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School violence in Canada and the United States is a topic of public and media concern following several recent shocking incidents of student killings by their classmates in Canada and the United States. This thesis reviews and critically evaluates Canadian and American studies of school violence. Published reports and studies are used as the source of data. The main focus for evaluating the studies is an in-depth analysis of the conceptual frameworks and elements of the research. This includes determining whether the studies defined their terms and solicited information concerning the seriousness of incidents reported, such as the nature and severity of injuries. Exemplary studies are pointed out as models for future research on school violence.

It is difficult to assess levels of school violence in Canada based on the studies reviewed in this thesis. Canadian national studies of violent crime and victimization of students in elementary and high schools have not been conducted to date. The fact that most of the Canadian studies are flawed by poor conceptual analysis makes the results questionable. Many Canadian and American studies lack clear definitions of the conceptual elements of the research, both in the research reports and the questionnaires administered to subjects. Most Canadian and American studies do not solicit information concerning the seriousness of incidents (e.g., aggravated assault versus simple assault) or the severity of injury resulting from violent crime (e.g., whether the
injuries sustained were severe or minor). Furthermore, most studies do not measure whether victims suffered injuries.

A few American studies demonstrate good conceptual analysis. Those studies show that school-related homicides are extremely rare events and that simple assault appears to be the most prevalent type of violence among American students and the most common school violence problem facing America.
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CHAPTER ONE
INTRODUCTION

School Violence in North America

School violence in Canada and the United States is a topic of public and media concern following recent shocking incidents of student killings by their classmates in Canada and the United States. Events highly publicized in the media come to mind, including the Reena Virk case in Victoria, British Columbia, where a high school girl was beaten and drowned to death by her peers, although not on school property ("Accused Killer," 2004; Joyce, 2004; Reevely, 2003; "Legal Wrangles," 1998). Recent North American school shootings include the March 2001 incident in San Diego, California where a teenage student killed two students and wounded thirteen other people at a high school (Novarro, 2001). In February 2000, a first grade boy shot and killed a six-year-old girl at an elementary school in Mount Morris Town, Michigan (Slevin & Claiborne, 2000). In April 1999, there was a shooting of two students, one fatally, at a high school in Taber, Alberta (Bergman, 1999; Harrington, 2000). At Columbine high school (April 1999) in Littleton, Colorado, heavily armed 19-year-old Eric Harris and 17-year-old Dylan Klebold killed 12 of their classmates and one teacher and injured 23 others (some were critically injured). They "ended their deadly rampage in a double suicide" (Coleman, 2002, p. 17). According to the documentary motion picture Bowling for Columbine, more than 900 rounds of ammunition were fired that day at Columbine high school (Moore, 2002). The Columbine massacre is
“the worst school shooting in United States history” (Weintraub, Hall, & Pynoos, 2001, p. 129). Harris and Klebold attempted to kill many others at Columbine. They installed a propane tank in the school equipped to explode and they planted approximately 30 pipe bombs which took days for police to locate and defuse (Coleman). One year prior to Columbine, in Jonesboro, Arkansas (March 1998), four students and a teacher were shot and killed by two students aged 11 and 13 (“Jonesboro killers convicted,” 1998). In Springfield, Oregon, two months after the Arkansas incident, a 15 year-old student shot 24 classmates in a high school cafeteria, two fatally, after killing his parents (Garbarino, 2001). In Santee, California (March 2001), a teenage student shot and killed two students and wounded thirteen other people at a high school (Novarro). At a New Orleans, Louisiana high school (April 2003), a gunman with an AK-47 rifle shot and killed a student and wounded three others (“Gunman kills student,” 2003). In Red Lion, Pennsylvania (April 2003), a 14 year-old-boy shot and killed his school principal inside a crowded junior high cafeteria and then killed himself (Levy, 2003). In Vancouver, British Columbia, Canada (November, 2003), a 17-year-old boy was beaten to death, on a Friday night, on the school grounds of the high school he attended (Mickleburgh, 2003). Two teenage boys (aged 16 and 17-years-old) were charged with second-degree murder (Mickleburgh). These are all examples of extreme incidents of school-related violence that ended fatally.

The recent incidents of violent deaths occurring at schools do not reflect the norm. School homicides are rare events in North America. According to the National Crime Victimization Survey of the United States, simple assault appears
to be the most prevalent violent behavior among American students (DeVoe, Peter, Kaufman, Ruddy, Miller, Planty, Snyder, & Rand, 2003). Canadian national studies of violent crime/victimization of students in elementary and high schools have not been conducted to date. The United States (U.S.) Departments of Education and Justice (1999) summarize the public's common misperception of school violence and emphasize the media's role in sensationalizing tragic incidents. They state:

The recent school shootings have drawn heightened public attention to school crime and safety. Unfortunately, public perceptions of school safety are often fueled by media accounts that play up tragic events and fail to provide a real understanding of the accomplishments of schools or the problems they face. (p. 1)

The media sensationalizes school violence, based on isolated events, (Burnstyn & Stevens, 2001; Dolmage, 1996, 2000; Kappeler, Blumberg, & Potter, 2000) which creates widespread fear among the public that schools are unsafe places. Contrary to these perceptions, school-related homicide is a rare event. The chances of a student dying as a result of a school-associated violent incident is less than one in a million in the United States (Anderson, Kaufman, Simon, Barrios, Paulozzi, Ryan, Hammond, Modzeleski, Feucht, Potter, and the School-Associated Violent Deaths Study Group, 2001).

**Methodology**

This thesis reviews both Canadian and American studies of school violence. Although most of the American studies reviewed in this thesis are national, none of the Canadian studies reviewed are national. Published reports
and studies are used as the source of data. Reports for this thesis were located using the databases: Criminal Justice Abstracts, National Criminal Justice Reference Service, and ERIC. Additional research was obtained through the following Internet World Wide Websites: Centers for Disease Control (www.cdc.gov), National Center for Education Statistics (NCES) (http://nces.ed.gov), Statistics Canada (http://www.statisticscanada.com), University of Michigan (http://www.icpsr.umich.edu/SAMHDA), the U.S. Department of Education (http://www.ed.gov), and the U.S. Department of Justice, Bureau of Justice Statistics (http://www.ojp.usdoj.gov/bjs).

Research for this thesis was obtained from general subject searches from the Simon Fraser University library database. Reports were also located by referencing the bibliography of other scholarly works (e.g., Cornell & Loper, 1998; Furlong & Morrison, 2000; Maguire & Pastore, 1998, 2001; Miller & Chandler, 2003) or by contacting individuals at various public organizations (e.g., Alberta Teachers' Association; British Columbia Teachers' Federation; Canadian Research Institute for Law and the Family [Faculty of Law, University of Calgary]; Centers for Disease Control and Prevention; Manitoba Teachers' Society; McCreary Centre Society; New Brunswick Teachers' Association; Nova Scotia Teachers Union; Ontario Teachers' Federation; Parents' Resource Institute for Drug Education (PRIDE) Surveys; Mental Health, Law, and Policy Institute [Department of Psychology, Simon Fraser University]; Saskatchewan Teachers' Federation; Statistics Canada; U.S. Department of Justice, Bureau of Justice Statistics; and the University of Michigan, Institute for Social Research).
Newspaper articles for this thesis were located using the Canadian Business and Current Affairs database, Canadian Newsstand database, *The Vancouver Sun*, and *The Globe and Mail*.

The focus of the thesis is a critical evaluation of Canadian and American school violence studies. The main focus for evaluating the studies is an in-depth analysis of the conceptual frameworks and elements of the research. This thesis determines whether these studies solicited information concerning the seriousness of reported incidents.

The percentage rates of violence in schools, reported in the studies reviewed in this thesis, are evaluated as either high or low depending on how they compare with other related studies reviewed in this thesis. Canadian and American studies are compared separately because of differing investigations of types of violent behavior between the Canadian and American studies. For example, some of the Canadian studies investigated incidents of being threatened with a weapon (Gomes, Bertrand, Paetsch, & Hornick, 1999, 2000; Smith, Bertrand, Arnold, & Hornick, 1994, 1995), but do not specify types of weapons (e.g., gun, knife, club) as seen in other studies (e.g., Bachman, Johnson, & O’Malley, 1997c; Johnson, Bachman, & O’Malley, 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003; Johnson, Bachman, O’Malley, & Schulenberg, 2003; PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). Furthermore, the majority of American studies, reviewed in this thesis, are national, whereas, with the exception of the Statistics Canada’s General Social Survey, the Canadian studies are not national, as prior
mentioned. Many studies, regardless of category (i.e., Canadian student or teacher surveys or American national or individual studies) cannot be compared due to differing investigations or lack of definition of conceptual elements of the research.

The findings of school violence studies (e.g., rates of violent incidents), reviewed in this thesis, are reported in order to integrate the research of individual studies. This thesis aims to accomplish the goal of an “integrative research review,” which is a type of literature review: “The goal of an integrative [research] review is to summarize the accumulated state of knowledge concerning the relation(s) of interest and to highlight important issues that research has left unresolved” (Cooper, 1982, p. 292). This thesis serves to point out weaknesses of past research which is important in order for future researchers to learn from past researchers’ mistakes and avoid recycling the same mistakes.

For ease of discussion, all percentages have been rounded to the nearest whole number.

**Dark Figure of Crime**

The true extent of school-related violent crime is not known. The “dark figure” of crime is a major limitation of school violence statistics. The dark figure of crime is “the vast *number* of unrecorded crimes and criminals” (Coleman & Moynihan, 1996, p. 3). Crime is often underreported (Brantingham, Mu, & Verma, 1995; Fattah, 1991; Mosher, Miethe, & Phillips, 2002; Solicitor General
Canada, 1984; Sommer & Sommer, 2002). Police statistics are often incomplete because of crimes unreported by victims/ witnesses and discretionary practices of the police in recording of events; for example, police informally “screening out” some incidents from being recorded as crimes (Solicitor General Canada, 1984, p. 2). Some victims of school violence may not report their victimization (either to the police or school principal) if the victim feels the incident is not serious enough and/or if a victim fears their attacker. Victimization surveys attempt to uncover some of the dark figure of crime that is unreported in official statistics (Besserer & Trainor, 2000; Mihorean, Besserer, Hendrick, Brzozowski, Trainor, & Ogg, 2001; Fattah). According to the 1999 General Social Survey, a Canadian victimization survey, the most common reason, cited by victims, for not reporting crimes to police was “incident not important enough” (Mihorean et al., 2001, p. 41). A school principal’s decision regarding whether or not to report an assault to the police is not automatic compared with the necessity that comes with the decision to report a school homicide to the police.

In summary, victimization surveys are an important source of information for understanding the extent of school violence. These surveys can reveal the level and nature of school violence that is unrecorded by police and other official statistics.

The next chapter in this thesis reviews various definitions of school violence and provides a definition of school violence used in this thesis.
CHAPTER TWO
LITERATURE REVIEW

History

Conceptions of school violence have changed as lethal school violence has become a public concern. The definition of school violence today that includes mass murder has evolved from recent notorious school shootings. However, changes in the concept of school violence transpired even before the Columbine high school massacre. The concept of school violence before Columbine did not include mass murder. Rubel (1977) noted that, between 1950 and 1975, the nature of school fights has changed drastically, that is, "whereas the fights were previously limited almost entirely to words and fists, now there are aggravated assaults with dangerous weapons and murder" (p. 6).

Definition of School Violence

"Defining 'violence' in schools and society is a challenge," according to MacDougall (1993, p. 2). The term "school violence" has many different meanings (Flannery, 1997; Furlong & Morrison, 2000; Hanke, 1996; Kimweli & Anderman, 1997; MacDonald, 1998; MacDougall, 1993; Wall, 1995; West, 1993).

Assessing rates of school violence and establishing trends can be both difficult and confusing because of inconsistent and varying definitions. Inconsistent definitions of violence can result in methodological problems when comparing studies of school violence (Hanke, 1996). For example, some studies
may include property crime (such as vandalism) and bullying as forms of violence while other studies do not (Hanke).

The most commonly held definition of school violence includes "behaviors which can result in either physical or psychological harm," according to MacDonald (1998, p. 17). Therefore, acts of intimidation, harassment, and discrimination by students at school are included under this framework (MacDonald, daCosta, & Maynes, 1996). The definition of school violence should include "non-physical acts, harassment, and verbal slurs, recognizing that the victims of many violent, unindictable, delinquent behaviors should not be ignored," according to MacDonald (1997, p. 144).

Other scholars define violence more narrowly, limiting it to physical acts. For example, Elliott, Hamburg, and Williams (1998) define violence as:

- the threat or use of physical force with the intention of causing physical injury, damage, or intimidation of another person. We are concerned with interpersonal forms of violence . . . . homicide, aggravated assault, armed robbery, and forcible rape . . . shoving, punching, hitting, and throwing objects where the intent is to harm or intimidate another human being. Verbal and psychological abuse are not included in our definition of violence. Forms of physical violence that generally involve no intended injury or intimidation, e.g., hitting, slapping, shoving, and pushing, which are common among siblings and friends, are also excluded. (pp. 13-14)

Statistics Canada (1999) defines violent incidents as "offences that deal with the application, or threat of application, of force to a person. These include homicide, attempted murder, various forms of sexual and non-sexual assault, robbery, and abduction" (p. 71).

Statistics Canada's (1999) definition of violent incidents is used as the definition of school violence throughout this thesis. This definition is chosen
because it is precise. Definitions that are narrow, such as legal definitions, are "restrictive, yet precise" (West, 1993, p. 6). School violence is defined narrowly in order to maintain consistency and focus throughout the evaluation of studies in this thesis. Broad definitions of violence require narrowing for analyzing a social problem (Dentler, 1977).

The National Crime Victimization Survey's (NCVS) definition of violent crime is similar to Statistics Canada's definition (see page 70 of this thesis for discussion of NCVS). The NCVS includes rape, sexual assault, robbery (completed or attempted), aggravated assault, and simple assault (includes attempted assault without a weapon), however, murder is not included as a violent crime because the victim is deceased and not able to participate in this victimization survey (e.g., Addington, Ruddy, Miller, DeVoe, & Chandler, 2002; Chandler, Chapman, Rand, & Taylor, 1998; DeVoe et al., 2003; U.S. Department of Justice, Bureau of Justice Statistics, 2003b).

The Uniform Crime Reports (UCR), national statistics compiled annually by the Federal Bureau of Investigation (FBI) of the United States, limits the definition of violent crime to what would broadly be considered severe forms of violence (Federal Bureau of Investigation, U.S. Department of Justice, 2002). The UCR includes murder, rape, robbery, and aggravated assault in their definition of violent crimes (Federal Bureau of Investigation, U.S. Department of Justice). The UCR is an example of how a government source defines violence. The UCR defines the term "aggravated assault" as "an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily
injury" (Federal Bureau of Investigation, U.S. Department of Justice, 2002, p. 454). The UCR excludes simple assault in the definition of violent crimes (Federal Bureau of Investigation, U.S. Department of Justice); unlike this thesis, Statistics Canada, and the National Crime Victimization Survey which include simple assault as a type of violent crime. This thesis includes simple assault in the definition of school violence because simple assault involves physical force which arguably can be classified as a violent act. Furthermore, the NCVS employs simple assault in their definition of violent incidents (Addington et al., 2002; Chandler et al., 1998; DeVoe et al., 2003; U.S. Department of Justice, Bureau of Justice Statistics, 2003b).

The following forms of assault are included under the definition of violent incidents in this thesis: simple assault, otherwise known as common assault or minor assault and major assault (Stevenson, Tufts, Hendrick, & Kowalski, 1998). Common assault is "the [Canadian] Criminal Code category assault (level 1). This is the least serious form of assault and includes pushing, slapping, punching and face-to-face verbal threats" (Stevenson et al., 1998, p. 67). Major assault is defined as "more serious forms of assault under the Criminal Code; i.e., assault with a weapon or causing bodily harm (level 2) and aggravated assault (level 3)" (Stevenson et al., 1998, p. 68). Assault level 2 involves "carrying, using or threatening to use a weapon against someone or causing someone bodily harm" (Stevenson et al., 1999, p. 18; Trainor, 2002, p. 46). S. 268(1) of the Criminal Code provides that "Every one commits an aggravated assault who wounds, maims, disfigures or endangers the life of the complainant" (Criminal Code,
R.S.C. 1985, c. C-46). Assault is defined, in this thesis, using the definition provided in section 265(1) of the Canadian *Criminal Code*:

A person commits an assault when

(a) without the consent of another person, he applies force intentionally to that other person, directly or indirectly;

(b) he attempts or threatens, by an act or a gesture, to apply force to another person, if he has, or causes that other person to believe on reasonable grounds that he has, present ability to effect his purpose; or

(c) while openly wearing or carrying a weapon or an imitation thereof, he accosts or impedes another person or begs. (R.S.C. 1985, c. C-46)

Acts of harassment and intimidation are not included under the definition of school violence in this thesis. As for bullying, only incidents of physical assault and physically threatening types of bullying behavior are included. Bullying can be defined as “(a) aggressive behavior or intentional ‘harmdoing’ (b) which is carried out ‘repeatedly and over time’ (c) in an interpersonal relationship characterized by an imbalance of power . . . often occurs without an apparent provocation” (Olweus, 1994, p. 1173). The definition used in this thesis is not intended to minimize the experiences some students encounter by being harassed or bullied by their peers. Harassment and bullying are important social issues that, unfortunately, are a reality for some students. These issues are excluded from this thesis because of a necessity to narrow the investigation and focus of this thesis.

In this thesis, the term “school” includes institutions offering education (either public or private) to children in kindergarten through grade 12 or 13. This same definition of school can be applied to the term “grade schools” (Statistics
Canada, 2002b, p. 4.18). Universities and colleges are not examined because of a necessity to limit the focus of this thesis and because violence in grade schools has drawn particular attention from the mass media and garnered much public concern.

