suggest that the extent and severity of gang activity within the school parallels trends within the surrounding community. Prosecutors in

Allentown, Pennsylvania claimed that a rival gang fight led to the slashing of a student by a machete, which the victim was carrying for protection during his commute to and from school. According to court testimony, the fight occurred two blocks from school shortly after dismissal, when the attacker took the weapon away from the victim and slashed him five or six times. During the sentencing hearing, the judge expressed concern about the effect that unsafe daily commutes can have on children by noting that "[k]ids shouldn't be afraid to go school. How can anybody study, how can anybody learn, if they're afraid to go to school?" (McEvoy, 2012). Other schools in Pennsylvania have experienced similar problems after dismissal. Students at an intermediate school in Reading, Pennsylvania have experienced on-going safety concerns immediately after school, such as fights in a nearby park, which lead to the assigning of additional police in the area. Students at the school reported fights occurring on the way home from school daily since the beginning of classes in August (Herman, 2012). In the same city, police and prosecutors reported one case of bullying that escalated into an armed robbery after school. After being pulled into an empty classroom and punched, the victim was assaulted and robbed at knifepoint by the safe offenders on this way home from school the same afternoon. At 3:30 p.m., after school dismissal, the offenders confronted the victim and pushed him into an alley. The offenders then held the victim at knifepoint while going through the victim's pockets, taking his cellphone, money, and keys. According to the victim's report, he was attacked again because of his reporting previous bullying incident to school officials (Kelly, 2012).

Police in Allentown, Pennsylvania reported a female high school student was shot about a block from the school while walking home in the afternoon. The superintendent requested that police increase their presence around the school. A resident in the neighborhood reported problems when the students are dismissed from school "and make their way home, including fights, stabbings and at least one shooting" (Gamiz, 2012: 2).

According to research on youth gangs in Rochester, New York, Thornberry, et al. (2003) discovered that gang members seek to avoid harm by rival gang members by moving through other territories on the way to and from school. Gottfredson & Gottfreson (2001) suggest that maintaining safe environments during the school commute may help reduce gang membership, while the Center for Mental Health in Schools at UCLA (2007) notes that feeling unsafe on the way to and from school is "among the strongest correlates found in research on factors related to gang membership (p. 4).

Research on violence in inner-city schools (Sheley, et al., 1992) found that the violence in and around schools "is *not* predicted by factors inherent in the school environments themselves; rather, violence spills into the schools from the outside world" (p. 681). Gang activity in urban areas would therefore, be a manifestation of the community and cultural environment in distressed communities. These youths would then be "encouraged" to behave violently because of the violence they experience within the community. Youths who perceive their school commute as dangerous would therefore be more likely to carry weapons to school for protection or retaliation (Sheley, et al., 1992). Data from the Violent Schools-Safe Schools report (National Institute of Education, 1978) reported that 29 percent of assault victims reported occasionally bringing weapons to school when only nine percent of other students carried weapons. Not surprisingly, when students have an unsafe commute, and they feel that there is little or no supervision or support, there could be an increase in avoidance behavior, the

number of weapons being carried, and aggression in both the school setting and during the commute.

#### Less Serious Victimizations

Most school-related victimization is nonfatal. Nonetheless, data from the National Crime Victimization Survey reveal that school students between 12 and 18 were victims of approximately 1.7 million nonfatal crimes (for example, theft) while they were either at or near school, and approximately 1.3 million nonfatal offenses while away from school (Dinkes, et al., 2008). Children are at elevated risk of criminal victimization on the way to and from school, even when excluding the most serious forms of victimization (Gottfredson, et al, 2005).

Bullying is among the most prevalent types of nonfatal, less serious student victimization, with the field of education identifying bullying as a serious problem for youth within the United States (Cornell, et al, 2006; Espelage and Swearer, 2004; Nansel, et al, 2001). This finding has contributed to numerous studies within the United States on the problem, attempting to identify characteristics of youth who are likely to become offenders, and as discussed in chapter 1, many states are now passing laws or considering legislation to address bullying amongst schoolchildren (Limber and Small, 2003). Bullying can include many different types of behavior, such as threats, physical harm, the taking of personal belongings, and name-calling.

Research in the area of bullying-related offenses among schoolchildren, however, has failed to explore the extent of the problem during the daily commute to and from school (Moore, et al, 2011). This could be explained by the ambiguous context of the school

commute, in which it is somewhat unclear "where the school's responsibility for the child's safety ends, and the community or parent's responsibility begins while children are traveling to and from school" (Meyer and Astor, 2002: 103).

Bullying within the schools is a very old phenomenon, and has received extensive attention within the literature (Olweus, 1993, 1994). One of the challenges when studying bullying within an academic context is finding agreement upon the definition of the offense. Definitions vary from the way the term is used in everyday language, to the extensive and sometimes complex definitions within the literature on bullying.<sup>2</sup> Olweus (1994) offers a general definition of bullying or victimization: "A student is being bullied or victimized when he or she is exposed repeatedly and over time, to negative actions on the part of one or more other students. It is a negative action when someone intentionally inflicts, or attempts to inflict, injury or discomfort upon another" (1173). One of the earlier studies utilizing this general definition to study the problem in Great Britain (Whitney and Smith, 1993), surveyed junior and middle school pupils to identify the specific location of the bullying-related offenses. Their research discovered that the majority of the bullying among junior and middle school-aged pupils was reported to have occurred outside of the school on the playground. Some children (14 percent of junior and middle school pupils) reported being bullied "going to and from school" (12).

A more recent study (Moore et al., 2011) that drew from the initial results of a survey of schoolchildren throughout eight European countries regarding their experiences of victimization during the school commute discovered that there are relatively high levels of victimization of children while traveling to and from school, and that a small

<sup>&</sup>lt;sup>2</sup> Problems with bullying definitions in the current research will be discussed in more detail in Chapter 3.

percentage (approximately 2.5 percent) experience "regular, sustained victimization" (247). A survey of 2681 students in Italy discovered that the majority of "bullying" occurred during the journey to school or otherwise outside of the classroom (Santamaria, 2001).

#### **Perceptions of Safety during the School Commute**

Research consistently shows that rates of juvenile crime and violence peak between 3 p.m. and 4 p.m., which strongly correlates with school dismissal times. Not surprisingly, juvenile victimization of violent crimes also peaks during the same hours (Meyer and Astor, 2002). Considering the high rates of violence and victimization committed by juveniles and directed at youths during these times, it is important to study children's experiences during their school commute in order to develop initiatives to improve safety during the school commute.

While there is a sizeable amount of research on fear of crime, few studies have examined the population most likely to be affected by fear of crime: adolescents (Alvarez and Bachman, 1997). Even less attention has been given to the understanding that children have of the potential harms they may encounter while travelling to and from school. Alvarez and Bachman (1997) used a sample of over 10,000 junior high and high school students from a supplement to the National Crime Victimization Survey to examine the factors contributing to students' fear of assault both at school and while going to and from school. The authors assumed that a student's particular mode of transportation to and from school. The study asked specifically "How do you get to school most of the time?" Possible responses included: "walk; school bus; public bus, subway, train; car; bicycle, motorbike, or motorcycle; some other way" (Alvarez and Bachman, 1997, p. 76).

According to Alvarez and Bachman (1997), students' mode of transportation to school affected the level of perceived fear while travelling to and from school. Specifically, pupils who primarily used city transportation or who walked to school perceived significantly higher levels of fear going to and from school than those who took the school bus or commuted in private vehicles. Students who commute to and from school using more isolated modes of transport, such as walking or relying on public transportation, may not only *perceive* higher levels of danger in the absence of capable guardianship, but they may actually *be* in precarious situations more often. This is consistent with Fisher and Nasar's (1995) claim that fear may be associated with a perceived exposure to risk on a micro-scale.

Fisher and Nasar's research builds upon work in environmental criminology (Brantingham and Brantingham, 1981) that suggests the physical characteristics of places can contribute to fear. These characteristics include lack of prospect in which a pedestrian is unable to properly see the openness of his or her immediate environment (sometimes referred to as "blind spots"), hiding places for potential offenders, and blocked escape routes. Students who walk or rely on public transportation during their school commute may encounter such areas of danger or risk, which contribute to the unsafe perception of the area. When commuting through these areas, In addition to the physical characteristics contributing to students' perceived levels of fear, social characteristics are also important within the context of the situation for students to assess fear and receive certain cues that would heighten fear (Van der Wurff et al., 1989). According to Van der Wurff et al. (1989), the social situations affecting fear of crime could include being at a bus stop with a group of male teenagers.

To measure the levels of fear during the commute to and from school, students were asked specifically "How often are you afraid that someone will attack or harm you on the way to and from school?" (Alvarez and Bachman, 1997: 74). The authors noted that the limitations on quantifying perceived fear during the school commute was the absences of a specific reference period. Therefore, the study was limited in that it did not determine the specific reference period of the students' level of perceived fear.

Alvarez and Bachman's (1997) research involving student perception of safety during the school commute also found that fear of crime is unevenly distributed across genders, race and ethnicity, as well as community setting. More specifically, the fear was context specific. Females were not more fearful of being attacked than males in all contexts, including while at school. The interesting finding, however, is that females were more fearful of an attack *while going to and from school*.

In a qualitative study that examined schoolchildren's perspectives of the danger and potential harm they face while traveling to and from school in urban areas, Meyer and Astor (2002) used semi-structured interviews to study the pupils' mode of travel, whether they felt safe or not during the commute, what they witnessed, and how the routes could

be made safer. Emergent themes from their study included fear or awareness of death, violence or victimization, and fear of gangs. Students in the study were from two urban areas, with modes of travel including walking to and from school (28 percent), driven to school (32 percent), and taking a bus (19 percent). Others reported using different forms of transportation during their commute to and from school, including walking and being driven (14 percent), walking and taking the bus (4 percent), and being driven and taking the bus (3 percent). When asked about safety during their commute, "approximately 71 percent of the students perceived the route that they took to get to and from school to be unsafe or dangerous" (Meyer and Astor, 2002: 112). Furthermore, the majority of students (77 percent) expressed concern about gangs "and/or gang members while they were traveling to and from school" (112). Other concerns that students expressed during the interviews included fear of being bullied, assaulted, robbed, attacked by dogs, sexually harassed or assaulted, as well as kidnapped. The mode of travel most commonly associated with victimization was walking alone, with the perception of the safest mode of travel being having a parent drive, even when traveling through routes which the students perceived to be unsafe or dangerous.

The results of a survey of Year 9 pupils conducted in the UK (Noaks and Noaks, 2000) revealed similar findings. In addition to one-third of research participants worrying about becoming a victim of crime while in school, more students were concerned about being a victim "on the way to school" (71). The effects of the fear of crime during the school commute on actual behavior was revealed in the survey, with a significant number of pupils admitting to never walking alone in order to avoid possible victimization. The fear of victimization could logically lead to the victim responding with avoidance,

escape, or withdrawal behavior, such as skipping school, running away, or even suicide (Batsche and Knoff, 1994).

In a recent study that explored the relationship between school security measures and the perceptions of fear at school and while commuting to and from school among White and African-American students, Bachmann, et al., (2011) did not uncover any gender or racial differences in perception of fear at school and while commuting to and from school. The study did, however, discover that school security measures increased fear during the school commute. In other words, metal detectors and the presence of security at school was related to increased levels of fear during the school commute, with locked doors contributing significantly to a heightened sense of fear. The researchers speculated that the locked doors at school may prevent escape from an unsafe situation in the neighborhood, whereas the relationship between fear during the school commute and the other security surveillance mechanisms at school are not so intuitive.

Many of the prior studies on school safety suggest that the journey to and from school is the peak time when students experience victimization. In the United Kingdom, research found 22 percent of bullying-related offenses occurring outside of school or on the journey to and from school over a 12 month period (Ofsted, 2008). With regard to fear and anxiety, Noaks and Noaks (2000) discovered a significant level of anxiety and level of fear among students while traveling to and from school. These studies not only suggest the importance of focusing on the school commute as a period when students are likely to be victimized, but also reveal this as a tremendously understudied topic (Moore, et al., 2010). (See Table 2.1 for a summary of studies related to school commute victimization). This study will attempt to contribute to the field of criminal justice by studying victimization among a sample of American students from across a diverse demographic range (urban, suburban, rural), and will try to shed some new light on the types of victimization experienced by these students based upon their mode of travel as they negotiate their daily travel paths to and from school.

Table 2.1. Summary of Study	of school commute vict Population	mization studies Measure(s)	Results
Moore, Maclean, & Jefford (2011). The "land in-between": A comparative European study of the victimization of young people traveling to and from school. <i>Crime</i> <i>Prevention and</i> <i>Community Safety</i> , <i>13</i> , 246-259	Students between the ages of 12 and 16 in eight European countries	Surveys	Travel between the perceived safety of the home and school is a risky activity for European students.
Bachman, R., Randolph, A., and Brown, B. (2011). Predicting perceptions of fear at school and going to and from school for African American and White students: The effects of school security measures. <i>Youth &amp;</i> <i>Society, 43</i> (2): 705- 726.	Students between the ages of 12 and 18 in the United States	School Crime Supplement, 2009	No gender or racial differences in perception of fear during the school commute. The presence of school security measures, however, increased fear during the commute.
Lemieux, A. (2010). Risks of violence in major daily activities United States, 2003-2005. Unpublished dissertation, Rutgers, Newark, NJ	Demographic subgroups within the United States	National Crime Victimization Survey and American Time Use Survey	The activity- specific analysis showed that going to and from school was the most dangerous activity. Risk of violence 285 times higher than while sleeping.

Table 2.1. (continued) Study	Population	Measure(s)	Results
Meyer & Astor (2002). Child and parent perspectives on routes to and from school in high crime neighborhoods. <i>Journal of School</i> <i>Violence, 1</i> (4): 101- 128.	Students in 2 <sup>nd</sup> , 4 <sup>th</sup> , 6 <sup>th</sup> , and 8 <sup>th</sup> grades	Structured interviews	Seventy-one percent of students perceived their school route to be dangerous. Seventy- seven percent of pupils interviewed were concerned about gangs while commuting to and from school.
Noaks & Noaks (2002). Violence in school: Safety and fear of crime. <i>Educational</i> <i>Psychology in</i> <i>Practice, 16</i> (1): 69- 74.	Year 9 students in Great Britain	Surveys	Students identified school busses as an unsupervised location where bullying was commonplace.
Alvarez & Bachman (1997). Predicting the fear of assault at school and while going to and from school in an adolescent population. <i>Violence</i> <i>and Victims</i> , <i>12</i> (1): 69-86.	Students between the ages of 12 and 18 in the United States	School Crime Supplement, 1995	Students' mode of transportation to school affected the level of perceived fear while travelling to and from school.

# **Research Questions**

The primary purpose of the current study is to examine the relationship between schoolchildren's mode of travel and incidents of bullying-related victimization. The relationship has not been directly examined in the existing literature (A. Lemieux, personal communication, November 18, 2012; D. May, personal communication, April 29, 2011; Lemieux, 2010; Meyer and Astor, 2002). Based upon what is known from the prior research, this study seeks to answer the primary question: *What is the relationship between mode of travel and the victimization and perception of safety among schoolchildren during their daily commute to and from school?* 

The specific research questions which this dissertation attempts to answer are:

1. What types of incidents do schoolchildren experience during their commute to and from school?

The incidents were categorized into verbal, physical, and social victimization, with "bullying" being described in the survey instrument to the research participants as having any of the following experiences during the past school year: someone calling them mean names, faking fun of them, or teasing them; being hit, kicked, pushed, or shoved around; having items stolen from them; being threatened; being made fun of based on their appearance; and receiving mean or hurtful messages on their cell phone.

2. Is length of commute to and from school related to victimization?

Within any community, there are undefined physical areas that are not anyone's responsibility to monitor or secure. Newman (1973) discovered that in these undefined spaces (corridors, alleyways, etc) were places where the majority of crime occurred.

Furthermore, the routine activity approach (Cohen and Felson, 1979) argues that the movement of people in time and space cause victims and offenders to converge when there is an absence of capable guardianship. According to Lemieux (2010), commuting to and from school averaged just 0.56 person-hours a day. The activity-specific analysis of the research showing that going to and from school was the most dangerous activity in America should suggest that longer commute times (during which individuals are exposed to risk for longer periods of time) would likely expose students to areas that are not properly supervised in locations where there are few guardians willing or available to intervene when an incident occurs.

3. What is the relationship between mode of travel and the victimization of children during their daily commute to and from school?

Modes of travel include walking alone, walking with friends or siblings, school bus, being driven by an adult, and public bus. Because the route and mode of transportation will vary between pupils, so will levels of guardianship to which the children are exposed. Walking alone provides less guardianship and exposes a pupil to greater risk than receiving a ride from a parent. Each mode of transportation poses different levels of guardianship along with opportunities for victimization. According to Meyer and Astor (2002), students felt more safe when being driven to school by a parent or other adult, even when the youths perceived their school route to be unsafe.

4. What do students fear most during their daily commute?

Emergent themes from prior research using structured interviews with youths in urban neighborhoods (Meyer and Astor, 2002) found that students feared violence and gangs during their commute. Parents who were interviewed in the same study reported many of the same fears as their children: gangs (60%), physical fights (23%), and weapons (11%).

5. Do the pupils feel safer in school or during their commute?

In response to high-profile shootings, and the public perception of schools becoming increasingly unsafe, many districts have implemented a variety of security measures along with strict codes of conduct and zero tolerance policies. This is despite evidence suggesting that schools continue to be relatively safe locations and during periods of decline in overall school violence, and that, in reality, school violence has been decreasing since 1992, and that overall, schools are relatively safe places for students and teachers (Best, 2002; Esbensen, 2008; Lemieux, 2010).

### **CHAPTER III.** Theoretical Explanations of Student Victimizations

Research on juvenile crime and violence consistently shows that the rates of offending peaks between 3 p.m. and 4 p.m., which coincides with the end of the school day when children are in the process of commuting from school to home. Therefore, it is important to explore the problems that children experience on their school routes in order to make the commute safer. This chapter presents the theoretical framework of the current research, and how this theoretical model can be used to explain victimization during the commute to and from school. The phenomenon of juvenile disorder is not as highly structured and organized as one would suspect, and offending behavior amongst youth tends to change from one offense to the next (Felson, 2006). Therefore, the physical location provides an additional element in the study of delinquent behavior. According to Warr (1996), the group character of delinquent behavior is a firmly established feature within the field of criminology. The prior literature, however, suggests the need to analyze the physical setting of delinquent behavior within the context of victimization during the school commute (Alvarez and Bachman, 1997).

Theories are used to assist in explaining, predicting, or controlling the matter that we are studying (Clarke and Cornish, 2001). To be useful, the theory must not only be consistent, but simply stated. Theoretically, much of the bullying-related research has been embedded within a developmental social-ecological perspective and risk and protective factors approach (Tusinski, 2008; Bronfenbrenner, 1979, 1986; Lerner, 1995; Hawkins et al., 1998). These more macro-sociological explanations present considerable challenges when studying victimization along the pathways to and from school. Foremost, within the sociological environment of victimization of children, the context of

the school commute is somewhat ambiguous. It remains unclear whether victimization of children travelling to and from school falls within the context of the school, community or parental realm of responsibility. Discussions with school officials have also revealed the challenges in reporting offenses uncovered during a study during the school commute (Diibor, personal communication, March 8, 2012), which could be an example of this ambiguity.

This is not to dismiss the importance of studying the victimization of pupils within a broader sociological framework. As Bronfenbrenner (1979) observed, homicide, suicide, drug use, and delinquency among schoolchildren is a manifestation of the increasing fragmentation and breakdown in the interconnectedness of the family, school, and neighborhood. For the child, the school has become isolated from the home, with school buildings moving farther out from the child's neighborhood. The buildings have become larger and more impersonal, and the teachers often commute, rather than live within the child's neighborhood.

A broader sociological explanation of student victimization during the school commute relating closely to the social disorganization model within criminology includes the informal ability of local neighborhoods to supervise the behavior of youths. The regulation of behavior at the neighborhood or community level would include (1) informal surveillance, which involves active observation of the streets during the daily commute of students, (2) rules that govern movement, or the avoidance of areas perceived by the youth as unsafe, and (3) direct intervention, in which a resident who observes youth misbehaving would address the behavior and admonish the offender. (Bursik and Grasmick, 1993). The field of environmental psychology emphasizes a strong relationship between violence and the physical and social environment in neighborhoods (Astor, Meyer, and Behre, 1999). Within the context of the urban housing project, the architect and urban planner Oscar Newman (1973) discovered that most crime and violence occurred in what he referred to as "undefined public space;" that is, locations where ownership or personal responsibility is absent or lacking. To discourage crime in these spaces, Newman suggested increasing "natural surveillance," which includes bystanders whose visibility and close proximity serve to discourage offending. Natural surveillance, however, is not likely to discourage offending if there are too many bystanders, which can diffuse responsibility. Natural surveillance during the school commute can therefore be weak (Mayhew, 1981).

Newman categorized public space into private, semi-private, semi-public, and public. Private spaces are looked over by those with personal responsibility for the property, such as family, friends, and owners. Public areas, such as school commuter pathways, may only be monitored by strangers. Therefore, higher risk of victimization in semi-public and public areas is a reflection of the location's reliance upon diffuse and general responsibility of management over these areas, which may be not be dependable (Felson, 2008).

While Newman's work did focus explicitly on the school commute, a study conducted by Astor, Meyer, and Behre (1999) utilized the defensible space/urban planning approach to map violent events of territories in and around schools. The study found that most violence occurred outside of the classroom setting and within undefined public space, where most adults "did not perceive those areas and times as part of their professional role or responsibility" (34). Their study suggested that areas considered undefined public space by students and teachers (such as hallways, cafeterias, and gym locker rooms) may include "areas external to the school" (10). Although technology can play an important role in discouraging crime, the implications of the theoretical approach in this study go far beyond the placing of closed-circuit television cameras or security personnel in high-risk areas, but rather suggest initiatives that promote personal responsibility for security within undefined space.

Felson (2002) argues that informal controls over behavior, which were effective at one time, have declined in modern society. Reasons for the decline of informal controls include working mothers, larger schools, and increased economic independence of youths. Implications for this decline will likely lead to initiatives that shift from a focus on the offender to the situations in which victimization occurs. Building upon the "defensible space" approach to designing-out crime, victimization of youths during their daily commute to and from school can be studied through the lens of the routine activities approach.

## Routine activities and 'terra di mezzo'

This dissertation focuses more on the location and mode of transportation used by the victim in understanding bullying-related offending. The theoretical perspective does not attempt to explain offender motivation and treats the motivation of offending behavior as constant within the setting. The study does not attempt to ask questions such as: "Why do some students choose to assault their classmates?", or "What altercations occurred

between the victim and offender that may have precipitated the offense?" Instead, the study focuses on the mode of travel and location of victimization, witnessing of victimization, fear, and avoidance behavior from more of an ecological perspective. The human ecological perspective examines the temporal and spatial interactions of everyday life. As Felson (1993) observes, the streets and other travel paths are much more dangerous when taking into account the shorter amount of time that youth spend during their commute as opposed to at home or in school.

When reviewing previous studies that were related specifically to school commute victimization (Moore, et al., 2010; Alverez and Bachman, 1997), it was apparent that the theoretical framework departed from the more traditional focus on the relationship amongst the individuals (differential association), strength of bonds to institutions, social structure, and other more macro-level processes, to the more specific convergences such as the target along an unsupervised pathway. Within virtually all victimization studies, the central organizing concept appears to be opportunity (Burrow and Apel, 2008). Becoming a victim of crime or being exposed to the risk of bullying-related victimization during the school commute can be explained within the context of the routine activity approach (Cohen and Felson, 1979). According to Felson (2004), the initial focus of the routine activity approach was on predatory crimes—offenses whereby one person takes or damages the person or property of another. The approach has evolved into a micro and macro explanation of crime, and can be applied to explain many types of offenses including violent acts.

The routine activity approach succinctly explains the elements of a crime, with an emphasis on the locations and conditions where the offense occurs, and avoids vague or general descriptions about the environment or participants in the criminal event. The approach is unique in its ability to identify specific convergences "that make crime possible, likely, unlikely, or impossible" (Felson, 2004: 123). According to the routine activity approach, criminal opportunities are the result of (a) likely offenders meeting (b) suitable targets or victims<sup>3</sup> and (c) the absence of capable guardians. The concept of guardianship will be discussed as avenues for prevention of victimization as well as future research.

Cohen and Felson (1979) developed the routine activity approach that linked crime to a broad range of legal activities. This approach, as originally conceived in macro terms, attributed an increase in crime within the U.S. to both the dispersion of routine activities from the home, to areas outside of the household, in addition to technological shifts (Felson, 2009). The central tenet of the approach is that crime is dependent upon opportunity and legitimate activities. According to Cohen and Felson, the spatial and temporal structure of activities such as work and school help inform the routine activities of everyday life. Many offenders commit crimes on the travel paths used for school (Brantingham and Brantingham, 1993). The routine activities approach can be conceptualized by the crime triangle (see Figure 2-1). The center of the triangle is the problem or crime; this could include any type of bullying-related victimization which the students experience during their daily commute. A school bus stop could provide the elements of place, potential victim, and absence of capable guardianship. When the bully

<sup>&</sup>lt;sup>3</sup> Felson (2004) prefers the word "target" to "victim," suggesting that the word "victim" draws attention away from the harm that offenders inflict and undermines the often impersonal nature of criminality. The word "victim" is used in this research for the purpose of consistency, and continuity of similar terminology in bullying-related studies (e.g., Moore, et al., 2010).

arrives at the school bus stop, the elements then converge in time and space, allowing the bullying victimization to occur. What is important is the convergence of all elements. The lack of any one will prohibit victimization during the school commute. The routine activities approach as used in this research emphasizes the absence of capable guardianship during the commute to and from school.

On the school bus, two main risk factors that may contribute to victimization include the large number of students in relation to supervising adults, and the inability of students to avoid victimization. According to Raskauskas (2005) this problem is exacerbated by fuller buses on which there is decreased supervision by adults and where victimization can be more easily shielded from the driver.

This perspective also aligns with routine activities approach's focus on how activity outside of the home environment creates more opportunities for crime and has led to an increase in crime rates (Cohen and Felson, 1979). Victimization data can provide evidence in support of the routine activity approach (Felson, 1997). Rather than exploring the characteristics of the victim, an examination of the actions of individuals within the contexts of specific settings are predicted better by the characteristics of the settings than the characteristics of the specific individuals within those settings (Barker, 1968; Lynch, 1987; Titus, 1995). Titus (1995) argues that victims of crime, including recent victims, repeat victims, and others known to be at "high risk" (e.g., teenage males) should receive more attention within the context of the routine activities approach. This research will contribute to this under-examined component of this criminological perspective. Over time, the routine activities approach included the presence of supervisors whose presence or absence could affect the criminal event. *Handlers* are persons who are connected to the likely offenders and are capable of preventing them from committing a crime. John Eck (2003) developed the Problem Analysis Triangle, which includes the outer triangle's elements depicting what could be added to control or suppress a problem. As shown in Figure 3.1, the outer triangle depicts handlers, guardians and managers, who act as supervisors: the handler supervises the target, and the manager supervises the crime location. The absence of the "supervisors" makes an offense possible. Within the context of the commute to and from school, an offense occurs when the bully is not around his handlers, such as a parent, teacher, or school bus driver, finds a victim who is not around his guardian, in a setting that is not watched by a manager, such as a school bus stop, park, or pathway to and from school (Felson, 2008). Just as

Sherman (1995) suggests that this approach is like a crime triangle, much like the elements of a fire triangle:

On one side of the triangle is the target (a person in personal crimes and an object in property crimes). Suitable targets are like fuel: you can't commit crime without them. Another side of the triangle is the offender. Motivated offenders, of course, get most of the blame for crime, just as heat gets much of the credit for fire. But in both cases, it's really all teamwork. The third side of the triangle is the place. Unless the offender gets together with the target at the same place and time, no crime can take place. Places are analogous to oxygen: unless heat and fuel are brought together with oxygen, combustion cannot take place (38). Figure 3.1. The Problem Analysis Triangle as a Theoretical Framework for School-

**Commute Victimization** 



Source: Popcenter

Felson (2004) argues that the routine activity approach refers to specific convergences that make offending likely or unlikely (or even impossible). Times when school is in session, for example, have an impact on the offending and victimization patters of youths. Offenders are likely to target youths along or near their familiar travel routes. The routine activities approach integrates the three minimal elements of offending with the ebb and flow of the children's activities in time and space.

This theoretical framework aligns with prior research on student perspectives on safe or unsafe areas during the school commute (Meyer and Astor, 2002). In general, students had concerns about specific areas and territories during their commute to and from school that they felt were particularly unsafe, "which tended to have the characteristics of undefined space," which included lack of capable guardianship (124). For many pupils, the lack of capable guardianship in the area between school and home is also a period of freedom from the watchful eyes of parents and teachers. Italian research (Segato, 2011) characterizes this area as *terra di mezzo* or the "land in-between the presumed safety of school and home" (Moore, et al., 2010: 247). The routine activity approach is, therefore, an appropriate lens through which to view this physical rather than social realm.

In summary, the routine activity approach developed by Cohen and Felson (1979) suggests that a person's movement in time and space is dictated by everyday activities. This perspective does not make assumptions about the character and social background of the offenders that would predispose their engaging in deviant behavior, but rather the patterning of daily routines that result in the victims and offenders converging in time and space, leading to opportunities for bullying-related offenses and crime. This dissertation relies upon the routine activities approach by focusing on how the pupils usually travel to and from school, and where they are most likely to become victims of bullying-related offenses.

# **Chapter IV. Challenges of Access in School-Based Research**

This chapter discusses a critical but little discussed component of research involving schoolchildren: the challenges involved in accessing the research participants within a school. This discussion is important because gaining access to a school is not simply a once and done event physical event in order to gather data. Access to schoolchildren is a highly negotiated and continuing process that affects the design, collection, analysis, and dissemination phases of the study (Burgess, 1991). For this study, in two cases, administrators who were receptive to the research transferred or otherwise left the school just prior to final approval. One district that had an administrator in charge of approving research projects was unable to locate a principal willing to allow the study.<sup>4</sup> As will be shown, access is a negotiated process that can depend heavily upon the ability to navigate through multiple levels of gatekeepers, in addition to perseverance.

Research involving children as the main focus of academic study has been a growing trend only in more recent decades (Barker and Weller, 2003). Children have either not been the focus of academic study, or have been part of a broader level of inquiry of social science research, such as the family. The growing body of literature in which youth have the dominant research voice also transcends academic disciplines. Within recent years, this includes the field of criminal justice, in which data are collected to assess bullying within schools, but also sociology, social work, education, as well as geography. Schools are highly significant spaces and times in the lives of children (Barker and Weller). These

<sup>&</sup>lt;sup>4</sup> Building principals had final approval authority for any research and could deny permission at will, even though the research was approved at the district level and had already successfully passed through a lengthy approval process.

are spaces in which children spend a great deal of their time, most of which is highly organized, and within these confines, children are classified and regimented mainly by age. Therefore, for research purposes, schools provide a convenient location in which to study various topics involving youths.

The school building provides a "captive audience" for the researcher. Gaining access to schools to conduct research with children can be a highly complex, lengthy, and frustrating process. Schools protect themselves from outside researchers seeking access by maintaining a layered maze of gatekeepers, which include school district administration, local administrators, teachers, parents, and even secretaries. Getting past each individual gatekeeper requires time-consuming preparation and patience. Barker and Weller (2003) call these lengthy negotiations "the politics of access" (212).

I attempted to address the minimize access difficulties by emphasizing key "selling points" of the research, such as:

- Minimal impact on instruction time;
- Minimal impact on staff resources;
- A willingness to share research outcomes with administrators;
- Volunteering consultation services on bullying prevention and school safety;
- No cost to the district to conduct the study.

## Access to Subjects: "None Shall Pass!"

When attempting to obtain data from public schools within the United States, it quickly became apparent that, absent any connections with teachers or administrators, access to the schools was going to be a painstakingly slow and frustrating process. Furthermore, it became apparent that securing permission from school officials is quite different than receiving cooperation from lower level administrators and teachers, aside from cooperation from challenges involving students and parents in returning the consent forms in a timely manner.

Securing access to schools and gaining cooperation from each of the gatekeepers is perhaps one of the greatest challenges which school-based researchers encounter, and previous studies have confirmed that researchers can encounter significant problems when seeking permission to conduct studies involving schoolchildren (T.J. Taylor, personal communication, February 23, 2012; ; Isaksen and Roper, 2010; Wanat, 2008; Melnick and Henk, 2006). According to Friedman and Orru (1991), gaining access to the research setting is also a crucial part of the research process and warrants discussion. Schools as research settings differ considerably from commercial establishments and organizations. On the surface, this is because of the increasingly security-oriented and closed-campus nature of the school establishment. School districts in particular have multiple levels of gatekeepers that screen research proposals, and these gatekeepers can withhold access for any number of reasons. Similar to the findings of Barker and Weller (2003), the principal has tremendous influence over the granting of access, and within the school environment "with its own set of socio-spatial expectations and processes, was powerful enough to redefine the entire research project" (212). Therefore, when

attempting to contact a school for the purpose of gaining access, the researcher must know "whom to contact, how best to contact them, what to expect from them and, importantly, what can go wrong when working with them" (Isaksen and Roper, 2010: 304). Despite formal approval processes, final approval, along with cooperation was reserved for the building principal, whose cooperation was essential not only in allowing the access for the study to commence, but for facilitating distribution of parental consent forms. Burgess (1991) conducted extensive ethnographic research in education settings and suggests that a focus on the school's principal or "headteacher" is necessary. This assumption further suggests that access is negotiated and renegotiated throughout the research process. This often has a lot to do with the research topic and research questions in relationship to available resources. Principal cooperation will be discussed in more detail later in this chapter.

### **Evaluation Avoidance**

Public school institutions in particular maintain their legitimacy through avoidance of any external evaluations that might threaten their organizational survival (Friedman and Orru, 1991), and often create complex layers of organizational procedures and rules to shield it from any external threats. Friedman and Orru describe this threat to the institution's legitimacy and survival goals as "evaluation avoidance," whereby even relatively non-threatening topics are resisted by administrators (121).

Melnick and Henk (2006) collected data from a series of interviews with superintendents, followed by a survey of 310 school districts to uncover what factors were important to school administrators in allowing researchers access to their schools. The findings of this study were used as a guide in the present research to help overcome obstacles in gaining permission to access schools to conduct the survey. Five possible factors included: risk assessment, trust, benefit, cost assessment, and contribution to the field of education.

"Risk assessment" was the administrators' determination as to whether the results of the proposed research would negatively reflect upon the district or the administration. "Trust" involved whether the administrators considered the researcher as serious, ethical, or considerate. "Cost assessment" involved weighing whether the proposed study would unnecessarily burden school staff or affect the financial resources of the school district. "Benefit" was the extent to which the proposed research would benefit the district in any way. "Contribution" included any potential advancement impacting the field of education. (Melnick and Henk, 2006: 655).

**Risk Assessment.** Melnick and Henk (2006) discovered that of the five possible factors that school administrators consider in allowing researchers access to their schools, risk to the district and superintendent was the single most important consideration for the administrators. Surprisingly, the study discovered that the official approval certification by the principal investigator's institutional review board, although routinely required when submitting proposals to the districts, "was not routinely accepted as compelling by the superintendents," many of whom preferred to make their own risk judgments, as they are the ones held accountable if any negative information comes to light (Melnick and Henk, 2006: 660).

Despite these findings, the present study encountered challenges in its ability to address or minimize school administration's potential concerns regarding risk to the district, beyond assurances of anonymity in the research results. This could help explain the difficulties encountered in finding a district that was willing to allow the researcher to conduct the study. The process of gaining access for the present study strengthened Orru and Friedman's (1991) argument that a researcher's access to the setting is not guaranteed, even when the researcher follows official routes to approval and scrupulously obeys the school's written guidelines.

Because this dissertation addresses bullying and other forms of victimization of school children during the school commute—a sensitive topic in light of recent, highly-publicized tragedies relating to this issue—assurances were included in the proposals to district officials that risk to participants was minimized. The proposal included assurances to the administration that the researcher has undergone extensive training and certification in bullying prevention, and will provide information to victims of bullying. Information was also included on the pupil's consent form that any student who is experiencing bullying is to contact his or her teacher, guidance counselor, or principal.

**Trust.** The issue of trust was addressed in the proposal to the districts by the inclusion in the research packet of copies of all FBI background checks, state police documentation showing no criminal record, and child abuse history clearances. Trust was further addressed by including in the cover letter to the administration information on current and previous research interests, information on the researcher's extensive training on school safety with the National Association of School Resource Officers (NASRO), in addition to service to the community through the offering of training and consultation (*pro bono*) to schools within the United States and Canada who are interested in implementing bullying prevention programs.

**Cost.** Costs were not addressed at any great length in the proposals to the administrators, and similarly, according to Melnick and Henk (2006), did not factor prominently in influencing the districts' right of entry decisions. The proposal mentioned that the district would not be responsible for any financial costs involved in the study. Costs involving staff time were addressed in the proposal by emphasizing that impact on instructional time has been minimized as much as possible by keeping the survey brief, and by providing other scholastic activities for pupils who are not participating in the research.

**Benefit.** Many of the formal proposal requirements asked the principal investigators to include how the proposed research would benefit the district or its gatekeeper. According to Wanat (2008) if administrators think a project would benefit them, they are more likely to cooperate with the study. This was addressed by illustrating the potential improvement of student safety in high risk areas during the pupils' commute to and from school. The proposal attempted to persuade the decision makers that the research could lead to a better understanding of how students perceive their routes to and from school as safe or unsafe; that results from this research could also be used for awareness programs to make parents aware of safety concerns during their child's commute to and from school; and that police and school officials will become aware of specific areas of concern during children's commute to and from school.

The proposal cited research suggesting that the results of such a study could be used to improve student achievement (Glew, et al, 2005; Nansel, et al., 2001). The research

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literature on the relationship between victimization from bullying and student achievement supports the hypothesis that bullying negatively impacts concentration and academic achievement in victims (Glew, et al, 2005; Nansel, et al., 2001). Peer victimization is related to negative attitudes toward school, as well as a lack of engagement in classroom activities (Nishina and Juvonen, 2005). A study of 204 middle school students in the United States found that 90 percent of students experienced a drop in grades as a result of being a victimization of bullying (Hazler, Hoover, and Oliver, 1992). A study of pupils conducted in California used Stanford Achievement Test scores and grades as a measure of student achievement and found a "significant association between low scores and being a victim of bullying" (Glew, et al: p. 1031).

Victims of bullying can experience long-term undesirable outcomes, such as depression and social withdrawal (Lösel and Bender, 2011. Within the school context, children who are victims of bullying have trouble with academics (Juvonen, Nishina, and Graham, 2000; Schwartz, 2000; Nolin et al., 1996), and report being unhappy at school (Rigby and Slee, 1993; Kochenderfer and Ladd, 1996; Ahmed and Braithwaite, 2004). Bullying victimization can significantly impact school attendance (Fried and Fried, 1996; Seeley, et al, 2011), which could lead to lower academic performance and eventual dropping out. According to a recent study from the University of Virginia, which was reported recently in the New York Times (Kristof, 2012), students who experience bullying-related victimization can negatively impact the entire school's academic standing (A 27). Students who simply witness this type of victimization are "more likely to skip school or abuse alcohol" (A 27). Other studies have also observed a correlation between bullying-related victimization and student absenteeism (Rigby, 1996; Reid, 1989), social isolation (Slee & Rigby, 1993), and internalizing problems such as depression, anxiety, and poorer psychosocial adjustment (Callaghan and Joseph, 1995; Olweus, 1979; Nansel et al., 2001; Sourander et al., 2000). Craig (1998) reported that all forms of bullying — physical, verbal, and social — were predictive of victim anxiety. According to Esbensen (2008), school attendance, academic achievement, and feelings of safety at school "are three interrelated consequences attributed to school victimization (118). Victimization of schoolchildren may also "reduce their willingness to attend school, and thereby lower their academic achievement" (118). Esbensen further claims that even minor forms of victimization, such as minor bullying and theft, have been linked to academic problems.

Despite all of the evidence presented to school administrators demonstrating that the research could address safety concerns in addition to contributing to an *improvement* of student achievement, many districts denied the request to conduct research for seemingly arbitrary reasons (see appendix A). Research access was denied in several schools located within the southern United States. One school district claimed that the research "would unnecessarily duplicate and confound bullying studies already in progress" within the district. Similar claims were made by the administrators within another district in the South, claiming that the study "replicates district efforts in addressing bullying and gang issues" (D. Gooch, personal communication, February 2, 2012). At first it would seem that the administrators of these two districts were apparently unable to grasp the concept that the current research focuses on victimizations occurring during the school commute, not within the school building, despite the evidence (Moore, et al., 2011) suggesting that "limited research has been carried out on the victimization of young people travelling to

and from school, and what research has been done is mainly <u>from the British</u> <u>perspective</u>." (see also Ofstred, 2007, 2008; Howard League, 2007; MPA, 2008). The Senior Leadership Team of Lexington County School District One in South Carolina categorically denied the research proposal for the sole reason that the definition of "bullying" within the proposal did not agree with the district's definition of "bullying" (J. Rivers, personal communication, January 9, 2012). Denials were often absolute and without any opportunity offered to revise and re-submit. <sup>5</sup> The resistance to the external study, however, seemed to further reinforce the argument presented by Friedman and Orru (1991) that the public schools use "evaluation avoidance" as the critical goal in maintaining legitimacy.

**Contribution.** The research proposal mentioned that the results will supplement literature on bullying and other types of victimization during the school commute, as well as what contributes to fear and avoidance behavior of students during their commute to school. The administrators were advised that the results of the research could lead to a better understanding of how students perceive and routes to and from school as safe or unsafe and therefore, contribute to the field of education.

Other findings involving contributions to the field of education were explained to persuade the administrators to allow access. Examples of studies include how peer victimization is related to negative attitudes toward school, as well as a lack of engagement in classroom activities (Nishina and Juvonen, 2005). A study of 204 middle school students in the United States found that 90 percent of students experienced a drop in grades as a result of being a victimization of bullying (Hazler, Hoover, and Oliver,

<sup>&</sup>lt;sup>5</sup> The school districts contacted for this research, in fact, give priority to "instructional time" over student safety. This was a recurring theme in communication with several of the large districts.

1992). A study of pupils conducted in California used Stanford Achievement Test scores and grades as a measure of student achievement and found a "significant association between low scores and being a victim of bullying" (Glew, et al: 1031).

Upon reflection and further study of the important topic of gaining access to schools for research, more emphasis should be placed on the potential liability that schools could face be avoiding any research that has the potential to shed light on a problem within a particular district. Districts in which officials are unaware of a problem or fail to take action, could face lawsuits in the tens of millions of dollars (DiBlasio, 2011). This issue will be revisited again in Chapter 10.

#### "Getting Past the Gatekeepers"

Gatekeepers to school districts can be either formal or informal (Wanat, 2008). After making many unsuccessful "cold calls" to superintendents requesting a meeting or telephone interview, it appeared that secretaries provide an important level of gatekeeping within the school districts. A strategy of applying to districts that had a formal application and review process was utilized so that official approval could be sought which might further persuade building principals to allow access to research participants (See appendix B for detailed examples of formal application and review processes). Surprisingly though, project approval at the top by formal gatekeepers does not guarantee cooperation or access from building principals or teaching staff (Wanat, 2008; Friedman and Orru, 1991).

Each research setting is unique. Flexibility, patience, and persistence is critical in obtaining permission from all levels to gain access to the research site, in addition to

determination and being able to minimize any potential obstacles (See appendix C for examples of final school district approval documentation). While one school welcomed the study with very little resistance, others issued curt denial letters. Two large urban districts had lengthy formal procedures that had to be completed. After completing the process, further delays ensued because the local principals had either resigned or were transferred. One urban school granted access immediately because the researcher knew one of the teachers. After a brief meeting with the principal and one other administrator, the study could get underway. This tends to support Isaksen and Roper's (2010) observation that networking is often the best way to gain access to the school. Conversations with colleagues revealed the name of a former student who was currently working in the school, which facilitated access.

Another strategy to facilitate access suggested by Isaksen and Roper (2010) included researcher involvement in school-centered projects (for example, involvement in student outreach projects or volunteer work) can be beneficial to gaining access by getting to know teachers. Surprisingly, this was not found to be as effective a measure as initially expected. The researcher's heavy involvement with anti-bullying initiatives and participation in school resource officer workshops provided ample opportunities to network with teachers and administrators, who were initially highly receptive. The "follow-through" commitment to the project, however, never occurred, as the gatekeepers' initial willingness to help with the study led to either a denial from supervisors, or unexplained unreturned messages. Lack of any follow-through on initial agreement to participate in the research contributed to what was already a slow and frustrating process. The time of year when conducting the study is also an important consideration when conducting studies involving schoolchildren. The researcher must be familiar with mandatory standardized assessment schedules, holiday breaks, and teacher in-service days. The project most likely will need to be planned at least one year in advance.

#### Factors Influencing Active Parental Consent Rates

There are two types of methods for obtaining parental consent in school-based research: passive and active. In a passive consent procedure, parents receive information on the research being conducted, the research methods that will be used, as well as any risks and benefits. The parents then sign and return the form if they do *not* want their child to participate in the research. If the parent does not return the form, the researcher can assume that the child is allowed to participate in the study.

Because of school district requirements (see appendix D), the pilot study in this research utilized an *active* consent procedure. In an active consent procedure, the parents receive a consent form explaining the study, along with any risks and benefits. The parent then decides whether or not to allow the child to participate in the study. The researcher cannot allow the child to participate in the study until the parental consent form is signed and returned. The active parental consent procedure is viewed as the more conservative method to ensure that parents are fully informed of any risks involved with a study involving their child (Ji, et al., 2004).

Obtaining active consent forms can be an extremely painstaking task, requiring a considerable investment of time and resources (Ji, et al., 2004). Active consent procedures might also contribute to a sampling bias (Esbensen, et al., 1996: Severson and

Biglan, 1989). It can be difficult to measure students who are at-risk if they are not participating in the research, in addition to the concerns that low return rates may increase sample bias, with non-minority students tending to have higher return rates (Ellickson and Hawes, 1989).

Methods of collecting active parental consent forms include the use of mailings, incentives such as prizes or gifts for the student, class, or teacher, follow-up phone calls, and teacher reminders. According to Ji, et al. (2004), most reported efforts to retrieve consent forms have taken place in middle schools, which has direct relevance for the present study. Within the middle school setting, the two active parental consent retrieval procedures that were most effective were attaching the parent consent form with a school document such as a report card, which required a parent's signature, and having the cooperation of school officials (Ji et al., 2004; Esbensen and Deschenes, 1996). Within the present pilot study, follow-up reminders from teachers resulted in a response rate of approximately 60 percent. This was lower than the desired return rate of 70 percent (T.J. Taylor, personal communication, February 23, 2012).

Prior studies (Isaksen and Roper, 2010) have identified access to schools as one of the most difficult stages of research with children. Swearer and Cary (2007) hypothesize that low participation rates in their study on bullying at a Midwestern middle school was related to media attention to school violence and bullying, particularly after the school shooting at Columbine High School in Colorado in 1999, which made parents less receptive to allow their children to participate in research on bullying-related topics. Unfortunately, the need to receive permission from schools will likely remain a necessity for many independent researchers who wish to study topics relating to youths. Avoiding

the schools completely and approaching the participants at the opposite end of their journey (the home) would provide a daunting task for the researcher, where it would be impossible to identify residences with school-age children. Venturing into the community could also pose a serious risk to the researcher's safety, even in more remote areas. It remains to be seen how the shooting at an elementary school in Connecticut in December 2012 will affect researcher access. Future studies involving school-related topics conducted by independent researchers (non-school or government initiated research) may need to rely on recruiting school-age participants from homes within the community in order to study school-related issues as schools become ever more security conscious.

# **CHAPTER V. PILOT STUDY**

Pilot testing is an important and necessary component of conducting survey research (Litwin, 1995). Pilot studies are essentially mini versions of the full-scale study (sometimes called "feasibility studies") and provide an opportunity for pre-testing of the research instrument (Teijlingen and Hundley, 2001). The pilot study can give advance warning about whether the survey instrument is unclear or perhaps too complicated. This is a critical consideration, particularly when administering a survey instrument involving children. Another important consideration is including essential questions on the survey (what needs to be known) against the amount of time available with the participants (Fink, 1995). The time allowed for the students to complete the survey varies, and can be as short as a 20-minute homeroom period before school.<sup>6</sup> To discover whether a 30-question survey can be answered in the shortest amount of time possible, the survey must be administered ahead of time to participants who most similar to the sample population (Fink, 1995).

Prior to conducting the main study for this dissertation, a pilot study of 30 middle school pupils was conducted. The pilot study was conducted at a public middle school in South Carolina. The district in which the research site is located is the second largest school system in South Carolina, which is more urban and suburban. The school district serves approximately 44,000 students in 80 schools, along with specialized programs (Charleston County, n.d., para. 1). The site selected for the pilot study was not deliberate, but rather because of the fortuitous approval received from the district administration and

<sup>&</sup>lt;sup>6</sup> Ultimately, the determination of allocated time for the researcher to conduct the study is made by the building principal.

the cooperation given by the administration at the research site. Appendix B details the application and approval process that the researcher must complete in order to be granted permission to access the school and its participants. The location of the pilot study site, which was located over 700 miles (1100 kilometers) from the researcher's home created additional logistics and costs.

The participants were selected from three homerooms, and active parental consent forms were distributed. The homeroom teachers provided verbal reminders to the students to return the forms. There was an approximate return rate of 50 percent, with three parents declining participation in the study, and the remainder participating. The study was conducted approximately one month after the distribution of the consent forms (immediately following the holiday break) during the morning homeroom period. All students who had received parental permission participated in the survey. According to the building principal and other teachers, the disappointingly low participation rate was likely because of the flurry of activity occurring in most households during the holiday season.

The survey was conducted in the cafeteria of the school, with adequate space between each pupil to allow for privacy. The principal investigator carefully read and collected the student assent, and proceeded to hand-out the survey. After each student received a survey, pupils were reminded not to put their names on the paper, and that they could skip any question that they did not want to answer. Each question was read individually, with approximately one minute allowed for each response. The pilot session concluded after approximately 30 minutes, at which time the surveys were collected and the students returned to their classrooms. Teijlingen and Hundley (2001) make some poignant observations about claims that the results and lessons learned from pilot studies are often not reported. The outcomes of can be useful to other researchers who conduct future studies in the same area. Furthermore, information obtained from the pilot study can inform improvements within the research process.

There will be two difficulties involved in conducting a survey of schoolchildren on their reports of victimization and perceptions of safety during their school commute: First: ensuring that the questions are clear and unambiguous. This problem is also addressed through the pilot testing of the study, and also by making most of the questions closed-ended questions. Second: receiving a large enough number of completed surveys for sufficient data analysis. This challenge will be addressed by administering the survey in one setting to all the students who have obtained informed consent.

# **Preliminary Results**

Pilot studies nearly always being based upon a small sample size (Teijlingen and Hundley, 2001). The purpose of the present pilot study was to "try out" the research instrument and use the results to make any necessary modifications to the questionnaire. Within the present study, a significant majority of the students who participated in the either took the school bus or had their parents drive them. Results from the pilot of middle school pupils were analyzed. Victimization during the commute was analyzed based upon the pupils' mode of travel. The selection of mode of travel included:

- Walk alone
- Walk with one or more friends
- Bike parents or others drive
- School bus
- Public bus
- Skateboard
- Some other way. Please specify\_\_\_\_\_

Six questions asked about the pupils' experiences as victims of bullying-related behavior during their school commute. The first question in the survey that addressed victimization asked: "On the way to or from school, I was called mean names, was made fun of, or teased in a hurtful way." Table 5.1 indicates that there is a positive correlation between pupils who rode the school bus reporting this type of victimization (.481). The fifth question in the survey asked: "On the way to or from school over the past year, I was called mean names or comments about my appearance." The results suggest a positive correlation between students who rode the bus and experienced being called mean names about their appearance (.649). The sixth question asked: "On the way to or from school over the past year, I received mean or hurtful calls or text messages on my cell phone. Table 1 shows a positive correlation between riding the school bus and experiencing this type of victimization" (.408).

Table 5.1 Results of	Pilot Study		
	Pupils who were	Pupils who were	<b>Pupils who</b>
	teased or called	made fun of	received mean text
	mean names	because of	messages
		appearance	
School Bus	.481**	.649**	.408*

\*p<.05 \*\*p<.001

Interestingly, less serious forms of bullying-related victimization, such as being called mean names, were found to be correlated with riding the bus in this particular research setting. This finding reflects the conclusion made by Moore et al. (2011) that the actions that the young people see as characterizing them as victims "do not fall neatly within the more traditional categories of 'bullying' or 'crime' (256). According to Esbensen (2008) relatively little research has been conducted on these more mundane forms of school-related victimizations, quite possible because of the media attention given to school shootings and violent assaults. Roe and Ashe (2008) suggest that children are frequently involved in low-level incidents which may go unreported. Further study is needed to identify how mode of travel affects these more serious forms of victimization.

The tendency of the media and policymakers to focus their attention on serious violent shooting incidents is not, as previously mentioned, because students are likely to become victims of a shooting at school, but rather as Vossekuil et al. (2002) argue, because shootings have "a tremendous and lasting effect on the school in which [they] occurred, the surrounding community, and the nation as a whole" (i). Incidents of violence against schoolchildren are followed by demands for the immediate implementation of initiatives to address student safety. The urgency to take action following a shooting at a school is seldom tempered with careful analysis of the risk of such an incident as opposed to the

risk involved during the routine commute to and from school. As Zeckhauser and Viscusi (1990) suggest in their study of the statistics of risk, the general public has difficulty evaluating risk, and will be susceptible to overreacting to risks of "low probability but high salience (such as those posed by trace carcinogens or terrorist action") (559).

Given the outcome of the pilot study and the need to examine some of the more minor forms of victimization, modifications have been made to the survey instrument. The data clearly indicate that incidents of minor forms of bullying need to be included. Therefore, as a result of the pilot study, the survey instrument used for the main study was modified to include the more minor types of bullying victimization such as: "teasing, name-calling, being made fun of, laughed at." More serious forms of bullying-related behavior will also be included, such as: "having items stolen, kicking, slapping, and punching." The more minor forms of bullying-related offenses should not be dismissed as "trivial" or simply a "rite of passage" for schoolchildren (Greene, 2006). For example, in 2006, after enduring prolonged name-calling on the school bus, an 11-year-old boy in England hanged himself. Even the more minor forms of taunting can lead to depression, school phobia, and, depending upon the frequency, duration, and intensity, the behavior can even lead to violence (Greene, 2006), the policy implications of which will be discussed in the final chapter. Incorporating the lessons learned from the pilot study, the next chapter will discuss the research site, along with the sample, sources of data, and the methods of data collection.

## **CHAPTER VI. METHODOLOGY**

#### Research Design Overview

The primary purpose of this study is to examine the relationship between the journey to and from school and amount and types of victimization of school students based upon their mode of travel and length of commute, as well as fear and avoidance behavior of areas along their pathway to and from school. This chapter discusses the research methods implemented in this study, including a discussion of the sample, sources of data, and instruments used in gathering the data. The United States was selected as the area of study because the research is based on a previous study that identified the school commute within the United States as the riskiest activity in which American engage (Lemieux, 2010). The current study will examine an understudied area involving the victimization of schoolchildren within the context of their daily commute to and from school (Meyer and Astor, 2002).

## **Site of Present Study**

The research sites were a mix of urban, rural, and suburban settings across four districts within the eastern United States. These sites were not selected randomly, but were rather a convenience sample based upon the researcher's ability to access the sites.<sup>7</sup> This research builds on the findings of a recent study which identifies the trip to and from school as the most dangerous activity in America (Lemieux, 2010). The goals of this

<sup>&</sup>lt;sup>7</sup> Chapter 4 discussed the challenges and details involving researcher access to schools, shedding some light on how these districts were in particular were selected.

study are to examine and quantify the different types of victimization, such as bullyingrelated behavior that middle school students experience during their travel to and from school. Research on the daily movement and activities within a community reveals that a significant amount of victimization occurs during the hours prior to and immediately following school, when youths travel from a supervised environment to their destination. To assist in the possible reduction of victimization during the period immediately following school dismissal and improvement of safety during the school commute, it is necessary to study the journey that students take after they leave home and school property. The primary purpose of this research is to:

- study the daily school commute of middle school students in an urban school district and analyze the relationship between the various modes of travel and level and amount and types of victimization;
- examine the fear and avoidance behavior of middle school students as they negotiate their daily commute to and from school;
- identify the locations of dangerousness during the school commute through the students' experience as victims or witnesses to bullying-related behavior, and which modes of travel to and from school do they perceive as being the least safe.

The study uses the Routine Activities Approach as a theoretical foundation for explaining victimization during the school commute. More specifically, the study will attempt to address whether the absence of capable guardianship (such as the routine presence of a teacher, parent, or police during the child's commute), can help explain why certain modes of travel, routes, and various travel times to and from school are more unsafe than others.