**Moral Panics**

Broad definitions of violence are problematic because they can distort perceptions of the situation: “Vague, generalizing definitions are provocative, politically sensitizing, yet also potentially alarmist,” according to West (1993, p. 6). A broad definition of violence that includes non-violent disruptive behaviors can have the effect of promoting and/or supporting a “moral panic” (Cohen, 1972, p. 9; West, 1993). Cohen, who “first formulated the concept of a moral panic” (Smelser & Baltes, 2001, p. 10030), describes a moral panic as a phenomenon that can occur when society feels threatened by individuals or a group labelled by society as deviant. Note that the term moral panic first appeared in an essay by Jock Young in a book edited by Cohen (1971). Cohen states that a moral panic occurs when:

> A condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereotypical fashion by the mass media; the moral barricades are manned by editors, bishops, politicians and other right-thinking people; socially accredited experts pronounce their diagnoses and solutions . . . Sometimes the object of the panic is quite novel and other times is something which has been in existence long enough, but suddenly appears in the limelight. (p. 9)
“School shootings, the media, and public fear: Ingredients for a moral panic,” the title of a journal article, best summarizes the relationship between school violence and a moral panic (Burns & Crawford, 1999, p. 147). Recent school shootings have resulted in increased public fear and concern (Blumstein & Wallman, 2000; Burns & Crawford, 2000; Casella, 2001; Dolmage, 1996, 2000; Donohue, Schiraldi, & Zeidenberg, 1998; Flaherty, 2001; Futrell, 1996; Gluckman, 1996; Mosher et al., 2002; McCann, 2001; National Research Council and Institute of Medicine, 2003; Trump, 2000). Definitions of school violence should be limited to acts of violence (see page 9 of this thesis) in an effort to control for misinterpretations of statistics that can mislead. For example, Wiseman (1993) defines school violence as anything that interferes with learning and working, including verbal abuse, “disruptive aggressive behavior” in the classroom, assaults, and carrying and use of weapons (p. 2). His definition is too broad. If a survey study applies this definition of school violence, the result would be inflated rates of “violence,” which may unjustifiably fuel the public’s fear of school violence.

The following chapter of this thesis reviews Canadian school violence studies in an attempt to determine the current state of school violence in Canada.
CHAPTER THREE
CANADIAN STATISTICS

Are levels of school violence increasing or is it just levels of public concern for violence in schools that are increasing? An in-depth survey of school violence in Canada found that "One thing on which we can agree is that there is an increasing concern for violence among children and youth" (Day, Golench, MacDougall, & Beals-Gonalizes, 1995, p. 21). A lack of reliable data collected over multiple time periods makes it difficult to determine the level of school violence in Canada (Day et al.). The majority of data is based on perceptions of teachers (Day et al.), that is, studies conducted by teachers’ federations of various provinces (British Columbia Teachers' Federation, 1994; Malcolmson, 1994; Manitoba Teachers' Society, 1990, 1993; New Brunswick Teachers' Association, 1994; Ontario Teachers' Federation, 1991b; Saskatchewan Teachers' Federation, 1994).

Most studies that investigate rates of violence in schools are studies that have been conducted only once (MacDougall, 1993, p. 15). There is an absence of longitudinal data collection that would allow yearly comparisons of rates of violence (MacDougall). However, Statistics Canada reports annual rates of school violence based on police data. Longitudinal studies have been described as "often the best way to study changes over time" (Babbie & Benaquisto, 2002, p. 88). Longitudinal studies are, however, limited by attrition and expense (Farrington, 1992; Gall, Borg, & Gall, 1996; Hagan, 1997). Longitudinal studies
are usually more complex and costly than cross-sectional research (Neuman, Wiegand, & Winterdyk, 2004).

The following section of this chapter discusses studies of school violence from Statistics Canada, teachers' federations across Canada, and other individual studies. In order to conduct an in-depth critical analysis of these studies of teacher and student victimization rates, the studies are discussed separately and divided into the following sections: Statistics Canada; teacher surveys; principal surveys of teacher victimization; student surveys; principal surveys of student victimization; teacher and student surveys; student, teacher, and administrator surveys; and police and school board surveys. The findings of teacher and student respondents are discussed separately for various reasons. A meaningful comparison between studies is not possible because of differing investigations and differing definitions of terms. For example, many of the teacher survey studies do not define physical attack (e.g., Buski, 1992; Manitoba Teachers' Society, 1990, 1993; New Brunswick Teachers' Association, 1994; Viewpoints, 1993; Wall, 1995), therefore, those studies are not comparable, on the basis of assault rates, to student survey studies that define assault (e.g., Duffee, 1994; Gomes et al. 2000; Kasian, 1992; Smith et al., 1995). In one case, the teacher survey study includes physical attacks on teachers' family members (e.g., Saskatchewan Teachers' Federation, 1994) in their definition of physical abuse, which makes a comparison with the student surveys not possible. Student survey studies, reviewed in this thesis, did not investigate physical attacks on teachers' family members. As for threats, while some of the
teacher/administrator surveys specify whether the reported threats were physical in nature (e.g., Lyon & Douglas, 1999; Manitoba Teachers’ Society, 1990, 1993; Saskatchewan Teachers’ Federation), the student surveys (e.g., Gomes et al., 1999; Smith et al., 1994) do not specify if the threats they experienced were physical.

Statistics Canada

Statistics Canada began to study locations of crime in 1988 with the initiation of the Incident-based Uniform Crime Reporting Survey (UCR2 Survey) (Statistics Canada, 2003). UCR2 Survey, reported in Statistics Canada’s annual *Canadian Crime Statistics* publication, is based on individual criminal offences reported to police departments. The UCR2 Survey is not national and is not representative of Canada (Janhevich, 1997; Statistics Canada). Mimi Gauthier, an Information Officer for the Canadian Centre for Justice Statistics, Statistics Canada, states that the Royal Canadian Mounted Police do not participate in the survey. The UCR2 Survey is limited only to certain municipal police departments (personal communication, September 8, 2000). In 2002, the Incident-based UCR Survey data was collected from 123 police departments, representing 59% of the national volume of police-reported crime in Canada (Statistics Canada). The province of British Columbia has only two police departments reporting to the UCR2 (Vancouver and Port Moody) and Manitoba and Nova Scotia only have one police department reporting (Winnipeg and Halifax) (Statistics Canada). The incident-based UCR data is not representative of any specific region in Canada:
41% of the incidents are currently from Ontario, 29% from Quebec, 11% from Alberta, 5% from British Columbia, 5% from Manitoba, 5% from Saskatchewan, 2% from Nova Scotia, 1% New Brunswick, and 1% from Newfoundland and Labrador (Statistics Canada).

School as a location of crime was not studied by Statistics Canada until 1988. Statistics Canada's UCR2 definition of school is not limited to grade schools (kindergarten through to grade 13 schools or equivalent) (the focus of this thesis), but also includes colleges, universities, and business schools (Statistics Canada, 2002b, 2002c; Stevenson et al., 1998). According to Statistics Canada, the reported rate of school-related violence is low; therefore, it stands to reason that the rate of violence in grade schools is low (Statistics Canada, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002a, 2003). The average rates, between 1994 and 2002, are calculated by the author of this thesis on the basis of dividing the sum of annual rates for each category of violence (e.g., homicide is one category), from 1994 through 2002, by the number of years between 1994 and 2002 (i.e., 9). The calculated percentage rates of police reported violent incidents at school are as follows: homicide (0.4%), sexual assault (1,2,3) (4%), assault (1,2,3) (5%), kidnapping/hostage taking (1%), abduction (5%), robbery (2%), and criminal harassment (3%) (Statistics Canada, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002a, 2003).

Statistics Canada conducted studies of violent youth crime on school property (Frank, 1992; Janhevich, 1997, Statistics Canada, 1993; Stevenson, et al., 1998). According to two studies (i.e., Janhevich; Stevenson et al., 1998), one
fifth (22%) of violent youth crime occurred on school property and few serious
injuries resulted from the reported violent incidents.

The UCR2 Survey, from 1988 through 1991, reports the following proportions of violent youth crime which occurred in schools: minor assaults (15%), aggravated assaults (13%), sexual assaults (6%), and robberies (2%) (Frank, 1992). In 1992, 19% of violent incidents involving youth occurred in schools (Statistics Canada, 1993). In 1992, of the incidents involving young offenders (aged 12 to 17), 24% of minor assaults, 17% of other assaults, 15% of sexual assaults, and 10% of robberies took place in schools (Statistics Canada, 1993).

One study found that in 1993, 28% of youth violent crime occurred in public institutions (Statistics Canada, 1994). Statistics Canada (1994) defines institutions as schools, public institutions, and public transportation facilities. This figure is, therefore, unrepresentative of schools because the category is too broad.

Statistics Canada's figures on school crime are dependent on offences reported to the police. Furthermore, as stated earlier, the UCR2 is limited only to police departments that participate in the survey.

Is urban school crime in Canada widespread? A Statistics Canada study, of urban school crime, found that 22% of violent youth crime occurred on school property (Janhevich, 1997). This rate is similar to the 19% rate reported in a previous Statistics Canada study (Frank, 1992). The study, based on 1995 data from the UCR2 Survey, is limited to data reported by police (not including RCMP)
from five of Canada's largest cities: Vancouver, Edmonton, Calgary, Toronto, and Montreal. Janhevich concludes that "given the fact that youths spend a large proportion of their time in schools, this proportion is not alarmingly high . . . .

Despite the recent concern over the safety of the school environment, the overwhelming majority of all youth victims of violent crimes were victimized off school property (85%)" (1997, pp. 1, 6).

Of all victims (aged 12-17) of violent school incidents, eight in ten were assaulted and one in ten was sexually assaulted (Janhevich, 1997). Janhevich defines violent crime as "violations against the person: violations causing or attempt to cause death (e.g., homicide), sexual assaults, assaults, violations resulting in the deprivation of freedom (e.g. abduction), robbery, extortion, criminal harassment, and other offences involving violence or the threat of violence" (1997, p. 3). Schools were defined as grade schools, colleges, universities, and business schools (Janhevich). Therefore, the following data is not limited to elementary and high schools. Most violent offenses on school property were for minor assault (Assault level 1) (60%) (Janhevich). The study found that the majority of violent incidents occurring at school do not result in major physical injuries (i.e., "injuries requiring professional medical attention at the scene or transportation to a medical facility") (Janhevich, 1997, p. 14). Only 6% of violent incidents resulted in serious injury (Janhevich). A total of 48% of all incidents involved minor injuries "requiring first-aid at most" (Janhevich, p. 14).

No physical injuries were reported in 45% of all violent incidents. These rates of injury are similar to the findings of Stevenson et al. (1998) (to be discussed).
Janhevich’s (1997) study is limited in that data was not collected separately for each school category, therefore, there is no specific data for elementary or high schools. The broad category of school, as defined by Statistics Canada, was applied in the study. Although the researcher discusses the rate of violent youth crime that occurred on school property, no further information is provided in the study regarding type of assault or seriousness of injuries of these incidents involving youth (Janhevich).

A Statistics Canada study, based on UCR2 Survey crime data from 179 police agencies in six provinces (New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, and British Columbia), found that, in 1997, 22% of victims of youth violence were victimized in schools (Stevenson et al., 1998, 1999). This rate is identical to the rate reported by Janhevich (1997) and is similar to the 19% rate reported by Frank (1992). Violent offences are defined in the study as “incidents that involve unlawful acts in which the perpetrator uses or threatens to use violence against a person. These include homicide, attempted murder, sexual and non-sexual assault, robbery and abduction” (Stevenson et al., 1998, p. 69).

According to a sample of police statistics, during 1997, 9% of all youth crime occurred on school property (Stevenson et al., 1998). A total of 38% of all incidents at school involved violent offences: 67% of violent incidents at school involved common assault, followed by major assault (16%) and robbery (7%) (Stevenson et al.). Stevenson et al. do not specify if these rates of violent incidents are limited to offences involving youth specifically or also include adult
offenders (i.e., offenders aged 18 years or older). In order to clarify the meaning of terms applied in the report, the researchers state that the term "common assault includes the Criminal Code category assault (level 1). This is the least serious form of assault and includes pushing, slapping, punching and face-to-face verbal threats" (Stevenson et al., 1998, pp. 21, 67; Stevenson et al., 1999, p. 18). Stevenson et al. define major assault as "more serious forms of assault under the Criminal Code, i.e. assault with a weapon or causing bodily harm (level 2) and aggravated assault (level 3)" (p. 68). These rates reported are not representative of Canada because the study is based on UCR2 Survey data (Statistics Canada, 2003; Stevenson et al., 1998, 1999). Statistics Canada explicitly states that UCR2 Survey data is not national (Statistics Canada, 2003). However, the findings provide at least some indication that serious violent crime (e.g., aggravated assault) may not be widespread.

According to Stevenson et al. (1998), only a small number of serious physical injuries resulted from violent incidents occurring on school property: "Less than 5% of victims reported major physical injuries (requiring medical attention), more than half of victims (52%) reported minor injuries (not requiring medical attention), and 44% reported no injuries" (p. 22). Stevenson et al. do not define or establish a criterion for the term "medical attention" (1998, p. 22). Therefore, it is not clear whether consulting a nurse for a band-aid constitutes medical attention. However, a separate Statistics Canada report defines minor injuries as "those that do not require professional medical treatment or only some first aid" and major injuries are defined as "those that require professional
medical treatment or immediate transport to a medical facility" (Trainor, 2002, p. 46). Based on these figures, which are almost identical to those reported by Janhevich (1997), it is plausible that only a small proportion of elementary and high school students in the sample suffered major injuries from violent incidents.

Teacher Surveys

Several surveys of victimization of teachers at school have been conducted. For example, the British Columbia Teachers’ Federation, Ontario Teachers’ Federation, Saskatchewan Teachers’ Federation, Manitoba Teachers’ Society, New Brunswick Teachers’ Association, and the Nova Scotia Teachers’ Union have all conducted research on this topic. Although these studies are methodologically limited in many ways, the effort to uncover the extent of teacher victimization at schools is an important aspect of research on school violence in order to help determine if violence is limited to the student population (i.e., student to student).

Many of the studies of violence directed toward Canadian teachers, reviewed in this thesis, are limited by conceptual problems (e.g., lack clear definitions or provide definitions that are too broad) (e.g., Malcolmson, 1994; Manitoba Teachers’ Society, 1990, 1993; New Brunswick Teachers’ Association, 1994; Nova Scotia Teachers’ Union, 1999a, 1999b; Ontario Teachers’ Federation, 1991b; Viewpoints Research, 1993; Wall, 1995). Of all the studies reviewed, by the author of this thesis, on teacher victimization in Canada, Lyon and Douglas (1999) is an exemplary study of school violence and teacher
victimization in terms of good conceptual analysis, demonstrated by clear
definition of terms provided in the report and questionnaire; extensive
investigation regarding the prevalence of various types of violent victimization;
and scale of severity of injuries.

The seriousness of the reported incidents (e.g., minor/common assault
versus aggravated assault) and severity of injury was not investigated in most of
the teacher survey studies reviewed in this thesis (e.g., Manitoba Teachers'
Teachers' Union, 1996, 1999b; Ontario Teachers' Federation 1991b;
Saskatchewan Teachers' Federation, 1994; Viewpoints Research, 1993; Wall,
1995). Few studies of teacher victimization, reviewed in this thesis, investigated
whether a weapon was involved in reported incidents of physical attack or
conducted a separate investigation of physical attacks with and without a weapon
(e.g., Kasian, 1992; Lyon & Douglas, 1999).

Most studies, reviewed in this thesis, are incomparable because of varying
definitions of terms applied in the studies or lack of definition provided in the
studies. For example, none of the teacher survey studies defined the term
"physical attack" even though rates of physical attack were investigated (e.g.,
Buski, 1992; Manitoba Teachers' Society, 1993; New Brunswick Teachers'
Association, 1994; Wall, 1995). Therefore, the nature and extent of physical
attacks is not clear, such as the proportion of simple assault versus aggravated
assault cases. The lack of definition and data precludes a meaningful
comparison. The term "physical abuse" varied in definition between studies (e.g.,
Manitoba Teachers' Society, 1990, 1993; Nova Scotia Teachers Union, 1999b). Teacher survey studies, reviewed in this thesis, are incomparable because of varying types of reported victimization. For example, Lyon and Douglas (1999) investigated many different types of physical violence directed toward teachers (e.g., threatened physical violence with and without a weapon, attempted physical violence with and without a weapon, and actual physical violence with and without a weapon), whereas most studies of violence directed toward teachers, reviewed in this thesis, did not conduct their study to provide these kinds of distinctions (e.g., Kasian, 1992; Malcolmson, 1994; Manitoba Teachers' Society, 1990, 1993; New Brunswick Teachers' Association, 1994; Nova Scotia Teachers' Union, 1996, 1999b; Ontario Teachers' Federation, 1991b; Saskatchewan Teachers' Federation, 1994; Viewpoints Research, 1993; Wall, 1995). For example, many of the teacher studies reported only one general rate of physical abuse/violence directed toward teachers, but they did not investigate levels of attempted violence versus completed violent acts nor did most of the studies investigate proportions of weapon involvement (e.g., Manitoba Teachers' Society, 1990, 1993; New Brunswick Teachers' Association, 1994; Nova Scotia Teachers' Union, 1999a, 1999b; Ontario Teachers' Federation, 1991a, 1991b; Saskatchewan Teachers' Federation, 1994; Viewpoints Research, 1993).

Another reason some studies could not be compared is because of different time-frames of when respondents were asked to recall victimization incidents. For example, some teacher studies asked respondents to recall victimization incidents that occurred in the previous year (Saskatchewan...
Teachers' Federation, 1994), previous academic year (September-June) (Kasian, 1992; Lyon & Douglas, 1999), previous 9 months (Duffee, 1994), previous 15 months (Manitoba Teachers' Society, 1993), previous 1.5 years (Manitoba Teachers' Society, 1990), previous 20 months (New Brunswick Teachers' Association, 1994), previous two years (Buski, 1992; Wall, 1995), previous two weeks (Wall, 1995), during the course of their career (Lyon & Douglas, 1999), or ever (i.e., where no time-frame was specified) (Nova Scotia Teachers' Union, 1999a, 1999b; Viewpoints Research, 1993). When comparing victimization rates between studies, the studies being compared should have applied the same time-frames in their methodology. Otherwise, a valid comparison is not possible because it creates ambiguity as to whether a higher rate reported in one study is due to the elapse of time or higher levels of violent incidents.

Manitoba Teachers' Society

A study of emotional and physical abuse of Manitoba teachers found that, during the 1.5 years prior to the study, 17% of the teacher respondents reported being physically abused and 28% reported that they experienced damage to personal property (Manitoba Teachers' Society, 1990). A survey questionnaire was administered to both teachers and administrators. Physical abuse is defined as “acts of violence against teachers, their families, and/or their property (e.g. hitting, kicking, slapping, broken car mirrors, flat tires, eggs, etc.)” (Manitoba Teachers' Society, p. 4). This definition of physical abuse is too broad because it includes property crime. Alternatively, the definition should be limited to acts of
physical assault and not include property damage and vandalism. The term "physical abuse," as in child abuse cases, is typically associated with physical injuries (e.g., bruises, abrasions, lacerations, wounds, cuts, etc.) (Dembo, Williams, Schmeidler, Berry, Wothke, Getreu, Wish, & Christensen, 1992; Lewis, Shanok, Pincus, & Glaser, 1979; Widom, 1989, 1991; Widom & Ames, 1994) and physical assault (e.g., beaten, slapped, hit, kicked, strangled) (Dembo et al.; Dutton & Hart, 1992; Hamalainen & Haapasalo, 1996; Lewis et al.). The questionnaire used in the study, however, separates these categories (Manitoba Teachers' Society, 1990). It is important for researchers to avoid broad definitions of terms, otherwise, their results could be distorted. For example, if this figure of physical abuse is reported in the media (and the media does not provide any other findings of the study), there is a danger that the public could assume that this term represents only acts of physical violence toward teachers, not property crime.