Utilizing data collected through a survey of approximately 245 late elementary, middle, and early high school students attending schools within the district, the study analyzes the school journey, and compares types and levels of victimization among students during the commute to and from school. The study will compare basic demographic data to help explain levels and differences in victimization that middle school pupils have experienced. The research focuses mainly on pupils ranging in grades 5 through 9, because this group likely has the largest mix of various modes of travel combined with the prevalence of experiencing bullying, as the percentage of students who are bullied tends to decrease in the higher grades (Olweus, 1993).

The participants for the study were drawn from two urban schools (North Urban School n = 96; South Urban School N=56), East Suburban School (n = 52), and West Rural School (n = 40). All schools are located within the Middle Atlantic region of the United States. Photographs of the sites and surrounding neighborhoods of the urban districts only are included to capture a glimpse of the environment through which the students travel whose primary mode of transportation would be walking. The site of the North Urban School is in a city of approximately 81,000 residents. During its heyday, the city was a major hub of industrial activity, transporting anthracite from the state's northern coal regions in order to power America's Industrial Revolution. During the later-half of the 20<sup>th</sup> century, the city had established a reputation for shopping, attracting busloads of out-of-state shoppers to its many factory stores which sold brand name clothing at discount prices. In more recent years, however, all of the shopping areas have closed as the area gained a new reputation for violent drug-related crime. The city acquired a notorious reputation for having one of the worst records for violent crime in the United States, along with the state's highest murder rate in the state (Grossman 2003). Drug dealers have taken to the streets using semiautomatic weapons, with bystanders

getting caught in the crossfire. In January 2003, a bullet from a gunfight on the street even pierced an occupied preschool classroom. In April 2006, a young family was a victim of a random drive-by shooting. According to police, the gunman may have been targeting people who have been selling drugs on the corner near their house, located less than one block from police headquarters.

The site of the North Urban School is in the heart of the downtown area where a large volume of violent crime and drug activity occur. The main entrance is also where the pupils who take the school bus or receive rides from adults are either dropped off in the morning, or wait in the afternoon for their transportation home. The pick-up and drop-off point in front of the school is guarded daily by school staff until all the students leave the area.

The daily commute for students who walk involves passing bars (some begin service alcohol at 7:00 in the morning), abandoned buildings, and many alleys. As Bursik and Grasmick (1993) observed, within the routine activities approach, neighbors would form one element of capable guardianship, keeping "an eye on the activities of those who are very ineffective self-guardians, such as young children and the elderly (71). Bursik and Grasick argue that this theoretical approach focuses mostly on the individual dynamics of victimization, "with little attention being paid to the urban dynamics that may affect the distribution of criminal opportunities among neighborhoods" (71). Roncek and Lobosco (1983) also discovered in their study on the effects of schools on crime in their surroundings in San Diego, that crime occurred in areas in which the housing conditions

were deteriorated, which was related to their findings of low levels of informal social control.

The South Urban School is located in a downtown area of a large Middle Atlantic city with a population of almost 636,000 (US. Census, 2009). It is considered the fifth deadliest city in the nation, and the seventh most dangerous in terms of overall violent crime ("We're No. 5," 2011).

The students who walk to or from school during their commute would encounter abandoned and boarded-up buildings, alleys, and multiple locations where offenders could congregate.

The Eastern Suburban School is located within one of the fastest growing regions in Pennsylvania located approximately 96 kilometers north of Philadelphia, and is the 64<sup>th</sup> most populated metropolitan area in the entire United States (U.S. Census, 2009). The school comprises a wide socioeconomic range of students. The school is located in a region that is considered a suburban bedroom community for neighboring regions such as Philadelphia, New Jersey, and New York City because of its relatively low cost of living.

The Western Rural School is located in a bucolic setting in a rural part of the state which serves a resident population of only 16,250 people and a student population of 2,100. The area was known for its oil boom in the early part of the 20<sup>th</sup> century. The residents of the community are predominantly white (96 percent). The mode of travel for the district is primarily by school bus Pupils within four districts with the United States: two urban, one suburban, and one rural, were selected, and provide a diversity of methods of travel to and from school which would involve risk, as well as the longest commute through areas that lack capable guardianship (Lemieux, 2010). The age of the pupils ranges between approximately 10 and 14. In this dissertation, survey data of middle and junior high school pupils are used to study the relationship between student mode of travel and length of commute, and the incidences of various bullying-related victimization, types of bullying-related offenses, approximate time of occurrence (on the way to school or on the way home), and general geographic location of victimization. While the incidents of violence and bullying within the schools has received a tremendous amount of attention, particularly since the high-profile school shootings in the 1990s, little research has been conducted on incidents that take place against schoolchildren during their journey to and from school. This study will fill a significant gap in the research on victimization of schoolchildren.

This chapter provides an outline of the data sources, variables and methodology used to quantify bullying victimization during the school commute of American junior high school students within an urban setting.

The major purpose of the survey research is to examine the relationship between the mode of travel and length of school commute of middle school pupils in urban school districts and their experiences of being a victim of crime and bullying behavior. The research will also explore the pupils' fear and avoidance behavior of specific areas during their daily school commute within the theoretical context of Routine Activities Approach (absence of capable guardianship).

### **Independent Variables**

Independent variables include the various modes of travel to and from school (which includes students who travel to and from school by walking, are driven by a parent or guardian, walking with friends, walking with siblings, or ride the school bus), length of commute, district, gender, and locations where victimization has occurred. Descriptive data are included which ask participants to describe the specific places where victimization has occurred or the locations that they fear or avoid during their daily commute.

### **Primary Outcome Variables**

Little is known about student victimization and fear while traveling to and from school (Moore et al, 2001; Addington and Yablon, 2011). Alvarez and Bachman (1997) suggest that walking to school and taking public transit may increase exposure to dangerous areas around the school, and may, therefore, contribute to fear. Table 6.1 presents the variables that the research will attempt to study. The outcome variables will be the various forms of bullying-behavior as well as fear and avoidance behavior of the students and offenses witnessed.

Table 0.1. Outcome variables bladed	Table 6.1.	Outcome	Variables St	udied
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Victimization	Fear	Witnessed Victimization
Called mean names or made fun of	Afraid during the commute to school in the morning	Witnessed another student being called mean names or made fun of
Hit, kicked, pushed, or shoved around	Afraid during the trip home in the afternoon	Witnessed another student being hit, kicked, pushed, or shoved around
Had property taken	Afraid of being picked on or made fun of during the commute	Specific location where the victimization was witnessed
Verbally threatened	Afraid of being harmed on a school bus	
Mean comments about appearance	Avoids specific modes of travel because of fear of harm	
Received hurtful calls or text messages	Avoids certain areas because of safety concerns	

The study attempts to document instances of minor forms of bullying-related behavior—which could be considered harmful or threatening—to the more serious offenses that middle school pupils experience during their trip to and from school. Prior research has uncovered evidence suggesting a correlation between bullying-related victimization and the commute to and from school (Moore et al., 2011; Addington and Yablon, 2011), in addition to fear of victimization during the travel to and from school (Meyer and Astor, 2002). This is in support of Lemieux's (2010) research which suggests that students' travel to and from school is among the riskiest activity in America. **Analysis**. The research will use frequencies and correlation analyses. The study attempted to survey as many participants as possible in order to maximize sample size. The level of probability for significance will be at .05, which has been established in the social sciences for statistical significance.

#### Research Question and Hypotheses

This study utilizes modifications of established survey instruments (Limber et al., 2010; Whitney and Smith, 1993) among middle school pupils within the United States. In light of recent research (Lemieux, 2010) which indicates the trip to and from school as "the most dangerous activity in America" (p. 464), the present study asks the primary question: *What is the relationship between mode of travel and the victimization of children during their daily commute to and from school?* The study also seeks to answer the questions: *Is length of commute to and from school related to victimization?* And, *what types of incidents do schoolchildren experience during their commute to and from school?* 

This study will attempt to test the following hypotheses:

1. Victimization and perception of safety will be related to specific modes of travel.

2. Boys will experience more bullying-related offenses during the school commute than girls.

3. The length of commute will positively correlate with the number of reported bullying incidents.

4. Students will report feeling safer at school than on the way to and from school if their normal travel paths are unsupervised.

The specific research questions which this dissertation attempts to answer are:

1. What types of incidents do schoolchildren experience during their commute to and from school?

2. Is length of commute to and from school related to victimization?

3. What is the relationship between mode of travel and the victimization of children during their daily commute to and from school?

4. What do students fear most during their daily commute?

5. What modes of travel would they prefer to avoid?

6. Do the pupils feel safer in school or during their commute?

## **Demographic Variables**

The criminological literature has established links between exposure to risk, various demographic variables such as age and sex, and the individuals' routine activities (Cohen and Felson, 1979). Certain demographic groups, such as teenagers, are disproportionately victimized by crime (Felson and Boba, 2010). In accessing the sample, the researcher used a convenience sample of pupils from urban, suburban, and rural districts within the Middle Atlantic region of the United States. Although age is not a variable included in the study, the pupils range in age from approximately 10 to 14. Therefore, the study will

not address age because of the small variation among the pupils in this study. Future research in this area could explore differences among ages or groups, such as elementary, middle, and high school, modes of travel used, and differences in types and levels of victimization experienced, feared, or witnessed.

#### Sex: Males vs. Females

This study utilizes the dichotomous categories of boy and girl as utilized in other research involving the sex of research subjects (Gottfredson, 1984; Miethe, et al., 1987; Sampson and Lauritsen, 1990; Kennedy and Forde, 1990; Miethe and McDowall, 1993; Mustaine, 1997). The study will explore whether males or females experience higher rates of victimization during the school commute, in addition to the type of victimization that is specific to each sex.

#### Non-Response

While the primary investigator read each question on the survey and allowed time for the participants to respond, there are responses that were left blank. There could be many reasons why people do not answer a survey question. Examples include refusal by participant, inability to understand the question, the participant may not feel comfortable answering a question about victimization, or perhaps the question was not appropriate to the participant's specific situation. The study attempted to survey as many participants as possible in diverse locations to minimize the problem with non-response. The number of missing data is identified in Chapter 7 for each of the applicable survey questions. One major goal of the researcher is to minimize sample loss (Esbensen, et al., 2008). The 50 percent participation rate within the pilot study fell below the rate of 70 percent suggested as the minimum for analysis for reasons discussed in Chapter 5. Current return rates averaged between 63 and 68 percent, which likely could only be improved upon with regular visits to the research sites, almost daily contact with teachers, and, according to Esbensen, et al., "creative solutions or strategies" which "often come with a hefty price tag—in terms of both time and money" (341).

#### Survey Instrument

The survey instrument used in this dissertation contains 30 questions, the purpose of which is to document the pupils' experiences as victims of bullying-related behavior and crime during their commute to and from school. The survey was pilot tested on approximately 30 middle school pupils in one middle school to detect any problems with the survey instrument (See appendix D). The principal of the research site was enthused about the study, and allowed the investigator to access three homerooms within the middle school, which include students from grades 6, 7, and 8. The pilot study was conducted during the morning homeroom period in the school's cafeteria, with adequate spacing between each pupil in order to avoid discussion of the questions or copying of answers

Given the sensitivity of the topic of bullying, the means of obtaining information about the issue is extremely important. Interviews with children were not found to be suitable as a means of studying the incidence of bully/victim problems because of the tendency of children to provide defensive answers and the inability to shed light on new cases of bullying (Whitney and Smith, 1993). Prior research has suggested that the "best method for establishing [bullying] incidence from middle school age upward is the anonymous questionnaire" (Smith, 1991: 243; e.g., McCord, et al., 2000; Gottfredson and Gottfreson, 1985).

The current survey instrument format is similar to other bullying surveys (e.g., Olweus, 1994; Youth Risk Behavior Survey, 2011), but has been modified to address the student's experiences with bullying based upon their mode of travel, length of commute, and place of victimization. While there are some data that have examined student's perceptions of safety related to their routes to and from school (e.g., Kaufman et al., 2000), no existing data sets from other standardized questionnaires currently explore student experiences with bullying or explore risk of victimization specifically within the context of their commute to and from school (D. May, personal communication, April 29, 2011; Lemieux, 2010; Meyer and Astor, 2002).

Ahmad and Smith (1990) conducted a comparison study of a number of different methods of assessing bully/victim problems on a sample of about 100 children aged nine, 11, 13, and 15, and found that best method for establishing incidence from middle school age upward appeared to be the use of an anonymous questionnaire. Their questionnaire is also similar in format to the one in the proposed research. According to an analysis on rates of bullying conducted in the UK by Whitney and Smith (1993), it is common to use modified versions of these questionnaires to suit the specific format of the research location. The Olweus questionnaire used by Whitney and Smith in the UK "closely followed the design of those used by Olweus (1991) but some changes were made to suit the British context and language" (7). Psychometric properties and prevalence estimation of bullying using this type of questionnaire has undergone extensive research (Solberg and Olweus, 2003). According to Limber, et al., (2010) questionnaires similar to the Olweus Bullying Questionnaire (OBQ) are "likely to provide reliable, largely valid, and relevant data on the phenomena of interest" (71).

There are several potential problems that may undermine a study involving the use of a survey. For example, the survey must extract accurate information, the questions must be unambiguous and not be misinterpreted by the subjects, and the questions must be age-appropriate as well as developmentally appropriate. For instance, with the term "assault," the general concept and meaning of the word is understood by most adults (aside from the formal legal definition), but may not be understood by a 12-year-old child. Therefore, "assault" must be presented in the survey instrument as "hitting," "kicking," "punching," or "shoving."

One of the best methods for avoiding some of the pitfalls mentioned above is through piloting the survey (Drew et al., 2008). The pilot test involved asking a small sample of pupils to complete the survey. The research will conduct the pilot survey in person with pupils who are at least similar to the respondents in the main sample, and will provide information to the research as to the survey's clarity. Chapter 5 discussed the pilot testing of the survey instrument in more detail, and some of the lessons learned while attempting to conduct field-based research in a school setting.

The current research follows a similar format as far as frequency of occurrence, with questions crafted that are specific to the context of the school commute. In prior research

involving the use of the survey format, Swearer and Cary (2007) developed a survey for research on the attitudes and perceptions of middle school pupils toward bullying. The survey instrument "was based on other well-known surveys of bullying; however, items were also included that were of interest to the local district" (73).

The current survey, however, is meant more as a tool to document incidents of bullying-related behaviors. The victimization response format on the survey has been standardized (limited to "never," "sometimes," and "often." (Fink, 1995). These choices followed the pattern of the responses used by Moore et al. (2011) in their comparative European study of victimization of pupils travelling to and from school.

The term "bullying" was carefully avoided within the survey for two related reasons: 1) to avoid any conflict with the varying bullying definitions within school district codes of conduct; and 2) to avoid any confusion or misinterpretation by the research subjects. Dan Olweus (1993), a pioneer in bullying research and prevention in Norway, defines bullying as when a person is "exposed, repeatedly and over time, to negative actions on the part of one or more other students" (9). Regoli, et al. (2010) defined the term as "using one's strength or status to intimidate, injure, or humiliate another person of lesser strength or status. It happens whenever students are picked on or forced to do things they do not want to do" (p. 401). Other definitions include physical or psychological oppression of a less powerful person (Farrington, 1993), the systematic abuse of power (Smith and Sharp, 1994), and "evident enjoyment by the aggressor and generally a sense of being oppressed on the part of the victim" (Rigby, 2002: p. 51). Obviously, differing definitions could lead to much confusion within the research proposal and survey. Also problematic within the request to collect data would be the possibility that a bullying definition which "does not agree" with the individual school district's official definition of bullying would result in a denial of the request to conduct the study (J. Rivers, personal communication, January 9, 2012).

Comparative research in Europe on the victimization of pupils travelling to and from school (Moore et al., 2011) encountered difficulty with the lack of specificity in the term "bullying." The researchers noted that the concept "encompasses a broad range of lowerlevel, less-specific behavior, and consequently the term remains rather vague" (p. 249). Moore et al argue that the vagueness of the term "bullying" causes "considerable difficulty in creating accurate cross-European perspectives," more specifically, deciding what behavior would be considered bullying or not, in addition to differing meanings and practices cross-culturally (Ananiadou and Smith, 2002). The lack of agreement of definitions of bullying is similar to the confusing lack of consensus of what constitutes gang violence (Sullivan, 2005). Previous research, such as the Life in School checklist (Arora, 1994), asks children about their being victims of being hit, threatened, teased, or called names. This approach similarly avoids the problem of children understanding and, perhaps interpreting the term "bullying" differently. Moore et al. (2011) discovered that the actions of offenders travelling to and from school did not always fit within the traditional category of "bullying," but would often include acts such as ignoring the victim, or calling him or her a mean name. For many children, "being ignored or having comments made about them caused significant hurt" (256). Vivolo, et al. (2011) argue that in order to effectively inform surveillance and prevention efforts, consistent

definitions are necessary in research to uniformly measure risk and protective factors related to bullying.

Felson (2006) observes that in order to avoid confusion, a scientist "avoids mixing up what *is* and what *ought to be*" (p. 35). Vague and ill-defined offenses that vary by location can easily confuse research subjects, who must interpret the concept based upon their own experience. The lack of consistent definitions of a problem such as bullying across studies makes the problem difficult to study. Presenting the concepts to the subjects in simple terms will help avoid any variation in interpretation from one subject to the next, and from the term's changing meaning over time and specific context (e.g. Felson, 2009). Just as the crime of "vandalism" could be too broad of a category, so too could be the offense of "bullying" (Felson, 2010). If someone calls another student a mean name, the survey instrument identifies the behavior as being "called a mean name." A kick, punch, or slap, are likewise identified as such. The main purpose of this research is to "gather facts and learn from them," to focus on "very specific slices of crime," and to look at "particular behaviors and environments" (Felson, 2010: 179).

Within an international context of school-related offenses, Benbenishty and Astor (2006) demonstrate the difficulties associated with the term "bullying," and argue that the term can have very different interpretations and connotations at the local level. During their first National Study of School Violence in Israel, Benbenishty and Astor strongly suggested that researchers refrain from using the term "bullying" in instruments, and, similar to the present study, decided highlight the specific and concrete behaviors within their survey instrument (e.g., Benbenishty and Astor, 2005; Furlong, et al., 1995;

Furlong, et al., 2005). Within some contexts, offender behavior could be verbal, and in other cases it could be physical. Moore et al. (2011) suggest that using a catch all term such as "bullying" fails to differentiate different forms of behaviors that affect young people in different ways. Hurtful personal comments that occur less frequently, for example may not be captured in many of the bullying surveys and criminal victimization research.

## **CHAPTER VII. DESCRIPTIVE RESULTS**

Frequencies were obtained for each question in the survey instrument. Table 7.1 shows a breakdown of the participants at each research site, separated into Urban, Suburban, and Rural, and assigned fictitious names to further protect the anonymity of the schools: "North Urban," "South Urban," "East Suburban," and "West Rural." The urban sites were different schools, and were separated to capture nuances in the different nature of victimization between the two settings. Modes of transport between these districts varied, as some of the students in the South Urban School, for example, were more likely to take the public bus because the district did not provide bus service. Participants were asked to report the number of types of victimizations that occurred to them, or that they had witnessed, during the school year. Surveys were administered in late May, and the students were asked to recall events from that same school year.

#### **Profile of Participants**

The combined number of participants from all locations is 244. The participants were a convenience sample, as randomization of the study was not possible given the highly sensitive nature of and procedural hurdles of conducting research with schoolchildren. Students were not asked to report race or ethnicity on the survey instrument because one school district did not permit identification of ethnic identification (see appendix A). As indicated, Table 7.1 also presents the gender of the participants. The participants are almost evenly divided, with a slightly higher (56.6) percentage of female students in the sample. The table also illustrates the mean commute time for the students (in minutes), with the North Urban school having the longest commute time (21.17 minutes) and the

South Urban school, which contains a large number of students living in the surrounding neighborhoods, reporting the shortest commute time (15.88).

	North Urban	South Urban	East Suburban	West Rural	Total
Participants	96	56	52	40	244
(Percentage)	(39.3)	(23)	(21.3)	(16.4)	(100)
Female	54	34	30	20	138
(Percentage)	(56.3)	(60.7)	(57.7)	(50.0)	(56.6)
Male	42	22	22	20	106
(Percentage)	(43.8)	(39.3)	(42.2)	(50.0)	(43.4)
Mean Length of Commute	21.17	15.88	18.54	17.65	18.31
S.D.	15.822	17.747	12.253	17.045	15.72

Table 7.1. Sample Profile

Table 7.2 identifies the various modes of travel to school. As indicated, there were many students (35.2 percent) who received a ride to school each day with their parents. Over 25 percent of the students rode the school bus to school. A small number (2.9 percent) in the urban districts rode the public bus. Over 20 percent of the students walked alone. A small number (2.0 percent) walked to school each day with their parents. Some students walked with one or more friends (7.0 percent) and a smaller number (6.6) walked with one or more of their siblings. Flowing from the Routine Activities Approach, the modes of travel are organized to reveal modes that have high levels of capable guardianship (being driven by parents), to relatively little capable guardianship (walking alone).

Normal Mode of Travel	Number of Students	Percent
Parents/Adult Drives	86	35.2
School Bus	62	25.4
Walk Alone	51	20.9
Walk with Friends	17	7.0
Walk with Siblings	16	6.6
Public Bus	7	2.9
Walk with Parents	5	2.0
Total	244	100

Table 7.2. Modes of travel to school in the morning

Table 7.3 indicates the same modes of travel after leaving school in the afternoon. Some interesting comparisons involve the number of students whose parents drive, declines significantly from the commute to school in the morning (35.2 percent) to 17.2 percent in the afternoon. It would seem reasonable to assume that parents are likely to be at work in the afternoon when school dismisses, therefore, fewer parents pick up their children after school. The number of students who walk home alone in the afternoon increases only slightly from 20.9 percent in the morning, to 24.6 percent in the afternoon. The number of students who walk with one or more friends increases from 7.0 percent in the morning, to 20.9 percent in the afternoon. The other modes of travel for the afternoon commute: walking with parents (1.6 percent), school bus (24.2 percent), and taking the public bus (3.3 percent) are fairly consistent with the morning commute. Because of the small number of students reporting taking public transit or walking with parents, these data will be omitted from further analysis.

Normal Mode of Travel	Number of Students	Percent
Walk Alone	60	24.6
School Bus	59	24.2
Walk with Friends	51	20.9
Parent/Adult Drives	42	17.2
Walk with Siblings	20	8.2
Public Bus	8	3.3
Walk with Parents	4	1.6
Total	244	100

Table 7.3. Modes of travel home from school in the afternoon

Table 7.4 provides some description of how students travel to and from school by district. The percentage of students within the school using a particular mode of transportation is provided. For example, 33 students in the sample from the North Urban School walk alone to school in the morning. This represents 34.4 percent of the students.

Not surprisingly, only three students in the West Rural School report walking alone, which represents only 7.5 percent of the study participants from that school. There is no school bus service provided in the South Urban District. A small number of students reported taking public transportation in this school.

	Walk Alone	School Bus	Walk with Friends	Parent/Adult Drives	Walk with Siblings	Other	Total
North	33	17	8 (8.3%)	32 (33.3%)	3 (3.1%)	3 (3.2%)	96
Urban	(34.4%)	(17.7%)					
South	13	0	7	19 (33.9%)	10	7	56
Urban	(23.2%)		(12.5%)		(17.9%)	(12.5%)	
East	2 (3.8%)	30	1 (1.9%)	17 (32.7%)	2 (3.8%)	0	52
Suburban		(57.7%)					
West	3 (7.5%)	15	1 (2.5%)	18 (45.0%)	1 (2.5%)	2 (5%)	40
Rural		(37.5%)					
Total	51	62	17	86	16	12	244

Table 7.4. Modes of travel to school by district

	Walk	School	Walk	Parent/Adult	Walk	Other	Total
	Alone	Bus	with	Drives	with		
			Friends		Siblings		
North	32	20	24	14 (14.6%)	4 (4.2%)	2 (2.1%)	96
Urban	(33.3%)	(20.8%)	(25.0%)				
South	13	0	12	8 (14.3%)	16	7	56
Urban	(23.2%)		(21.4%)		(28.6%)	(12.5%)	
East	5 (9.6%)	27	11	7 (13.5%)	0	2 (3.8%)	52
Suburban		(51.9%)	(21.2%)				
West	10	12	4	13 (32.5%)	0	1 (2.5%)	40
Rural	(25.0%)	(30.0%)	(10.0%)				
Total	60	59	51	42	20	12	244

Table 7.6. depicts the approximate commute times in minutes. Minutes were selected as the distance measurement for students who live relatively close to school. Also,

younger students who commute by bus may not know the distance that they travel in miles. As indicated, commute times varied from one minute, to over an hour, with a mean commute time of 18.82 minutes. The question on commute time flows from the hypothesis that students who have longer commutes will experience more victimization.

Approximate commute time	Number of Students	Percent
(Minutes) 0-5	50	20.5
0-3	50	20.5
6-10	55	22.5
11-15	46	18.9
16-20	24	9.8
21-25	8	3.3
26-30	27	11.1
31-35	6	2.5
36-40	3	1.2
41-45	7	2.9
>45	18	7.4
Total	244	100

 Table 7.6. Approximate school commute time (in minutes)

 Table 7.7. Mean commute time by mode of travel

Mode of Travel	Mean Number of Minutes	S.D.			
Walk alone	15.86	13.126			
Walk with one or more friends	15.41	14.383			
Walk with one or more siblings	18.94	20.882			
Parents or others drive	15.41	15.169			
School bus	26.66	15.930			
Total	18.456	15.898			

## Outcomes

The dependent variables in the study include <u>victimization</u>—including whether the students had witnessed the victimizing of other students—<u>fear</u>, and <u>avoidance</u> behavior of the students during their daily commute to and from school.

Table 7.8 illustrates the number of victimizations experienced by each student. The majority (53.7 percent) did not report experiencing any victimization during their daily commute over the previous school year. Nearly half (46.3 percent), however, did experience problems during the daily commute. Almost 30 percent experienced one or two incidents, and 16.7 percent experienced three or more incidents. Incidents encountered by the students who reported victimization included being hit, kicked, pushed, or shoved around. Chapter 8 will explore victimization as a dichotomous variable for simplicity given the number of outcomes.

Number of Victimizations	Number of Students	Percent
0	131	53.7
1	36	14.8
2	36	14.8
3	14	5.7
4	14	5.7
5	11	4.5
6	2	.8
TOTAL	244	100

Table 7.8. Number of victimizations experienced by students during daily commute

Table 7.9 shows the number of victimizations by school district with the percentage of students within the district experiencing victimization. The rural district students reported the fewest assaults, with the urban districts experiencing more assaults. More females reported being teased and assaulted than males.

	Pupils	Pupils/Property	Pupils	Pupils	Pupils	Pupils
	Assaulted	Theft	Threatened	Teased	Called	Receiving
					Mean	Hurtful
					Names	Texts
North	8 (8.5%)	9 (9.6%)	8 (8.5 %)	18	14	8 (8.5%)
Urban				(19.4%)	(14.9%)	
South	10	17 (30.4%)	5 (9.4%)	20	29	13
Urban	(18.2%)			(36.4%)	(51.8%)	(24.1%)
East	10	12 (23.5%)	6 (11.8 %)	20	22	5 (10.0%)
Suburban	(19.6%)			(39.2%)	(43.1%)	
West Rural	2 (5.0%)	5 (12.5 %)	3 (7.5%0	8	8	8 (20.0%)
				(20.0%)	(20.0%)	
Total	30	43	22	66	73	34
Pupils						
Victimized						

Table 7.9. Victimizations by district

## Table 7.10. Victimizations by gender

Pupils	Pupils/Property	Pupils	Pupils	Pupils	Pupils
Assaulted	Theft	Threatened	Teased	Called	Receiving
				Mean	Hurtful
				Names	Texts

Females	13	28	12	38	43	19
	(9.4%)	(20.3%)	(8.7%)	(27.5%)	(31.2%)	(13.9)
Males	17	15	10	28	30	15
	(16.0%)	(14.2%)	(9.4%)	(26.4%)	(28.3%)	(14.4%)

Table 7.11 shows data on the frequency of students who were called mean names, made fun of, or otherwise teased during their daily commute. This suggests more minor forms of bullying behavior that is verbal in nature. This suggests that over one-fourth of the sample experienced verbal taunting during the daily commute to school over the previous school year. Table 7.11 specifies the frequency of students who were targeted based upon their appearance. Appearance could suggest insults that are based on any of the student's physical characteristics, such as race or ethnicity, size, or gender. These two frequencies suggest that nearly one-third of the subjects were the victims of verbal taunting during their daily commute.

Frequency of Victimizations	Number of Students	Percent
Did not happen	173	70.9
Once	30	12.3
Two or three times	35	14.3
More than three times	1	.4
Missing	5	2
TOTAL	244	100

Table 7.11. Students who were teased on their way to or from school

"On the way to or from school over the past year, I was teased in a hurtful way."

Frequency of	Number of Students	Percent
Victimizations		
Did not happen	168	68.9
Once	46	18.9
Two or three times	7	2.9
More than three times	20	8.2
Missing	3	1.2
TOTAL	244	100

Table 7.12. Students who received mean comments about their appearance on their way to or from school

"On the way to or from school over the past year, I was called mean names or comments about my appearance."

Table 7.13 depicts the frequency of physical bullying during the school commute. Students were asked if they had ever been "kit, kicked, pushed, or shoved around" during their commute over the school year. The results show that 12.6 percent of students had been the victim of physical bullying offenses.

Frequency of Victimizations	Number of Students	Percent
Did not happen	210	86.1
Once	15	6.1
Two or three times	6	2.5
More than three times	9	3.7
Missing	5	1.6
TOTAL	244	100

Table 7.13. Students who were physically assaulted on their way to or from school

"On the way to or from school over the past year, I was hit, kicked, pushed, or shoved around."

Table 7.14 shows almost 18 percent of the students were victims of property theft during their commute. Participants were asked if they had anything stolen from them, such as a backpack, clothing, phone, laptop, or iPod.

Frequency of	Number of Students	Percent
Victimizations		
Did not happen	198	81.1
Once	27	11.1
Two or three times	9	3.7
More than three times	7	2.9
Missing	3	1.2
TOTAL	244	100

 Table 7.14. Students who were victims of theft or robbery on their way to or from school

"On the way to or from school over the past year, somebody stole something from me. Things like money, a backpack, clothing, phone, iPod, or anything else."

Table 7.15 reports the frequency of students who have received threats of physical

harm during their daily commute. As shown, almost 70 percent of students reported not receiving threats during their commute, with 30 percent receiving one or more threats during the school year. Similarly, Moore, et al. (2011) found it "striking" that most young people in their study did not feel threatened during their commute.

Frequency of Victimizations	Number of Students	Percent
Did not happen	168	68.9
Once	46	18.9
Two or three times	7	2.9

 Table 7.15. Students who received threats during their daily commute

More than three times	20	8.2
Missing	3	1.2
TOTAL	244	100

"On the way to or from school over the past year, I was threatened or forced to do things I did not want to do."

Table 7.16 suggests 13.5 percent of students received verbal taunts or mean messages

on their cell phone during the commute to and from school.

Frequency of Victimizations	Number of Students	Percent
Did not happen	204	83.6
Once	21	8.6
Two or three times	4	1.6
More than three times	9	3.7
Missing	6	2.5
TOTAL	244	100

 Table 7.16. Students who received mean or hurtful text messages

"On the way to or from school over the past year, I received mean or hurtful calls or text messages on my cell phone."

As table 7.17 illustrates, students reported the highest frequency of victimizations near the school building. This could include, specifically, the area near the entrance to the school, or sidewalks leading to the bus stop. When looking at the locations by district in 7.18, it becomes apparent that pupils in the suburban and rural districts report the highest number of victimization on the school bus, and pupils in the urban districts report the most victimization near the school building or near home.

Location	Number of Students Reporting	Percent of All Students who are Victims (N=113)
Near the School Building	30	27
Near Home	21	19
On the School Bus	18	16
On a Playground	6	5
School Bus Stop	7	6
On the Street	5	4

Table 7.17. Locations where students report being victimized

	Cable 7.18. Locations where Students	udents Report Being	Victimized by District
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District	Near the	Near	On the	On a	School	On the	In
	School	Home	School	Playground	Bus	Street	School
	Building		Bus		Stop		
North	6 (6.3%)	6 (6.3%)	1 (1.0%)	0	1	1	5
Urban					(1.0%)	(1.0%)	(5.2%)
South	12	9	1 (1.0%)	6 (10.7%)	1	1	6
Urban	(21.4%)	(16.1%)			(1.8%)	(1.8%)	(10.7%)
East	8	4 (7.7%)	10(19.2%)	0	4	3	21
Suburban	(15.4%)				(7.7%)	(5.8%)	(40.4%)
West	4	2 (5.0	6 (15.0%)	0	1	0	3
Rural	(10.0%)	%)			(2.5%)		(14.3%)

## **Outcome Variable: Witnessing of Victimization**

Tables 7.19-7.26 address victimizations that the students across the four districts (urban, suburban, and rural) witnessed during their commute to and from school over one school year. Interestingly, the majority of students (66.9 percent) witnessed at least one incident of victimization during their daily commute. A student was said to have

"witnessed" an incident of victimization when reporting another student being called names by other students, or witnessing another student being hit, kicked, slapped, punched, or otherwise attacked by other students. More than half of the students reported witnessing physical attacks (64.8 percent) and verbal abuse (61.9 percent). Locations of the incidents where the students reported witnessing incidents varied. Students reported witnessing a large number of victimizations (30.3 percent) near the school building. This could be explained by the larger concentration of offenders, victims, and witnesses who would be present in this particular location either immediately prior to school or after school dismissal. Table 7.25 shows that the school bus is once again a problematic location for pupils in the suburban school, with 51.9 percent reporting having witnessed victimization the bus, along with 34.6 percent witnessing victimization at the school bus stop.

	•		
	Number of Students	Percent	
	Reporting		
Witnessed no incidents	81	33.2	
Witnessed one incident	99	40.6	
Witnessed two incidents	30	12.3	
Witnessed three incidents	19	7.8	
Witnessed four incidents	8	3.3	
Witnessed five incidents	7	2.9	
Total	244	100	

 Table 7.19. Number of incidents witnessed by students

District	Did Not	Witnessed	Witnessed	Witnessed	Witnessed	Witnessed
	Witness	One	Two	Three	Four	Five
	any	Incident	Incidents	Incidents	Incidents	Incidents
	Incidents					
North	52	29 (30.2%)	5 (5.2 %)	3 (3.1%)	3 (3.1%)	4 (4.2%)
Urban	(54.2%)					
South	12	31 (55.4%)	6 (10.7%)	3 (3.1%)	3 (3.1%)	4 (4.2%)
Urban	(21.4%)					
East	8 (15.4%)	24 (46.2%)	9 (17.3 %)	6 (11.5%)	3 (5.8%)	2 (3.8%)
Suburban						
West	9 (22.5%)	15 (37.5 %)	10	4 (10.0%)	2 (5.0%)	0
Rural			(25.0%)			

Table 7.20. Number of Incidents Witnessed by District

Table 7.21. Number of Incidents Witnessed by Gender

	Did Not	Witnessed	Witnessed	Witnessed	Witnessed	Witnessed
	Witness	One	Two	Three	Four	Five
	Any	Incident	Incidents	Incidents	Incidents	Incidents
	Incidents					
Females	47	58	14	13	3	3
	(34.1%)	(42.0%)	(10.1%)	(9.4%)	(2.2%)	(2.2)
Males	34	41	16	6	5	4
	(32.1%)	(38.7%)	(15.1%)	(5.7%)	(4.7%)	(3.8%)

## Table 7.22. Students who have witnessed verbal abuse

Frequency of	Number of Students	Percent		
Victimizations				
Never	87	35.7		
Sometimes	97	39.8		

Often	54	22.1
Missing	6	2.5
TOTAL	244	100

"During your trip to or from school, have you ever witnessed another student being called names by other students?"

Frequency of	Number of Students	Percent
Victimizations		
Never	109	44.7
Sometimes	100	41
Often	29	23.8
Missing	6	2.5
TOTAL	244	100

# Table 7.23. Students who have witnessed physical assault

"During your trip to or from school, have you ever witnessed another student being hit, kicked, slapped, punched, or otherwise attacked by other students?"

Table 7.24. Locations where students have witnessed verbal abuse or physical	
assault	

assault					
Location	Number Reporting	Percent of All Students who have Witnessed Victimization (N=163)			
Near the School Building	74	45			
Near Home	71	44			
On the School Bus	54	33			
On a Playground	45	28			

School Bus Stop	37	23
On the street	5	.03

 Table 7.25. Locations where Students have Witnessed Verbal Abuse or Physical Assault by District

District	Near the	Near	On the	On a	School	On the	Total
	School	Home	School	Playground	Bus	Street	
	Building		Bus		Stop		
North	19	26	9 (9.4%)	13 (13.5%)	12	1	80
Urban	(19.8%)	(27.1%)			(12.5%)	(1.0%)	
South	18	17	4 (7.1%)	24 (42.9%)	3	1	67
Urban	(32.1%)	(30.4%)			(5.4%)	(1.8%)	
East	20	13	27(51.9%)	3 (5.8%)	18	3	84
Suburban	(38.5%)	(25.0%)			(34.6%)	(5.8%)	
West	17	15 (37.5	14	5 (12.5%)	4	0	55
Rural	(69.7%)	%)	(35.0%)		(10.0%)		

Table 7.26. Number of incidents witnessed by gender

	Near the	Near	On the	On a	School	On the
	School	Home	School	Playground	Bus Stop	Street
	Building		Bus			
Females	38	43	27	24	17	3
	(27.5%)	(31.2%)	(19.6%)	(17.4%)	(12.3%)	(2.2)
Males	36	28	27	21	20	2
	(34.0%)	(26.4%)	(25.5%)	(19.8%)	(18.9%)	(1.9%)

# **Outcome Variable: Fear**

Tables 7.27 to 7.31 illustrate fear of victimization that students experience during their daily commute. Almost 23 percent express some fear during their commute to school,

while a slightly higher percentage (24.6 percent) admit to being fearful during the commute home in the afternoon. For those students who ride the school bus, only 4 percent express fear during their morning commute, while over 13 percent express fear during the ride home. Over 25 percent admit to feeling as though they need some sort of a weapon in order to protect themselves during their daily commute.

	0	
Frequency of	Number of Students	Percent
Victimizations		
Never	188	77
Sometimes	43	17.6
Often	10	4.1
Missing	3	1.2
TOTAL	244	100

Table 7.27. Students who are fearful of harm during their commute to school

"How often are you afraid that someone will harm you during your trip **to** school in the morning?"

Table 7.28. Students who are fearful of harm during their commute here	ome <u>from</u>
school	

Frequency of Victimizations	Number of Students	Percent
Never	180	73.8
Sometimes	51	20.9
Often	9	3.7
Missing	4	1.6
TOTAL	244	100

"How often are you afraid that someone will harm you during your trip home **from** school in the afternoon?"

Frequency of	Number of Students	Percent
Victimizations		
Never	103	42.2
Sometimes	14	5.7
Often	3	1.2
Not Applicable/Missing	124	50.8
TOTAL	244	100

"How often are you afraid that someone will harm you on a school bus?"

# Table 7.30. When students fear victimizations on the school bus

Time of Victimization	Number of Students	Percent
Morning	10	4.1
Afternoon	32	13.1
Both	3	1.2
Not Applicable/Missing	199	81.6
TOTAL	244	100

"How often are you afraid that someone will harm you during your trip **to** school in the morning?

Frequency	Number of Students	Percent
Never	169	72.2
Sometimes	38	15.6
Often	27	11.1
Missing	10	4.1
TOTAL	244	100

"Have you ever felt like you should have some sort of weapon on your way to or from school in order to protect yourself?"

## **Outcome Variable: Avoidance Behavior**

In Tables 7.32-7.34, students were asked about modes of travel that they would avoid out of concern for their safety, in addition to reasons why they would avoid certain areas during their daily commute. Not surprisingly, many students (44.7 percent) felt that walking alone should be avoided, whereas having capable guardianship during their commute, which includes primarily being driven by an adult (60.7 percent) or walking with one or more friends (41 percent) were considered the safest way to commute to and from school. Out of the 95.9 percent of students responding to the question of whether anyone told them to avoid certain areas because of safety concerns, nearly half (46.7 percent) reported that someone did tell them to avoid certain areas. Avoidance behavior is also explored by district and gender in table 8.32 and 8.33. Students were able to select more than one mode of travel that they considered unsafe. In table 8.32, significantly more girls (57.7 percent) fear walking alone to and from school than boys (37.7percent).

<b>Mode of Travel</b>	Number of Students	Percent
Walking Alone	109	44.7
Biking	28	11.5
Public Bus	26	10.7
School Bus	15	6.1
Walking with one or	15	6.1
more Friends		
Driven by Adult	3	1.2
All Modes are	71	29.1
Perceived as Safe		

Table 7.32. Modes of travel students would avoid because of safety concerns

"Based upon your own commute to and from school, is there any way to travel to and from school that you would **avoid** because of concerns for your safety?"

District	Walking	Walking	Biking	School Bus	All
	Alone	with			Modes of
		Friends			Travel
					are Safe
North	37 (38.5%)	5 (5.2%)	3 (3.1%)	8 (8.3%)	28
Urban					(29.2%)
South	29 (51.8%)	5 (8.9%)	9 (16.1%)	0	12
Urban					(21.4%)
East	35 (67.3%)	5 (9.6%)	16 (30.8%)	3 (5.8%)	9 (17.3%)
Suburban					
West Rural	9 (22.5%)	0	0	0	29
					(72.5%)

Table 7.33. Modes of travel avoided by district

Table 7.34. Modes of travel avoided by gender

District	Walking	Walking	Biking	School Bus	All
	Alone	with			Modes of
		Friends			Travel
					are Safe
Females	70	10	13	8	36
	(57.7%)	(7.2%)	(9.4%)	(5.8%)	(26.1%)
Males	40	5	15	7	42
	(37.7%)	(4.7%)	(14.2%)	(6.6%)	(39.6%)

Table 7.35 illustrates the reasons why students choose to avoid certain areas on their way to or from school. Students could choose from a list of the following reasons, or describe in their own words why they would avoid certain areas. The respondents could select more than one reason. Many of the students avoided areas that lacked supervision. Surprisingly, there was significant concern about being attacked by dogs, particularly in urban areas where many of the students walked to and from school (see Chapter 6, Figures 6.4-6.7).

Reason Avoided	Number of Students	Percent
Lack of Supervision	37	15.2
Dogs	37	15.2
Teasing	33	13.5
Gangs	27	11.1
Assault	17	7.0
Robbery	14	5.7

Table 7.35. Why students avoid locations during their commute

<b>Table 7.36. Wh</b>	v students avoid	l locations du	ring their o	commute by district

District	Lack of	Dogs	Teasing	Gangs	Assault	Robbery
	Supervision					
North	17	10	10	12	6	7
Urban	(45.9%)	(27.0%)	(30.3%)	(44.4%)	(35.3%)	(50.0%)
South	5	17	13	7	7	3
Urban	(13.5%)	(45.9%)	(39.4%)	(25.9%)	(41.2%)	(23.0%)
East	11	5	8	5	3	4
Suburban	(29.7%)	(13.5%)	(24.2%)	(18.5%)	(17.6%)	(28.6%)
West Rural	4	5	2	3	1	0
	(10.8%)	(13.5%)	(6.1%)	(11.1%)	(5.9%)	

Table 7.37 indicates that among both girls and boys, a significantly higher percentage of girls (70.3 percent) fear lack of supervision during their daily commute. A significantly higher percentage of girls (69.7 percent) fear being teased, while the other types of victimization are about evenly divided.

1 abic 7.57.	What Students	s icar uuring	, then comm	ute (by genu		
Gender	Lack of	Dogs	Teasing	Gangs	Assault	Robbery
	Supervision					
Females	26	18	23	16	8	8
	(70.3%)	(48.6%)	(69.7%)	(59.3%)	(47.1%)	(57.1%)
Males	11	19	10	9	9	6
	(29.7%)	(51.4%)	(30.3%)	(52.9%)	(52.9%)	(42.9%)

 Table 7.37. What students fear during their commute (by gender)

Finally, tables 7.38-7.40 present data on the perception of safety that students have during their commute. As indicated, students overwhelmingly feel safer at school (60.7 percent) than during their commute (29.1 percent), with 7 percent reporting that they feel safe during both the commute and at school. Pupils in all districts report feeling safer at school, with more pupils within the urban districts feeling safer at school than during the commute. The results are about evenly divided by gender.

Location	Number of Students	Percent
At School	148	60.7
During the Commute to School	25	10.2
During the Commute Home from School	40	16.4
During the Commute to and from School	6	2.5
All of the above	17	7.0
Missing	8	3.3
TOTAL	244	100

Table 7.38. Where do students feel safer?

"Generally speaking, do you feel safer in school, during your commute to school, or during your trip home from school?"

District	At School	During the	During the	During the	All of the
		Commute	Commute	Commute	above are
		to School	Home from	to and from	Safe
			School	School	
North	74 (84.1%)	4 (4.5%)	9 (10.2%)	0	1 (1.1%)
Urban					
South	35 (62.5%)	5 (8.9%)	16 (28.6%)	0	0
Urban					
East	24 (46.2%)	15 (28.8%)	8 (15.4%)	3 (5.8%)	2 (3.8%)
Suburban					
West Rural	15 (37.5%)	1 (2.5%)	7 (17.5%)	3 (7.5)	14
					(35.0%)

 Table 7.39. Where do students feel safer by district?

District	At School	During the	During the	During the	All of the
		Commute	Commute	Commute	above are
		to School	Home from	to and from	Safe
			School	School	
Females	84	11 (8.2%)	26	6	7 (5.2%)
	(62.7%)		(19.4%)	(4.5%)	
Males	64	14	14	0	10 (9.8%)
	(62.7%)	(13.7%)	(13.7%)		

Table 7.40. Where do students feel safer by gender

#### **Descriptive Results**

To further clarify the above findings, opened-ended questions from the survey instrument were analyzed. The students were to answer in their own words in order to provide greater depth and detail of incidents occurring during their commute. Students were asked to describe in their own words: **"Have you ever had any unpleasant things happen to you while you were going to or from school?"** Commuters whose primary mode of travel is walking seemed to experience most of the problems. Participants reported the following offending behavior during their commute: "Catcalls." "Students from a school across town picking fights." "I got jumped by 5 girls and 3 high school boys." "I almost got jumped." "Strangers stare and attempt to get me to come over to them." "People talk about me." "I got into a fight while walking to school." "Some kid tried to fight me so I threatened to kill him." "I see kids pick on others." "I have been kicked and I got punched." "Someone got into a fight." "I have seen unpleasant things and I have seen fights and kids breaking things like the gates." "Someone spit at me." "Being hit and having things thrown at me." "I've been hit in the head." "Kids throwing things at me."

Students also reported safety concerns in addition to the hazards posed by their peers: "I got chased by a dog on my way to school." "When I was walking to school one morning there was a dog loose and was heading for me and my sister." "Chased by a dog."

# **Emergent Themes**

When the pupils were asked about their victimization experiences during their school commute, the emergent theme seemed to be more physical encounters than verbal or social. A few students reported witnessing others being victimized, but even the incidents witnessed were physical, such as witnessing fights or acts of vandalism.

A surprising discovery was that a few students in all schools recall more serious concerns, such as potential safety concerns posed by strangers during the commute: "A stranger attempted to lure the student into his vehicle. "This guy tried to get me to get in his car on Franklin Street." "Strangers stare and attempt to get me to come over to them." "I was being followed home by a grown man." "Had a van park next to me and follow me for about four blocks until I turned a corner and ran." "Men stop their cars and honk and tell me things that make me feel uncomfortable." "Someone I didn't know asked me to enter their vehicle."

Students were also asked to describe any places during their commute to and from school that they felt were especially unsafe. Table 7.38 depicts responses based upon

district. Findings suggest that students from the urban districts reported fear of alleyways and street corners. From observations made of the physical surroundings during site visits, there were numerous dark alleyways next to vacant and vandalized buildings, where offenders could hide (see figures 6.4 and 6.5 in the previous chapter). In contrast to relatively abandoned locations that contribute to a sense of fear among the urban students, the suburban and rural students reported experiencing more anxiety in relatively occupied locations, such as the school bus and several restaurant parking lots located near the school. When asked if the pupils told anybody about the unpleasant experience that happened during their trip to or from school, such as a teacher, parent bus driver, friend, or anyone else they thing might help prevent the incident from happening again, only 38 students admitted to discussing the incident with someone, and the majority of them claimed to have talked about it with a parent (N=22), followed by a friend (N=8). Seven reported discussing the incident with a teacher, and only one with the school principal.

School Context	Location
Urban	"In the alley across the street from my house."
	"I feel unsafe after school on the playground."
	"The projects."
	"Near the main (school) door."
	"During the walk home."
	"No, but only because I live so close to the school."
	"In school."

Table 7.41. Descriptions of unsafe locations during school commute

	"The alley."
	"The alley cause you never know who is there."
	"On the corner and the alley."
	"The alley up the street from my school."
	"The corner alley and street."
	"It is the alley."
	"The alley and on the corner"
	"The alley ways between vandalized houses a few blocks from my house"
	"Alleyways to get home."
	"Yes in the alley, fights happen there."
	"The intersection before my school."
Suburban/Rural	"The school bus."
	"Back roads where no one travels."
	"On the bus."
	"Across the road from my school in the parking lot of the pizza place where I wait for my rides or have to walk through.
	"Intersection I have to cross when walking home from school."
	"The Pizza Hut across the street from my school."
	"An alley that is between a row of houses."
	"Dunkin Donuts/Pizza Hut parking lots."
	"The roads, some younger drivers speed in

the community and it's dangerous."
"On a street by the store."
"Yes the alleyway there are men always there huddled up in a corner."
"The back of the school bus."
"Bus stop and on the bus. I got bullied a lot because of my appearance on the bus, and I was pushed and my bookbag was pulled."
"On the bus."

Findings presented in this chapter indicate that nearly half (46.3 percent) of the research participants experienced at least one type of bullying-related victimization during the daily commute, which could include physical assault, verbal abuse, property theft, or mean text messages. An overwhelming majority of the pupils (66.8 percent) report witnessing either physical assault or verbal abuse during their daily commute. When pupils were asked about whether they were afraid of being harmed during their commute to and from school, nearly one-fourth of the pupils (22.9 percent) reported being fearful on their way to school in the morning, and a slightly higher percentage (26.2 percent) report being fearful on their way home from school in the afternoon. Over 15 percent of the pupils avoid certain locations during their daily commute because of a lack of supervision. One unexpected finding in the study is that over 15 percent were fearful of attack by dogs during their commute, followed by being fearful of teasing (13.5 percent). Another interesting finding is that students were over three times more fearful of being victimized on the school bus during the afternoon journey home (13.1 percent) than in the morning (4.1 percent). Chapter 8 will analyze the several variables linked to

victimization, witnessing of victimization, and fear of victimization during the school commute.

## CHAPTER VIII. BIVARIATE AND MULTIVARIATE RESULTS

This chapter presents the bivariate and multivariate results of the data. Results in this chapter include a summary of dependent variables—victimizations to and from school, a summary of reported fear during the commute, and the witnessing of victimization during the commute. Summaries of the independent variables—mode of travel, district, and gender—are included. Chi-square analyses of the independent and dependent variables are presented. The chapter concludes with binary logistic regression data to analyze the probability of victimization during the school commute.

#### **Summary of Results**

Tables 8.1-8.2 summarize results of victimization experiences for pupils during their commute to school in the morning. As the tables show, of all the respondents walking alone to school, over 28 percent report being teased during their commute to school over the previous academic year. Within the report of victims of teasing, pupils who walk alone represent over 25 percent of the victims who reported being teased. Of all pupils who ride the school bus in the morning, over 37 percent report having been teased, while almost 30 percent of all pupils who walk alone report having been teased. Most of the pupils report being victims of verbal offenses during their commute, with the most being called mean names and teased, followed by having belongings taken. The results are similar to what was found in the pilot study, suggesting more frequent victimization involving minor offenses such as teasing and being called mean names during the daily commute.

	Walk	Walk	Walk	Adults	School	Total
	Alone	with	with	Drive	Bus	
		Friends	Siblings			
Teased	15	2 (11.8%)	5 (7.6%)	16	23	61
	(29.4%)			(18.6%)	(37.1%)	
Assaulted	6 (11.8%)	1 (5.9%)	4 (25%)	9 (10.5%)	9 (14.5%)	29
Had	7 (13.7%)	4 (23.5%)	6 (30.0%)	11	12	40
Property				(12.8%)	(19.4%)	
Stolen						
Threatened	6 (11.8%)	1 (5.9%)	3 (15.0%)	5 (5.8%)	6 (9.7%)	21
Called	13	3 (17.6%)	8 (50%)	23	21	68
Mean	(25.5%)			(26.7%)	(33.9%)	
Names						
Received	10	2 (11.8%)	3 (18.8%)	8 (9.3%)	11	34
Hurtful	(19.6%)				(17.7%)	
Text						
Messages						
Total	57	13	29	72	82	

Table 8.1. Summary of victimizations to school

Table 8.2. Summary of victimizations home from school

	Walk	Walk	Walk	Adults	School	Total
	Alone	with	with	Drive	Bus	
		Friends	Siblings			
Teased	17	13	6 (30.0%)	6 (14.3%)	21	63
	(28.3%)	(25.5%)			(35.6%)	
Assaulted	11	6 (11.8%)	1 (5.0%)	3 (7.1%)	8 (13.6%)	19
	(18.3%)					
Had	11	6 (11.8%)	6 (30.0%)	4 (9.5%)	12	39
Property	(18.3%)				(22.0%)	
Stolen						
Threatened	8 (13.3%)	4 (7.8%)	3 (15.0%)	1 (2.4%)	6 (10.2%)	22
Called	18	13	10 (50%)	8 (19.0%)	18	67
Mean	(30.0%)	(25.5%)			(30.5%)	
Names						
Received	11	4 (8.0%)	4 (20.0%)	3 (7.1%)	11	33
Hurtful	(18.6%)				(18.6%)	
Text						
Messages						
Total	76	63	30	25	76	

	Tuble 0.5. Summary of students reporting fear during their commute (by mode)					
	Walk	Walk with	Walk with	Adults	School	Total
	Alone	Friends	Siblings	Drive	Bus	
Fearful	15	3 (17.6%)	7 (46.7%)	15	8 (12.9%)	48
during	(30.0%)			(17.6%)		
commute to						
School						
Fearful	21	17	5 (26.3%)	24	10	77
during	(36.2%)	(34.0%)		(28.2%)	(16.1%)	
commute						
home						
Total	36	20	12	39	18	

Table 8.3. Summary of students reporting fear during their commute (by mode)

Table 8.4. Summary of students reporting witnessing victimization during th	ıeir
commute (by mode)	

	Walk	Walk with	Walk with	Adults	School	Total
	Alone	Friends	Siblings	Drive	Bus	
Witnessed	29	9 (52.9%)	12	63	51	164
victimization	(56.9%)		(75.0%)	(73.3%)	(82.3%)	
during						
commute to						
School						
Witnessed	44	35	15	24	48	128
victimization	(73.3%)	(68.6%)	(75.0%)	(28.2%)	(81.4%)	
during						
commute						
home						
Total	73	44	27	87	99	

Table 8.5. Summary of reported victimization, fear, and witnessing of victimization	l
(by district)	

	North	South	East	West Rural	Total
	Urban	Urban	Suburban		
Victimization	30 (31.3%)	36 (64.3%)	33 (63.5%)	14 (35.0%)	113
during commute					
Fear during	26 (27.4%)	27 (49.1%)	21 (41.2%)	4 (10.0%)	78
commute					
Witnessed	53 (55.2%)	43 (76.8%)	47 (90.4%)	31 (77.5%)	174
Victimization					
during commute					
Total	109	106	101	49	

	Female	Male	Total
Victimization during	69 (50.0%)	44 (41.5%)	113
commute			
Fear during	54 (39.1%)	24 (23.3%)	78
commute			
Witnessed	104 (75.4%)	70 (66.0%)	174
victimization during			
commute			
Total	227	138	

Table 8.6. Summary of reported victimization, fear, and witnessing of victimization (by gender)

#### **Chi-Square Analysis**

To examine the primary research question of what is the relationship between mode of travel and victimization of youths during their daily commute to and from school, a chisquare test was conducted to explore the relationship between specific modes of travel and any victimization (such as being hit, teased, having property taken, or being made fun of). Phi ( $\Phi$ ) is included in the analysis to measure the strength of the association between the variables. The phi-value is symmetrical. In other words, it does not make the distinction between the independent variables and dependent variables. The value of phi is always between 0 and 1, with the higher phi value suggesting a stronger association between the two variables.