Based on the definition of physical abuse applied in the study, these rates do not make sense. If physical abuse and personal property damage are supposed to be part of the same definition of physical abuse, then the percentage of damage to property should not exceed the percentage of physical abuse.

Physical and emotional abuse are defined in both the research report and in a letter attached to the questionnaire (Manitoba Teachers' Society, 1990). The researchers’ attempt at conceptual clarity strengthened the study. Respondents were provided with an understanding of the meaning of terms to help ensure
valid responses. The frequency of different types of physical and emotional abuse were investigated. Of the teacher respondents who reported abuse, 17% indicated physical abuse, 88% indicated emotional abuse (i.e., insults and obscene gestures), and 28% indicated damage to personal property (Manitoba Teachers' Society).

Teacher and administrator respondents ranked threats as the third most frequent type of abuse followed by physical abuse, harassment, and attacks on family (Manitoba Teachers' Society).

Three years later, the Manitoba Teachers' Society (1993) conducted another study and found that 10% of the teacher respondents reported experiencing physical attacks during 1.5 years prior to the study, an increase of 3% since the 1990 survey (the latter rate was not included in the 1990 report, but is listed in the 1993 report). A definition of physical attack was not provided in the study (Manitoba Teachers' Society, 1993). Other studies of school violence, reviewed in this thesis, are more specific regarding the nature of physical attacks in that (student) respondents were surveyed as to whether they were “slapped, punched, or kicked” (Gomes et al., 2000; Smith et al., 1995). A few studies of violence directed toward teachers, reviewed in this thesis, investigated rates of physical violence with and without a weapon (Kasian, 1992; Lyon & Douglas, 1999). These researchers (Gomes et al.; Kasian; Lyon & Douglas; Smith et al.) all attempt to narrow what is otherwise a broad term. It is important to clearly define and, if necessary explain terms, in questionnaire items, in order that respondents and readers are clear as to their meaning. A total of 8% of teachers
reported threats of physical injury. The same definitions of physical and emotional abuse are applied in both studies (Manitoba Teachers' Society, 1990, 1993), including the survey questionnaires.

Although abuse is reported to be rising to 47%, compared to 39% in the previous study, the most common form of abuse, reported by teacher respondents, is verbal abuse (45%), defined as “insults, obscene gestures, and abusive telephone calls” (Manitoba Teachers' Society, 1993, p. 3). The second most prevalent form of abuse reported is damage to property, reported by approximately 15% of teacher respondents (Manitoba Teachers' Society). Teachers and administrators ranked types of abuse in the following order (beginning with the most frequently occurring behavior): insults and obscene gestures, damage to personal property, physical attacks, threats of physical injury, harassment, and attacks on family members (Manitoba Teachers' Society).

**Ontario Teachers' Federation**

A study of teacher assault found that 441 major assault incidents were reported in the 931 schools (school principal respondents) responding to the survey (Ontario Teachers' Federation, 1991b, p. 8). Information was solicited for the years 1987-1988 and 1988-1989. Incidents of reported major assault range from physical biting; kicking; scratching; punching; pushing, to use of knives, firearms, and other instruments that could inflict serious injury, and personal property damage such as damage to teachers' cars. The researchers do not
provide percentage rates for all types of incidents. The principals reported 6,342 minor assault incidents. Minor assaults included verbal assault and profanities, trespassing, pushing, biting, insubordination, threatening behavior, refusal to follow reasonable instructions, crank and obscene telephone calls, personal property damage, and threats by parents. Most of the above reported incidents, all of which were counted as minor assaults in the study, do not fit the criteria of assault in the Criminal Code (R.S.C. 1985, c. C-46). The Criminal Code is explicit that assault includes the application of force or threat to apply force: Verbal profanity, trespassing, property crime, insubordination, and harassment are not included under the Criminal Code's definition of assault.

The researchers conclude that both major and minor assaults are increasing at alarming rates (more than doubling compared to the previous school year surveyed) (Ontario Teachers' Federation, 1991b). They admit, however, that given the "significant" increase in incidents of teacher assault cases in the past three years, the problem involves relatively few of the student population (Ontario Teachers' Federation, 1991b, p. 15). Furthermore, they note that "a significant number" of schools did not record any incidents of assault (which they admit could be due to differing interpretations of assault) and there were no serious teacher assaults in any of the schools (Ontario Teachers' Federation, 1991b, p. 14). Unfortunately, the above comments, intended to put the matter in perspective, are not included in their sensational press release entitled Assaults in Ontario Schools on the Rise (1991a) which states that physical and verbal assaults in Ontario's schools are rising at an alarming rate.
Interestingly, in a supplement to the study, the Ontario Teachers' Federation states that data should be “interpreted with caution” due to the subjective nature of the principal's judgement of major and minor incidents (p. 2). Unfortunately, these comments were also absent in their press release.

The questionnaire does not provide clear definitions of major and minor assault; only examples of major and minor assault incidents were provided in the questionnaire (Ontario Teachers' Federation, 1991a, 1991b). The questionnaire examples of minor assault incidents are as follows: “punching, scratching, biting, pushing, insubordination, and serious verbal abuse” (1991b, Appendix A). It is questionable whether the term “insubordination” belongs in the category of minor assault, particularly in the context of a school violence study which should be a study of violent behavior, not disobedience (1991b, Appendix A). Furthermore, an incident of punching could be categorized as a major assault incident in the case of aggravated assault. Examples of major assault incidents provided in the questionnaire are as follows: “assault with a weapon, threatening with a weapon, serious physical injury, serious verbal threats re teachers personal safety, and constant bullying” (1991b, Appendix A). The terms “bullying” and “serious physical injury” are not defined in the questionnaire which would have been helpful so that respondents were clear as to the meaning (1991b, Appendix A). The respondents may have differed in their interpretations of what constitutes a major versus minor incident; for example, teachers reported pushing and biting under both categories (even though these particular acts were listed in the questionnaire as examples of minor incidents).
Data was not reported for each category of major/minor assault types; for example, the number of incidents of scratching versus assault with a weapon is not reported. In the questionnaire, the researchers included only a number of incidents category in the questionnaire, where respondents would list the total number of major or minor incidents they experienced in the years from 1987-1988 and 1988-1989, and an open-ended question asking respondents to describe the nature of the incident. Verbal assault by students (including use of profanity) is the most common assault reported by principals.

The researchers' claim of alarming rates of school violence should be supported by a study that provides clear definitions of terms applied in the questionnaire, solicits information concerning the prevalence of various types of assault, and reports findings related to the prevalence of the different types of assault. The researchers did not satisfy these suggested criteria.

**Alberta Teachers' Association**

A survey of teachers from the Alberta Teachers' Association found that only 8% of teachers had been physically attacked at least once during the two years prior to the study (Wall, 1995). According to Wall (personal communication, August 2, 2000), the Alberta Teachers' Survey is an internal document not publicly available. The term "physical attack" is not defined in the survey (Buski, 1992, p. 38). Therefore, the seriousness of the assaults is not known. Buski warns that the survey findings should be interpreted "with some
caution” due to the lack of a clear definition of the term “physical attack” (1992, p. 38). This word of caution is warranted.

**New Brunswick Teachers’ Association**

A survey of New Brunswick teachers found that 22% of respondents reported having experienced physical attacks from September 1991 to April 1993 (The New Brunswick Teachers' Association, 1994). The term “physical attack” was neither defined in the study nor the questionnaire (New Brunswick Teachers' Association, p. 13). The researchers should have defined this term in order that teacher respondents clearly understood the meaning and readers understand the significance of the results. Furthermore, it would have been helpful if the researchers had investigated rates for different types of physical attacks teachers have experienced (e.g., simple assault versus aggravated assault). This information would provide an understanding of the seriousness of assaults.

**Saskatchewan Teachers' Federation**

A survey on the abuse of Saskatchewan teachers found that 40% of teachers reported experiencing abuse in the previous year (Saskatchewan Teachers' Federation, 1994). The majority of incidents (65%) involved verbal abuse, which the researchers define as “insulting or threatening words or gestures, excluding physical or property damage aspects” (Saskatchewan Teachers' Federation, p. 9). Only 7% of incidents involved “threats of physical violence or other harm to you or your family” (Saskatchewan Teachers'
Federation, p. 7). The researchers should have investigated threats of physical violence and incidents involving "other harm" separately in order to establish rates of physical threats of violence. Furthermore, incidents involving teachers' family members should have been investigated separately. Collapsing these variables into the same category precludes comparison with other studies (e.g., Lyon & Douglas, 1999) regarding threats of physical violence reported by teachers. Eighteen percent of teachers reported experiencing physical abuse. Physical abuse is defined, in the research report, as "contact either harmful or intended to harm, against the teacher or their family" (e.g., hitting, kicking, scratching, slapping, punching, throwing objects, etc.) (1994, p. 8, Appendix, p. 1). The researchers provide definitions of abuse both in the research report and the questionnaire (Saskatchewan Teachers' Federation, 1994). This attempt at conceptual clarity strengthened the study. However, they did not investigate different types of physical abuse (such as hitting, kicking, scratching), which would have provided the reader with information regarding the severity of incidents. For example, incidents involving punching are more likely to be serious than scratching incidents. Even though abuse directed toward teachers and their families had been investigated separately, the findings were collapsed into one figure in the research report (Saskatchewan Teachers' Federation). The lack of reporting exact victimization rates of teachers themselves precludes comparison of rates with other studies that investigated teacher victimization.
British Columbia Teachers' Federation

A qualitative research study by the British Columbia Teachers' Federation (BCTF) found that only two out of thirty teachers (7%), participating in the study, reported being physically assaulted by students (Viewpoints Research, 1993). This rate cannot be compared to other studies, reviewed in this thesis, because the researchers (Viewpoints Research) did not specify a time-frame in which the incidents occurred (e.g., in the previous year). All of the teachers participating in the study recounted incidents of verbal and physical violence in their schools (Viewpoints Research). The study is weakened by poor conceptual analysis. The researchers do not clearly define verbal and physical violence. What is verbal violence? Is a verbal threat part of the definition, or is uttering profanity considered verbal violence? The definition of verbal violence should be limited to threats of physical injury. Researchers of school violence need to carefully define and appropriately apply terms related to violence. Furthermore, the Canadian Criminal Code is explicit that assault includes a threat to apply force: verbal profanity is not included under the Criminal Code's definition of assault (Criminal Code, R.S.C. 1985, c. C-46). At what level is a physical act considered violent? For example, is pushing and/or scratching considered violent? Although the researchers do not address this issue, it is the opinion of the author of this thesis that pushing and scratching are forms of assault, an act of violence; however, these acts should be classified as assault level 1 (simple assault). Researchers should distinguish between different levels of assault in order to indicate the seriousness of the assault. Furthermore, although the researchers
counted the number of teachers who reported being physically assaulted by students, they do not provide figures for other types of violence they investigated such as number of incidents of verbal violence toward teachers, verbal and physical violence between students, and weapon-carrying among students (Viewpoints Research).

A study of teacher perceptions of violence, in British Columbia schools, found that teachers generally ranked violence in their schools as not very serious and that 1% of respondents indicated that it is very serious (Malcolmson, 1994). The study showed that most teachers (66%) “never feel threatened or intimidated within the school setting” and almost all others (30%) feel this way occasionally. In the questionnaire, the researcher did not specify a time-frame for respondents to recall incidents (Kuehn, Flanders, Carlson, & Malcolmson, 1993). The researcher does not define the term “violence” in the report; however, the term is defined in the questionnaire: “the threat or use of force that injures or intimidates a person (makes them feel afraid) or damages property. This includes threats or use of force aimed at a teacher’s partner or family member if the intent is to intimidate the teacher” (Kuehn et al., 1993, p. 21). A problem with this definition is that damage to property is not a type of violent victimization, just as property crime is not a type of violent crime (Brantingham et al., 1995; DeVoe et al., 2003; Dressler, 2002; Fattah, 1991; Federal Bureau of Investigation, U.S. Department of Justice, 2002; Nash, 1992; Simon, Mercy, & Perkins, 2001; Statistics Canada, 2003, Stevenson et al., 1998; U.S. Department of Justice, Bureau of Justice Statistics, 2003b). Property crimes include burglary (break and enter), motor
vehicle theft, or theft (i.e., "completed or attempted theft of property or cash without personal contact"), whereas crimes of violence include murder, forcible rape, sexual assault, robbery, or assault (Federal Bureau of Investigation, U.S. Department of Justice, 2002; Nash, 1992; Statistics Canada, 2003; Stevenson et al., 1998; U.S. Department of Justice Statistics, Bureau of Justice Statistics, 2003b, Criminal Victimization Glossary).

Based on informal interviews with teachers, violence-prevention field-workers, and reading-related materials, the British Columbia Teachers' Federation (1994) concludes that violence is of increasing concern. However, they do not report percentage rates of violence, only general trends. For example, they report there is an increase in the following: more aggressive behavior among younger children, more severe violence, more weapons, increase in female involvement, verbal abuse, lack of respect for authority, increase in "informal gangs," and "unprovoked random acts" (1994, p. 6). The BCTF describes more severe violence as:

rather than one-on-one fights there has been a tendency to group attacks on individuals. Some teachers are noticing children resort to violence to resolve conflict more quickly than in the past. There are also reports of the 'end point' of the fights changing- the attack continues even after the victim is down. (p. 5)

Again, these findings are based on informal interviews and some literature reviews.

A more recent survey on violence against British Columbia teachers (731 members of the British Columbia Teachers' Federation), conducted by Lyon and Douglas (1999), found that approximately half (50%) of teachers experienced
some form of violence in 1997/1998 and 81% reported experiencing violence
during the course of their careers. Violence is defined as “any threatened,
attempted, or actual harm to a person or persons” (Lyon & Douglas, p. 5). Lyon
and Douglas report that “violence prevalence and seriousness were inversely
related” (p. 6). Five percent of teachers reported actual physical violence, that is,
“violence in which physical contact was actually made”, for the 1997-1998 school
year and 12% in their careers (Lyon & Douglas, p. 20). While 43% of
respondents reported “covert violence” (defined as “insidious, non-physical
behavior intended to harm”) in 1997-98, and 76% reported experiencing covert
violence in their careers, the rate was less for “overt violence” (defined as
“attempted, threatened, or actual physical violence”), totaling 10% for 1997/98
and 28% for career (Lyon & Douglas, p. 6).

A total of 6% of teachers reported being physically threatened with a
weapon and 1% were physically threatened without a weapon (Lyon & Douglas,
1999). Three percent of teachers reported having experienced attempted
violence without a weapon and 1% reported attempted violence with a weapon.
Four percent of teacher respondents experienced actual physical violence
without a weapon and 1% experienced actual physical violence with a weapon
(Lyon & Douglas).

Of the teachers who were injured as a result of violent incidents, 96%
indicated that they suffered only minor injuries that did not require medical
treatment (Lyon & Douglas, 1999). Lyon and Douglas designed their study to
investigate different types of physical injuries: “minor injuries (no treatment),
moderate (treated and released), and severe (hospitalized)” (p. 31). This information provides the reader with an indication of the seriousness of assault incidents. The researchers do not define or establish a criterion for the term “medical treatment” in either the report or the questionnaire; therefore, it is not clear whether seeing a nurse for a band-aid constitutes medical treatment (p. 31). Of the teachers who reported experiencing a violent incident at school, 5% indicated that no physical injuries were sustained, 1 respondent reported moderate physical injuries (treated and released), and none of the respondents reported severe physical injuries that required hospitalization (Lyon & Douglas). Similarly, Duffee (1994) found that only 1 teacher respondent required medical treatment as a result of an assault incident at school.

Lyon and Douglas (1999) is an exemplary study of school violence and teacher victimization in terms of both good conceptual analysis and providing a scale of severity of injuries (except that the term medical treatment should have been defined). They clearly define their terms, both in the research report and the questionnaire administered to teachers. Furthermore, the extent of their investigation of types of violence is exemplary. Lyon and Douglas did not investigate rates of robbery: Future research should include an investigation of this type of violent behavior.

The response rate of 34% is low; therefore, the findings may not represent the teachers of the BCTF population. Some researchers set a standard for an adequate response rate being around 50% (Babbie & Benaquisto, 2002; Maxfield & Babbie, 1995).
Principal Surveys of Teacher Victimization

Manitoba Teachers' Society

The Manitoba Teachers' Society (1993) study of teacher abuse found that, according to the administrators surveyed, most teacher abuse incidents involve verbal abuse (50%); and the other more serious forms of abuse (physical attacks, property damage, threats of physical injury, harassment and attacks on family members) all rank below 22%. In the 1993 study, rates of different types of teacher abuse handled by administrators were compared with the 1990 study (rates that were not mentioned in the 1990 report). Of the teacher abuse incidents reported by principal respondents, physical attacks rank 21% in 1993 compared to 18% in 1990; attacks on teacher family members rank 2% for both years; and threats of physical injuries rank 22% in 1993, compared to 18% in 1990.

Nova Scotia Teachers' Union

The Nova Scotia Teachers' Union surveyed Nova Scotia principals in 1992, 1995, and 1999 (Nova Scotia Teachers' Union, 1999b). The following rates reported are based on a Nova Scotia Teachers' Union press release and a chart that lists victimization rates of teachers. Verbal violence directed toward teachers was the most common form of violence reported: 73% of the total violent incidents in 1992, 82% in 1995, and 65% in 1999 (Nova Scotia Teachers' Union, 1999b). Verbal violence was defined in the 1999 questionnaire as “any socially unacceptable comment, derogatory remark about a person, or threat of
harmful action made by a student against a teacher or within range of being heard by a teacher” (Nova Scotia Teachers' Union, 1999a, section ii). The Nova Scotia Teachers' Union did not investigate different types of verbal violence, which would have provided the reader with information regarding the severity of incidents. For example, incidents involving a threat of harmful action (e.g., physical and potentially life-threatening) are more serious than incidents involving a derogatory remark about a person. The findings of the Saskatchewan Teachers' Federation (1994) and the Nova Scotia Teachers' Union (1996) regarding verbal abuse cannot be compared because of varying definitions of the term “verbal abuse.” For example, the Saskatchewan Teachers' Federation's definition of verbal abuse specifies that it does not include physical threat, whereas the Nova Scotia Teachers' Union is ambiguous as to whether “threat of harmful action” (1999a, p. 2) includes physical harm.