Relationships were found for some modes of travel as reported in table 8.7. During the commute to school, a relationship was found between pupils who walk with siblings and are threatened, an adult driving ad teasing, and riding the school bus and teasing. During the commute home in table 8.8, a relationship is observed between pupils who walk with siblings and are called mean names, or are driven by an adult and teasing.

Mode of Travel	Teased	Assaulted	Had Property Stolen	Threatened	Called Mean Names	Received Hurtful Text Messages
Walk Alone	N.S.	N.S	N.S.	N.S.	N.S.	N.S.
Walk with Friends	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Walk with Siblings	N.S.	N.S.	N.S.	5.33* Ф.148	N.S.	N.S.
Adults Drive	4.80* Ф140	N.S.	N.S.	N.S.	N.S.	N.S.
School Bus	4.25* Φ.132	N.S.	N.S.	N.S.	N.S.	N.S.

Table 8.7. Chi-Square analysis of victimization by specific modes of travel to school

\*P<.05 N.S.=No Significance.  $\Phi$ =Phi.

Mode of Travel	Teased	Assaulted	Had Property Stolen	Threatened	Called Mean Names	Received Hurtful Text Messages
Walk Alone	N.S.	N.S	N.S.	N.S.	N.S.	N.S.
Walk with Friends	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Walk with Siblings	N.S.	N.S.	N.S.	N.S.	4.19* Ф.131	N.S.
Adults Drive	4.18* Ф131	N.S.	N.S.	N.S.	N.S.	N.S.
School Bus	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.

 Table 8.8. Chi-Square analysis of victimization by specific modes of travel home

 from school

\*P<.05 N.S.=No Significance.  $\Phi$ =Phi.

Table 8.9-8.10 illustrate relationships between mode of travel and fear of victimization and whether the students witnessed any victimization during the daily commute to school. The tables indicate a relationship between walking alone to school, riding the school bus to and from school and witnessing victimization. Pupils who walk home alone

also indicate fear of victimization.

Table 8.9. Chi-Square analysis of fear and	witnessing of victimization by specific
modes of travel to school	

Mode of Travel	Fear	Witnessing of Victimization
Walk Alone	N.S.	6.58*
		Φ164
Walk with Friends	N.S.	N.S.
Walk with Siblings	5.58*	N.S.
	Φ.152	
Adults Drive	N.S.	N.S.
School Bus	4.95*	4.87*
	Φ143	Φ009

\*P<.05 N.S.=No Significance. Φ=Phi.

 Table 8.10. Chi-Square analysis of fear and witnessing of victimization by specific modes of travel home from school

Mode of Travel	Fear	Witnessing of Victimization
Walk Alone	5.12*	N.S.
	Ф.146	
Walk with Friends	N.S.	N.S.
Walk with Siblings	N.S.	N.S.
Adults Drive	N.S.	N.S.
School Bus	N.S.	3.83*
		Φ.125

\*P<.05 N.S.=No Significance. Φ=Phi.

Table 8.11 suggests a relationship between type of district (urban, suburban, and rural), and victimization, fear and the witnessing of victimization during the daily commute. A weak relationship is observed between gender and fear of victimization.

	District	Gender
Victimization during	24.245*	N.S.
commute	Ф.315	
Fear during commute	19.061*	6.751*
	Ф.281	Φ167
Witnessed Victimization	22.984*	N.S.
during commute	Ф.307	

Table 8.11. Chi-Square analysis of reported victimization, fear, and witnessing (by district and gender)

\*P<.05 N.S.=No Significance.  $\Phi$ =Phi.

#### **Binary Outcome Measures**

In this section the findings are presented from the logistic regression models developed for the variables: experiencing victimization, fearing victimization, and witnessing victimization during the commute to and from school. In preparation for logistic regression analyses, the independent variables (mode of travel and gender) were dummy-coded. Dummy coding is used to transform categorical data into two categories. In this case, mode "Being driven by an adult" is used as the reference category and coded as 1, with all other modes coded as 0. "Female" is coded as 1.

For variables that are dummy-coded, the odds ratios are interpreted against the omitted reference category. The results suggest that the odds of victimization increase by 309 percent for students who walk to school with siblings relative to those who have an adult drive them. The odds of fearing victimization increase by 126 percent for students who walk alone to school relative to being driven by an adult. For students whose primary mode of travel to school is by school bus, the odds of witnessing victimization increase by almost 182 percent in relation to students who are driven to school by an adult.

Dependent variable:	β	S.E.	Exp(β)
Victimization			
(Constant)	724***	.215	.485
Walk Alone	.234	.362	1.264
Walk with Friends	152	.574	.859
Walk with Siblings	1.129*	.569	3.094
School Bus	582	.380	.559
Model chi-square			
4.689			
Nagelkerke R <sup>2</sup> =			
.025			

 Table 8.12. Binary logistic regression results predicting likelihood of experiencing victimization during commute to school (Model 1)

Table 8.13. Binary logistic regression results predicting likelihood of fearingvictimization during commute to school (Model 1)

Dependent variable:	β	S.E.	Εχρ(β)
Victimization			
(Constant)	724***	.215	.485
Walk Alone	.234	.362	1.264
Walk with Friends	152	.574	.859
Walk with Siblings	1.129*	.569	3.094
School Bus	582	.380	.559
Model Chi-square			
9.254			
Nagelkerke R <sup>2</sup> .053			
<b>Nageikerke K .053</b> * P<.05 **p<.01 *** P	2<.0001		

Table 8.14. Binary logistic regression results predicting likelihood of witnessing
victimization during commute to school (Model 1)

Dependent variable:	β	S.E.	Exp(β)
Victimization			
(Constant)	1.032***	.228	2.808
Walk Alone	756*	.363	.469
Walk with Friends	915	.537	.401
Walk with Siblings	.066	.621	1.068
School Bus	.597	.414	1.816
Model Chi-square			
12.803*			
Nagelkerke R <sup>2</sup> .073			

# \* P<.05 \*\*p<.01 \*\*\* P<.0001

Table 8.15. presents the second regression analysis examining the relative influence of gender and district on victimization, fear of victimization, and witnessing of victimization during the commute to school.

 Table 8.15. Binary logistic regression results predicting likelihood of experiencing victimization during commute to school (Model 2)

Dependent variable:	β	S.E.	Exp(β)
Victimization			
(Constant)	479	.258	.620
Walk Alone	.088	.349	1.093
Walk with Friends	324	.549	.723
Walk with Siblings	1.092*	.579	2.981
School Bus	.232	.328	1.261
Gender	.362	.264	1.437
Model chi-square			
6.588			
Nagelkerke $R^2 =$			
.036			

\* P<.05 \*\*p<.01 \*\*\* P<.0001

Table 8.16. Binary logistic regression results predicting likelihood of fearing
victimization during commute to school (Model 2)

Dependent variable:	β	S.E.	Exp(β)
Victimization			
(Constant)	-1.236**	.296	.291
Walk Alone	.285	.370	1.330
Walk with Friends	106	.584	.899
Walk with Siblings*	1.222*	.583	3.395
School Bus	598	.385	.550
Gender**	.815	.300	2.260
Model Chi-square			
17.010*			
Nagelkerke R <sup>2</sup> .095			

\* P<.05 \*\*p<.01 \*\*\* P<.0001

Dependent variable:	β	S.E.	Εχρ(β)
Victimization			
(Constant)	.791**	.278	2.206
Walk Alone	739*	.365	.477
Walk with Friends	900	.540	.407
Walk with Siblings	.104	.624	1.110
School Bus	.600	.416	1.821
Gender	.430	.293	1.537
Model Chi-square			
14.962*			
Nagelkerke R <sup>2</sup> .085			
* P<.05 **p<.01 *** P	<.0001		

Table 8.17. Binary logistic regression results predicting likelihood of witnessing victimization during commute to school (Model 2)

Tables 8.18 to 8.21 analyzes the likelihood of experiencing victimization during the commute home from school in the afternoon. Students who walk with siblings are predicted to experience more victimization. In table 8.19, relative to the reference category, students who walk home are 500 percent more likely to fear victimization. Students who ride the school bus home are significantly more likely to witness victimization.

victimization during co	mmute home from	school (Model 1)	
Dependent variable:	β	S.E.	Εχρ(β)
Victimization			
(Constant)	611*	.285	.543
Walk Alone	.611	.385	1.842
Walk with Friends	.414	.400	1.513
Walk with Siblings	1.230*	.549	3.421
School Bus	.509	.386	1.664
Model chi-square			
5.955			
Nagelkerke R <sup>2</sup> =			
.032			

Table 8.18. Binary logistic regression results predicting likelihood of experiencing

\* P<.05 \*\*p<.01 \*\*\* P<.0001

Dependent	β	S.E.	Exp(β)
variable:			
Victimization			
(Constant)	-1.749***	.383	.174
Walk Alone	1.611**	.465	5.008
Walk with Friends	1.344**	.480	3.833
Walk with Siblings	1.549**	.591	4.705
School Bus	.582	.490	1.789
Model Chi-square			
18.547**			
Nagelkerke R <sup>2</sup> .103			

Table 8.19. Binary logistic regression results predicting likelihood of fearing victimization during commute home from school (Model 1)

P<.05 \*\*p<.01 \*\*\* P<.0001

Table 8.20. Binary logistic regression results predicting likelihood of witnessing victimization during commute home from school (Model 1)

Dependent variable:	β	S.E.	Εχρ(β)
Victimization			
(Constant)	.375	.277	1.455
Walk Alone	.637	.402	1.891
Walk with Friends	.408	.410	1.504
Walk with Siblings	.724	.586	2.062
School Bus	1.099**	.434	3.000
Model Chi-square			
7.188			
Nagelkerke R <sup>2</sup> .042			

\* P<.05 \*\*p<.01 \*\*\* P<.0001

Table 8.21 presents the second regression analysis examining the relative influence of gender and district on victimization, fear of victimization, and witnessing of victimization during the commute home from school. The results suggest a relationship between walking home with siblings and experiencing victimization. Table 8.22 suggests a relationship between walking home alone and fearing victimization. Table 8.23 reveals a relationship between riding the school bus and witnessing bullying-related incidents.

Students who walk home alone and ride the school bus home are more likely to witness

bullying-related victimization than their peers who use other modes of transportation.

Dependent	β	S.E.	Exp(β)
variable:			
Victimization			
(Constant)	799**	.322	.450
Walk Alone	.628	.386	1.874
Walk with Friends	.400	.402	1.491
Walk with Siblings	1.217*	.550	3.377
School Bus	.482	.388	1.619
Gender	.342	.265	1.408
Model chi-square			
7.631			
Nagelkerke R <sup>2</sup> =			
.041			

Table 8.21. Binary logistic regression results predicting likelihood of experiencing victimization during commute home from school (Model 2)

Table 8.22. Binary logistic regression results predicting likelihood of fearing
victimization during commute home from school (Model 2)

Dependent	β	S.E.	Exp(β)
variable:			
Victimization			
(Constant)	-2.261***	.439	.104
Walk Alone	1.682***	.473	5.375
Walk with Friends	1.332**	.486	3.790
Walk with Siblings	1.546**	.600	4.691
School Bus	.523	.496	1.687
Gender	.840**	.306	2.316
Model Chi-square			
26.433***			
Nagelkerke R <sup>2</sup> .145			
* P<.05 **p<.01 *** I	P<.0001		

rp<.01 P<.05 P<.0001

Table 8.23. Binary logistic regression results predicting likelihood of witnessing
victimization during commute home from school (Model 2)

Dependent variable: Victimization	β	S.E.	Εχρ(β)
(Constant)	.147	.316	1.159
Walk Alone	.660	.405	1.934

Walk with Friends	.390	.412	1.477
Walk with Siblings	.704	.589	2.021
School Bus	1.069**	.436	2.913
Gender	.431	.290	1.539
Model Chi-square			
9.398			
Nagelkerke R <sup>2</sup> .054			

\* P<.05 \*\*p<.01 \*\*\* P<.0001

These results suggest that controlling for all the other variables, there appears to be a relationship between walking home alone and the likelihood of being fearful of being victimized as well as witnessing bullying-related victimization. There appears to be a relationship between specific location of district (whether urban or rural) and experiencing, fearing, and witnessing bullying-related victimization during the daily commute. Tables 8.25 and 8.28 suggest a relationship between gender and the fear of victimization during the commute to and from school

Dependent	β	S.E.	Exp(β)
variable:			
Victimization			
(Constant)	.231	.396	1.260
Walk Alone	.337	.381	1.401
Walk with Friends	514	.573	.598
Walk with Siblings	.771	.618	2.163
School Bus	.167	.371	1.182
Gender	.344	.278	1.411
North Urban	-1.366***	.403	.255
South Urban	.002	.463	1.002
West Rural	-1.124**	.448	.325
Model Chi-square			
29.131			
Nagelkerke R <sup>2</sup> =			
.150			

 Table 8.24. Binary logistic regression results predicting likelihood of experiencing victimization during commute to school (Model 3)

\* P<.05 \*\*p<.01 \*\*\* P<.000

Dependent variable:	β	S.E.	Εxp(β)
Victimization			
(Constant)	414	.444	.661
Walk Alone	329	.395	1.389
Walk with Friends	247	.611	.781
Walk with Siblings	.961	.618	2.614
School Bus	773	.450	.462
Gender	.749**	.309	2.115
North Urban	-1.041*	.439	.353
South Urban	289	.484	.749
West Rural	-2.002**	.624	.135
Model Chi-square			
34.314***			
Nagelkerke R <sup>2</sup> .185			

Table 8.25. Binary logistic regression results predicting likelihood of fearing victimization during commute to school (Model 3)

P<.05 \* \*p<.01 \*\*\* P<.0001

Table 8.26. Binary logistic regression results predicting likelihood of witnessing victimization during commute to school (Model 3)

Dependent variable:	β	S.E.	Exp(β)
Victimization			
(Constant)	1.828***	.553	6.223
Walk Alone	426	.387	.653
Walk with Friends	799	.573	.450
Walk with Siblings	078	.663	.925
School Bus	.403	.450	1.496
Gender	.450	.306	1.569
North Urban	-1.720***	.542	.179
South Urban	662	.617	.515
West Rural	853	.618	.426
Model Chi-square			
31.430***			
Nagelkerke R <sup>2</sup> .173			

Dependent variable:	β	S.E.	Εχρ(β)
Victimization			
(Constant)	094	.443	.910
Walk Alone	.949	.416	2.584
Walk with Friends	.488	.432	1.629
Walk with Siblings	.911	.603	2.486
School Bus	.508	.433	1.661
Gender	.344	.280	1.411
North Urban	-1.497***	.391	.224
South Urban	089	.468	.915
West Rural	-1.159**	.455	.314
Model Chi-square			
31.947			
Nagelkerke R <sup>2</sup> =			
.164			

Table 8.27. Binary logistic regression results predicting likelihood of experiencing victimization during commute home (Model 3)

Dependent	β	S.E.	Exp(β)
variable:	-		
Victimization			
(Constant)	-1.637***	.550	.195
Walk Alone	1.993***	.512	7.335
Walk with Friends	1.372**	.514	3.941
Walk with Siblings	1.126	.643	3.084
School Bus	.580	.555	1.786
Gender	.804**	.318	2.234
North Urban	-1.118***	.430	.327
South Urban	-2.012	.508	1.023
West Rural	-2.012***	.636	.134
Model Chi-square			
46.691***			
Nagelkerke R <sup>2</sup> .246			

Dependent	β	S.E.	Exp(β)
variable:			
Victimization			
(Constant)	1.242*	.568	3.463
Walk Alone	1.093**	.440	2.984
Walk with Friends	.668	.452	1.949
Walk with Siblings	.774	.643	2.169
School Bus	1.087*	.486	2.964
Gender	.490	.307	1.632
North Urban	-2.093***	.535	.123
South Urban	906	.618	.404
West Rural	825	.625	.438
Model Chi-square			
34.827***			
Nagelkerke R <sup>2</sup> .190			

Table 8.29. Binary logistic regression results predicting likelihood of witnessing victimization during commute home (Model 3)

## **Chapter IX. Discussion, Limitations, and Implications**

## **Summary**

Victimization of schoolchildren is an issue that is at the forefront of policy concerns among educators, law enforcement, and elected officials. Research has documented the negative outcomes associated with youth who are victims of bullyingrelated behavior which emphasizes the importance of the study. The findings of this dissertation are largely supportive of previous research on the victimization of students traveling to and from school (Moore, et al., 2011), suggesting that the travel between home and school is a risky activity for many schoolchildren, and that youths frequently encounter anti-social behavior. This study reveals that nearly half of the students in the study reported experiencing at least one incident of bullying-related victimization during the previous school year. Verbal abuse (i.e., teasing and being called mean names) represented the majority of the offenses reported during the commute to school. Relationships were found between walking to school with siblings and being threatened, teasing and being driven by an adult, and teasing and riding the school bus. The highest percentage of students reporting teasing rode the school bus.

When asked about modes of travel most feared, 30 percent of the students who walked alone to school reported being fearful. When examining all modes of travel, a slightly higher percentage of youths reported being fearful of harm during their commute home from school in the afternoon than during their morning commute. Among the students who rode the school bus, over three times as many reported fear of victimization during the commute home than on the way to school. Overall, over 25 percent of all students felt that they needed a weapon to protect themselves during the daily commute. Among the students reporting witnessing victimization during their daily commute, more than half reported witnessing physical attacks and verbal abuse during the school year that was studied. A relationship was found between students who witnessed victimization whose mode of travel was walking alone or riding the school bus. When examining location, students reported witnessing many of the victimizations near the school building. The routine activities approach could inform this finding because the larger concentration of offenders, victims, and witnesses who would be present in this particular location either immediately prior to school or following dismissal.

#### Experiencing Victimization

One of the main research questions which this dissertation sought to address is what specific types of incidents do schoolchildren experience during their commute to and from school. Pupil responses to the questions were analyzed: "On the way to or from school over the past year, I was called mean names, was made fun of, or teased in a hurtful way"; "On the way to or from school over the past year, I was hit, kicked, pushed, or shoved around"; "On the way to or from school over the past year, somebody stole something from me. Things like money, a backpack, clothing, phone, iPod, or anything else"; "On the way to or from school over the past year, I was threatened or forced to do things I did not want to do"; "On the way to or from school over the past year, I was called mean names or comments about my appearance"; "On the way to or from school over the past year, I was called mean names or comments about my appearance"; "On the way to or from school over the past year, I was called mean names or comments about my appearance"; "On the way to or from school over the past year, I was called mean names or comments about my appearance"; "On the way to or from school over the past year, I was threatened or forced to do the past year, I received mean or hurtful calls or text messages on my cell phone."

Overall, nearly half (46.3 percent) reported experiencing at least one incident of bullyingrelated victimization during the school year (see Table 7.8).

When pupil reports of victimization on the way to school were compared to the mode of travel, of all the students who rode the school bus, 37.1 percent experienced teasing, and 29.4 percent of students who walked alone to school experienced teasing. Verbal abuse (teasing and being called mean names) represented the majority of the offenses reported during the commute to school (see Table 8.2). Results were similar during the commute home, with the highest percentage of students reporting teasing by mode of travel falling within the school bus category (35.6 percent). Interestingly, students whose mode of travel home was by a mode other than having an adult drive reported more than double the incidents of teasing during their daily commute (14.3 percent whose parents drove, compared to 29.7 percent).

When students' reports of victimization were compared by the specific mode of travel variable, relationships were found for some groups (see Table 8.5-8.6). There was a relationship found between walking to school with siblings and being threatened (r=.021), and curiously, there was a relationship found with teasing and being driven by a parent (r=.028). There was also a relationship between teasing and riding the school bus (r=.039).

#### Fearing Victimization

When asked about what modes students fear the most during their daily commute, 30 percent of all students in the study who walked alone to school reported being fearful during their commute to school. Chi square analysis suggested a relationship between

walking alone and fear (p=.024), walking with siblings and fear (p=.017), and riding the school bus and fear (p=.045).

Nearly half of all participants (45 percent) feared walking alone to and from school, and viewed being driven by an adult as the safest mode of travel. Being driven to school has the highest level of capable guardianship. Similarly, the reason given by the students as to why they would choose to avoid a certain location is because of lack of supervision. This was particularly evident in the urban districts, with a significantly higher percentage of girls (70.3 percent) fearing lack of supervision during the commute. A slightly higher percentage of youths (26.3 percent) were fearful of harm during their commute home from school in the afternoon, with 22.9 percent expressing fear of harm during their morning commute.

#### Witnessing Victimization

Participants were asked about incidents that they witnessed during their daily commute. A relationship was found between students who walked alone (r=.010) and rode the school bus (r=.027). The majority of the suburban students who witnessed any victimization of their peers (52 percent) claimed to have witnessed the offenses on the school bus. As for location, students reported witnessing many of the victimizations near the school building. This could be explained by the larger concentration of offenders, victims, and witnesses who would be present in this particular location either immediately prior to school or following dismissal.

## Perception of Safety

When asked if they generally felt safer in school or during the commute to and from school, overall the majority of students (60.7 percent) reported feeling safer in school than during their daily commute. When further analyzing these findings by district, 84.1 percent of the North Urban district and 62.5 percent of the South Urban district reported feeling safer in school than during the daily commute, while 46.2 percent of the East Suburban and 37.5 percent of the West Rural district admitted feeling safer in school than during the daily commute. The results were almost evenly divided by gender.

Descriptive (qualitative) results indicate that commuters whose primary mode of travel is walking seemed to experience most of the problems. Pupils who walked to school reported students from different schools "picking fights," others reported "getting jumped," "getting picked on" and having items thrown at them. An interesting find in the data indicates that youths from urban districts feared seemingly unoccupied locations during the commute (such as alleyways, abandoned/vandalized houses), whereas students from suburban and rural districts feared more occupied locations (restaurant parking lots, alleyways where people are "hanging out," and the school bus.

### Length of Commute

The research explored whether the commute to and from school was related to victimization. Length of commute was measured in minutes and varied from less than five minutes to over 45 minutes, with the mean commute time of 18.456 minutes. The longest commutes were by school bus, with the mean number of minutes of 26.66. No

significant relationship was found in this study between length of commute and victimization.

#### **Summary of Outcomes by District**

Table 9.1 summarizes the percentages of students who experienced any type of victimization, feared being victimized, or witnessed victimization during their daily commute to and from school during the past school year. Experiencing victimization could include physical assault (being hit, kicked, pushed, or shoved around), verbal abuse (teasing, or being called mean names), theft of property, or receiving mean or hurtful text messages. Fearing victimization includes being apprehensive about places during the daily commute, or fearing that someone will inflict harm during the commute to and from school. Witnessing victimization includes whether the commuter has ever witnessed another student being called names or physically attacked during the daily commute.

Table 9.1. Percentage of Stude	ents Reporting Victir	nization (by District)
Table 9.1. Tercentage of Stude	and Reporting vieth	Inzation (by District)

	Experienced	Fear	Witnessed
	Victimization	Victimization	Victimization
North Urban	26.5	33.3	30.5
South Urban	31.9	34.6	24.7
East Suburban	29.2	26.9	27.0
West Rural	12.4	5.1	17.8

The students in the suburban district experienced a slightly higher percentage of victimization, perhaps because the highest percentage of students within this district ride the school bus, which is the location where over 19 percent of students report experiencing victimization. Students in both urban districts report fearing victimization during their commute. Students who walk to and from school in these districts report

fearing many of the unsupervised locations during their commute, which includes not only bullying-related victimization, but also attack by dogs. The lowest percentages of students reporting experiencing, fearing, and witnessing victimization are found within the rural district, which has the highest percentage of students receiving rides to and from school by a parent or another adult. This district appears to have the highest level of capable guardianship during the daily commute.

## Strengths and Limitations of Study

This dissertation focuses on victimization of school children along school travel paths. It does not address why some individuals become victims of offenses or what motivates offenders to choose their victims. This study did <u>not</u> address offender motivation, which was treated as a constant across time and space. The study also did not address why people become victims, or why offenders choose some victims over others. Future research in this area should explore the relationships between the bullying victims and the perpetrators.

While bullying-related behaviors are studied within the context of the school commute, the term "bullying" is carefully avoided within the survey instrument in order to avoid ambiguity and confusion over the meaning of the term. Additionally, this dissertation did <u>not</u> attempt to address questions such as: Why do offenders bully others?", "Why do offenders choose certain types of victims?", "What are the physical characteristics of victims of bullies?" or "Are the victims of bullies during the school commute also victims of bullying on school property?" No inferences will be made

between the victims of bullying offenses during the school commute and the victims' grades or overall enjoyment of school.

Furthermore, the safety and security concerns during the school commute are limited to "social aspects" of security and risk during the commute. The present study did not address safety concerns relating to vehicle and pedestrian safety, traffic violations that could impact the safety of the school commute, seat belt use, or other related concerns about victimization relating to accidents.

This study was a cross-sectional study utilizing survey data to examine the experiences relating to victimization of pupils during their commute to and from school, as well as their perception of fear and feeling safe during their daily commute to and from school. Because of the cross-sectional nature of the study, caution should be exercised in drawing causal inferences, as the validity in this practice can be affected (Stone, et al., 2000). A sample from public schools has other limitations, such as the exclusion of private school students, and the exclusion of students who are absent, tardy, sick, or truant during the time of the survey.

The study surveys the experiences and perceptions of students who are in school and willing to participate in the research. The results could undercount the number of victimized students, or students who were too afraid of repercussions to participate in the study (Addington and Yablon, 2011). The use of self-report surveys to examine student experiences of victimization and perceptions of safety are among the most widely used measures for studying school-related violence among juveniles (Furlong and Morrison, 1994). According to Skiba et al (2004), student self-report surveys "may be more precise

than community-based data (e.g., police reports or emergency room records)," and may do a better job of protecting the child's anonymity (p. 150). Vernberg, et al (1995) argue that it is crucial to obtain self-reports when studying victimization of children, based upon their findings that children are reluctant to report aversive exchanges with peers, even to friends or siblings. According to Meyer and Astor (2002), the majority of major national surveys ask youths whether they agree with statements using a Likert-type scale, rather than asking specific questions about their victimization experiences or what they fear. This study attempted to achieve more precision in uncovering what students experience during their daily commute. Nonetheless, surveys are limited by the researcher's inability to ensure accurate participant reporting. Further details about the participants and a micro-analysis of incidents occurring during the commute were not possible because of restraints imposed by the school administrators, and the ability of younger participants to comprehend and respond to more complex questions.

There are additional limitations inherent in self-report studies, particularly overreporting and underreporting errors in reporting, and motivation to report accurately (Skiba et al, 2004). Furthermore, the experiences of one group of schoolchildren tend to be context-specific. In other words, while a national survey on schoolchildren's perception of safety during their commute to and from school could suggest that the majority of students feel safe during their daily commute (Meyer and Astor, 2002), this may not accurately the children's experiences and perception of fear within specific locations during the commute to and from school.

While this survey has revealed some interesting findings, some more detailed methodological approaches are needed. There are valuable findings that could have been collected, or possibly not because of limitations in the methodological approach of the survey. For example, the length of commute was not separated by morning and afternoon, but rather combined to include both the journey to and from school. Separating the length of commute by morning and afternoon could have uncovered additional differences in types and levels of offenses. For students who commuted (for example) by either walking alone or with friends, the study did not explore if the student made any stops along the way—at a convenience store, friend's house, or other location to socialize. The study did not look at delays in leaving school, such as a lengthy wait at a bus stop, which could lead to an increase in victimizations. Unfortunately, previously noted time constraints imposed by school administrators limited the length of the survey instrument and the amount of information that could be obtained from each pupil. Administrators tasked with approving the research were extremely reluctant to approve the use of any survey beyond the length of the present instrument (Diibor, personal communication, February 20, 2012).

While the current survey instrument is similar in format and structure to other bullying surveys (e.g., Olweus, 1994; Youth Risk Behavior Survey, 2011), the current instrument was modified to address the student's experiences with bullying-related behavior based upon their mode of travel, length of commute, and place of victimization. School districts have strict time management policies, and most do not allow outside research to infringe upon any instruction time. <sup>8</sup> Therefore, the survey had to be condensed as much as possible without sacrificing any ability to capture valuable data.

<sup>&</sup>lt;sup>8</sup> Some districts would not even allow research to be conducted during the morning homeroom period, which was considered "instruction time."

Future studies should utilize both a survey approach, in addition to interviews with schoolchildren, parents, school resource officers, and teachers, to give a more in-depth picture of the types of victimization experienced and the perceptions of fear and safety at specific locations during the school commute. Ethnographic studies, for example, can provide more depth and detail within specific school districts (e.g., Sullivan, 2002). Sullivan (1998) further suggests that while survey data can effectively trace individual variations of delinquent behavior from a cross-sectional approach, most surveys collect "scant information on social context in comparison to the rich detail provided by ethnographic studies" (381).