A large number of schools reported no incidents of physical violence: 68% in both 1992 and 1995 and 79% in 1999 (Nova Scotia Teachers' Union, 1999b). Of the total reported incidents of violence, rates of physical violence directed toward teachers are as follows: 15% in 1999, 10% in 1995 and 13% in 1992 (Nova Scotia Teachers' Union, 1999b). Physical violence is defined in the 1999 questionnaire as “any aggressive act against a teacher's person or property wherein there is contact and there may or may not be injury to a person or damage to property” (Nova Scotia Teachers' Union, 1999a). The Nova Scotia Teachers' Union (1996) does not provide this definition in their press release. A problem with this definition is that damage to property is not a type of violent
victimization, just as property crime is not a type of violent crime (Brantingham et al., 1995; DeVoe et al., 2003; Dressler, 2002; Fattah, 1991; Federal Bureau of Investigation, U.S. Department of Justice, 2002; Simon et al., 2001; Statistics Canada, 2003; Stevenson et al., 1998; U.S. Department of Justice, Bureau of Justice Statistics, 2003b). The researchers should have investigated assault and property offences separately.

The Nova Scotia Teachers' Union (1996) press release is the only report that summarizes the survey findings. The only other source of information, from the Nova Scotia Teachers' Union, is a chart listing all of the findings (Nova Scotia Teachers' Union, 1999b). The 1996 press release begins by quoting MacDonald, President of the Nova Scotia Teachers' Union, stating that [incidents of school violence in Nova Scotia schools] “have risen more than 28 percent since a 1992 survey” (p. 30). MacDonald's statement is misleading because the study found that only the incidents of verbal violence were greater in 1995 compared to 1992, not physical violence. The total incidents of physical violence in 1995 were identical compared to the total incidents in 1992 (350 incidents of physical violence in both 1992 and 1995). Although he mentions rates of violence later in the news report, both the statement regarding 28% and the title of the press release, “School Violence Increasing” should have been eliminated to avoid misleading readers.

The study should have included a survey of teachers because of the possibility that the principal respondents may be unaware of the true extent of
teacher abuse, which could be due to unwillingness of some teachers to report abuse and inaccuracy of school records.

The response rates are as follows: 70% in 1992, 64% in 1995, and 39% in 1999 (Nova Scotia Teachers’ Union, 1999b). The 1999 response rate is inadequate and therefore limits the study. A 50% response rate is generally considered adequate, 60% is good, and 70% is very good (they note that these rates are “rough guides” that have no statistical basis) (Babbie & Benaquisto, 2002, p. 258; Maxfield & Babbie, 1995, p. 227).

**Student Surveys**

Administering survey questionnaires to students is one method of studying levels of violent victimization in schools. It is important to gain insight into the prevalence of school violence from the perspective of students. It is hoped that student respondents divulge information regarding unreported incidents of school-related violence, that is, incidents of which teachers and principals are unaware. A guarantee of anonymity encourages student respondents to report incidents that they have witnessed or in which they have been the victim. Anonymity encourages truthful responses to survey questions that ask respondents to indicate crimes they have committed at school (if any). If respondents are not guaranteed anonymity there is a risk that they may not admit to criminal behavior for fear of detection, particularly for crimes that have not yet been detected/reported to the police or school principal.
Many of the Canadian studies of violence against students, reviewed in this thesis, are limited by conceptual problems (e.g., lack clear definitions of at least one term applied in the study) (e.g., Gabor, 1995; Gomes et al., 2000; King, Boyce, & King, 1999; MacDonald, 1995; McCreary Centre Society, 1998; Ryan, Matthews, & Banner, 1993, Smith et al., 1995). Seriousness of reported incidents (e.g., minor/common assault versus aggravated assault) and severity of injury (if any) was not investigated in most of the student survey studies reviewed in this thesis (e.g., Kasian, 1992; King et al., 1999; MacDonald, 1995; McCreary Centre Society, 1998, 1999; Ryan et al., 1993; Smith et al., 1994, 1995).

It is not possible to compare rates of reported violence in most of the student survey studies because of varying definitions of terms. For example, in one study, the term “assault” is defined variously as both actual incidents and threats (e.g., Duffee, 1994). Other studies limit the definition of assault to include only actual incidents of assault (e.g., Gomes et al., 2000; MacDonald, 1995; Ryan et al., 1993; Smith et al., 1994, 1995). Some studies could not be compared because of different time-frames of when respondents were asked to recall victimization incidents. For example, some studies asked student respondents to recall victimization incidents that occurred in the previous year (Gomes et al., 2000; McCreary Centre Society, 1998, 1999; Smith et al., 1994, 1995), previous academic year (Kasian, 1992), previous 9 months (Duffee, 1994), or ever (i.e., where no time-frame was specified) (MacDonald, 1995; Ryan et al., 1993).
Only two Canadian student survey studies are comparable (e.g., Gomes et al., 2000; Smith et al., 1995). These two studies applied the same time-frame of when respondents were to recall incidents and investigated the same types of victimization. For example, both studies investigated the following types of victimization incidents: threatened to be hurt; threatened with a weapon; punched, slapped, or kicked; sexually touched against will; and something taken by force (Gomes et al.; Smith et al.).

Ryan et al. (1993) surveyed over 850 students in two middle level schools in Ontario. They report results for both “School A” (the pilot study), grades 6, 7, and 8, and “School B,” grades 7, 8, and 9. In the questionnaire, the researchers did not specify a time-frame for respondents to recall incidents (other than specifying in the instructions of the School A questionnaire that their responses were to exclude the present school year). Therefore, it is not known when the reported victimizations occurred, which precludes a comparison with other studies reviewed in this thesis (see page 26, of this thesis, for a discussion of the importance of similar time-frames when comparing studies).

Of the School A students, approximately 45% reported there was “Some” to “A Lot” of violence in the schools (Ryan et al., 1993, p. 6). Although the researchers do not provide exact percentages, one can estimate from the graphs provided that 32% of students were in the “Some” category and 12% of students were in the “A Lot” category (p. 6). However, the researchers do not provide definitions of the term “school violence” in either the report or questionnaire (Ryan et al., pp. 6, 110). They should have defined this term in order that
students clearly understand the meaning and readers understand the significance of the results (Ryan et al.).

School A students reported experiencing the following violent victimization: threatened (29%), beaten-up while in school (e.g., kicked/punched) (16%), robbed (14%), hurt or threatened with a weapon (8%), and sexually assaulted (5%) (Ryan et al., 1993). Ryan et al. do not define the term “threatened,” in the report or questionnaire; therefore, it is unclear whether the term is limited to threats physical in nature or could include non-physical threats, such as a student’s threat to report another student’s misconduct to the school principal for disciplinary action (pp. 12, 111). A physical threat of bodily harm is significantly more serious compared to a threat to report misconduct. In research, it is important to distinguish between physical and non-physical threats. Note that one can assume that Ryan et al. did not intend for the category of threatened to include being threatened with a weapon because students were asked, in a separate questionnaire item, whether they or someone they knew had been threatened with a weapon. Ryan et al. likely realized their oversight in the pilot study because in the School B questionnaire, the threatened category was disaggregated into physically threatened, threatened with a weapon, and have something stolen with threats or physical violence.

Approximately 63% of School B students reported that there was “A Moderate Amount” to “A Lot” of violence in their school (Ryan et al., 1993, p. 43). Again, although the researchers do not list exact percentages, one can estimate from the graphs that 52% of students reported “A Moderate Amount” and 12%
reported "A lot" (p. 43). The rate of 12% is the same as reported by the School A respondents. School B students reported the following types of violent victimization: physically threatened (23%), beaten up while in school (e.g., kicked/punched) (13%), threatened with a weapon (7%), had something stolen with threats or physical violence (5%), assaulted with a weapon (3%), and sexually assaulted (2%). Of the rates that are comparable, the rate for “beaten up” and sexually assaulted are 3% lower than the rates reported by the School A respondents.

A survey of 231 students in five junior high schools, located in Edmonton, Alberta, found that approximately half of the students reported experiencing the following behaviors: fights (51%), threats with weapons (16%), verbal threats (66%), and punching, hitting, and grabbing (53%) (MacDonald, 1995). The researcher did not specify a time-frame for respondents to recall incidents in the questionnaire. This could explain the high rate of assault incidents. For example, other studies that investigate student assault and limit the reporting of incidents to the past 12 months would likely yield lower rates of assault (e.g., Gomes et al., 2000; Smith et al., 1995).

MacDonald (1995) does not provide definitions of terms, applied in the study, in either her thesis or the questionnaire administered to student respondents. It is not clear whether the term “fights,” for example, refers to both physical and verbal fighting (MacDonald, p. 66). Therefore, it is possible that the reported rate of fights refers to nonviolent conflict. She does not define the term
"verbal threats" (p. 66). Does the researcher intend verbal threats to be limited to physical threats?

MacDonald (1995) does not claim her study sample represents the Alberta junior high school student population. She lists study size and selection of sample as some limitations of her study. Only 231 students of 120,000 Alberta students were selected for the study (MacDonald). Schools for the study were chosen by the school board administration office and school administrators selected the classes to be surveyed (MacDonald). In both cases, the reason was not shared with the researcher (MacDonald). Therefore, MacDonald emphasizes that the sample was not randomly selected.

A study of the level and nature of youth crime and violence in Calgary, Alberta found that that 82% of students reported being victimized at school in the previous year (Smith et al., 1994). A total of 1,515 students were randomly selected from 20 junior and senior high schools and administered questionnaires (Smith et al.). Smith et al. define victimization as something damaged intentionally; something stolen; something taken by force or threat of force; threatened to hurt or caused harm; slapped, punched, or kicked; threatened with a weapon; attacked/beat up by a group/gang; someone exposed themselves; and sexually touched against will. A total of 42% of students reported being threatened to be hurt; 37% slapped, punched, or kicked; 8% threatened with a weapon; 6% attacked by a group/gang; 15% robbed (had something taken by force or threat of force); and 18% were sexually touched against will while at school (Smith et al.). These victimization rates are all higher than a similar study
(Gomes et al., 2000) and, in some cases, at least twice as high. For example, the rate of being threatened to be hurt is twice as high and the rate of being threatened with a weapon is 4 times higher compared to rates reported by Gomes et al. The rates of being attacked by a group or gang, robbed, and sexually touched against will are at least 3 times higher compared to the findings of Gomes et al.

It is not clear what the “threatened to be hurt” category means (Smith et al., 1995, p. 39). Is it limited to physical threats or does it also include psychological harm such as a threat to spread a rumour? The term “hurt” was not defined in the report or the questionnaire (Smith et al., 1994, 1995). Therefore, students may not have clearly understood the question concerning whether they had been threatened to be hurt or caused harm (Smith et al., 1994, 1995).

A survey of 2,001 students from 67 public and Catholic junior and senior high schools in Alberta found that 54% of students indicated they had been victimized at least once in the previous year (Gomes et al., 2000). Gomes et al. define victimization similar to the Smith et al. (1995) study, except that the categories “something thrown at them” and “someone said something sexual” are added. A total of 22% of respondents had been threatened to be hurt or caused harm; 22% slapped, punched or kicked; 9% had something thrown at them intending to hurt; 2% threatened with a weapon; 2% attacked by a group/gang; 5% robbed (something taken by force or threat of force); and 5% were sexually touched against will while at school (Gomes et al.). These rates are all low
compared to another similar study reviewed in this thesis (Smith et al.). Note that the rate for having something thrown at them/intending to hurt/cause harm was not investigated in other studies reviewed in this thesis.

The student questionnaire contains open-ended questions that ask respondents to describe their most serious incident of victimization (Gomes et al., 1999): this was not included in Smith et al.'s (1995) questionnaire survey. Such questions provide clarification of the nature of the incident. Of the respondents who reported that they had been threatened at school, the majority of reported threats (64%) involved threats of being “beaten up” (e.g., slapped, kicked, and/or kicked) and 16% of the threats involved threats of being killed by their attacker (Gomes et al.).

The researchers did not improve the questionnaire item related to the threatened to hurt/cause harm category (Gomes et al., 1999). This questionnaire item reads the same in the 1999 study as the prior study questionnaire by Smith et al. (1995), except for an open-ended question that asks respondents to describe their most serious incident of being threatened (Gomes et al.). Although the researchers intended to investigate bodily harm, as the phrase “someone threatened to hurt respondent or cause bodily harm” was included in their list of types of victimization assessed in the study, the questionnaire item “someone threatened to hurt you or cause you harm” does not totally reflect this (Gomes et al. 1999, 2000, pp. 8, 13). The researchers should have specified in the questionnaire whether hurt/harm is limited to physical harm. Does this include psychological harm (e.g., harm to one’s reputation)?
Of the student respondents who reported being slapped, punched, and/or kicked by someone in the previous year, 6% indicated that the incident resulted in them receiving broken bones or fractures or required hospital attention (Gomes et al., 2000).

A survey of adolescent health and risk behavior, in British Columbia, found that 17% of males and 6% of females reported being physically assaulted at school in the previous year (McCready Centre Society, 1999). A total of 42% of males and 18% of females reported having had at least one physical fight in the previous year (McCready Centre Society, 1999). The sample consisted of approximately 26,000 students that were surveyed in 1998. The researchers do not define physical assault, physical attacks, or physical fights in either the research report or questionnaire (McCready Centre Society, 1998, 1999). For example, respondents were asked the following question: “During the past 12 months, while in school, how many times did someone physically attack or assault you?” (McCready Centre Society, 1998, p. 15). The researchers should have defined these terms in order to provide clarity for respondents and the reader as to the degree of seriousness that would constitute a physical assault, attack, or fight (McCready Centre Society). For example, other studies, reviewed in this thesis, provide examples of physical attack (e.g., slapped, punched, or kicked) in the questionnaire (e.g., Gomes et al., 2000; Ryan et al., 1993; Smith et al., 1994).

A survey of bullying among Canadian children in 1993/94 and in 1997/1998 was conducted using the Health Behaviours in School-Aged Children
survey, a World Health Organization Cross-National study (King, Boyce & King, 1999). The 1998 survey found that nearly one third of males in grade 6 (32%) and grade 8 (30%) have reportedly experienced incidents involving hitting, slapping, and pushing; however, the rate for males in grade 10 is 15% (half that of grade 6 and grade 8 males) (King et al., 1999). Females reportedly experienced less incidents of this nature compared to males (approximately 50% less): 17% of females in grade 6, 14% of females in grade 8, and 8% of females in grade 10. The victimization rate for grade 10 females is lower by nearly 50% compared to grades 6 and 8 females (a similar pattern reported by males). A total of 20% of males in grades 6 and 8 reported incidents of being threatened compared to 12% of males in grade 10. The rate for males in grade 10 is lower by almost 50% compared to males respondents in younger grades. Females reportedly experienced less incidents of threats compared to males: 14% of females in grade 6, 11% of females in grade 8, and 9% of females in grade 10 (King et al.).

The study is weakened by poor conceptual analysis. The term “threatened” is not defined in either the research report or the questionnaire (King et al. 1999, p. 24; Social Program Evaluation Group, n.d, p. 12.). Were the threats physical in nature (threats to cause bodily harm)? The study did not solicit information concerning the seriousness of reported hitting, slapping, pushing, and threatening incidents (King et al., 1999, Social Program Evaluation Group, n.d.).
Principal Surveys of Student Victimization

Wall (1995) surveyed school principals from twenty-nine Alberta schools (both elementary and high school). Based on telephone interviews with principals, Wall found that the overall rate of principal reported violent incidents in the sample was 0.9 per 100 students during a two-week period. Wall defines violent incidents as incidents involving bullying, threats, harassment, or physical attacks. The researcher does not explain the terms within that definition (Wall). He should have defined these terms in order that principals clearly understand the meaning and readers understand the significance of the results.

The seriousness of the incidents is not known. Wall (1995) did not investigate the seriousness of any of the incidents.

Teacher and Student Surveys

Kasian (1992) surveyed teachers, non-teaching school personnel, and students of the Ottawa Roman Catholic Separate School Board to investigate rates of school violence. The questionnaires were administered to respondents in March and April of 1992, and student respondents were asked to include only violent school-related incidents that occurred between September to June of “last year” (Kasian, Student questionnaire, p. 1). This study risks telescoping due to memory decay which is a likely consequence of asking respondents to recall events so far back in time (see page 131, of this thesis, for definition of telescoping).
The frequency and perceived seriousness of the following "problematic behaviors" related to physical and emotional injury were investigated in the study: verbal abuse, verbal threats, sexual harassment, racial harassment, aggression, "unaided assault," "aided assault," weapons, theft, and vandalism (Kasian, 1992, p. 2). Kasian defines aggression as pushing, shoving, tripping, poking, slapping, spitting, and throwing objects. Unaided assault is defined as "intent to cause harm without the use of a weapon" and aided assault is defined as "threatening or using a weapon in the commission of an assault" (Appendix). Following are estimates of the most frequently occurring violent victimization of teachers over the course of the year (rates were estimated by examining the graph because figures were not provided in the text): verbal threats (55%), aggressive behavior (39%), unaided physical assault (25%), and aided assault (9%). In regards to aided assault, the researcher should have investigated actual incidents of assault with a weapon separately from incidents of weapon threats in order to specify the nature of the incident. Furthermore, the researcher should have provided examples of unaided assault, in the student questionnaire, in order for student respondents to be clear as to what constitutes an unaided assault. In the teacher questionnaire she lists fighting, kicking, and punching as examples of unaided assault (Kasian, Appendix). She should have provided these same examples in the student questionnaire. However, she provides a general definition of unaided physical assault in the student questionnaire (same definition as listed above).

Students reported the highest rates of victimization over the course of the year, compared to teachers and non-teaching personnel (Kasian, 1992).
Students reported experiencing the following types of violent victimization: verbal threats (41% male; 27% female), aggressive behavior (60% male; 51% female), unaided assault (31% male; 19% female), and aided assault (16% male; 5% female). Kasian concludes that students were identified as the "highest risk group" because they were most often the target of verbal abuse, harassment, and physical aggression "on a regular basis" (p. 25).

Respondents were asked to rate problematic behaviors using a five point scale. The choices ranged from "serious" (rating 1), to "very serious" (rating 3), to "extremely serious" (rating 5) (p. 4). Kasian's scale lacked the option of not serious, which should have been provided for respondents who may have believed the incident was not serious. Kasian disagrees that any of the behaviors investigated in the study could be non-serious. In the questionnaire, she states that "It is recognized that a display of any of the behaviors identified in this survey would be considered serious and totally unacceptable" (Appendix).