#### **Threats to Validity**

#### Generalizability

The four research sites provided a convenience sample, yet fortuitously represented a mix of two urban districts, one suburban, and one rural. This diversity allowed for exploration of victimization problems that are unique to location, and also have a wider range of modes of travel. For example, while the suburban and rural districts contained a significant number of students who rode the school bus, the one urban district did not provide any school bus transportation, and had a large number of pupils who walked to and from school. Issues of generalizability in school-based research beyond the specific research setting are notoriously problematic (Burton, et al., 2008). Because this is not a random sample, there can be no generalizations to experiences encountered by adolescents as a whole (Taylor, et al, 2008). Unlike in a scientific laboratory, no two schools or even classrooms, even within the same district, are identical. Likewise, the

levels of dangerousness of travel paths during the school commute are highly dependent upon the vagaries of human activities—events which are constantly in motion (Felson, 2006).

External validity could be a problem because there is no way to generalize from the convenience sample in the study to the larger population of pupils. It should be noted, however, that the sample in the present study represented a cross-section of students from urban, suburban, and rural school districts across two states. Nonetheless, the primary purpose of the study is to better understand whether or not a relationship exists between mode of travel and victimization of pupils (Drew et al., 2008). The importance of the survey is in documenting and identifying aspects of the school commute that relate to victimization of students.

Future studies should incorporate survey data along with in-depth, face-to-face interviews of pupils, parents, and school personnel to get a better picture of the precise locations where victimization occurs in each district, in addition to the incidents of bullying-related victimization and other safety concerns that are unique to the pupils' particular daily commute.

### **Theoretical Implications**

### Theoretical Implications of Principal Findings

Table 9.2 summarizes the study's principal findings. The first column reports the finding that nearly half of all students experienced at least one type of victimization during their daily commute, and that the majority of students witnessed at least one incident of victimization during their commute over the period of one school year

(column 3). These findings support previous research by Lemieux (2010) that there is a high level of risk inherent in the daily commute to and from school. When further exploring students who reported experiencing victimization, teasing and name-calling appear to be the most common forms of bullying-related victimization. These findings are very similar to Moore et al.'s (2011) discovery that the majority of youth in Italy who reported experiencing their school commute reported experiencing incidents of verbal abuse.

The routine activities approach can inform the finding that the majority of incidents of teasing occurred on the school bus, as depicted in column 1, and that more than three times as many students who reported fear while going home rode the bus (column 2), and that students who rode the bus witnessed most of the victimization in comparison to other modes of travel (column 3). According to Noaks and Noaks (2002), students identified school busses as an unsupervised location where bullying was fairly common. As observed in Chapter 3, major risk factors that may contribute to victimization on the school bus include the large number of likely offenders in relation to supervising adults, and the inability of youths to avoid becoming a victim. A full bus could further contribute to the problem of victimization as this particular type of victimization can be shielded from the driver , as the driver is less likely to hear incidents of verbal victimization (Raskauskas, 2005).

In the second column, nearly half of all students feared walking alone to and from school. The overwhelming majority of students who walked to and from school were in

the urban districts.<sup>9</sup> As Newman (1973) suggests, these commuter pathways may only be monitored by strangers. A broader theoretical explanation of this fear of walking alone to and from school could relate to the temporal and spatial interactions of victims and offenders (Felson, 1993). Students who walk alone in urban settings must often negotiate territory that is not watched by a place manager, such as a parent, school crossing guard, or principal. During the walk to and from school, the bully is not around his handlers, which would include a parent. The finding that students fear walking alone is similar to prior research on concerns that students expressed about commuting through areas of undefined space which lacked capable guardianship (Moore, et al., 2010; Meyer and Astor, 2002). These findings are also consistent with Brantingham and Brantingham's (1981) finding that suggests the physical characteristics of open areas, which often create "blind spots" and other hiding areas for potential offenders, as well as blocked escape routes, can contribute to the students' perception that their commute is unsafe.

A disturbing finding in column 2 is that over 30 percent of students admitted to feeling the need to carry a weapon for protection because of fear. This could be a further indication of the lack of capable guardianship that many students experience during their commute, and therefore, the desire to feel safe is expressed by many students' need to essentially provide for their own security.

Another salient finding is that students witnessed most incidents of verbal abuse or physical assault near the school building (column 3). Areas near the school building, such as a school bus stop could provide the convergence in time and space of all elements of

<sup>&</sup>lt;sup>9</sup> Only five students in the suburban and rural districts reported walking alone to school. In comparison, 46 students in the two urban districts reported walking alone to school. See tables 7.4-7.5.

the routine activities approach. Large numbers of offenders converging at the start of school and at dismissal time near the school building is problematic. Similar to the finding of witnessing or fearing victimization on school buses, areas near the school building tend to lack capable guardianship. It is a location where the three elements contained within the routine activities approach are perhaps most evident: a location that contains the "spillover effect" from the street (Fox and Bernstein, 2010), likely offenders with scores to settle from altercations that have occurred during the morning commute on the bus, or during within the school building during the day.

The study found that overall, most students in all districts reported feeling safer at school than during their commute. This finding was the same for both males and females. Reflecting back to the routine activity approach, this discovery is likely because of the increased guardianship within the school (Lemieux, 2010). Unlike the unsupervised environment during the school commute, being in school provides students with much higher levels of capable guardianship (Lemieux, 2010). The finding of the same percentage of males and females reporting feeling safer at school also supports Lemieux's suggestion that demographic variables are less important than routine activity patterns when describing victimization risk.

<b>Table 9.2</b> .	Summary	of Principal	Findings
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Experiencing	Fearing Victimization	Witnessing Victimization	
Victimization			
Nearly half of all students	Nearly half of all students	The majority of students witnessed at least one	
experienced victimization.	feared walking alone to and		
	from school.	incident of victimization	
		during their commute.	
Most students experienced	More than three times as	Students who rode the bus	
teasing and name-calling.	many students who reported	witnessed most of the	
	fear while going home rode	victimization in comparison	
	the bus.	to other modes of travel.	
Most students experienced	Over 30 percent of students	Students witnessed most	
incidents of teasing on the	admitted to wanting a	incidents of verbal abuse or	
school bus.	weapon for protection	physical assault near the	
	because of fear.	school building.	

As mentioned previously, future research in this area could expand upon the theoretical explanations of victimization during the commute to and from school by incorporating theories that examine the role of third parties (Phillips and Cooney, 2005). Specifically, the role that third parties play in predicting whether a conflict during the school commute will escalate both on macro-level explanations of offending, such as the role of third parties. This theoretical perspective is an elaboration of Black's theory (1993) specifying two relevant forms of social distance and their effect on conflict management: "relational distance (how involved are people in one another's lives?)" and "organizational distance—whether people belong to the same, different or no organized entities (e.g., kinship groups, gangs)" (337-338). This perspective could be used to focus on these two groups in analyzing bullying-related victimization during the commute to and from school.

# "Peacemakers, Third Parties, and Victimization"

The central premise of Cooney's work is that third parties often shape and exert an influence on the course of disputes and victimizations. Third parties "may be a force for violence or for peace, acting as warriors, peacemakers, or something in between" (Cooney, 1998: p. ix). The elaboration of Cooney's theory considers the variety of ways in which "the actions and inactions of family members, friends, neighbors, onlookers, and legal officials can promote violent or nonviolent outcomes to conflict" (Cooney, 1998: p. 10).

This dissertation provides fertile ground for the future exploration of the role of third parties in mediating bullying-related behavior among schoolchildren. According to Phillips and Cooney (2005), third parties may curtail victimization by urging restraint or mediating the dispute. Conversely, the parties could encourage the offenders by joining in the conflict. Cooney (1998) identifies three broad categories of third-party behavior: partisanship, inaction, and settlement. During the victimization of schoolchildren, third parties may engage in partisanship behavior which could support the victims or offenders. Third parties could also choose inaction and not get involved when youths are being victimized. The effect of inaction on conflicts, however, is difficult to discern (Phillips and Cooney, 2005).

Settlement involves intervention in the conflict (Phillips and Cooney, 2005). Settlement could include separating victim from offender, or otherwise intervening to stop the victimization. The presence of a third-party involved in settlement could be informal, such as a sibling, friend, gang member, or anyone else who has close personal ties to the parties. According to Tedeschi and Felson (1994), third parties may serve as a guardian in predatory victimization, but their role is less influential in dispute-related violence. In the present study, third parties could include friends, siblings, or an adult who serves to intervene. The capable guardianship role of a third party within the routine activities perspective, however, is critical in the study of safety during the school commute.

### Rational Choice

Rational choice focuses on an offender's decision-making process as an explanation for criminal behavior. This perspective maintains that offending or criminal behavior is rational, that the decision to engage in such behavior is a rational decision. This perspective departs from theories that focus on an offender's abnormal personality, dysfunctional upbringing, while ignoring the more "mundane, opportunistic, and rational nature" of offenders (Fattah, 2008: 229). According to Cornish and Clarke (1986), the rational choice perspective provides a framework for the focus on place as an important element, further suggesting that offenders will select their targets in a way that can be explicated and assumes a certain element of offender rationality. Rationality involves the decision-making process of determining the opportunities for meeting commonplace needs of the offender. Additionally, the offender weighs the potential costs of the act and the anticipated benefits. Rationality does not assume a high degree of sophistication in the decision making of the offender. The offenders who victimize students during the daily commute to and from school make decisions in which they weigh the costs of offending, such as getting caught or the likelihood of formal censure. For offenders along the pathway to and from school, a prime influence in the decision making process includes the accessibility of the victim and the possibility of resistance.

According to Clarke and Felson (2008), the rational choice perspective views the nature of the offense as a critical component of explanation by focusing more on the micro-level. This perspective offers direct policy implications by decreasing the opportunity and attractiveness of specific offenses. Implications for this study involve the shift away from an offender-focused approach to explaining offenses during the school commute, to the situational and rather commonplace factors influencing their commission. The rational choice perspective, therefore would view the victimization of schoolchildren as a "normal and predictable outcome of human interaction; human conflict, as a normal and predictable response to environmental stimuli, opportunities, temptations, provocations, lack of options, etc." (Fattah, 2008: 239). This perspective informs policy and prevention by emphasizing situational prevention, target hardening, and a reduction in opportunity under the disciplinary parentage of "environmental criminology" (Clarke and Felson, 2008). The rational choice perspective emphasizes the situational determinants of offending, and interpret delinquent behavior "in terms of the location of targets and the movement of offenders and victims in time and space" (Clarke and Felson, 2008: 9).

## Situational Crime Prevention

Within the context of the school commute safety can be enhanced by addressing situational factors that could lead to victimization. Victimization during the daily

commute to and from school can be reduced through the "environmental and managerial changes" (Clarke, 1997, 2) by implementing situational crime prevention (SCP) techniques along the commuter's travel paths. These environmental changes, which now encompass 25 techniques, can inform initiatives designed to address safety during the school commute. These techniques are summarized in Table 9.3. By expanding the scope of school authority to encompass the school commute, the school could then include offenses within the school code of conduct. This would be an example of "rule setting" under SCP.

Bullying on buses is an international problem (Roher, 2008). Local police agencies can reduce the problem by "utilizing place managers" on school buses. This strategy can include having a second adult present, or installing video cameras. In an effort to reduce bullying on school busses, the Chicago School District has installed two cameras, one in the front and one in back on 1,400 school buses in the district. The cameras can also monitor the action of bus drivers (Tucker, 2015). Formal surveillance can be implemented along major routes to school to ensure student safety.

Increase the Effort	Increase the Risks	<b>Reduce the Rewards</b>	<b>Reduce Provocations</b>	Remove Excuses
<ol> <li>Target harden</li> <li>Steering column locks and immobilisers</li> <li>Anti-robbery screens</li> <li>Tamper-proof packaging</li> </ol>	<ul> <li>6. Extend guardianship</li> <li>Take routine precautions: go out in group at night, leave signs of occupancy, carry phone</li> <li>"Cocoon" neighborhood watch</li> </ul>	<ol> <li>Conceal targets</li> <li>Off-street parking</li> <li>Gender-neutral phone directories</li> <li>Unmarked bullion trucks</li> </ol>	<ul> <li>16. Reduce frustrations and stress</li> <li>Efficient queues and polite service</li> <li>Expanded seating</li> <li>Soothing music/muted lights</li> </ul>	<ul> <li>21. Set rules</li> <li>Rental agreements</li> <li>Harassment codes</li> <li>Hotel registration</li> </ul>
<ul> <li>2. Control access to facilitie</li> <li>Entry phones</li> <li>Electronic card access</li> <li>Baggage screening</li> </ul>	<ul> <li>7. Assist natural surveillance</li> <li>Improved street lighting</li> <li>Defensible space design</li> <li>Support whistleblowers</li> </ul>	<ul> <li>12. Remove targets</li> <li>Removable car radio</li> <li>Women's refuges</li> <li>Pre-paid cards for pay phones</li> </ul>	<ul> <li>17. Avoid disputes</li> <li>Separate enclosures for rival soccer fans</li> <li>Reduce crowding in pubs</li> <li>Fixed cab fares</li> </ul>	<ul> <li>22. Post instructions</li> <li>"No Parking"</li> <li>"Private Property"</li> <li>"Extinguish camp fires"</li> </ul>
<ul> <li>3. Screen exits</li> <li>Ticket needed for exit</li> <li>Export documents</li> <li>Electronic merchandise tags</li> </ul>	<ul> <li>8. Reduce anonymity</li> <li>Taxi driver IDs</li> <li>"How's my driving?" decals</li> <li>School uniforms</li> </ul>	<ul> <li>13. Identify property</li> <li>Property marking</li> <li>Vehicle licensing and parts marking</li> <li>Cattle branding</li> </ul>	<ul> <li>18. Reduce emotional arousal</li> <li>Controls on violent pornography</li> <li>Enforce good behavior on soccer field</li> <li>Prohibit racial slurs</li> </ul>	<ul> <li>23. Alert conscience</li> <li>Roadside speed display boards</li> <li>Signatures for customs declarations</li> <li>"Shoplifting is stealing"</li> </ul>
<ul> <li>4. Deflect offenders</li> <li>Street closures</li> <li>Separate bathrooms for women</li> <li>Disperse pubs</li> </ul>	<ul> <li>9. Utilize place managers</li> <li>CCTV for double-deck buses</li> <li>Two clerks for convenience stores</li> <li>Reward vigilance</li> </ul>	<ul> <li>14. Disrupt markets</li> <li>Monitor pawn shops</li> <li>Controls on classified ads.</li> <li>License street vendors</li> </ul>	<ul> <li>19. Neutralize peer pressure</li> <li>"Idiots drink and drive"</li> <li>"It's OK to say No"</li> <li>Disperse troublemakers at school</li> </ul>	<ul> <li>24. Assist compliance</li> <li>Easy library checkout</li> <li>Public lavatories</li> <li>Litter bins</li> </ul>
<ul> <li>5. Control tools/ weapons</li> <li>"Smart" guns</li> <li>Disabling stolen cell phones</li> <li>Restrict spray paint sales to juveniles</li> </ul>	<ol> <li>Strengthen formal surveillance</li> <li>Red light cameras</li> <li>Burglar alarms</li> <li>Security guards</li> </ol>	<ul> <li>15. Deny benefits</li> <li>Ink merchandise tags</li> <li>Graffiti cleaning</li> <li>Speed humps</li> </ul>	<ul> <li>20. Discourage imitation</li> <li>Rapid repair of vandalism</li> <li>V-chips in TVs</li> <li>Censor details of modus operandi</li> </ul>	<ul> <li>25. Control drugs and alcohol</li> <li>Breathalyzers in pubs</li> <li>Server intervention</li> <li>Alcohol-free events</li> </ul>

 Table 9.3. TWENTY FIVE TECHNIQUES OF SITUATIONAL PREVENTION

Source: Cornish and Clarke (2003).

## **Policy Implications**

Enhancing safety during the school commute needs to begin with a systematic analysis of the problem. This begins by the school district's undertaking a systematic examination of the problem by asking questions about the location of the problem and providing evidence for the existence of a need or problem (Welsh and Harris, 2013). How is the problem going to be defined? How pervasive is it, and where is it located? Reflecting back to chapter 1, the perception of a problem, along with the reaction to it may be different than what it actually is. The "need" is the lack of an initiative that could reduce the problem, such as capable guardianship along school travel routes. There must also be some boundaries applied to the problem. The concern might be limited to a particular school bus stop, or a corner of a playground. The focus might even be a specific school within the district, such as a middle school, or a group of youths within that school. For example, descriptive data from the present study indicated problems occurring in a fast-food parking lot near the school. Collecting data through surveys or interviews can assist in documenting the need for change. As Welsh and Harris argue, "[t]hrough, localized problem analysis should precede the revision or development of school policies in any district" (33).

The types of offenses studied in this research can also be analyzed by exploring the communities in which the schools are situated. Sullivan (2002) argues that these more ordinary forms of school violence can be examined by multilevel analysis. This can include the individual, institutional, and community correlates of offending. Future studies should therefore inquire "how these three levels interact to generate or prevent violence and whether the processes involved are similar or different for different forms of violence" (256).

For students whose primary mode of travel is by school bus, it is important to provide specific tools to bus drivers to prevent victimization. In some cases, a second adult on board can enhance supervision during the commute. It is important to inform bus drivers about bullying victimization and include them in programs designed to address school safety. Communication is essential, and administrators need to listen to bus drivers whenever they voice concerns about incidents occurring on the bus.

# **Legal Implications**

Legislation may also create an impetus for addressing victimization (Welsh and Harris, 2013). Challenges to concern about bullying has fueled the enactment of various laws, which now require school districts to become proactive in implementing antibulling initiatives, creating potentially significant legal obligations for administrators. School districts will most likely face increased legal liability when bullying within the school environment is not adequately addressed at the building level and during daily commutes.

One of the many challenges when formulating policy to address bullying is finding consistent definitions. Any proposed legislation to address bullying must reconcile the many ways the problem is defined. Definitions vary from the way the term is used in everyday language, to the extensive and sometimes complex definitions within the literature on bullying. As mentioned previously, Olweus (1994) offers a general definition of bullying or victimization: "A student is being bullied or victimized when he or she is exposed repeatedly and over time, to negative actions on the part of one or more other students. It is a negative action when someone intentionally inflicts, or attempts to inflict, injury or discomfort upon another" (p. 117). Olweus's definition of bullying consists of three key elements in order for the behavior to be considered bullying: (1) Aggressive behavior that involves unwanted actions; (2) A patter of repeated behavior over time; and, (3) An imbalance of power or strength.

Legislators in New Jersey passed the state's Anti-Bullying Bill of Rights Act, which is often referred to in the media as "the toughest such measure in the country" (Rundquist, 2012). The new bullying initiative gained momentum following the death Taylor Clementi, a student at Rutgers University who committed suicide in September 2010. Clementi jumped off the George Washington Bridge after his roommate used a webcam to record Clementi's encounter with another man in a dorm room. The new legislation mandates strict new rules and time frames for schools to address allegations of bullying, resulting in the term "HIB"—harassment, intimidation and bullying"—which has now become part of the anti-bullying vocabulary in schools across New Jersey.

One of the first challenges which school districts face in response to bullying legislation include the gradual drift into zero tolerance-style responses to misbehavior. If laws straightjacket schools into reporting and sanctioning behavior based upon a report of bullying, as opposed to using discretion, then youth have the potential of being stigmatized as an offender. In addition, overuse of the word could lead to arguments, conflict, and other trivial matters being labeled as a bullying offense. Similar to the findings of Moore, et al. (2011), what this suggests is that using an all-encompassing term such as "bullying" fails to distinguish different types of behavior that students could interpret differently, or that could be criminal in nature. Likewise, studies which classify the behavior as "criminal" victimization will not incorporate ongoing verbal taunts or insults, which could have an equally deleterious impact on the youth over the long term as physical assaults over a shorter period.

While there is no federal law that directly addresses bullying, it could, in some cases overlap with discriminatory harassment when the behavior is based on race, national origin, color, sex, age, disability, or religion. When bullying and harassment overlap, federally-funded schools must step-in and address the behavior. Schools are obligated to address any behavior that is "severe, pervasive, or persistent." The United States Department of Education has issued what's known as a "Dear Colleague" letter reminding school districts across the U.S. some student misconduct that violates a school's anti-bullying policies may also violate one or more of the federal government's antidiscrimination laws enforced by the Department of Education's Office for Civil Rights (OCR).

### Forming School, Family, and Community Partnerships

Given the ambiguity of the context of the school commute discussed in Chapter 1, forming an interconnected partnership with schools, families, and communities is one approach that can facilitate shared responsibilities for the safety of schoolchildren. Epstein (1995) developed a theory of "overlapping spheres of influence," which suggests that frequent interactions between schools, families, and communities will lead to better communication, shared interests, and better support for youths. The original intent of the sphere of influence approach was to work together to create better programs and opportunities for youth, with the assumption that if the students feel cared for by all stakeholders, they are more likely to do their best academically, learn other skills, and stay in school. Expanding this concept to the area of safety during the commute to include school is also a possibility. Collaboration between teachers, administrators, parents, and police officials should be encouraged to identify and problem areas during the daily commute and the formation of a "team" which consists of members from the school, family, and community could provide a resource to minimize risk and enhance the perception of a safe commute.

This study suggests possibilities for initiatives that would make the school commute safer, including partnerships between the different context of school, community, and home. Resource officers are often in the best position to develop relationships between the neighborhood and school, and are often aware of the hot spot areas in the immediate vicinity of the school. Bus drivers are also a potential source of information and prevention in the reduction of offenses. Bullying prevention initiatives often encourage bus drivers to intervene when an incident against a student occurs.

One of the primary reasons given for why pupils avoid certain locations during their daily commute is lack of supervision. This suggests that they fear that there would be no one to intervene to help if they were victimized. It was also the mode of walking alone that pupils claimed that they would prefer to avoid out of concern for their safety. The majority also felt safer at school than during the daily commute. This suggests a need for a more collaborative effort between the schools, families, and community agencies. These institutions should encourage the development of strategies to monitor areas identified by pupils as having as victimization "hot spots," which can then be targeted for additional monitoring during the hours immediately before and after school. Flowing from the routine activities approach, the routine rhythms of the daily commute to and from school concentrate youths in different locations at different times of the day. The routine of commuting creates the potential for the formation of hot spots along travel paths (Brantingham and Brantingham, 1999). Community resources, such as parent volunteers, neighborhood watch groups, and school resource officers, could be allocated in locations where youths congregate to wait for transportation, hang-out, or in locations identified as hot spots of bullying victimization.

### **Implications for Afterschool Initiatives**

The current study, along with research identifying the after school hours as the peak time for juvenile offending, should inform initiatives which provide safe-havens and activities after school. Afterschool programs not only provide a closely supervised environment for children, but they also provide a link between the school, parents, and the communities in which the youth travel. The programs have the potential to not only enhance safety, but reduce fear of victimization during the commute. In a study of 35 afterschool programs in communities identified as having a high concentration of ethnically diverse, low-income youth in high-poverty neighborhoods, Vandell et al. (2007) discovered that a lack of supervision after school is associated with seriously negative outcomes for disadvantaged students, which included aggressive behavior with peers. The William T. Grant Foundation provides funding to support research devoted to after-school. Between 2003 and 2011, the Foundation funded \$12.9 million in afterschool program research. The research addressed various programs that could have the potential to enhance safety during the school commute. Afterschool programs should ideally incorporate physical safety, supervision, opportunities to belong, positive social norms, and the integration of family, school, and community initiatives (Granger, 2011). Additionally, the programs can focus on facilitating information sharing between the youth, parents, school administrators, and community members to addressing bullyingrelated behavior and other unsafe conditions that may arise during the daily commute.

This study documented students' experiences with bullying-related victimization, fear and avoidance behavior, and their witnessing of offenses on their school routes in four districts. Although this sample of is not representative of all schoolchildren and their experiences during their daily commute to and from school, further attention to student safety is an important issue that warrants additional attention and investigation. For urban districts, cities experiencing an increase in urban blight, vacant houses, and other signs of physical deterioration can contribute to an increase in victimizations and fear among schoolchildren during their commute (e.g., Dawsey, 2012).

As Greene (2006) argues, the distinction between school-based and community-based bullying-related offending, along with the "rite of passage" norms are artificial constructs from the perspective of the youths who experience and engage in the behavior. Parents, school staff, law enforcement, and neighborhood-based groups should collaborate to improve security during the daily commute. The more "formal" social control methods have also been adopted in Europe to ensure the safety of students traveling to and from school. The study conducted by Moore et al (2011) further suggests that "informal" means of control—primarily through friendship groups—are instrumental in the prevention of victimization. In an era of austere financial resources, perhaps reliance upon the youths themselves to reframe what behavior is acceptable will be a key element in future school safety initiatives.

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## Appendices

## Appendix A

## School District Denial Letters

January 9, 2012

Jonathan Kremser, Assistant Professor Rutgers State University Department of Criminal Justice Old Main 369 PO Box 730 Kutztown, PA 19530

Dear Mr. Kremser:

The Senior Leadership Team of **Sector** has met and considered the recommendations of the district's Research Committee regarding your proposal to conduct a pilot study for your study titled *Safe Passage during the School Commute.* **Sector** receives many requests from researchers who want to collect data here. Unfortunately, it is not possible to accommodate all of the requests. The Research Committee and the Senior Leadership Team consider each proposal carefully. These groups approve only those requests that are determined to be of value to the district, that do not interfere with the educational programs of the district, and that respect the privacy and due process rights of students and employees. Even if a request is approved at the district level, principals have the option to deny research requests.

The premise of your study is interesting; however, the population of our district does not meet your criteria. Our district comprises only suburban and rural schools, and the most diverse middle school is 75% White.

Your request has been denied because your definition of bullying on page 2 of the School Commute Survey does not agree with our district's definition of bullying. The committee also noted that your survey questions did not follow a logical progression. Race and appearance should not be combined in question 10. Question 11 appears to inquire about cyber bullying; however, your restriction to cell phone omits common electronic bullying methods via social network sites.

The committee thinks that your research topic is worth pursuing. We are not sure whether you have approached other districts.

# **Research Development and Accountability**

February 2, 2012

Dear Jonathan M. Kremser,

recognizes the potential benefits of participating in relevant, well-designed research studies and data collection activities proposed by qualified individuals, organizations or institutions. Approval for conducting such studies is based primarily on the extent to which substantial benefits can be shown for mission of educating students and staff but also includes additional criteria. Unfortunately, your application for conducting research in been denied for the following reason(s):

**X** Lack of significant relevance of the research topic, questions, and/or hypotheses to the current needs and interests of **X**, beyond information that adds to the general body of knowledge. The results of this survey would not "develop prevention programs" nor "anti-bullying strategies or professional development." **X** Potential disruption of instructional program, impact on instructional time and/or additional responsibilities for school staff.

This research requires technology in school. It replicates district efforts in addressing bullying and gang issues. There are no provisions for students who chose not to take the survey. Survey will use instructional time.

**X** Issues pertaining to the quality, feasibility and/or technical adequacy of the study. There is minimal variance in the type of transportation **bud** utilize which will prevent analyzation of the relationship. The same size is too small to generalize the results. Most **bud** students are bus riders.

Issues regarding the qualifications of the applicant (including demonstrated writing and research skills.

\_\_\_\_\_ Potential encroachment on the privacy and legal rights of the students, parents and/or staff members.

**\_\_\_X**\_\_ Other: Issues with ethnic classification.

November 18, 2011

I regret that we are unable to approve your request to conduct the research for your dissertation in the

While your study does have merit, it would unnecessarily duplicate and confound bullying studies already in progress in our district.

Coordinator, Research & Evaluation

## Appendix B

## Formal Application and Review Process

I am respectfully submitting a proposal to conduct research within the Charleston County School District. I'm certain that the Research Review Committee will find that this research is unique because of its tremendous benefit to pupils, parents, the District and the community.

The proposed research builds on the findings of a recent study which identifies the trip to and from school as the most dangerous activity in America. The goals of this study are to examine and quantify the different types of victimization, such as bullying behavior that middle school students experience during their travel to and from school. Research on the daily movement and activities within a community reveals that a significant amount of victimization occurs during the hours prior to and immediately following school, when youths travel from a supervised environment to their destination. To assist in the possible reduction of victimization during the period immediately following school dismissal and improvement of safety during the school commute, it is necessary to study the journey that students take after they leave home and school property. The primary purpose of this research is to:

- study the daily school commute of middle school students in an urban school district, and;
- analyze the relationship between the various modes, routes, and length of travel and the level and types of victimization, as well as fear and avoidance behavior of the pupils.