Kasian (1992) does not define what would be considered either very serious or extremely serious incidents in either the research report or questionnaires. Therefore, results in this section depend strictly on the perceptions of the respondents.

Kasian (1992) claims the following:

Incidents between students were rated, on average, as more serious than incidents occurring between teachers and students . . . although the majority of the teachers experienced some form of student initiated violence, approximately 1 in 5 incidents were rated by teachers as either very or extremely serious . . . . Non-teaching personnel did not appear to experience the same degree or frequency of violent incidents as compared to teachers. (p. 25)
Kasian’s claim would have been more valid had she provided a standard of severity (for rating seriousness of incidents) to respondents. This would have established consistency. One student’s perception of the seriousness of an incident may differ from another student’s perception of the same incident. In order to set a standard for respondents, Kasian should have defined, in the questionnaire, what constitutes a serious case of assault (e.g., simple assault versus aggravated assault). Having said this, her claims are not invalid, either.

Kasian provide definitions of victimization types in the questionnaires in order that respondents clearly understand the meaning of her terms (e.g., aided assault, etc.). Her attempt to provide clarity for respondents helped to strengthen the study. However, as mentioned earlier, her definition of unaided assault is limited.

The researcher should have included exact percentages of rates in the text of her research report to correspond with graph illustrations. The reader must estimate these percentages by judging the space between intervals on the bar graph.

**Student, Teacher, and Administrator Surveys**

A survey study of school violence and abuse in one large, urban, western Canadian public school district found that 16% of students, 5% of teachers, and zero administrators reported incidents of assault in the past 10 months (Duffee, 1994). The sample consisted of 708 grade 10, 11, and 12 students; 161 teachers; and 13 school-based administrators. Assault is defined in the study as
"physical violence and/or threats of violence to another person without the consent of that person" (Duffee, p. 14). The researcher should have investigated actual physical violence and threats of violence separately. Collapsing these variables into the same category precludes comparison with other studies regarding incidents of physical violence versus threats. Many other studies of teacher victimization, reviewed in this thesis, investigated these variables separately (e.g., Lyon & Douglas, 1999; Manitoba Teachers' Society, 1990, 1993; New Brunswick Teachers' Association, 1994; Nova Scotia Teachers' Union, 1999a; Saskatchewan Teachers' Federation, 1994). Note that Duffee's definition of assault reflects the definition of assault provided in the Canadian Criminal Code (R.S.C. 1985, c. C-46).

The researcher includes a questionnaire item asking students and teachers to indicate the "most recent" type of assault they had experienced (e.g., actual attack, attempted attack, and threatened attack) (Duffee, 1994, Appendix, p. 22 Teacher questionnaire, p. 23 Student questionnaire). However, a stronger survey design would have included three separate questionnaire items designed to ask students/teacher respondents if they were, in the past 10 months, the victim of (1) an actual assault, (2) an attempted attack, or (3) a threatened attack. This method is superior to asking respondents only about the most recent episode in order to account for the possibility that a respondent could have been a victim of all three types of abuse. This way, all three types of victimization are captured, in the survey, as opposed to only the most recent incident.
Furthermore, this method would allow for a comparison with other school-violence related studies.

The majority of reported injuries were not serious: Only 3% of students and 13% of teacher assault victims (one teacher respondent) required medical attention as a result of the assault incidents (Duffee, 1994). The rates of injuries suffered by teachers is similar to the findings of another study reviewed in this thesis: Lyon and Douglas (1999) found that only one teacher reported requiring medical treatment as a result of a violent incident. Of the student assault victims, a total of 31% of students reported that they suffered bleeding, 1% suffered broken bones, and 9% were injured seriously enough that they had to stay home as a result of the incident (Duffee). The rates of injuries suffered by students cannot be compared to other studies reviewed in this thesis because, with the exception of one study, none of the studies, reviewed in this thesis, report rates of injuries. Although Gomes et al. (2000) collected some data regarding injuries suffered from incidents, the type of data reported is different from Duffee (1994). For example, Gomes et al. collapse the figures for reported broken bones and hospital treatment into one rate which precludes a comparison with Duffee's rate reported for broken bones. Only 2% of students, zero teachers, and zero administrators reported robbery. Of the student robbery victims, 56% indicated that they were bleeding as a result of the incident and 11% reported that they required medical attention (Duffee). A total of 33% of the student robbery victims indicated that they were injured seriously enough that they stayed at home
Both measuring the seriousness of injuries and providing students with clear definitions of terms in the questionnaire strengthened Duffee's study.

Duffee (1994) is an exemplary study of school violence in terms of good conceptual analysis and providing a scale of severity of injuries. Although the researcher clearly defines his terms, both in the research report and the questionnaire administered to students, he should have investigated actual physical assault incidents separately from incidents of threats. Student respondents were asked to indicate levels of injuries they experienced (if any):

"Were you hurt badly enough in any of the assaults that (Check [ ] ALL that apply: You had to seek medical attention, you were bleeding, you had broken bone(s), you had to stay home from school" (Duffee, Appendix-18). The researcher does not define or establish a criterion for the term “medical attention” in either the report or the questionnaire (Duffee, Appendix-18). Although the lack of definition of medical attention weakened the study, Duffee’s attempt to solicit information concerning injuries is commendable.

Duffee (1994) admits that his study is limited by its 51% response rate, and the refusal of some schools to participate limits the generalizability of the results.

**Police and School Board Surveys**

A study, based on surveys and focus groups with police and school boards across Canada, found that 80% of respondents believe that school violence is more prevalent compared to ten years ago (Gabor, 1995). Thirty
percent of police and 18% of school officials believe the level of violence is much worse now than ten years ago (prior to the study) (Gabor). The term "school violence" was not defined in the study. Therefore, it is not clear what this rate really means. Gabor concludes that while there is a high frequency of threatening behavior, it does not always lead to physical violence. Gabor does not include statistical rates to support his claim. Both school boards and police frequently listed bullying/intimidation, verbal abuse/threats, disorderly behavior, assaults on students, property damage/vandalism, and stealing or other illegal acts as common problems which occur in schools. However, without more detail such as percentage rates the study is weakened. Furthermore, no definitions of terms were provided in the report.

Conclusion

It is difficult to assess levels of school violence in Canada based on the studies reviewed in this thesis. The Statistics Canada annual figures on violent incidents in schools, based on UCR2 Survey data, are neither national nor representative of Canada (Statistics Canada, 2003). Furthermore, Statistics Canada's definition of "school" is not limited to elementary and secondary schools (Statistics Canada, 2003). In 1997, a total of 67% of violent incidents in schools involved common assault, followed by major assault (16%) and robbery (7%) (Stevenson et al., 1998). This rate for common assault is only 7% higher than the minor assault rate reported for 1995 in a previous Statistics Canada study (Janhevich, 1997). Although these findings, based on UCR2 Survey data,
are not representative of Canadian elementary and secondary schools (Statistics Canada, 2003), it provides at least some indication that common assault is the most prevalent type of violent behavior.

The fact that most of the Canadian studies, reviewed in this thesis, are flawed by poor conceptual analysis makes their results questionable. Few studies demonstrate good conceptual analysis (e.g., Duffee, 1994; Janhevich, 1997; Kasian, 1992; Lyon & Douglas, 1999; Saskatchewan Teachers' Federation, 1994; Stevenson et al., 1998). Many of the studies of violence against Canadian teachers provide definitions that are too broad (e.g., Malcolmson, 1994; Manitoba Teachers' Society, 1990, 1993; Nova Scotia Teachers' Union, 1999a; Ontario Teachers' Federation, 1991b).

Many Canadian studies of teacher and student victimization lack clear definitions of the conceptual elements of the research, both in the research reports and questionnaires administered to subjects (e.g., Gomes et al., 2000; King et al., 1999; MacDonald, 1995; McCreary Centre Society, 1998, 1999; Manitoba Teachers' Society, 1990, 1993; New Brunswick Teachers' Association, 1994; Ryan et al., 1993; Smith et al., 1995; Wall, 1995). Another study, reviewed in this thesis, also lacks definition in the questionnaire; however, the researchers provide definitions of their terms in the report (Ontario Teachers' Federation, 1991b). Researchers should define their terms in order that respondents clearly understand the meaning and readers understand the significance of the results.

It is also difficult to assess levels of violence against teachers and students in Canada, based on the studies reviewed in this thesis, because of
incomparable studies that vary in terms of definitions, types of investigation, and time-frames of when respondents were to recall victimization incidents. The only two Canadian studies of student violence that could be compared (Gomes et al., 2000; Smith et al., 1995) are not national and are limited to one province in Canada (Alberta).

The majority of studies, reviewed in this thesis, do not indicate whether the incidents were violent in a criminal sense or more like "minor school yard scraps" (Janhevich, 1997, p. 20). With the exception of some Statistics Canada studies (e.g., Frank, 1992; Janhevich, 1997; Stevenson et al., 1998), most studies do not report the type of assault, for example, common/minor assault versus major assault (e.g., aggravated assault). Statistics Canada annually report the total percentage of assault incidents (level 1, 2, 3), collapsed into one figure, occurring at school, but do not annually report the percentage of each type of assault occurring at school (i.e., assault level 1 versus level 2 or 3) (Statistics Canada, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002a, 2003).

Only a few Canadian studies investigated the severity of injury victims suffered from violent crime (e.g., Duffee, 1994; Gomes et al., 2000; Janhevich, 1997; Lyon & Douglas, 1999; Stevenson et al., 1998). Most studies did not investigate the severity of injuries resulting from assaults, that is, whether the injuries were severe major or minor and whether medical attention was required. Most studies did not investigate whether victims suffered no injuries, with the exception of the following studies: Duffee (1994), Janhevich (1997), Lyon & Douglas (1999), and Stevenson et al. (1998). Of the studies that collected data
for medical attention/treatment (Duffee, 1994; Janhevich, 1997; Lyon & Douglas, 1999; Stevenson et al., 1998), the researchers do not define or establish a criteria for the term "medical attention" in either the report or the questionnaire. It is not clear whether seeing a nurse for a band-aid constitutes medical attention.

According to Statistics Canada’s UCR2 data, only 5% to 6% of reported violent incidents occurring at school resulted in serious injury (Janhevich, 1997; Stevenson et al., 1998). Note that data is not collected separately for elementary and secondary schools in Janhevich's study. In Stevenson et al.'s study, it is not clear whether the reported injury rates pertain to youth and elementary/secondary schools specifically or if the rates also include universities and colleges. Based on the figures of serious injury, reported in these Statistics Canada reports (Janhevich; Stevenson et al.), it is plausible that only a small proportion (less than 6%) of violent incidents that occurred either at elementary or high schools resulted in serious injury. A study of teacher victimization found that only 1% of teachers suffered moderate physical injuries and zero teachers suffered severe injuries (Lyon & Douglas, 1999). A study of teacher and student victimization found that the majority of injuries were not serious; however, nearly one third of student victims (31%) reported they were bleeding as a result of the assault (Duffee, 1994).

Of all the studies of teacher victimization in Canada, reviewed in this thesis, Lyon and Douglas (1999) is an exemplary study of school violence and teacher victimization in terms of good conceptual analysis, extensive investigation regarding the prevalence of various types of violent victimization,
and scale of severity of injuries; however, the scale of severity of injuries provided in the National Crime Victimization Survey is a superior model (Bureau of Justice Statistics & U.S. Census Bureau, 2001). Lyon and Douglas did not investigate rates of robbery victimization. Future research should include an investigation of this type of violent behavior.

The study by Lyon and Douglas (1999) is an exemplary Canadian study for studies of student victimization in terms of types of incidents investigated, (provided the language is appropriate for the respondents’ grade level).

Of all the studies reviewed on student victimization, two studies conducted an extensive investigation of different types of student victimization, although these studies are limited (Gomes et al., 2000; Smith et al., 1995). For example, the researchers do not define the term “hurt” for the questionnaire item regarding threats. The researchers did not investigate the prevalence of weapon-related assault. Furthermore, Smith et al. did not investigate the type of injuries suffered. Other school violence studies report injuries (e.g., Duffee, 1994; Gomes et al.). It is important to investigate injuries sustained in order to establish the severity of incidents.

The results of these flawed studies should be interpreted with caution. Of the studies that provide a satisfactory conceptual analysis and investigated the severity of injuries resulting from assaults (Duffee, 1994; Janhevich, 1997; Lyon & Douglas, 1999; Stevenson et al. 1998), these studies are not national and there are too few in number to generalize about the level of violence in Canadian schools.
The following section of this thesis reviews American school violence studies in an attempt to determine the prevalence of school violence in the United States.
CHAPTER FOUR
AMERICAN STATISTICS

The United States has a far greater wealth of statistics on violence in schools compared to Canada. This chapter discusses various American statistics, the majority of which are based on studies affiliated with the United States government (e.g., the 2000 School Survey on Crime and Safety, the National Crime Victimization Survey, and the Youth Risk Behavior Survey). Annual studies by the University of Michigan's Monitoring the Future: A Continuing Study of American Youth survey and PRIDE Surveys (non-government studies) are also reviewed in addition to a few other individual studies (e.g., Arndt, 1995; Louis Harris & Associates, 1993; New York State Education Department & New York State Division of Criminal Justice Services, 1994).

It is difficult to assess levels of school violence in the United States based on the studies reviewed in this thesis. Many of the studies lack clear definitions of the conceptual elements of the research, both in the research reports and questionnaires administered to subjects (e.g., Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003; Johnson, Bachman, O'Malley, & Schulenberg, 2003; Louis Harris & Associates, 1993; Nolin, Davies, & Chandler, 1996; PRIDE Surveys, 1995, 1997, 1998, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2002c, 2003a, 2003b). Most of the studies do not indicate the type of assault, for example, common/minor assault versus major assault.
(aggravated assault). The National Crime Victimization Survey is the only American study to differentiate between aggravated assault and simple assault in the definition of assault (U.S. Department of Justice, Bureau of Justice Statistics, 2003b) and serious violent crime and violent crime (DeVoe, Peter, Kaufman, Ruddy, Miller, Plany, Snyder, Duhart, & Rand, 2002; DeVoe et al., 2003; Kaufman, Chen, Choy, Chandler, Chapman, Rand, & Ringel, 1998; Kaufman, Chen, Choy, Ruddy, Miller, Chandler, Chapman, Rand, & Klaus, 1999; Kaufman, Chen, Choy, Peter, Ruddy, Miller, Fleury, Chandler, Plany, & Rand, 2001; Kaufman, Chen, Choy, Ruddy, Miller, Fleury, Chandler, Rand, Klaus, & Plany, 2000). Most studies did not investigate the severity of injuries resulting from assaults. Only two studies, relevant to this thesis, report results based on a standard of injury (Arndt, 1995; New York State Education Department & New York State Division of Criminal Justice Services, 1994).

From 1993 through 2002, the highest rate for students who reported being threatened with a weapon (gun, knife, club) is 16% and the lowest rate is 10% (Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003, Bachman, O'Malley, & Schulenberg, 2003; PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The range is as follows: 10% (Johnson et al., 2003; PRIDE Surveys, 1999a, 2001), 11% (Johnson et al., 2001b, 2001c, 2001e; PRIDE Surveys, 1997, 1999b, 2000, 2002a, 2002b), 12% (PRIDE Surveys, 2003a), 13% (Johnson et al., 1997e, 2001a, 2001d, 2003), 15% (Bachman et al., 1997c), and 16% (Johnson et al., 1995).
The highest rate of students who reported being threatened without a weapon (1993 through 2002) is 24% and the lowest rate is 19% (Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003; Johnson, Bachman, O’Malley, & Schulenberg, 2003). The range is as follows: 19% (Johnson, Bachman, O’Malley, & Schulenberg, 2003), 21% (Johnson et al., 2001b, 2001c), 22% (Johnson et al., 2001a, 2001e, 2003), 23% (Johnson et al., 1997e, 2001d), and 24% (Bachman et al., 1997c; Johnson et al., 1997e). These rates are not compared with the rates of PRIDE Surveys for threats of hitting, slapping, or kicking because of the potential conflict that would arise if a respondent has been threatened to be hit with a weapon (e.g., club).

From 1993 through 2002, the highest rate for students who reported being injured or hurt with a weapon (gun, knife, club) is 5% and the lowest rate is 3% (Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003; Johnson, Bachman, O’Malley, & Schulenberg, 2003; PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The range is as follows: 3% (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2000), 4% (Johnson et al., 2001e, 2003; PRIDE Surveys, 2003a), and 5% (Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2003).

The highest rate for students who reported being hurt or injured without a weapon is 22% and the lowest rate is 11% (Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003; Johnson, Bachman, O’Malley, & Schulenberg, 2003; PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The range is as follows: 10% (Johnson et al.,
2001d), 11% (Johnson et al., 1997e, 2001c, 2001e; Johnson, Bachman, O'Malley, & Schulenberg, 2003), 12% (Bachman et al., 1997c; Johnson et al., 1997e, 2001a, 2001b), 13% (Johnson et al., 2003), 18% (PRIDE Surveys, 1999a, 2002a), 19% (PRIDE Surveys, 1997, 1999b), 20% (PRIDE Surveys, 2001, 2002b), 21% (PRIDE Surveys, 2000), and 22% (PRIDE Surveys, 2003a).

From 1995 through 2002, the highest rate for students who admitted to hurting a student by using a gun, knife, or club is 4% and the lowest rate is 3% (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The range is as follows: 3% (PRIDE Surveys, 2001, 2002b) and 4% (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2002a, 2003a).

The highest rate for students who admitted to hurting a student by hitting, slapping, or kicking them (1995 through 2002) is 33% and the lowest rate is 29% (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The range is as follows: 29% (PRIDE Surveys, 2001, 2002b), 31% (PRIDE Surveys, 1999a; 1999b, 2000), 32% (PRIDE Surveys, 2002a, 2003a), and 33% (PRIDE Surveys, 1997).

The highest rate for students who admitted to threatening a student with a gun, knife, or club is 7% and the lowest rate is 5% (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The range is as follows: 5% (PRIDE Surveys, 2000, 2001, 2002b, 2003a), 6% (PRIDE Surveys, 1999a, 1999b), and 7% (PRIDE Surveys, 2002a, 1997).

The highest rate for students who admitted to threatening to hurt a student by hitting, slapping, or kicking them is 42% and the lowest rate is 36% (PRIDE

The highest rate of students who reported being threatened or injured with a weapon on school property is 9% and the lowest rate is 7% (Grunbaum, Kann, Kinchen, Ross, Hawkins, Lowry, Harris, McNanus, Chyen, & Collins, 2004; Grunbaum, Kann, Kinchen, Williams, Ross, Lowry, & Kolbe, 2002; Kann, Kinchen, Williams, Ross, Lowry, Grunbaum, & Kolbe, 2000; Kann, Kinchen, Williams, Ross, Lowry, Grunbaum, & Kolbe, 2000; Kann, Warren, Harris, Collins, Douglas, Collins, Williams, Ross, & Kolbe, 1995; Kann, Warren, Harris, Collins, Williams, Ross, & Kolbe, 1996). The range is as follows: 7% in 1993 and 1997 (Kann et al., 1995, 1998), 8% in 1995 and 1999 (Kann et al., 1996, 2000), and 9% in 2001 and 2003 (Grunbaum et al., 2002, 2004).

The highest rate reported for physical fighting on school property is 16% and the lowest rate is 13%. The range is as follows: 13% in 2001 and 2003 (Grunbaum et al., 2002, 2004), 14% in 1999 (Kann et al., 2000), 15% in 1997 (Kann et al. 1998), and 16% in 1993 and 1995 (Kann et al., 1995; Kann et al., 1996).

**National Crime Victimization Survey**

The National Center for Education Statistics (NCES) and the Bureau of Justice Statistics (BJS) publish a series of annual reports on school crime and

The National Crime Victimization Survey is the United States' primary source of information on crime victimization and victims of crime (DeVoe et al., 2003). The NCVS is a nationally representative survey of about 50,000 households, in the United States, selected using a stratified, multistage cluster design (DeVoe et al., 2003; Maguire & Pastore, 2001; Maxfield & Babbie, 1995, p. 376). Note that the range of households between 1998 and 2003 is approximately 50,000 and 55,000 annually (DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001). Household members are interviewed 7 times at 6-month intervals over a period of three years (DeVoe et al., 2003; Hagan, 1997; Maxfield & Babbie). After their seventh interview, households are replaced by new sample households (DeVoe et al., 2003). The NCVS is administered for the U.S. Bureau of Justice Statistics by the Census Bureau.

School crime data from the NCVS is reported in the annual publications of the U.S. Department of Justice, Bureau of Justice Statistics entitled Criminal Victimization in the United States (CVUS) and Indicators of School Crime and

However, in the Indicators reports, school crime data was analyzed specifically for students aged 12 through 18 (DeVoe et al., 2003). In the Indicators reports, “at school” is defined as “inside the school building, on school property, or on the way to or from school” (DeVoe et al., 2003, p. 7).

Crimes of violence are defined in the NCVS as “rape, sexual assault, personal robbery, or assault. This category includes both attempted and completed crimes . . . . Murder is not measured by the NCVS because of an inability to question the victim” (U.S. Department of Justice, Bureau of Justice Statistics, 2003b, Glossary). Both aggravated assault and simple assault are included in the NCVS' definition of assault:

An unlawful physical attack or threat of attack. Assaults may be classified as aggravated or simple. Rape, attempted rape, and sexual assaults are excluded from this category, as well as robbery and attempted robbery. The severity of assaults ranges from minor threat to incidents which are nearly fatal. (U.S. Department of Justice, Bureau of Justice Statistics, 2003b, Glossary)

Aggravated assault is defined as:
Attack or attempted attack with a weapon, regardless of whether or not an injury occurred and attack without a weapon when serious injury results . . . Serious injury includes broken bones, lost teeth, internal injuries, loss of consciousness, and any unspecified injury requiring two or more days of hospitalization. (U.S. Department of Justice, Bureau of Justice Statistics, 2003b, Glossary)

Simple assault is defined as "attack without a weapon resulting either in no injury, minor injury (for example, bruises, black eyes, cuts, scratches or swelling) or in undetermined injury requiring less than 2 days of hospitalization. Also includes attempted assault without a weapon" (U.S. Department of Justice, Bureau of Justice Statistics, 2003b, Glossary).


National Crime Victimization Survey data indicate that, from 1992 through 2001, students aged 12 to 18 were safer at school than away from school, that is, less likely to be victims of nonfatal serious violent crime (that is, rape, sexual assault, robbery, and aggravated assault) when they were at school than away from school (DeVoe et al., 2003). In 2001, students were victims of about
161,000 nonfatal serious violent crimes at school and about 290,000 away from school (DeVoe et al.). In this same year, students were victims of about 764,000 nonfatal violent crimes (rape, sexual assault, robbery, aggravated and simple assault) at school and about 758,000 away from school (DeVoe et al.).

National Crime Victimization Survey data indicate that, from 1992 through 2000, students were approximately 2 or 3 times more likely to be the victim of a serious nonfatal violent crime away from school compared to at school (DeVoe et al., 2002). However, the rates of nonfatal violent crime (violent crimes include serious violent crimes plus simple assault) at school and away from school are more similar compared to rates of serious violent crimes occurring at school and away from school (DeVoe et al, 2002.). From 1992 to 2000, the NCVS victimization rates for nonfatal violent crimes were lower at school than away from school (DeVoe et al., 2003). In 2001, no difference could be detected in the rate of violent victimization at school and away from school (764,000 at school and 758,000 away from school) (DeVoe et al., 2003).

The approximate rates for nonfatal violent crimes at school and away from school from 1992 through 2001 are as follows: 1.1 million (at school) compared to 1.7 million (away from school) in 1992, 1.4 million compared to 1.7 million in 1993, 1.4 million compared to 1.7 million in 1994, 1.3 million compared to 1.5 million in 1995, 1.1 million compared to 1.4 million in 1996, 1.1 million compared to 1.6 million in 1997, 1.2 million compared to 1.3 million in 1998, 884,000 compared to 1.1 million in 1999, 700,000 compared to 921,000 in 2000, and 764,000 compared to 758,000 in 2001 (DeVoe et al., 2003).
The approximate rates for nonfatal serious violent crimes at school and away from school 1992 through 2001 are as follows: 245,000 (at school) compared to 750,000 (away from school) in 1992, 307,000 compared to 850,000 in 1993, 322,000 compared to 833,000 in 1994, 223,000 compared to 559,000 in 1995, 307,000 compared to 671,000 in 1996, 202,000 compared to 636,000 in 1997, 253,000 compared to 550,000 in 1998, 185,000 compared to 476,000 in 1999, 128,000 compared to 373,000 in 2000, and 161,000 compared to 290,000 in 2001 (DeVoe et al., 2003).

The NCVS rates of the number of nonfatal violent crimes against students, aged 12 through 18, occurring at school compared to away from school per 1,000 students, from 1992 through 2001, are as follows: 48 (at school) compared to 71 (away from school) in 1992, 59 compared to 70 in 1993, 56 compared to 69 in 1994, 50 compared to 58 in 1995, 43 compared to 55 in 1996, 40 compared to 59 in 1997, 43 compared to 48 in 1998, 33 compared to 39 in 1999, 26 compared to 34 in 2000, and 28 compared to 28 in 2001 (DeVoe et al., 2003). From 1992 through 2000, the rates away from school are higher compared to rates at school (DeVoe et al., 2002).

The NCVS rates for nonfatal serious violent crimes against students aged 12 through 18 occurring at school compared to away from school per 1,000 students, from 1992 through 2000, are as follows: 10 (at school) compared to 32 (away from school) in 1992, 12 compared to 35 in 1993, 13 compared to 33 in 1994, 9 compared to 23 in 1995, 9 compared to 26 in 1996, 8 compared to 24 in 1997, 9 compared to 21 in 1998, 7 compared to 18 in 1999, 5 compared to 14 in
2000, and 6 compared to 11 in 2001 (DeVoe et al., 2003). The rates away from school are 2 or 3 times higher compared to rates at school.

The NCVS data indicate that students aged 12-18 are not as likely to be victimized at school compared to away from school (except for the 2001 data which indicate that no difference was found in the violent victimization rate for students at school and away from school) (DeVoe et al., 2003). The NCVS data indicate that simple assault is the most prevalent type of violence among American students and the most common school violence problem facing America. From 1992 through 2001, the rates for nonfatal serious violent crimes at school are lower than nonfatal violent crimes at school. For example, nonfatal serious violent crimes range from 128,000 to 322,000 compared to nonfatal violent crimes which range from 700,000 to 1.4 million (DeVoe et al.). Similarly, from 1992 through 2001, the rates for nonfatal serious violent crimes against students occurring at school, per 1,000 students, are lower than nonfatal violent crimes at school. For example, nonfatal serious violent crimes range from 5 through 13 per 1,000 students, compared to nonfatal violent crimes, which range from 26 through 59 per 1,000 students. The only difference between the NCVS's definition of nonfatal serious violent crime and nonfatal violent crime is that nonfatal violent crimes include simple assault (DeVoe et al.); therefore, simple assault appears to be the cause of the higher rates of reported nonfatal violent crime at school.

The National Crime Victimization Survey collects data on specific types of injuries sustained by victims of violent crime at school. Among those victims who
experienced violence at school (from 1992-1998), 77% reported no injury, 2% reported severe injury, and 21% reported minor injury (Simon et al., 2001). The figures indicate that only a small percentage of these victims suffered severe injury. Severe injury is defined, in the NCVS, as “gunshot or knife wounds, broken bones, loss of teeth, internal injuries, loss of consciousness, or undetermined injuries requiring 2 or more days of hospitalization” (Simon et al., p. 12). Minor injury is defined, in the NCVS, as “bruises, black eye, cuts, scratches, swelling, chipped teeth, and undetermined injuries requiring less than 2 days of hospitalization” (Simon et al., p. 11; U.S. Department of Justice, Bureau of Justice Statistics, 2003b, Glossary). The NCVS’s definition of serious and minor injury is an exemplary model for other researchers to use as a guide for determining what constitutes a serious injury versus a minor injury. These reported injuries are not limited to injuries that occur at elementary and secondary schools, as per the definition of school, applied in the NCVS. Injuries sustained by victims aged 12 through 18 is not published by the Bureau of Justice Statistics (e.g., in the Indicators of School Crime and Safety or Criminal Victimization in the United States) (e.g., DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001; U.S. Department of Justice, Bureau of Justice Statistics, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996a, 1996b, 1997a, 1997b, 1998a, 1998b, 1999, 2000a, 2000b, 2000c, 2001). It can be assumed that information was solicited concerning injuries, for students aged 12 through 18, because of question #31 of the NCVS-2 Incident Report where respondents were asked to check various types of injuries they suffered (Bureau of Justice
Statistics & U.S. Census Bureau, 2001) (see pages 123-124, of this thesis, for detailed listing of injuries). An attempt was made to indicate the level of seriousness of reported assault victimizations (for students ages 12 through 18) by including simple assault as a violent crime as opposed to a serious violent crime, by differentiating between aggravated assault and simple assault in the NCVS's definition of assault, and by collecting data separately on these two types of assault (see pages 72-73, of this thesis, for the U.S. Department of Justice, Bureau of Justice Statistics' definition of aggravated and simple assault) (DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001; U.S. Department of Justice, Bureau of Justice Statistics, 2003b).

Limitations of the National Crime Victimization Survey

Although the NCVS can provide information unavailable through official crime statistics, such as unreported crimes/victimization, this survey is limited. Each person twelve years and older in the household is interviewed. An exception is made to use proxy interviewing instead of direct interviewing for the following three cases: twelve and thirteen year old persons when a knowledgeable household member insists they not be interviewed directly, incapacitated persons, and household members either absent or physically or mentally unable to participate. Proxy interviewing is limited for twelve and thirteen year old subjects in that the interviewer is not able to clarify questions directly with the child and there exists confidentiality issues. It is possible a child
may not be willing to share certain information with their parent that they would divulge to the interviewer if interviewed directly.

The NCVS is limited by practicality issues: “Even when a well-constructed representative sample is used, it is practically impossible to reach and to interview all members in the sample,” according to Fattah (1991, p. 35). Some people may have moved and cannot be traced. Individual and household attrition, that is, “the movement of individuals and entire households out of the NCS’s address sample makes it difficult to assemble multi-wave data to measure multiple victimization,” (Skogan, 1990, 260). When a study is residence based, there are always some residences found vacant, demolished, or closed (Fattah).

Fattah states:

Not all members of the sample who are reached can be interviewed. There are always some who refuse to cooperate, to be interviewed, to answer all or some of the questions asked, and so forth. And some of those who agree to be interviewed may not take the survey seriously and thus make no real effort to provide precise information or to answer the questions accurately. (1991, p. 36)


The NCVS attempts to minimize the effects of telescoping of events by using a bounded interview, where the first household interview is used only to bound future interviews (DeVoe et al., 2003; Maguire & Pastore, 2001; O'Brien,
1985) to ensure that incidents reported actually occurred during the six-month reference period and to avoid overreporting the same criminal incidents in future interviews (DeVoe et al.; Maguire & Pastore).

School Crime Supplement (NCVS)

The Bureau of Justice Statistics and the National Center for Education Statistics collaborated to add a supplement to the National Crime Victimization Survey to collect data on school crime (Chandler et al., 1998). The survey, entitled School Crime Supplement, is designed to collect additional information about school-related victimizations on a national level (Chandler et al.). A total of 14.6% of students were victimized in schools in 1995, compared to 14.5% in 1989 (Chandler et al.). Victimization is defined as violent and property victimization (theft of student's property) (Chandler et al.). Violent victimization is defined as "physical attacks or taking property from the student directly by force, weapons, or threats" (Chandler et al., 1998, p. 3). The rates of students reporting violent victimizations remained approximately constant: 4% in 1995 compared to 3% in 1989 (Chandler et al.).

The rates of physical attacks versus taking property by force, weapons, or threats are not reported in the study, yet, they are included in the questionnaire as separate questions (Chandler et al., 1998). This information would have been helpful in order to determine the prevalence of physical attacks and robbery separately and to compare rates with other studies that report these rates separately. The researchers attempted to determine the degree of seriousness
of the reported victimizations by asking respondents, in both the 1989 and 1995 questionnaire, whether their injuries from physical attacks required seeing a doctor (Chandler et al.). Unfortunately, these results were not published in the report; therefore, the degree of seriousness of the incidents is not clear.

Chandler et al. state that although the report does not include all of the items in the 1989 and 1995 data sets, it includes those relevant to school crime. This statement is misleading considering that some data regarding school crime is excluded from the report.

The 1999 School Crime Supplement, a follow-up study, found that 4% of students, ages 12 through 18, reported experiencing violent victimization at school in 1999 (Addington et al., 2002). This rate is identical to that reported in the previous study for 1995 and only 1% higher than the 1989 rate reported. Violent victimization is defined in the same way as the previous study (Chandler et al., 1998), but also includes incidents reported in the NCVS (rape, sexual assault, robbery, aggravated assault, or simple assault (Addington et al.). A total of 12% reported of students reported "any victimization," which like the previous study, is defined as a combination of violent and property victimization (theft of student's property) (Addington et al.). This rate is similar to the victimization rates reported in the previous study (2.5% lower).

Principal/School Disciplinarian Survey on School Violence

The National Center for Education Statistics (NCES) conducted a survey of school principals entitled the Principal/School Disciplinarian Survey on School
Violence (Heaviside et al., 1998). Their sample size consisted of principals (or school disciplinarians) from 1,234 regular public elementary, middle, and secondary schools in the 50 states and the District of Columbia. The study was conducted in the spring and summer of 1997 to solicit information concerning the 1996-1997 school year. Ten percent of all public schools experienced one or more serious violent crimes that were reported to police or other law enforcement officials (Heaviside et al.).

"Serious violent crimes" is defined in the research report as "murder, rape or other type of sexual battery, suicide, physical attack or fight with a weapon, or robbery" (Heaviside et al., 1998, p. iv). The problem with this definition is that an incident of a physical attack without a weapon could be argued to be serious if the person was severely beaten by fist fighting or kicking. The researchers should have investigated the seriousness of the incidents of physical assault without a weapon (e.g., aggravated assault) and categorized aggravated assault incidents as serious violent crimes. In comparison, the National Crime Victimization Survey includes aggravated assault as part of the definition of serious violent crimes: aggravated assault is defined in the NCVS as attack or attempted attack with a weapon and attack without a weapon if serious injury occurs (DeVoe et al., 2003).

A total of 47% of U.S. public schools reported experiencing one or more incidents of less serious or nonviolent crime (Heaviside et al., 1998). Less serious or nonviolent crimes are defined, in the study, as "physical attack or fight without a weapon, theft/larceny, and vandalism" (Heaviside et al., p. 7).
The most common form of reported crimes in public schools were physical attacks or fights without a weapon (Heaviside et al., 1998). Schools reported the following crimes to police: 28% reported physical attacks or fights without a weapon, 6% reported physical attacks or fight with a weapon, 3% reported rape or other type of sexual battery, and 3% reported robbery (Heaviside et al.). The rate of 28% is low compared to other similar studies. For example, the rate of physical attacks/fights without a weapon reported by Miller and Chandler (2003) is more than twice as high. However, the large difference between the studies' rates of physical attacks/fights without a weapon is likely due to the fact that the figure reported by Miller and Chandler is not limited to incidents reported to police. The rate of 28% is low (16% lower) compared to Crosse, Burr, Cantor, Hagen, and Hantman's (2002) findings of incidents of physical attacks/fights without a weapon that were reported to the police by schools. The rate of 6% is similar to the physical attacks/fight with a weapon rate reported by Crosse et al. (1% lower). The robbery rate is 50% lower compared to the robbery rate reported by Crosse et al.

The researchers provide definitions of multiple terms in the questionnaire, which strengthened the study because an effort was made to ensure that respondents clearly understand terms applied in the questions (Heaviside et al., 1998). The definitions of physical attack with a weapon and physical attack without a weapon indicate that respondents should only count the instances that were "serious enough to warrant calling the police or other law enforcement personnel" (Heaviside et al., 1998, p. A-4). Although the researchers tried to
gather information for only serious events, interpretations of what is considered sufficiently serious to report to the police will differ depending on the principal's experience, perceptions, and decision-making. What one principal considers serious enough to call the police, another principal may feel the opposite. If a school is plagued with numerous incidents of physical fighting, the principal may tend to be more selective in what he/she reports to police for practicality reasons, hence, only reporting the most serious cases. The researchers did not solicit information concerning injuries, which would have helped indicate the seriousness of reported incidents (Heaviside et al.).

The researchers admit that their sample size of 1,234 public schools is not large enough to produce reliable estimates for rare events such as murder and suicide occurring in U.S. public schools (Heaviside et al., 1998).