The study uses the Routine Activities Approach as a theoretical foundation for explaining victimization during the school commute. More specifically, the study will attempt to address whether the absence of capable guardianship (such as the routine presence of a teacher, parent, or police during the child's commute), can help explain why certain modes of travel, routes, and various travel times to and from school are more unsafe than others.

Utilizing data collected through a survey of middle school students attending schools within the District, the study analyzes the school journey, and compares types and levels of victimization among students during the commute to and from school. The study will compare basic demographic data to help explain levels and differences in victimization that middle school pupils have experienced. The proposed research will consist of piloting the survey instrument to approximately 35 subjects within the same population sample, with the main survey to follow within a few weeks thereafter. The research focuses mainly on pupils in middle school, specifically 6<sup>th</sup>, 7th and 8th graders, because this group likely has the largest mix of various modes of travel combined with the prevalence of experiencing bullying, as the percentage of students who are bullied tends to decrease in the higher grades (Olweus, 1993).

*N.B.* The researcher is aware that many districts already undertake numerous studies related to bullying on campus. This research, however, focuses on safety during the commute to and from school, to include some bullying issues. It is unique in that it is not among the various "bullying studies" currently being conducted in many schools. Therefore, this study will not unnecessarily duplicate or in any way confound research that may already be in progress in your district (e.g. Moore, Maclean, and Jefford, 2011).

#### Data Collection Schedule

Upon the Research Review Committee's approval, the principal investigator, in coordination with the school's administration, will submit informed consent forms to be sent home to the parents (copy enclosed), in which benefits, risks, and specific details will be described, and a section will be included to provide parent/guardian consent. The parents will be asked to return the consent form in the provided sealed envelope to the classroom teacher within five days. The researcher will gain access to potential participants on a scheduled date to be agreed upon by the school administrator and the classroom teacher.

The pupils will complete a signed consent form (copy enclosed) prior to the administration of the pilot survey. The survey (copy enclosed) consists of approximately 48 questions and should take no longer than 35 minutes to administer. The survey will attempt to gather information on pupil's experiences with bullying, as well as their fear and avoidance behavior during the commute to and from school. Impact on instructional time has been minimized as much as possible by keeping the survey brief, and by providing other scholastic activities for pupils who are not participating in the research.

#### Potential Risks and Benefits to Participants

There are no foreseeable risks or discomforts from participation in the study. The potential benefits from the study will be the improvement of student safety in high risk areas during the pupils' commute to and from school. The Charleston County School District will benefit from this research, as the results will supplement literature on bullying and other types of victimization during the school commute, as well as what contributes to fear and avoidance behavior of students during their commute to school. This study could lead to a better understanding of how students perceive and routes to and from school as safe or unsafe. Results from this research could also be used for awareness programs to make parents aware of safety concerns during their child's commute to and from school. Police and school officials will become aware of specific areas of concern during children's commute to and from school.

In light of recent, highly-publicized tragedies relating to this issue, bullying is indeed a sensitive topic. The researcher has undergone extensive training and certification in

bullying prevention, and will provide information to victims of bullying. Per the ethics committee's request, information has been added to the pupil's consent form that any student who is experiencing bullying is to contact his or her teacher, guidance counselor, or principal.

#### General Overview of the Data and Analysis

Methodology (include information about design, procedures, population, sites, and analysis):

### PLEASE SEE ATTACHED

## The Proposed Study's Benefit to the Charleston County School District

### 1. The proposed study has the potential to improve student achievement.

The research literature on the relationship between victimization from bullying and student achievement supports the hypothesis that bullying negatively impacts concentration and academic achievement in victims (Glew, et al, 2005; Nansel, et al., 2001). Peer victimization is related to negative attitudes toward school, as well as a lack of engagement in classroom activities (Nishina and Juvonen, 2005). A study of 204 middle school students in the United States found that 90 percent of students experienced a drop in grades as a result of being a victimization of bullying (Hazler, Hoover, and Oliver, 1992). A study of pupils conducted in California used Stanford Achievement Test scores and grades as a measure of student achievement and found a "significant association between low scores and being a victim of bullying" (Glew, et al: 1031).

Adding the element of exposure to violence within the community setting, Schwartz and Gorman (2003) utilized a multi-informant approach involving a self-report inventory assessing the exposure of schoolchildren to violence within the community, achievement test scores, and GPAs obtained from school records. (According to Schwartz and Proctor, there was significant association between violent victimization and bullying by peers). The investigation demonstrated linkages between exposure to violence and bullying by peers within the community setting and poor student achievement at school.

Furthering our knowledge of student safety during the school commute, identifying areas of concern, and utilizing community resources to improve supervision in areas of increased risk, can lead to improvement in student achievement by pupils in the Charleston County School District who are experiencing problems during their commute to and from school.

# 2. The proposed study has the potential to increase the level of parent, family, community, and business support and involvement.

This study focuses specifically upon the types and levels of bullying-related victimization that pupils experience during their commute to and from school. Research on youth violence and victimization throughout the day suggests that the school commute is one of the riskiest contexts for children (Lemieux, 2010; Meyer and Astor, 2002). This pilot study will analyze the relationship between the various modes, routes, and length of travel and the level and types of victimization, as well as fear and avoidance behavior of the pupils during their commute to and from school. **Results of the study will be shared with the school and contribute to student safety by "linking the school and surrounding community from a child's perspective"** (Meyer and Astor: 103).

# **3.** The proposed study has the potential to help improve the safety and orderliness of the learning environment within the Charleston County School District.

According to research conducted on predicting schoolchildren's fear of assault using a nationally representative sample of over 10,000 junior high and high school students, Alvarez and Bachman (1997) discovered that victimizations occurring somewhere other than school, such as while going to and from school, "may also be generalized to students' perceptions of fear in all contexts **including the school environment**" (p. 74).

According to a cross-sectional investigation of the link between community violence exposure and academic difficulties in an urban school district (Schwartz and Gorman 2003), children "who have been exposed to neighborhood violence may also be at risk for disruptive behavior problems in the classroom" (p. 163). The study also links violence exposure within the community and academic difficulties (see also Schwartz and Proctor, 2000). According to Zuckerman, Bushman, and Pedersen (2011), youths most likely to carry a weapon reported being bullied away from school. More specifically, the researchers discovered that "carrying a weapon *in* school is more related to bullying *out* of school than bullying *in* school" (p. 2).

According to the U.S. Department of Education (2010), students who experience harassment and bullying may experience

- Lowered academic achievement and aspirations
- Increased anxiety
- Loss of self-esteem and confidence
- Depression and post-traumatic stress

- General deterioration in physical health
- Self-harm and suicidal thinking
- Feelings of alienation in the school environment, such as fear of other children, and
- Absenteeism from school

This study has the potential to assist the schools in meeting their obligations as set forth under the U.S. Department of Education Office for Civil Rights, which include taking prompt and effective steps to "eliminate any hostile environment, and prevent its recurrence."

#### Hypotheses to be tested:

This study will attempt to test the following hypotheses:

1. Victimization and perception of safety will be related to specific modes of travel.

2. Boys will experience more bullying-related offenses during the school commute than girls.

3. The length of commute will positively correlate with the number of reported bullying incidents.

4. Students will report feeling safer at school than on the way to and from school if their normal travel paths are unsupervised.

5. Students who leave school soon after dismissal will report the most frequent bullyingrelated offenses.

6. The specific physical characteristics of travel paths will influence the victimization of youths after school.

Instruments to be used:

A survey instrument of 25 questions is attached.

F	Name & Title	Matthew D. Van Itallie Chief Accountability Officer	BCPS
R O	Agency Name & Address	Office of Achievement and Accountability 200 E. North Avenue – Room 203	MEMO
Μ	Subject	External Research Studies Application Process	

To: Individuals Seeking to Conduct Research Studies in City Schools

Thank you for your interest in conducting an external study involving the Baltimore City Public School (City Schools). The Division of Research, Evaluation, Assessment, and Accountability (DREAA) reviews and approves all studies. Research studies include surveys of students and staff, observations conducted in schools, analyses of existing school or student level data, and pilot testing of assessment instruments or rating scales. Individuals seeking to conduct an external research study using data from City Schools must submit an application packet:

- One completed copy of the Applicant Information Form.
- Three copies of the Application Cover Page.
- One copy of the Institutional Review Board (IRB) Authorization Letter (This document must be supplied for activities sponsored by or affiliated with universities or colleges. Please refer to the National Research Act of 1974, The Family Educational Rights and Privacy Act of 1974, COMAR 13A.08.02, Standards for Program Evaluation, Standards for Educational and Psychological Assessment, and other pertinent laws, regulations, and publications to ascertain human subjects' protection and confidentiality rights related to student records.)
- Three copies of your Research Proposal with appropriate attachments.

DREAA reviews the validity and utility of the research proposal and considers whether the project aligns with the City Schools Goals and Objectives or if it imposes any intrusiveness that may outweigh its potential benefit. Applicants are notified within a month if their project is approved.

#### Salient points

DREAA has a mission to support research from the System's partners, from City Schools staff who pursue advanced degrees, and from federally- or state-mandated studies. All other studies are approved depending on interest and capacity to support them.

DREAA discourages some kinds of research. Because the System conducts climate surveys of all schools, research involving such surveying cannot be approved. Any projects that fall under the purview of Special Education or Student Support Services are vetted closely. DREAA suggests that all researchers conceptualize their studies for intact groups.

The principal investigator must provide appropriate assurances guaranteeing the confidentiality of data. This includes sequestering identifying information in an encrypted file available only to the principal investigator and authorized staff, publishing data only in the aggregate, and destroying all identifying data files on completion of the study.

# Any statistical reports must display the following disclaimer: "Statistics reported were prepared especially for this study and may not agree with other published statistics."

All individuals who serve as members of the research team (e.g., applicant, assistants, collaborators) who are not currently employed by City Schools and will have contact with students must complete the fingerprinting and background procedures required of the System's Department of School Police.

The approval of the study does not constitute an endorsement of the study, and such language should be included in final reports. Approval by DREAA is contingent upon approval of principals, teachers, students, and completion of informed consent forms by parents, as appropriate.

The disruption of the school's routine by the study must be kept to a minimum and avoid any day in which a standardized test is administered. The testing calendar is available from DREAA or the City Schools website.

Costs incurred (e.g., resources needed to copy reports, time taken to develop data file, technical assistance), may be charged to the applicant. Costs will be pre-determined and will be based on the level of expertise needed to complete the task.

Permission for research studies is for one year unless otherwise noted in the approval letter. Data collected are used solely for the purpose stated in the research application.



#### **Baltimore City Public Schools**

#### Division of Research, Evaluation, Assessment, and Accountability

#### **Research Application Cover Page**

Submit three (3) copies of this cover page and three (3) copies of the Research Proposal.

Name of Applicant:	Jonathan M. Kremser	<b>Date</b> 15 September 2011
	Safe Passage During the School Commu	ute
Title of Project:		
	Ph.D. Dissertation	
Reason the project is		
being conducted (e.g.		
dissertation, grant, etc)		
Name, title, institution and signature of the	Dr. Ronald Clarke. Professor of Crin University, Newark, New Jersey	ninal Justice. Rutgers
student advisor certifying	(Signature and approval attached)	
that the research proposal		
is acceptable (if		
applicable):		

This study aligns perfectly with the Baltimore City Schools Goals and Objectives. **Goal I: Improve student achievement**: The research literature on the relationship between victimization from bullying and student achievement supports the hypothesis that bullying negatively impacts concentration and academic achievement in victims (Glew, et al, 2005; Nansel, et al., 2001). Peer victimization is related to negative attitudes toward school, as well as a lack of engagement in classroom activities (Nishina and Juvonen, 2005). A study of 204 middle school students in the United States found that 90 percent of students experienced a drop in grades as a result of being a victimization of bullying (Hazler, Hoover, and Oliver, 1992). A study of pupils conducted in California used Stanford Achievement Test scores and grades as a measure of student achievement and found a "significant association between low scores and being a victim of bullying" (Glew, et al: 1031).

Describe how the study is Aligned with City Schools Goals and Objectives

Adding the element of exposure to violence within the community setting, Schwartz and Gorman (2003) utilized a multi-informant approach involving a self-report inventory assessing the exposure of schoolchildren to violence within the community, achievement test

scores, and GPAs obtained from school records. (According to Schwartz and Proctor, there was significant association between violent victimization and bullying by peers). The investigation demonstrated linkages between exposure to violence and bullying by peers within the community setting and poor student achievement at school.

The researcher strongly argues that this study directly aligns with the Baltimore City Schools Goal I. Furthering our knowledge of student safety during the school commute, identifying areas of concern, and utilizing community resources to improve supervision in areas of increased risk, can lead to improvement in student achievement by pupils who are experiencing problems during their commute to and from school.

Objective 5: Increase the level of parent, family, community, and business support and involvement: This study focuses specifically upon the types and levels of bullying-related victimization that pupils experience during their commute to and from school. Research on youth violence and victimization throughout the day suggests that the school commute is one of the riskiest contexts for children (Lemieux, 2010; Meyer and Astor, 2002). This pilot study will analyze the relationship between the various modes, routes, and length of travel and the level and types of victimization, as well as fear and avoidance behavior of the pupils during their commute to and from school. **Results of the study will be shared with the school and contribute to student safety by "linking the school and surrounding community from a child's perspective"** (Meyer and Astor: 103).

Additionally, the researcher is a certified Olweus Bullying Prevention Program (OBPP) trainer. The Olweus program is an evidenced-based program that has been implemented across the United States and abroad. The researcher is offering the program's mandatory training and on-going consultation *pro bono* to any of the Baltimore City Schools if the district implements the program in the future, which is offered independent of the current research proposal under review by the Office of Achievement and Accountability.

Furthermore, the researcher maintains all current FBI, Child Abuse, and State Police background clearances.

*Objective 6: Provide secure, civil, clean, and orderly learning environments:* 

According to research conducted on predicting schoolchildren's fear of assault using a nationally representative sample of over 10,000 junior high and high school students, Alvarez and Bachman (1997) argued that victimizations occurring somewhere other than school, such as while going to and from school, "may also be generalized to students' perceptions of fear in all contexts **including the school environment**" (p. 74).

According to a cross-sectional investigation of the link between community violence exposure and academic difficulties in an urban school district (Schwartz and Gorman 2003), children "who have been exposed to neighborhood violence may also be at risk for disruptive behavior problems in the classroom" (p. 163). The study also links violence exposure within the community and academic difficulties (see also Schwartz and Proctor, 2000). According to Zuckerman, Bushman, and Pedersen (2011), youths most likely to carry a weapon reported being bullied away from school. More specifically, the researchers discovered that "carrying a weapon *in* school is more related to bullying *out* of school than bullying *in* 

The present study, therefore, aligns with Objective 6 in providing secure, civil, clean, and orderly learning environments.

Estimate the amount of time and other resources the project would require of City Schools students or staff: The amount of time required for the classroom teacher to handout and collect parental consent forms: Approximately five minutes.

The amount of time required for the students to complete the pilot survey questionnaire: Approximately 35 minutes.

Anticipated starting date:	October 26, 2011
Anticipated completion	
date:	October 26, 2011

To be completed by the Division of Research, Evaluation, Assessment, and Accountability

Request Number	
Date of Receipt (Full Application)	
Date for Review	
Date for Final Decision	

## **Baltimore City Public Schools**

## Division of Research, Evaluation, Assessment, and Accountability

#### **Applicant Information Form**

One copy of this form is to be completed and submitted as part of the application packet by individuals requesting to complete an external evaluation and/or research study in the Baltimore City Public Schools. The request will not be reviewed until the full Application Packet is submitted.

Title of Study:	Safe Passage During the School Commute
	Jonathan M. Kremser
Name of Applicant:	Johannan M. Kremser
	Rutgers University
Affiliation:	Kutatown University of Depresilvenia
Full Work Address:	Kutztown University of Pennsylvania
	Department of Criminal Justice
	PO Box 730
	Kutztown, PA 19530
Full Home Address:	40 Old Friedensburg Road
	Reading, PA 19606

## Appendix C

## School District Approval Letters

This is to inform you that your request to extent "Daily School Commute of Middle School Students in an Urban School District" has been reviewed and approved.

Please adhere to the following guidelines:

> Except in the case of emancipated minors, researchers must obtain signatures of parents or legally authorized representatives on a consent form prior to a student's participation in the research study. All consent forms must contain the following sentences:

 $\circ$  "I do not wish (my child) to participate." (This must be an option on the form.)  $\circ$  The school district is neither sponsoring nor conducting this research.

- o There is no penalty for not participating.
- o Participants may withdraw from the study at any time without penalty.
- > Assent of children who are of sufficient age and maturity should be obtained prior to their participation in research. In all cases, students should be told that they have the right to decline participation.
- >> Parents or guardians of students participating in your research must be notified of their right to inspect all instructional materials, surveys, and non-secured assessment tools used in conjunction with your research. This notification should include details of how parents can access these materials.
- >> Student social security numbers should never be used.
- Data directly identifying participants (students, teachers, administrators), such as name, address, telephone number, etc., may not be distributed in any form to outside persons or agencies.
- J> All personally identifiable information, such as name, social security number, student ID number, address, telephone number, email address must be suppressed in surveys and reports. Reports and publications intended for audiences outside of the district should not identify names of individual schools or the district.
- >> Any further analyses and use of the collected data beyond the scope of the approved research project, and any extensions and variations of the research project, must be

requested through Department of Accountability and Academic Outcomes.

February 28, 2012

Jonathan Kremser 40 Old Friedensburg Rd Reading PA 19696

Dear Jonathan Kremser:

This letter will serve as final approval for your proposal, "Safe Passage during the School Commute" (Proposal# 2322.1). We have approved your research from March, 2012 to April, 2012. Please submit a copy of the final approval from your IRB and the consent letter with your institution's stamp if applicable.

Your project may proceed and you may contact your liaison, **and the second seco** 

Principals always have the right to grant or deny access to subjects within the school. Please contact the affected school principals about your research activities before you proceed.

If you have any questions, feel free to contact me at

Sincerely,

Please note that this district-level approval obligates no school or employee to participate. Final approval, consent to participate, and cooperation must come from the school principal or administrator of the unit involved. Please show this letter to the school principal or administrator.

Respectfully,

## Appendix D

## Survey Instrument

# SCHOOL COMMUTE SURVEY

Thank you for agreeing to participate in this survey. This survey will be helpful in identifying areas that may be safety concerns during your commute to and from school. Your answers will stay secret and your name will never be asked. Please <u>do not</u> write your name on this survey form. This survey is completely voluntary. You may skip any question.

- 1. Are you a boy or a girl?
  - o Girl
  - o Boy
- 2. How do you normally travel to school in the morning?
  - Walk alone
  - Walk with one or more friends
  - Walk with one or more siblings
  - Walk with parents
  - o Bike
  - Parents or others drive
  - School bus
  - Public bus
  - Skateboard
  - Some other way. Please specify\_\_\_\_\_\_

3. How do you normally travel home from school in the afternoon?

- o Walk alone
- Walk with one or more friends
- Walk with one or more siblings
- $\circ$  Walk with parents
- o Bike
- Parents or another adult drives
- School bus
- Public bus
- Skateboard
- Some other way. Please specify\_\_\_\_\_

4. About how long does it take you to get to school in the morning?

5. Have you ever had any unpleasant things happen to you while you were going to or from school? If so, please describe in your own words. If not, go on to the next question.

6. On the way to or from school over the past year, I was called mean names, was made fun of, or teased in a hurtful way.

- $\circ~$  It has not happened to me during the past year
- Only once
- $\circ$  2 or 3 times
- More than 3 times

7. On the way to or from school over the past year, I was hit, kicked, pushed, or shoved around.

- $\circ$  It has not happened to me during the past year
- $\circ$  Only once
- $\circ$  2 or 3 times
- More than 3 times

8. On the way to or from school over the past year, somebody stole something from me. Things like money, a backpack, clothing, phone, iPod, or anything else.

- It has not happened to me during the past year
- Only once
- $\circ$  2 or 3 times
- More than 3 times

9. On the way to or from school over the past year, I was threatened or forced to do things I did not want to do.

- It has not happened to me during the past year
- Only once
- $\circ$  2 or 3 times
- More than 3 times

10. On the way to or from school over the past year, I was called mean names or comments about my appearance.

- $\circ$  It has not happened to me during the past year
- Only once
- $\circ$  2 or 3 times
- More than 3 times

11. On the way to or from school over the past year, I received mean or hurtful calls or text messages on my cell phone.

- $\circ$  It has not happened to me during the past year
- $\circ$  Only once
- $\circ$  2 or 3 times
- More than 3 times
- 12. Where have any of the above things happened to you?
  - None of the above things have happened to me on the way to or from school during the past year
  - It has happened to me on the way to or from school in one or more of the following places during the past year
     Please select all the places where any of the above things have happened to you:
  - At the school bus stop
  - On the school bus
  - On a playground
  - Near your home
  - Near the school building
  - o In school
  - Other. Please describe the location in your own words:

13. If any unpleasant things happened to you during your trip to or from school, did you talk about it afterward with anybody you thought might help in making sure it didn't happen again? If yes, then who? (example: teacher, parent, bus driver, friend).

If no, then go on to the next question.

14. Based upon your commute to and from school, is there a place you find especially unsafe? If so, briefly describe where. If not, go on to the next question.

15. How often are you afraid that someone will harm you during your trip **to** school in the morning?

- o Never
- Sometimes
- o Often

16. How often are you afraid that someone will harm you during your trip home **from** school in the afternoon?

- o Never
- $\circ$  Sometimes
- o Often

17. How often are you picked on or made fun of during your trip to or from school?

- o Never
- Sometimes
- o Often

18. How often are you afraid that someone will harm you on a school bus? (If you don't take the school bus, go on to question **22**)

- o Never
- Sometimes
- o Often

19. If you normally ride the school bus, where do you usually sit?

- In the back of the bus
- $\circ$  In the middle of the bus
- In the front of the bus

20. If any unpleasant things happen to you on the school bus, when do they usually occur?

- $\circ$  In the morning
- $\circ$  In the afternoon

21. Please describe in your own words any unpleasant things that have happened to you on the school bus.

22. Do you ever **avoid** any areas on your way to or from school because of the possibility of any of the following? (Choose all that apply)

- Someone teasing you or calling you mean names
- Attack by dogs
- Getting robbed
- Getting beaten up
- o Gangs
- Lack of adult supervision

If none of the above, go on to the next question. If yes, please describe in your own words what kinds of place you avoid.

23. Have you ever felt like you should have some sort of weapon on your way to or from school in order to protect yourself?

- o Never
- Sometimes
- o Often

24. Based upon your own commute to and from school, what do you think is the safest way for you to travel to and from school? (Choose all that apply)

- Walking alone
- Walking with one or more friends
- o Biking
- Parents or another adult drives
- School bus
- Public bus

25. Based upon your commute to and from school, is there any way to travel to and from school that you would **avoid** because of concerns for your safety? (Choose all that apply)

- Walking alone
- Walking with one or more friends
- o Biking
- Having parents or another adult drive
- School bus
- Public bus
- I feel that all of the above are safe ways for me to travel to and from school

26. Based upon your commute to and from school, has anyone told you to avoid certain areas because of concerns for your safety?

- Yes
- o No

27. During your trip to or from school, have you ever witnessed another student being called names by other students?

- o Never
- o Sometimes
- o Often

28. During your trip to or from school, have you ever witnessed another student being hit, kicked, slapped, punched, or otherwise attacked by other students?

- o Never
- Sometimes
- o Often

29. If you have ever witnessed another student being called names or hit by other students during your commute to and from school, where did it occur?

- At the school bus stop
- On the school bus
- On a playground
- Near houses
- Near the school building
- Other. Please describe the location in your own words:

30. Generally speaking, do you feel safer in school, during your commute to school, or during your trip home from school?

- At school
- During the commute to school
- During the commute home from school

# THANK YOU!!!

## **APPENDIX E**

## **BIVARIATE AND MULTIVARIATE RESULTS**

Tables E.1-E.32 report results of victimization experiences for pupils during their commute to school in the morning. As Table E.1 shows, of the respondents walking alone to school, over 28 percent report being teased during their commute to school over the previous academic year. Within the report of victims of teasing, pupils who walk alone represent over 25 percent of the victims who reported being teased.

## Walking to School Alone

	Victimized	Not Victimized	Total
Count	15	36	51
% Respondents	29.4	70.6	100
walking alone to			
school (N=51)			
% within all pupils	22.7	20.2	20.9
who report being a			
victim (N=66)			
% of total number of	6.1	14.8	20.9
students (n=244)			

Table E.1. Crosstab-Walking Alone—Students Teased

Table E.2. Crosstab-Walking Alone—Students Assaulted

	Victimized	Not Victimized	Total
Count	6	45	51
% Respondents	11.8	88.2	100
walking alone to			
school (N=51)			
% within all pupils	20.0	21.0	20.9
who report being a			
victim (N=30)			
% of total number of	2.5	18.4	20.9
students (n=244)			

	6		
	Victimized	Not Victimized	Total
Count	7	44	51
% Respondents	13.7	86.3	100
walking alone to			
school (N=51)			
% within all pupils	16.3	21.9	20.9
who report being a			
victim (N=43)			
% of total number of	2.9	18	25.9
students (n=244)			

Table E.3. Crosstab-Walking Alone—Students Reporting Theft

Table E.4. Crosstab-Walking Alone—Students Being Threatened

	8	8	
	Victimized	Not Victimized	Total
Count	6	45	51
% Respondents	11.8	88.2	100
walking alone to			
school (N=51)			
% within all pupils	27.3	20.3	20.9
who report being a			
victim (N=22)			
% of total number of	2.5	18.4	20.9
students (n=244)			

Table E.5. Crosstab-Walking Alone—Students Being Called Mean Names

	Victimized	Not Victimized	Total
Count	13	38	51
% Respondents	25.5	74.5	100
walking alone to			
school (N=51)			
% within all pupils	17.8	22.2	20.9
who report being a			
victim (N=73)			
% of total number of	5.3	15.6	20.9
students (n=244)			

	0	6	8
	Victimized	Not Victimized	Total
Count	10	41	51
% Respondents	19.6	80.4	100
walking alone to			
school (N=51)			
% within all pupils	29.4	19.8	21.2
who report being a			
victim			
% of total number of	4.1	17.0	21.1
students (n=244)			

Table E.6. Crosstab-Walking Alone—Students Receiving Hurtful Text Messages

## Walking to school with friends

## Table E.7. Crosstab-Walking with Friends—Students Teased

	Victimized	Not Victimized	Total
Count	2	15	17
% Respondents	11.8	88.2	100
walking with friends			
(N=17)			
% within all pupils	3.0	8.4	7.0
who report being a			
victim (N=66)			
% of total number of	.9	6.1	7.0
students (n=244)			

Table E.8. Crosstab-Walking with Friends—Students Reporting Assault

	0	1 0	
	Victimized	Not Victimized	Total
Count	1	16	17
% Respondents	5.9	94.1	100
walking with friends			
(N=17)			
% within all pupils	3.3	7.5	7.0
who report being a			
victim (N=66)			
% of total number of	.4	6.6	7.0
students (N=244)			

	0	1 8	
	Victimized	Not Victimized	Total
Count	4	13	17
% Respondents	23.5	76.5	100
walking with friends			
(N=17)			
% within all pupils	9.3	6.5	7.0
who report being a			
victim (N=43			
% of total number of	5.3	1.6	17.0
students (n=244)			

Table E.9. Crosstab-Walking with Friends—Students Reporting Theft

 Table E.10. Crosstab-Walking with Friends—Students Being Threatened

	Victimized	Not Victimized	Total
Count	1	16	17
% Respondents walking with friends (N=17)	5.9	94.1	100
% within all pupils who report being a victim (N=22)	4.5	7.2	7.0
% of total number of students (n=244)	.4	6.6	7.0

Table E.11. Crosstab-Walking with Friends—Students Being Called Mean Names

	Victimized	Not Victimized	Total
Count	3	14	17
% Respondents	17.6	82.4	100
walking with friends			
(N=17)			
% within all pupils	4.1	8.2	7.0
who report being a			
victim (N=73)			
% of total number of	1.2	5.7	7.0
students (n=244)			

	Victimized	Not Victimized	Total
Count	2	15	17
% Respondents	11.8	88.2	100
walking with friends			
(N=17)			
% within all pupils	5.9	7.2	7.1
who report being a			
victim (N=			
% of total number of	.8	6.1	7.1
students (N=244)			

 Table E.12. Crosstab-Walking with Friends—Students Receiving Hurtful Text

 Messages

# Walking to School with Siblings

	Victimized	Not Victimized	Total
Count	5	11	16
% Respondents	31.3	68.8	100
walking with			
siblings ((N=16)			
% within all pupils	7.6	6.2	6.6
who report being a			
victim (N=66)			
% of total number of	2.0	4.5	6.6
students (N=244)			