**Study on School Violence and Prevention**

According to a national survey, entitled the Study on School Violence and Prevention, approximately 10% of schools and 11% of students experienced one or more incidents of serious violent crime during the 1997-1998 school year (Crosse et al., 2002). The study, prepared for the U.S. Department of Education, surveyed 886 elementary and secondary principals (Crosse et al.). In addition, students and teachers were surveyed in many of the participating secondary schools (Crosse et al.). School reported serious violent crime included physical attack or fight with a weapon and robbery, and student reported serious violent crime included threatened with a knife or gun and robbery (Crosse et al).
Approximately two-thirds of schools (66%) and students (66%) experienced one or more incidents of less serious violent crime and property crime. Incidents of less serious violent crimes and property crime reported by schools included physical attack or fight without a weapon, vandalism, theft, or larceny and for student reports included physical attack, threatened with a beating, and theft (Crosse et al.). Forty-four percent of schools reported to police one or more incidents of physical attack or fight without a weapon (Crosse et al.). Seven percent of schools reported to police at least one incident of physical attack or fight with a weapon and 6% reported at least one incident of robbery (Crosse et al.). The rate of 44% is 16% higher compared to the physical attack/fight without a weapon rate reported by Heaviside et al. (1998). These rates are not comparable to Miller and Chandler's (2003) study because, as noted earlier, Miller and Chandler do not specify the number of various types of violent incidents reported to police (e.g., physical attack/fight without a weapon). The rate of 7% is only 1% higher than the physical attack/fight with a weapon rate reported by Heaviside et al.; however, the rate of robbery, reported by Crosse et al., is twice as high as the robbery figure reported by Heaviside et al. (6% versus 3%).

As for student respondents, 13% reported being physically attacked, 18% of students were reportedly threatened with a beating, 5% were threatened with a knife or gun, 6% were robbed of a $1 or more, and 4% were robbed of a $1 or less (Crosse et al., 2002). The rate for threatened with a knife/gun can be compared to only one other American study, reviewed in this thesis, because
other studies do not limit the type of weapon to a gun or knife (e.g., Johnson et al., 2003, PRIDE Surveys, 2003a). The other comparable study (Louis Harris & Associates, 1993) is almost identical for the rate of threats with gun/knife (within 1%).

Approximately 4% of middle and senior high school teachers reportedly experienced one or more incidents serious violent crime during the 1997-1998 school year (Crosse et al., 2002). Three percent of these teachers were attacked and received minor injuries, 0.7% were attacked and received injuries requiring a doctor, and 0.5% were confronted by weapons at school (Crosse et al.).

2000 School Survey on Crime and Safety (SSOCS)

The 2000 School Survey on Crime and Safety (SSOCS) found that 71% of elementary and secondary public schools reported at least one violent incident (for the 1999-2000 school year) (Miller & Chandler, 2003). A total of 36% of all public schools experienced at least one violent incident that they reported to the police or other law enforcement. The National Center for Education Statistics administered the study that consisted of a survey of school principals from a nationally representative sample of 2,270 regular public elementary, middle, secondary, and combined public schools (Miller & Chandler). In the questionnaire, respondents were asked to report the total number of violent incidents separately from the number of violent incidents reported to the police or other law enforcement (Miller & Chandler). Of the 1.47 million violent incidents that occurred in public elementary and secondary schools, approximately
257,000 were reported to police. Miller & Chandler note that although only 18% of violent offences were reported to police, regulations concerning notification vary by state and district as well as the type of crime that has been committed. This reporting rate indicates that violent incidents are not consistently reported to the police. Official statistics that rely on police records do not reflect the total extent of school crime. Violent incidents are defined as “rape, sexual battery other than rape, physical attack or fight with or without a weapon, threat of physical attack with or without a weapon, and robbery with or without a weapon” (Miller & Chandler, p. 7). This rate cannot be compared to Heaviside et al. (1998) because of differing definitions of violence (e.g., Heaviside et al.’s “less serious or nonviolent crime” category compared to Miller and Chandler’s “violent incidents” category).

Of those violent incidents, physical attacks or fights without a weapon occurred most frequently (64%) and threats of physical attack without a weapon was the second highest reported incident (52%) (Miller & Chandler, 2003). Although the rate of 64% is more than double the rate reported in Heaviside et al. (1998) and 20% higher than reported by Crosse et al. (2002), this is likely be due to the fact that the rate of 64% was not limited to incidents reported to police, unlike the other two studies. Miller and Chandler report the number of various types of incidents that schools experienced (e.g., physical attacks or fights without a weapon), but the researchers do not limit their reporting to specific types of incidents that schools reported to police. Although Miller and Chandler investigated the number of various types of violent incidents reported to police
(which is evident in the study questionnaire), the findings for each individual type of violence (e.g., physical attacks or fights without a weapon) reported to police are not included in their report. These findings would have been helpful for a comparison with other studies that report such data (e.g., Crosse et al., 2002; Heaviside et al., 1998). A survey of principal reported threats of physical attack was not investigated by Crosse et al. or Heaviside et al.; therefore, a comparison is not possible. A total of 11% of schools experienced at least one threat of physical attack with a weapon, 5% experienced physical attack or fight with a weapon, 0% experienced robbery with a weapon, 5% experienced robbery without a weapon, and 1% experienced at least one rape or attempted rape. Again, all of these rates are not limited to incidents reported to police.

A total of 20% of schools experienced at least one serious violent incident, and 15% of schools experienced serious violent incidents that were reported to police (Miller & Chandler, 2003). Unlike violent incidents, the majority of serious violent incidents (57%) that occurred in schools were reported to police (i.e., of the 60,179 serious violent incidents that occurred in all public schools, 34,281 were reported to police) (Miller & Chandler). Serious violent incidents are more likely to be reported compared to simple assaults that may not require police involvement (Miller & Chandler). Serious violent incidents are defined as "rape, sexual battery other than rape, physical attack or fight with a weapon, threat of physical attack with a weapon, and robbery with or without a weapon" (Miller & Chandler, p. 7). The researchers should have investigated the seriousness of incidents of physical assault without a weapon and categorized any aggravated
assault incidents as serious violent crimes. In comparison, the National Crime Victimization Survey categorizes aggravated assault (without a weapon) as a serious violent crime if the victims suffer serious injury (DeVoe et al., 2003). The most commonly reported serious violent crime was threat of attack with a weapon (11%). The other types of serious violent incidents occurred in 5% or less of schools that year (Miller & Chandler). The rate of serious violent incidents cannot be compared to Heaviside et al.’s (1998) rate of serious violent crime because Miller and Chandler include threat of physical attack with a weapon in their definition of serious violent incidents, whereas Heaviside et al. do not. Furthermore, Heaviside et al. include murder and suicide in their definition of serious violent crime, whereas Miller and Chandler do not.

The researchers’ effort to define multiple terms in the questionnaire, in order to ensure respondents clearly understand terms applied in the questions, strengthened the study (Miller & Chandler, 2003).

**Monitoring the Future Study**

The Monitoring the Future survey involves annual data collections from high school seniors from 130 public and private high schools selected to provide an accurate cross-section of high school seniors throughout the United States (Johnson, Bachman, O'Malley, & Schulenberg, 2003; Maguire & Pastore, 2001).

Kaufman et al. (1998) reviewed survey data from the University of Michigan's Monitoring the Future Study (1976 to 1996) and found that:

The percentages of 12th graders who have been injured (with or without a weapon) at school have not changed notably over the
past 20 years, although the percentages who have been threatened with injury (with or without a weapon) show a very slight overall upward trend. (p. vi)


The survey used in the Monitoring the Future study does not define injury or provide a standard of severity in the questionnaire; therefore, it is not known how serious in nature the reported injuries were (Bachman et al., 1997a, 1997b, 1997c, 2002a, 2002b, 2002c, 2002d, 2002e; Johnson et al., 1995, 1997a, 1997b, 1997c, 1997d, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2002a, 2002b, 2002c, 2002d, 2002e, 2002f, 2003; Johnson, Bachman, O'Malley, & Schulenberg, 2003; University of Michigan, Institute for Social Research, 2000, 2001, 2002, 2003). The lack of definition of injury is particularly problematic when considering the study findings on injury without a weapon. Were the reported injuries minor in nature, such as scratches and bruises, or were they more serious such as broken bones or injuries that required hospitalization? In regards to the injured with a weapon (knife, gun, or club) questionnaire item, the reader can assume injuries were fairly serious in nature; however, it is possible someone may have escaped serious harm from a club by suffering only minor bruising. Data was not collected separately for each weapon type; therefore, it is not known which type of weapon caused the reported injury.


The rates of students reportedly threatened with injury by an unarmed person but not actually injured are as follows: 23% in 1993 and 1999; 24% in 1994 and 1995; 22% in 1996, 2000, and 2001; 21% in 1997 and 1998; and 19% in 2002 (Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b,
Youth Risk Behavior Survey


The rates of reported physical fighting on school property also remained approximately the same over the years studied: 16% in 1993 and 1995, 15% in 1997, 14% in 1999, and 13% in 2001 and 2003 (Grunbaum et al., 2002, 2004; Kann et al., 1995, 1996, 1998, 2000).
The researchers did not investigate the number of reported incidents of threats and injuries with a weapon separately (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, and Division of Adolescent and School Health, 2000, 2002). Although respondents are asked to indicate the number of times they have experienced either type of victimization, they are not provided with an opportunity to indicate which type of victimization occurred (Grunbaum et al., 2002, 2004; Kann et al., 1995, 1996, 1998, 2000). This limitation exists in the current 2005 Youth Risk Behavior Surveillance (to be administered in February 2005) (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention et al., 2000, 2002, 2004). Had this information been provided, it would have been helpful to determine whether the majority of incidents involve threats. Furthermore, the term “injured” was not defined in the YRBS questionnaire; therefore, respondents may not have clearly understood what constitutes an injury (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention et al., 2000, 2002). Would a minor scratch be considered an injury? The researchers did not investigate the seriousness of school-related incidents involving violence, such as the seriousness of injury resulting from the assaults. Although the YRBS survey provides a question regarding the number of times one received treatment by a doctor or nurse as a result of a fight-related injury, the location of the incidents (e.g., school) was not included in the questionnaire item (U.S. Department of Health and Human Services, Centers for Disease Control and
Prevention et al., 2002, p. 6). Lastly, a definition of physical fight was not provided in the questionnaire item (The U.S. Department of Health and Human Services, Centers for Disease Control and Prevention et al., 2000, 2002). Clear definitions would have strengthened the study because respondents would have clearly understood what exactly the researchers mean by the terms applied in the questionnaire.

School-Associated Violent Deaths in the United States Study

The Centers for Disease Control and Prevention (CDC) collaborated with the U.S Departments of Education and Justice and the National School Safety Center to publish the first systematic review of school-associated violent deaths in the United States from July 1992 through June 1994 (academic years) (Kachur, Stennies, Powell, Modzeleski, Stephens, Murphy, Kresnow, Sleet, & Lowry, 1996). Between July 1992 and June 1994, 105 school-associated violent deaths occurred in 25 states (Kachur et al.). Victims ranged in age from 4 to 62 years, with a median age of 16 years. Of the 105 deaths, 75 were among school-aged children 5-19 years of age: 12 suicide and 63 homicide (Kachur et al.). School-associated violent death is defined in the study as “any homicide or suicide in which the fatal injury occurred on the campus of a functioning elementary or secondary school in the United States, while the victim was on the way to or from regular sessions at such a school” (Kachur et al., 1996, p. 1729). Less than 1% of all homicides among school-aged children in the United States were school-related: the researchers estimated that 0.62% of homicides and
suicides among school-aged children were school-related (Kachur et al.). The low rates reported in Kachur et al.'s study indicate that school-associated violent deaths are rare events.

The majority of cases (81%) were homicides, and firearms were used in most (77%) of the deaths (Kachur et al., 1996). Most victims (77%) were less than 20 years of age at the time of death (Kachur et al.). The violent deaths occurred in communities of all sizes in 25 states (Kachur et al.).

The methodology used to obtain cases for the study is an ideal model for other researchers to use. Kachur et al. (1996) found cases for the study by first consulting with study collaborators at the U.S. Department of Education and National School Safety Center, where officials had been tracking school-associated fatalities since 1992 through a newspaper clipping service. In addition, voluntary reports from state and local education officers were used. The researchers then conducted a systematic search of two computerized newspaper and broadcast media databases. Those “probable cases” were then confirmed by contacting at least one local press, law enforcement, or school official who was familiar with each case in order to conduct a brief interview to determine if the death met the case definition (Kachur et al., 1996, p. 1730). Those cases were then confirmed from police reports and medical examiner’s reports and structured interviews with a police officer who investigated the case and the school principal or another school spokesperson (Kachur et al.).

An expanded follow-up study of the previous CDC study (Kachur et al., 1996) found that, between July 1994 and June 1999, 220 school-associated
violent events occurred in the United States: 202 involved the death of 1 victim and 18 events involved the deaths of multiple victims (median = 2 victims per multiple-victim event) (Anderson et al., 2001). Of the 220 cases, 172 were homicides, 30 were suicides, 11 were homicide-suicides, 5 were legal intervention deaths, and 2 were unintentional fire-arm-related deaths (Anderson et al.).

A total of 253 victims died in these events (Anderson et al., 2001). Of these victims, 172 (68%) were students, 146 (85%) of which were due to homicide and 24 (14%) were due to suicide. The remaining victims were as follows: 18 (7%) were faculty/staff, 12 (5%) were family members of students, 30 (12%) were residents of the surrounding community, 4 (2%) were associated with the school in other ways, 12 (5%) were not directly associates with the school or surrounding community, and 2 (1%) were police officers (school association was unknown for 1% of victims). Of the 279 known perpetrators, 103 (37%) were students, 2 (1%) were faculty/staff, 7 (3%) were family members of a student, 72 (26%) were residents of the surrounding community, 50 (18%) were not directly associated with the school or surrounding community, and 5 (2%) were associated with the school in other ways (school association was unknown or missing for 35 or 13% of perpetrators) (Anderson et al., 2001). Five police officers (in the line of duty) were responsible for a school-associated violent death.

The chances of a student dying as a result of a school-associated violent incident is less than one in a million (Anderson et al.). According to student risk
estimates, the average annual rate of school-related violent death for students was 0.068 per 100,000 students, of which homicide accounts for 0.058 (Anderson et al.). Students in high schools (grades 9-12) had a school-related violent death rate nearly 14 times higher than students in elementary schools (preschool-grade 8).

Between 1994 and 1999, 0.9% of homicides and suicides among school-aged children were school-associated (1.3% of all homicides and 0.3% of all suicides in the United States) (Anderson et al., 2001). This rate of 0.9% is similar to the rate reported by Kachur et al. (only 0.3% higher). Surprisingly, only 37% of known perpetrators were students. Perhaps undetected students account for the 13% category of unknown/missing perpetrators. In any case, these findings suggest that, contrary to popular assumption, students are not always the perpetrators responsible for homicide in schools.

School-related violent deaths account for only a small number of homicides and suicides among school-aged children (Anderson et al., 2001). School-associated homicide rates appear to have increased since the 1994-1995 school years due to an increase in homicide rates for multiple-victim homicides: 0% in 1992 to 42% in 1999 (Anderson et al.). Although this 42% increase seems alarmingly high, a comparison of 1992-1995 and 1998-1999 student homicide rates (displayed in figure 2 of Anderson et al.) indicate a difference of less than 0.03 per 100,000 students. Single-victim homicides decreased between 1992 and 1999; however, the researchers do not provide data on this for every year (a
comparison of years 1995-1996 and 1998-1999 indicate a difference of 0.02 per 100,000 students) (Anderson et al.).

The researchers note that their study is limited by their reliance on secondary sources, which may be "subject to error and bias" (Anderson et al., 2001, p. 2702). They point out that because their data is based on a small number of deaths, some of the risk estimates may be "unstable" and should be examined with close scrutiny (Anderson et al., p. 2702).

As an extension of the Anderson et al. (2001) study, the CDC report that, between September 1992 through June 1999, 209 school-related violent death events occurred that involved either the homicide or suicide of a student (Safe and Drug Free Schools Program, U.S. Department of Education; National Institute of Justice, U.S. Department of Justice; Division of Violence Prevention and Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 2001). During the 7 school years of the study period, an average of 0.14 school-related homicide events occurred each school day (one event every 7 school days) and an average of 0.03 suicide events occurred each school day (one event every 31 school days) (Safe and Drug Free Schools et al.)

**National Household Education Survey**

A study of student victimization at school, based on the National Household Education Survey, concludes that American schools are unsafe places (Nolin et al., 1996). The study, conducted by Westat for the U.S.
Department of Education's National Center for Education Statistics, is based on the responses of 6,504 students in grade 6 through 12 who were surveyed from January through April 1993. The evaluation found that 56% of the respondents had personally witnessed some type of crime or victimization at school, including bullying, physical attack, or robbery. Eight percent of students reported being directly and personally bullied, 4% of students reported experiencing a physical attack, and only 1% of students reported being a victim of robbery. The rate of physical attack cannot be compared to other studies because the term "physical attack" is too broad. Other studies that investigated student physical assault specified the nature of the assault, such as punched, hit, kicked, etc. (e.g., Bachman et al., 1997c; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003; Johnson, Bachman, O'Malley, & Schulenberg, 2003; Louis Harris & Associates, 1993; PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a).

The study is weakened by poor conceptual analysis (poor definition of terms); for example, the term "bullying" is narrowly defined as "repeated threat of harm" (Nolin et al., 1996, p. 216). How serious would a threat have to be in order to be considered a "threat of harm" which would constitute bullying? (Nolin et al., 1996, p. 216). Is one student's threat to report another student's misconduct to the school principal for disciplinary action considered a threat of harm? Or, in this study, is the term "threat of harm" used to mean threats of violence? The researchers do not make this clear either in their research report or in the
questionnaire item they used to operationalize bullying (Nolin et al., 1996; Brick, Collins, Nolin, Ha, Levinsohn, & Chandler, 1994).

Nolin et al. (1996) refer to bullying, robbery, and physical attack as separate variables. These variables cannot be separated easily because of the potential for overlap in some cases; for example, a student who is repeatedly bullied in the form of physical attacks or a student who is repeatedly bullied into giving away his/her lunch money. In the latter case, the student is both a victim of bullying and robbery according to the definitions of Nolin et al. (robbery was defined in the study as “taking something directly by force or threat of force”) (Nolin et al., 1996, p. 216). On a number of occasions the victim is bullied into giving away money due to a “threat of force” (Nolin et al., p. 216) which can also be considered a “repeated threat of harm” (p. 216). Hence, this incident belongs in both the bullying and robbery category.