Table E.14. Crosstab-Walking with Siblings—Students Reporting Assault	Table E.14	. Crosstab-Walking	g with Siblings-	-Students Rep	orting Assault
---	------------	--------------------	------------------	---------------	----------------

	8 6		0
	Victimized	Not Victimized	Total
Count	4	12	16
% Respondents	25.0	75.0	100
walking with			
siblings (N=16)			
% within all pupils	13.3	5.6	6.6
who report being a			
victim (N=30)			
% of total number of	1.6	4.9	6.6
students (n=244)			

	0 0	· •	0
	Victimized	Not Victimized	Total
Count	5	11	16
% Respondents	31.3	68.8	100
walking with			
siblings (N=16)			
% within all pupils	11.6	5.5	6.6
who report being a			
victim (N=43)			
% of total number of	2.0	4.5	6.6
students (n=244)			

Table E.15. Crosstab-Walking with Siblings—Students Reporting Theft

 Table E.16. Crosstab-Walking with Siblings—Students Being Threatened

	8 6		
	Victimized	Not Victimized	Total
Count	4	12	16
% Respondents walking with siblings (N=16)	25.0	75.0	100
% within all pupils who report being a victim (N=22)	18.2	5.4	6.6
% of total number of students (n=244)	1.6	4.9	6.6

Table E.17.	<b>Crosstab-Wa</b>	lking with <b>S</b>	Siblings—S	Students Beir	ng Called M	ean Names

	Victimized	Not Victimized	Total
Count	8	8	16
% Respondents	50.0	50.0	100
walking with			
siblings (N=16)			
% within all pupils	11.0	4.7	6.6
who report being a			
victim (N=73)			
% of total number of	3.3	3.3	6.6
students (n=244)			

	Victimized	Not Victimized	Total
Count	3	13	16
% Respondents	18.8	81.3	100
walking with			
siblings (N=16)			
% within all pupils	8.8	6.2	6.6
who report being a			
victim			
% of total number of	1.2	5.3	6.6
students (n=244)			

 Table E.18. Crosstab-Walking with Siblings—Students Receiving Hurtful Text

 Messages

## **Driven to School By Adults**

Table E.19. Crosstab-Driven by an Adult—Students Being Teased

	v	8	
	Victimized	Not Victimized	Total
Count	16	70	86
% Respondents	18.6	81.4	100
driven by an adult			
(N=86)			
% within all pupils	24.2	39.3	35.2
who report being a			
victim (N=66)			
% of total number of	6.6	28.7	35.2
students (244)			

	-		
	Victimized	Not Victimized	Total
Count	9	77	86
% Respondents	10.5	89.5	100
driven by an adult			
(N=86)			
% within all pupils	33.0	36.0	35.2
who report being a			
victim (N=30)			
% of total number of	3.7	31.6	35.2
students (n=244)			

	Dirich by an Maure	Students Reporting	nert
	Victimized	Not Victimized	Total
Count	11	75	86
% Respondents	12.8	87.2	100
driven by an adult			
(N=86)			
% within all pupils	25.6	37.3	35.2
who report being a			
victim (N=22)			
% of total number of	4.5	30.7	35.2
students (n=244)			

Table E.21. Crosstab-Driven by an Adult—Students Reporting Theft

Table E.22. Crosstab-Walking with Parents—Students Being Threatened

	Victimized	Not Victimized	Total
Count	5	88	86
% Respondents driven by an adult (N=86)	5.8	94.2	100
% within all pupils who report being a victim (N=22)	22.7	36.5	35.2
% of total number of students (n=244)	2.0	33.2	35.2

Table E.23. Crosstab-Driven by an Adult—Students Being Called Mean Names

	Victimized	Not Victimized	Total
Count	23	63	86
% Respondents	26.7	73.3	100
driven by an adult			
(N=86)			
% within all pupils	31.5	36.8	35.2
who report being a			
victim (N=73)			
% of total number of	9.4	25.8	35.2
students (n=244)			

	Victimized	Not Victimized	Total
Count	8	78	86
% Respondents	9.3	90.7	100
driven by an adult			
(N=86)			
% within all pupils	23.5	37.1	35.2
who report being a			
victim			
% of total number of	3.3	32.0	35.2
students (n= 244)			

 Table E.24. Crosstab-Walking with Parents—Students Receiving Hurtful Text

 Messages

## **School Bus to School**

 Table E.25. Crosstab-Riding the School Bus—Students Being Teased

	-	-	
	Victimized	Not Victimized	Total
Count	23	39	62
% Respondents	37.1	62.9	100
riding the school bus			
(N=62)			
% within all pupils	34.8	21.9	25.4
who report being a			
victim (N=66)			
% of total number of	9.4	16.0	25.4
students (244)			

	Victimized	Not Victimized	Total
Count	9	53	62
% Respondents	14.5	85.5	100
riding the school bus			
(N=62)			
% within all pupils	30.0	24.8	25.4
who report being a			
victim (N=30)			
% of total number of	3.7	21.7	25.4
students (n=244)			

		s statis in point	8
	Victimized	Not Victimized	Total
Count	12	50	62
% Respondents	19.4	80.6	100
riding the school bus			
(N=62)			
% within all pupils	27.9	24.9	25.4
who report being a			
victim (N=43)			
% of total number of	4.9	20.5	25.4
students (n=244)			

Table E.27. Crosstab-Riding the School Bus—Students Reporting Theft

Table E.28. Crosstab-Riding the School Bus—Students Being Threatened

	Victimized	Not Victimized	Total
Count	6	56	62
% Respondents riding the school bus (N=62)	9.7	90.3	100
% within all pupils who report being a victim (N=22)	27.3	25.2	25.4
% of total number of students (n=244)	2.5	23.0	25.4

 Table E.29. Crosstab-Riding the School Bus—Students Being Called Mean Names

	8	8	
	Victimized	Not Victimized	Total
Count	21	41	62
% Respondents	33.9	66.1	100
riding the school bus			
(N=62)			
% within all pupils	28.8	24.0	25.4
who report being a			
victim (N=73)			
% of total number of	8.6	16.8	25.4
students (n=244)			

	Victimized	Not Victimized	Total
Count	11	51	62
% Respondents	17.7	82.3	100
riding the school bus			
(N=62)			
% within all pupils	32.4	24.3	25.4
who report being a			
victim			
% of total number of	4.5	20.9	25.4
students (n= 244)			

 Table E.30. Crosstab-Riding the School Bus—Students Receiving Hurtful Text

 Messages

### **Travel Home From School**

#### Table E.31. Crosstab-Walking Alone—Students Teased

	Victimized	Not Victimized	Total
Count	17	43	60
% Respondents	28.3	71.7	100
walking alone to			
school (N=60)			
% within all pupils	25.8	24.2	24.6
who report being a			
victim (N=66)			
% of total number of	7.0	17.6	24.6
students (n=244)			

 Table E.32. Crosstab-Walking Alone—Students Assaulted

	Victimized	Not Victimized	Total
Count	11	49	60
% Respondents	18.3	81.7	100
walking alone to			
school (N=60)			
% within all pupils	22.9	36.7	24.6
who report being a			
victim (N=30)			
% of total number of	4.5	20.1	24.6
students (n=244)			

	Wanning mone bu	acing hepoting there	
	Victimized	Not Victimized	Total
Count	11	49	60
% Respondents	18.3	81.7	100
walking alone to			
school (N=60)			
% within all pupils	25.6	24.4	24.6
who report being a			
victim (N=43)			
% of total number of	4.5	20.1	24.6
students (n=244)			

Table E.33. Crosstab-Walking Alone—Students Reporting Theft

Table E.34. Crosstab-Walking Alone—Students Being Threatened

	0	0	
	Victimized	Not Victimized	Total
Count	8	52	60
% Respondents	13.3	86.7	100
walking alone to			
school (N=60)			
% within all pupils	36.4	23.4	24.6
who report being a			
victim (N=22)			
% of total number of	3.3	21.3	24.6
students (n=244)			

Table E.35. Crosstab-Walking Alone—Students Being Called Mean Names

	Victimized	Not Victimized	Total
Count	18	42	60
% Respondents	30.0	70.0	100
walking alone to			
school (N=60)			
% within all pupils	24.7	24.6	24.6
who report being a			
victim (N=73)			
% of total number of	7.4	17.2	24.6
students (n=244)			

	—	-	
	Victimized	Not Victimized	Total
Count	11	49	60
% Respondents	18.6	81.4	100
walking alone to			
school (N=60)			
% within all pupils	32.4	23.2	24.5
who report being a			
victim (N=34)			
% of total number of	4.6	19.9	24.5
students (N=244)			

Table E.36. Crosstab-Walking Alone—Students Receiving Hurtful Text Messages

# Walking Home From School with Friends

Table E.57. Crosstab- warking with Friends—Students Teased				
	Victimized	Not Victimized	Total	
Count	13	38	51	
% Respondents	25.5	74.5	100	
walking alone to				
school (N=51)				
% within all pupils	19.7	21.3	20.9	
who report being a				
victim (N=66)				
% of total number of	27.0	73.0	20.9	
students (n=244)				

Table E.37. Crosstab-Walking with Friends—Students Teased

Table E.38.	Crosstab-Walking with	Friends—Students Re	porting Assault

	0	-	0
	Victimized	Not Victimized	Total
Count	6	45	51
% Respondents	11.8	88.2	100
walking with friends			
(N=51)			
% within all pupils	20.0	21.0	20.9
who report being a			
victim (N=30)			
% of total number of	2.5	18.4	20.9
students (N=244)			

		s students hepot in	8
	Victimized	Not Victimized	Total
Count	6	45	51
% Respondents	11.8	88.2	100
walking with friends			
(N=51)			
% within all pupils	14.0	22.4	17.6
who report being a			
victim (N=43)			
% of total number of	2.5	18.4	17.6
students (n=244)			

Table E.39. Crosstab-Walking with Friends—Students Reporting Theft

 Table E.40. Crosstab-Walking with Friends—Students Being Threatened

	Victimized	Not Victimized	Total
Count	4	47	51
% Respondents walking with friends (N=51)	7.8	92.2	100
% within all pupils who report being a victim (N=22)	18.2	21.2	20.9
% of total number of students (n=244)	1.6	19.3	20.9

Table E.41. Crosstab-Walk	ing with Friends—Student	s Being Called Mean Names

	Victimized	Not Victimized	Total
Count	13	38	51
% Respondents	25.5	74.5	100
walking with friends			
(N=51)			
% within all pupils	17.8	22.2	20.9
who report being a			
victim (N=73)			
% of total number of	29.9	70.1	20.9
students (N=244)			

	Victimized	Not Victimized	Total
Count	4	47	51
% Respondents	8/0	92	100
walking with friends			
(N=51)			
% within all pupils	11.8	22.2	20.7
who report being a			
victim (N=34)			
% of total number of	14.1	85.9	20.7
students (N=244)			

 Table E.42. Crosstab-Walking with Friends—Students Receiving Hurtful Text

 Messages

# Walking Home with Siblings

Table E.43.	Crosstab-Walking wi	th Siblings—	-Students Being	Teased
				• • • • • • • •

	0 0	, 0	
	Victimized	Not Victimized	Total
Count	6	14	20
% Respondents	30.0	70.0	100
walking with			
siblings (N=20)			
% within all pupils	9.1	7.9	8.2
who report being a			
victim (N=66)			
% of total number of	2.5	5.7	8.2
students (N=244)			

Table E.44.	Crosstab-Walking	with Siblings-	-Students Rep	orting Assault

	Victimized	Not Victimized	Total
Count	1	19	20
% Respondents	5.0	95.0	100
walking with			
siblings(N=20)			
% within all pupils	3.3	8.9	8.2
who report being a			
victim (N=30)			
% of total number of	.4	7.8	8.2
students (n=244)			

	Victimized	Not Victimized	Total
Count	6	14	20
% Respondents	30.0	70.0	100
walking with			
siblings (N=20)			
% within all pupils	14.0	7.0	8.2
who report being a			
victim (N=43)			
% of total number of	2.5	5.7	8.2
students (n=244)			

Table E.45. Crosstab-Walking with Siblings—Students Reporting Theft

Table E.46. Crosstab-Walking with Siblings—Students Being Threatened

	Victimized	Not Victimized	Total
Count	3	17	20
% Respondents walking with	15.0	85.0	100
siblings (N=20)			
% within all pupils who report being a victim (N=22)	13.6	7.7	8.2
% of total number of students (N=244)	1.2	7.0	8.2

Table E.47. Crosstab-Walking	with Siblings—	-Students Being	Called Mean Names

	Victimized	Not Victimized	Total
Count	10	10	20
% Respondents	50.0	50.0	100
walking with			
siblings N=20)			
% within all pupils	13.7	5.8	8.2
who report being a			
victim			
% of total number of	4.1	4.1	8.2
students (n=244)			

	Victimized	Not Victimized	Total
Count	4	16	20
% Respondents	20.0	80.0	100
walking with			
siblings (N=20)			
% within all pupils	11.8	7.7	8.3
who report being a			
victim (N=34)			
% of total number of	1.7	6.6	8.3
students (N=244)			

 Table E.48. Crosstab-Walking with Siblings—Students Receiving Hurtful Text

 Messages

## **Driven Home By Adults**

Table E.49. Crosstab-Driven by an Adult—Students Being Teased

	v	0	
	Victimized	Not Victimized	Total
Count	6	36	42
% Respondents	14.3	85.7	100
driven by an adult			
(N=42)			
% within all pupils	9.1	20.2	17.2
who report being a			
victim (N=66)			
% of total number of	2.5	14.8	17.2
students (244)			

 Table E.50. Crosstab-Driven by an Adult—Students Reporting Assault

	e	1 0	
	Victimized	Not Victimized	Total
Count	3	39	42
% Respondents	7.1	92.9	100
driven by an adult			
(N=42)			
% within all pupils	10.0	18.2	17.2
who report being a			
victim (N=30)			
% of total number of	1.2	16.0	17.2
students (N=244)			

	-		
	Victimized	Not Victimized	Total
Count	4	38	42
% Respondents	9.5	90.5	100
driven by an adult			
(N=42)			
% within all pupils	9.3	18.9	17.2
who report being a			
victim (N=43)			
% of total number of	1.6	15.6	17.2
students (N=244)			

Table E.51. Crosstab-Driven by an Adult—Students Reporting Theft

Table E.52. Crosstab-Walking with Parents—Students Being Threatened

	Victimized	Not Victimized	Total
Count	1	41	42
% Respondents	2.4	97.6	100
driven by an adult			
(N=42)			
% within all pupils	4.5	18.5	17.2
who report being a			
victim (N=22)			
% of total number of	.4	16.8	17.2
students (n=244)			

Table E.53. Crosstab-Driven by an Adult—Students Being Called Mean Names

	Victimized	Not Victimized	Total
Count	8	34	42
% Respondents	19.0	81.0	100
driven by an adult			
(N=42			
% within all pupils	11.0	19.9	17.2
who report being a			
victim (N=73)			
% of total number of	3.3	13.9	17.2
students (N=244)			

	Victimized	Not Victimized	Total
Count	3	39	42
% Respondents	7.1	92.9	100
driven by an adult			
(N=42)			
% within all pupils	8.8	18.8	17.4
who report being a			
victim (N=34)			
% of total number of	1.2	16.2	17.4
students (N=244)			

 Table E.54. Crosstab-Walking with Parents—Students Receiving Hurtful Text

 Messages

# **Taking the School Bus Home**

	Victimized	Not Victimized	Total
Count	21	38	59
% Respondents	35.6	64.4	100
riding the school bus			
(N=59)			
% within all pupils	31.8	21.3	24.2
who report being a			
victim (N=66)			
% of total number of	8.6	15.6	24.2
students (N=244)			

Table E.56.	<b>Crosstab-Riding</b>	the School Bus-	-Students Reporting Assault

	-	-	-
	Victimized	Not Victimized	Total
Count	8	51	59
% Respondents	13.6	86.4	100
riding the school bus			
(N=59)			
% within all pupils	26.7	23.8	24.2
who report being a			
victim (N=30)			
% of total number of	3.3	20.9	24.2
students (N=244)			

	Victimized	Not Victimized	Total
Count	12	50	59
% Respondents	22.0	78.0	100
riding the school bus			
(N=59)			
% within all pupils	30.2	22.9	24.2
who report being a			
victim (N=43)			
% of total number of	5.3	18.9	24.2
students (N=244)			

Table E.57. Crosstab-Riding the School Bus—Students Reporting Theft

 Table E.58. Crosstab-Riding the School Bus—Students Being Threatened

	Victimized	Not Victimized	Total
Count	6	53	59
% Respondents riding the school bus (N=59)	10.2	89.8	100
% within all pupils who report being a victim (N=22)	27.3	23.9	24.2
% of total number of students (N=244)	2.5	21.7	24.2

Table E.59. Crosstab-Riding the School Bus—Students Being Called Mean Names

	0	0	
	Victimized	Not Victimized	Total
Count	18	41	59
% Respondents	30.5	69.5	100
riding the school bus			
(N=59)			
% within all pupils	24.7	24.0	24.5
who report being a			
victim (N=73)			
% of total number of	7.4	16.8	24.5
students (N=244)			

	Victimized	Not Victimized	Total
Count	11	48	59
% Respondents	18.6	81.4	100
riding the school bus			
(N=59)			
% within all pupils	32.4	23.2	24.5
who report being a			
victim (N=34)			
% of total number of	4.6	19.9	24.5
students (N=244)			

 Table E.60. Crosstab-Riding the School Bus—Students Receiving Hurtful Text

 Messages

Table E.61. Summary of Victimizations on the Way to School

	Walk	Walk	Walk	Adults	School	Total
	Alone	with	with	Drive	Bus	
		Friends	Siblings			
Teased	15	2 (11.8%)	5 (7.6%)	16	23	52
	(29.4%)			(18.6%)	(37.1%)	
Assaulted	6 (11.8%)	1 (5.9%)	4 (25%)	9 (10.5%)	9 (14.5%)	29
Had	7 (13.7%)	4 (23.5%)	6 (30.0%)	11	12	110
Property				(12.8%)	(19.4%)	
Stolen						
Threatened	6 (11.8%)	1 (5.9%)	3 (15.0%)	5 (5.8%)	6 (9.7%)	21
Called	13	3 (17.6%)	8 (50%)	23	21	89
Mean	(25.5%)			(26.7%)	(33.9%)	
Names						
Received	10	2 (11.8%)	3 (18.8%)	8 (9.3%)	11	34
Hurtful	(19.6%)				(17.7%)	
Text						
Messages						
Total	57	13	29	72	82	

Of all the people who walk with siblings 25.0 were assaulted.

	uninitiary or v	icumization				
	Walk	Walk	Walk	Adults	School	Total
	Alone	with	with	Drive	Bus	
		Friends	Siblings			
Teased	17	13	6 (30.0%)	6 (14.3%)	21	63
	(28.3%)	(25.5%)			(35.6%)	
Assaulted	11	6 (11.8%)	1 (5.0%)	3 (7.1%)	8 (13.6%)	51
	(18.3%)					
Had	11	6 (11.8%)	6 (30.0%)	4 (9.5%)	12	39
Property	(18.3%)				(22.0%)	
Stolen						
Threatened	8 (13.3%)	4 (7.8%)	3 (15.0%)	1 (2.4%)	6 (10.2%)	22
Called	18	13	10 (50%)	8 (19.0%)	18	67
Mean	(30.0%)	(25.5%)			(30.5%)	
Names						
Received	11	4 (8.0%)	4 (20.0%)	3 (7.1%)	11	33
Hurtful	(18.6%)				(18.6%)	
Text						
Messages						
Total	76	63	30	25	76	

 Table E.62. Summary of Victimizations on the Way Home From School

# Walking to School Alone

	Witnessed	Did Not Witness	Total
Count	29	22	51
% Respondents	56.9	43.1	100
walking alone to			
school (N=51)			
% within all pupils	16.7	31.4	20.9
who report			
witnessing			
victimization			
(N=174)			
% of total number of	11.9	9.0	20.9
students (N=244)			

# Walking to school with friends

	Victimized	Not Victimized	Total
Count	9	8	17
% Respondents	52.9	47.1	100
walking with friends			
(N=17)			
% within all pupils	5.2	11.4	7.0
who report			
witnessing			
victimizations			
(N=174)			
% of total number of	3.7	3.3	7.0
students (N=244)			

# Walking to School with Siblings

	0		8
	Victimized	Not Victimized	Total
Count	12	4	16
% Respondents	75.0	25.0	100
walking with			
siblings (N=16)			
% within all pupils	6.9	5.7	6.6
who report			
witnessing			
victimizations			
(N=174)			
% of total number of	4.9	1.6	6.6
students (N=244)			

## **Driven to School By Adults**

#### Table E.66. Crosstab-Driven by an Adult—Students Witnessing Victimization

	Victimized	Not Victimized	Total
Count	63	23	86
% Respondents	73.3	26.7	100
driven by an adult			
(N=86)			
% within all pupils	36.2	32.9	35.2
who report			
witnessing			
victimizations			
(N=174)			
% of total number of	25.8	9.4	35.2
students (244)			

## **School Bus to School**

#### Table E.67. Crosstab-Riding the School Bus—Students Witnessing Victimization

	Victimized	Not Victimized	Total
Count	51	11	62
% Respondents	82.3	17.7	100
riding the school bus			
(N=62)			
% within all pupils	29.3	15.7	25.4
who report			
witnessing			
victimization			
(N=174)			
% of total number of	20.9	4.5	25.4
students (244)			

#### **Travel Home From School**

## Walking Home from School Alone

### Table E.68. Crosstab-Walking Alone—Students Witnessing Victimization

	Victimized	Not Victimized	Total
Count	44	16	60
% Respondents	73.3	26.7	100
walking alone to			
school (N=60)			
% within all pupils	25.3	22.9	24.6
who report			
Witnessing			
victimization			
(N=174)			
% of total number of	18.0	6.6	24.6
students (N=244)			

# Walking Home from school with friends

Table E.69. Crosstab-Walking with Friends-	-Students Witnessing Victimization
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	Victimized	Not Victimized	Total
Count	35	16	51
% Respondents	68.6	31.4	100
walking with friends			
(N=51)			
% within all pupils	20.1	22.9	20.9
who report			
witnessing			
victimizations			
(N=174)			
% of total number of	14.3	6.6	20.9
students (N=244)			

## Walking Home from School with Siblings

	Victimized	Not Victimized	Total
Count	15	5	20
% Respondents	75.0	25.0	100
walking with			
siblings (N=20)			
% within all pupils	8.6	7.1	8.2
who report			
witnessing			
victimizations			
(N=174)			
% of total number of	6.1	2.0	8.2
students (N=244)			

Table E.70. Crosstab-Walking with Siblings—Students Witnessing Victimization

## **Driven Home from School By Adults**

Table E.71. Crosstab-Driven by an Adult—Students Witnessing Victimization	L
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	Victimized	Not Victimized	Total
Count	24	18	42
% Respondents	57.1	42.9	100
driven by an adult			
(N=42)			
% within all pupils	13.8	25.7	17.2
who report			
witnessing			
victimizations			
(N=174)			
% of total number of	9.8	7.4	17.2
students (244)			

## **School Bus Home from School**

	Victimized	Not Victimized	Total
Count	48	11	59
% Respondents	81.4	18.6	100
riding the school bus			
(N=59)			
% within all pupils	27.6	15.7	24.2
who report			
witnessing			
victimization			
(N=174)			
% of total number of	19.7	4.5	24.2
students (244)			

## STUDENTS REPORTING FEAR DURING COMMUTE TO SCHOOL

## Walking to School Alone

Table E.05. Crosstad-waiking Alone—Students Reporting Fear			
	Fear	No Fear	Total
Count	15	35	50
% Respondents	30	70	100
walking alone to			
school (N=50)			
% within all pupils	28.3	18.6	20.7
who report Fear			
(N=53)			
% of total number of	6.2	14.5	20.7
students (N=241)			

Table E.63. Crosstab-Walking Alone—Students Reporting Fear

## Walking to school with friends

	8	I	8
	Fear	No Fear	Total
Count	3	14	17
% Respondents	17.6	82.4	100
walking with friends			
(N=17)			
% within all pupils	5.7	7.4	7.1
who report fear			
(N=53)			
% of total number of	1.2	5.8	7.1
students (N=241)			

#### Table E.73. Crosstab-Walking with Friends—Students Reporting Fear

## Walking to School with Siblings

#### Table E.65. Crosstab-Walking with Siblings—Students Reporting Fear

		-	-
	Fear	No Fear	Total
Count	7	8	15
% Respondents	46.7	53.3	100
walking with			
siblings (N=15)			
% within all pupils	13.2	4.3	6.2
who report fear			
(N=53)			
% of total number of	2.9	3.3	6.2
students (N=241)			

## **Driven to School By Adults**

#### Table E.66. Crosstab-Driven by an Adult—Students Reporting Fear

	•		
	Victimized	Not Victimized	Total
Count	15	70	85
% Respondents	17.6	82.4	100
driven by an adult			
(N=85)			
% within all pupils	28.3	37.2	35.3

who report fear (N=53)			
% of total number of students (241)	6.2	29.0	35.3

## **School Bus to School**

#### Table E.67. Crosstab-Riding the School Bus—Students Reporting Fear

	Fear	No Fear	Total
Count	8	54	62
% Respondents	12.9	87.1	100
riding the school bus			
(N=62)			
% within all pupils	15.1	28.7	25.7
who report Fear			
(N=53)			
% of total number of	3.3	22.4	25.7
students (241)			

#### **Travel Home From School**

#### Walking Home from School Alone

#### Table E.68. Crosstab-Walking Alone—Students Reporting Fear

	0	• 0	
	Fear	No Fear	Total
Count	21	37	58
% Respondents	36.2	63.8	100
walking alone to			
school (N=58)			
% within all pupils	35.0	20.6	24.2
who report Fear			
(N=60)			
% of total number of	8.8	15.4	24.2
students (N=240)			

### Walking Home from school with friends

#### Table E.69. Crosstab-Walking with Friends—Students Reporting Fear

	Fear	No Fear	Total
Count	17	33	50
% Respondents	34.0	66.0	100
walking with friends			
(N=50)			

% within all pupils who report Fear (N=60)	28.3	18.3	20.8
% of total number of students (N=240)	7.1	13.8	20.8

## Walking Home from School with Siblings

#### Table E.69. Crosstab-Walking with Siblings—Students Reporting Fear

	0 0	-	8
	Fear	No Fear	Total
Count	5	15	19
% Respondents	26.3	73.7	100
walking with			
siblings (N=19)			
% within all pupils	8.3	7.8	7.9
who report Fear			
(N=60)			
% of total number of	2.1	5.8	7.9
students (N=240)			

## **Driven Home from School By Adults**

#### Table E.70. Crosstab-Driven by an Adult—Students Reporting Fear

	<b>i i</b> 8		
	Fear	No Fear	Total
Count	4	38	42
% Respondents	9.5	90.5	100
driven by an adult			
(N=42)			
% within all pupils	6.7	21.1	17.5
who report Fear			
(N=60)			
% of total number of	1.7	15.8	17.5
students (240)			

## **School Bus Home from School**

#### Table E.71. Crosstab-Riding the School Bus—Students Reporting Fear

	Victimized	Not Victimized	Total
Count	10	49	59
% Respondents	16.9	83.1	100
riding the school bus			
(N=59)			

% within all pupils	16.7	27.2	24.6
who report Fear			
(N=60)			
% of total number of	4.2	20.4	24.6
students (240)			

#### **CURRICULUM VITAE**

Date and Place of Birth July 12, 1968 Reading, Pennsylvania, United States of America

<u>Secondary School Attended</u> Governor Mifflin High School, Shillington, Pennsylvania (1983-1986) High School Diploma (June, 1986)

<u>Universities Attended</u> Kutztown University of Pennsylvania, Kutztown, Pennsylvania (1998-2001) Bachelor of Science (August, 2001) Criminal Justice and Minor in German

University of Ottawa, Ottawa, Ontario, Canada (2001-2003) Masters in Applied Criminology (2003)

Rutgers University, Newark, New Jersey (2004-2013) Master of Arts (October, 2009) Criminal Justice

<u>Occupations</u> Faculty, Department of Criminal Justice Kutztown University of Pennsylvania (2003-Present)

Graduate Assistant, Department of Criminology University of Ottawa (2001-2002)

#### List of Publications

"Characteristics of School Violence and Safety." *Encyclopedia of Community Policing and Problem Solving*. Peak, K. (ed.). Sage Publications (2013).

"Community Policing Strategies for School Violence and Safety." *Encyclopedia of Community Policing and Problem Solving*. Peak, K. (ed.). Sage Publications (2013).

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