Nolin et al. (1996) do not explain what they mean by the term students “having knowledge of” bullying, physical attacks, or robbery (p. 216). Is a rumor considered having knowledge of an event? The questionnaire items designed to assess levels of bullying, robbery, and physical attacks only ask, “Have you heard/do you know of . . . “ (Brick et. al., 1994, pp. A-16-17). The researchers should have investigated (e.g., designed their questionnaire) to assess rates at which students have personally experienced and/or personally witnessed violent incidents. Student hearsay knowledge is an unreliable source of information; therefore, the 71% rate reported for student’s having knowledge of bullying, physical attack, or robbery incidents is unreliable. Interestingly, the percentage
rate drops to 56% for students who reportedly witnessed bullying, physical attack, or robbery. Only 13% of students reported personal victimization.

Nolin et al. (1996) claim that "the NHES:93 results suggest that unsafe conditions at school are a reality for most U.S. students" (p. 216) is not supported by the findings of the survey. Poor conceptual analysis threatens the validity of this study, for example, vague definition of bullying, overlapping of categories, and unreliability of student's knowledge. It is not clear whether the questionnaire is measuring what the researchers claim it is measuring.

The American Teacher Survey

The American Teacher Survey found that 11% of teacher respondents reported that they had been victims of violence in school and 23% of students reported being victims of violence in or around school (Louis Harris & Associates, 1993). The survey, based on interviews with 1,000 teachers from grades 3 through 12, 1,180 students from the same grades, and 11 police department officials, investigated the following types of violence that occur in schools: verbal insults; threats to students/teachers; pushing, shoving, grabbing, or slapping; kicking, biting, or hitting someone with a fist; threatening someone with a knife or gun; using knives or firing guns; and stealing (Louis Harris & Associates, 1993). The researchers' broad definition of violence resulted in a higher violence rate than if they had narrowed it, for example, by excluding verbal insults and stealing.
Students reported types of “violent” incidents: verbal insults (60%); threatened (26%); pushed, shoved, grabbed, or slapped (43%); kicked, bitten, or hit with a fist (24%); threatened with a knife or a gun (4%); and knife or gun fired on them (2%) (Louis Harris & Associates, 1993, p. 71). One quarter of students reported being threatened. However, the researchers do not define the term “threatened” in either the report or questionnaire (Harris Louis & Associates); therefore, it is not clear if this term is limited to threats physical in nature. Although another questionnaire item solicited information regarding threats using a weapon, this does not clarify the researchers' meaning of their question regarding threats. The researchers do not make this clear in either the questionnaire or the research report. The rate for threatened with a knife/gun can only be compared to one other American study reviewed in this thesis because other studies do not limit the type of weapon to a gun or knife (e.g., Johnson et al., 2003, PRIDE Surveys, 2003a). The other comparable study (Crosse et al., 2002) report a similar rate of being threatened with gun/knife (within 1%).

Students admitted to committing the following types of violent acts: threatened another student (23%); pushed, shoved, grabbed, or slapped someone else (42%); kicked, bitten, or hit someone with a fist (26%); threatened someone with a knife or gun (3%); threatened a teacher (5%); and used a knife or fired a gun (1%) (Louis Harris & Associates, 1993). The rate for admissions of threatening someone with a weapon cannot be compared to the findings of other studies reviewed in this thesis (e.g., PRIDE Surveys, 1997, 1999a, 1999b, 2000,
2001, 2002a, 2002b, 2003a) because the questionnaire item asked student respondents if they had "threatened someone with a weapon, in or around school" (Louis Harris & Associates, p. 115), not if respondents had threatened a student, specifically (PRIDE Surveys designed their questionnaire to investigate the latter). Similarly, for the same reason stated above, the rate of "pushed, shoved, grabbed or slapped someone else" or "kicked, bitten, or hit someone with a fist" (Louis Harris & Associates, p. 115) cannot be compared to other studies in this thesis. The rate for admissions of threatening another student cannot be compared to other studies (e.g., PRIDE Surveys) because the researchers (Louis Harris & Associates) do not specify, in the questionnaire, if the term "threats" is limited to physical threats. The researchers do not report data for the types of violence teachers have experienced.

**PRIDE Surveys**

PRIDE Surveys provides a national state-wide annual summary of violence in American schools for grades 6-12. The sample sizes from years 1995-1996 through 2002-2003 ranged from 75,804 through 154,350 (depending on the year) (PRIDE Surveys, 2003a). The samples were not entirely randomly drawn in an effort to avoid certain states from having a disproportionate influence on the study results, for example, states where the PRIDE survey had been widely used by school systems throughout the state. Random samples were drawn only from those states where a disproportionate number of students were surveyed.


The number of students who reported being threatened by a student to hit, slap, or kick them, while at school, are as follows: 40% in years 1995-1996, 1997-1998, 1998-1999, and 2002-2003; 41% in 1996-1997 and 1999-2000; and

The PRIDE Surveys rates have remained approximately constant for each category from 1995 through 2003 (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The percentage of students who reported being threatened by a student to hit, slap, or kick them is the highest rate reported for all the categories and is at least double the rate of students who reported being hurt by a student who hit, slapped, or kicked them (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a). The percentage of students who reported being threatened with a gun, knife, or club is more than double the amount (triple the amount in the 2002-2003 study) compared to students who reported being actually hurt by a student using these weapons (PRIDE Surveys, 1997, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2003a).


PRIDE Surveys do not define the term “hurt” either in the reports or questionnaire (PRIDE Surveys, 1995, 1997, 1998, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2002c, 2003a, 2003b). Could hurt include bruises and scratches or is it limited to more serious injuries? The lack of a standard of injury measurement weakened the study. Although it may be seem obvious that a student who reports being hurt by a gun, knife, or club is seriously injured, this may not be the case if a student received only a minor bruise from a club. The researchers did not solicit information for each weapon injury; therefore, it is not known which of the three weapons was most frequently used. The lack of definition is particularly problematic for the questionnaire item related to students who reported being hurt by a student who hit, slapped, or kicked them. In this instance, the injuries suffered could range from minor scratches and bruises to more serious injuries (e.g., see page 73, of this thesis, for list of NCVS serious injuries). The researchers should have made it clear as to what constitutes being
hurt in order that both students being surveyed and the reader understand the meaning.

**Students/Teachers/Principals/Superintendents/Parents Surveys**

A statewide study of violence in New York’s public secondary schools (grades 7 through 12) found that students, teachers, principals, and superintendents rated offensive language, fighting, and bullying as the most serious problems (New York State Education Department & New York State Division of Criminal Justice Services, 1994). The nature of fighting was not specified in the student survey. Only the teacher, principal, and superintendent surveys included a question with the wording of “physical fights among students,” whereas the student survey question states “students fighting with each other” (New York State Education Department & New York State Division of Criminal Justice Services, Appendix D, F, &G).

Over 6,600 students, 5,152 teachers, 162 principals, 625 superintendents, and 814 parents participated in the study. Superintendents reported 87,955 incidents of crime and disorder during the 1992-1993 school year. Of that total, 36,107 were violent. The researchers do not define violence; however, in the survey administered to superintendents, they list types of personal violence as homicide, sex offense, robbery, assault, harassment, menacing, gang fight, kidnapping, and larceny (New York State Education Department & New York State Division of Criminal Justice Services, 1994).
Fourteen percent of students and 4% of teachers were reportedly robbed at least once during the school year, while 20% of students and 8% of teachers were assaulted at least once (New York State Education Department & New York State Division of Criminal Justice Services, 1994). The definition of robbery, in both the teacher and student questionnaire, includes actual or attempted incidents of robbery (New York State Education Department & New York State Division of Criminal Justice Services). Of the student robbery victims, 26% of reported incidents involved a weapon compared to 8% of the teacher robbery victims. Twenty-one percent of students and 5% of teachers were injured as a result of robbery. A total of 38% of students and 29% of teachers were injured as a result of assault. The definition of assault, in both the student and teacher questionnaire, includes actual or threatened physical/sexual attacks (not including robbery) (New York State Education Department & New York State Division of Criminal Justice Services). The researchers did not investigate actual and threats of assault separately. An investigation of the proportion of students that experienced threats versus physical attacks would have been helpful for the reader to understand the nature of violent incidents. However, the reports of injury provide an indication of the frequency of incidents that involved physical harm (e.g., if 38% of students were reportedly injured as a result of assault, then at least 38% of the total assault incidents were not limited to threats (New York State Education Department & New York State Division of Criminal Justice Services).
The researchers investigated different types of injuries experienced by students and teachers as a result of robbery/attempted robbery and assault/attempted assault: no injury, bruises/scratches, cuts/stab wound, broken bones/teeth knocked out, gunshot wound, and other injuries (students and teachers were advised on the questionnaire to check all that apply) (New York State Education Department & New York State Division of Criminal Justice Services, 1994). Bruises and scratches were among the most frequently reported injuries for both teachers and students that occurred during either an assault or robbery. The majority of students (79%) and teachers (95%) reported no injuries from robbery/attempted robbery incidents and 62% of students and 72% of teachers reported no injuries from assault/attempted assault incidents. The most common injury reported by students was bruises/scratches, the least serious of injuries compared to stab wounds, broken bones, and gunshot wounds. Students reported sustaining the following injuries from robbery/attempted robbery: bruises/scratches (15%), cuts/stab wounds (4%), broken bones (2%), gunshot wounds (3%), and other injuries (5%). Students reported sustaining the following injuries from assault/attempted assault: bruises/scratches (32%), cuts/stab wounds (4%), broken bones (2%), gunshot wounds (1%), and other injuries (7%). Teachers reported suffering the following injuries from robbery/attempted robbery: bruises/scratches (3%), cuts/stab wounds (2%), broken bones (0.6%), gunshot wounds (0%), and other injuries (2%). Teachers reported sustaining the following injuries from assault/attempted
assault: bruises/scratches (23%), cuts/stab wounds (1%), broken bones (0.7%),
gunshot wounds (0.2%), and other injuries (8%).

This study is a good example of the importance of measuring types of
injuries in order to help clarify the seriousness of the incidents as opposed to
merely reporting rates of assault and robbery. Furthermore, the researchers
defined their terms in both the research report and surveys used in the study
(with the exception of “fighting” which was not defined in the student survey
questionnaire) (New York State Education Department & New York State
Division of Criminal Justice Services, 1994). This attempt at conceptual clarity
strengthened the study.

City Officials

A study of school violence, over a five-year period throughout the United
States, found that school violence “is a problem of substantial or growing
significance in more than 80% of the nation’s cities and towns” (Arndt, 1995, p. 13).
The researcher concludes that “the findings of this survey reveal a situation
that has become a widespread concern- not just a unique and unfortunate
characteristic of a few troubled schools or cities” (Arndt, p. 8). School violence
was not defined in the research report; therefore, it is not clear whether the
school violence rates include harassment, intimidation, and verbal abuse (Arndt).
Furthermore, the questionnaire used in the survey is unavailable as it was not
included as an appendix in the research report. According to Pionke, National
League of Cities Media Relations, Arndt is no longer with the National League of
Cities (J. Pionke, personal communication, January 23, 2002). The questionnaire may have helped to determine how school violence was defined.

Seven hundred cities and towns participated in the survey conducted in August and September 1994. Survey respondents included mayors, police chiefs or other public safety officials, city managers, and other city officials. When asked to assess local school violence conditions over the past 5 years, 38% of respondents reported that violence had increased noticeably and 45% reported it was about the same. The largest cities and central cities most frequently reported increasing levels of school violence. At least 30% of all cities (in all categories) reported a “noticeable increase” in school violence (Arndt, p. 13).

Serious injuries or deaths, resulting from school violence, reportedly occurred in 25% of the surveyed cities during the previous year (September 1993–September 1994) (Arndt, 1995). A total of 31% of the cities reported serious injuries or deaths, resulting from school violence, in the previous two or three years, compared to 19% for the previous four or five years (Arndt). However, the rates of serious injuries and deaths are not separately reported (Arndt) which weakens the study and precludes comparison with other studies reviewed in this thesis. This information would have been helpful for the reader in order to understand the significance of the rates reported. It is not known whether injuries and deaths were investigated separately because of an unavailable questionnaire. The researcher used the need for hospital treatment
as his criteria for determining injuries as serious. This standard of severity for rating seriousness of nonfatal incidents strengthened the study.

Arndt's following comparison of levels of school violence in urban, suburban, and rural cities leads to the next discussion, in this thesis, of school demographic characteristics.

School Demographic Characteristics

Urban, Suburban, and Rural

Rural areas have been found to be less vulnerable to serious violent crime at school, compared to urban and suburban areas. However, data from the National Crime Victimization Survey (to be discussed) indicates that rural schools are sometimes equally at risk of serious violent crime, depending on the year of study. An urban school district is a large or midsize city; suburban is the urban fringe of a large or midsize city; and rural is a large town, small town, and rural area (Anderson et al., 2001). This definition of school districts, cited in Anderson et al., is based on the National Center for Education Statistics, U.S. Departments of Education's Common Core of Data (National Center for Education Statistics, U.S. Department of Education, 2003).

Central cities (48%) and the largest cities (41%) most frequently reported serious injuries or deaths resulting from school violence within the previous year (September 1993–September 1994) compared to suburban cities (19%), smaller cities (19%), and rural cities (21%) (Arndt, 1995).
A national study found that the majority of school-associated violent deaths (homicide and suicide) occurred in urban communities (60%), followed by suburban (31%), and rural (10%) (Kachur et al., 1996). The estimated risk rate for students (per 100 000 students), in urban school districts was 9 times higher than the estimated rate for students in rural school districts (Kachur et al.).

School-associated violent deaths of students occurred in 47 urban school districts, 23 suburban districts, and 6 rural districts (Kachur et al.). Similarly, a follow-up study indicates that school-associated violent deaths occur more frequently in urban school districts compared to suburban and rural school districts (Anderson et al., 2001). The study found that 58% of school-related homicides occurred in urban communities, compared to 30% in suburban and 12% in rural communities (Anderson et al.). The percentage of homicide in urban communities is almost twice as high as suburban communities and almost 5 times as high compared to rural communities. The number of school-associated violent deaths (homicide and suicide) of students are as follows: 75 urban (66 of 75 were homicide), 63 suburban (51 of 63 were homicide), and 20 rural (24 of 29 were homicide (Anderson et al.). The average annual rates of student homicides (per 100 000 students), by school district type, are as follows: urban (0.075 per 100 000 students), suburban (0.053 per 100 000 students), and rural (0.037 per 100 000 students) (Anderson et al.). The rate of student homicide in urban school districts is more than twice as high as rural school districts (Anderson et al.).
A national study, of crimes reported to the police by principals, indicates that central city schools reported nonfatal serious violent crimes at a rate twice that of rural schools (17% compared to 8%) (Heaviside et al., 1998). Eleven percent of urban fringe schools and 5% of town schools reported nonfatal serious violent crimes (Heaviside et al.).

Another national study found that rural schools (12%) were less likely than schools in cities (27%), urban fringe areas (22%), or towns (20%) to experience serious violent incidents (Miller & Chandler, 2003). As for serious violent incidents reported to the police, the rates are lower: city schools (21%), followed by urban fringe (17%), town (14%), and rural (9%) (Miller & Chandler). City schools reported serious violent crime at a rate more than twice as high compared to rural schools. Miller and Chandler's study cannot be compared to Heaviside et al.'s, based on location, because of a difference in the definition of serious violent crimes and serious violent incidents between the two studies. Although similar in their definition of serious violent crime, they differ in that Miller and Chandler include "threat of physical attack with a weapon" in their definition of "serious violent incidents" (p. 9), unlike Miller and Chandler, and Heaviside et al. include murder and suicide in their definition of "serious violent crime" (p. 35). The differences between city schools and rural schools are not nearly as drastic for reports of violent incidents compared to serious violent incidents (e.g., not twice as high as seen with reports of serious violent incidents). City schools (77%) were more likely than urban fringe schools (67%) to report a violent incident; however, no differences were detected among schools in town or rural
locations (74% and 70%, respectively) (Miller & Chandler). As for violent incidents reported to the police, city schools were more likely than urban fringe schools to report a violent incident (44% compared to 35%, respectively): town schools ranked 40% and rural schools ranked 29% (Miller & Chandler).

The following national studies indicate that students living in rural areas are not always less vulnerable to nonfatal serious violent crime at school compared to students in urban and suburban areas.

The National Crime Victimization Survey data (1996 through 2001) indicate that students (ages 12-18) living in urban and suburban areas typically experience nonfatal serious violent crime at school (or going to or from school) at similar rates and rural students are either equally likely or less vulnerable, depending on the year of study (DeVoe et al., 2003; Kaufman et al., 1998, 1999, 2000, 2001). In 2001, no difference was detected in the rates of nonfatal serious violent crime and nonfatal violent crime at school between students living in urban, suburban, and rural areas (DeVoe et al., 2003). In 1996, urban students (14 per 1,000 students) were more vulnerable to serious violent crime than rural students (4 per 1,000 students) and suburban students (8 per 1,000 students) (Kaufman et al., 1998). In 1997, students living in urban (12 per 1,000 students) and suburban (8 per 1,000 students) areas were more likely to be the victim of a nonfatal serious violent crime than rural students (2 per 1,000 students) (Kaufman et al., 1999). In 1998, students living in urban, suburban, and rural areas were equally likely to be the victim of a serious violent crime at school (Kaufman et al., 2000). In 1999, urban students (9 per 1,000 students) and
suburban students (8 per 1,000 students) areas experienced nonfatal serious
violent crimes at similar rates compared to rural students (2 per 1,000 students)
(Kaufman et al., 2001). In 2000, no difference was detected in the rates of
serious violent crime at school among students living in urban, suburban, and
rural areas (DeVoe et al., 2002). These findings indicate that students living in
rural areas are not always less vulnerable to serious violent crimes at school
compared to urban and suburban areas.

In the 1999 School Crime Supplement, no differences were detected
among students' reports of experiencing any victimization at school whether they
were from urban, suburban, or rural areas (Addington et al., 2002). These
results cannot be compared to the previous SCS study (Chandler et al., 1998)
because location of school and victimization was not reported in that study.

Elementary Versus Secondary Schools

Recent national studies indicate that elementary school students are less
vulnerable to being the victim of violence compared to secondary school students
(Anderson et al., 2001; Heaviside et al., 1998; Kachur et al., 1996; Miller &
Chandler, 2003). Students in secondary school (Grades 9-12) had an estimated
rate of a school-associated violent death 13 times higher (per 1000 students)
compared to students in elementary school (pre-kindergarten-Grade 8) (Kachur
et al., 1996). A total of 10 elementary school students and 63 secondary school
students were the victim of a school-associated violent death; the number of
secondary school students is 6 times greater than elementary students (Kachur
et al.). Of all the school-associated violent deaths, 30% occurred in elementary schools and 71% occurred in secondary schools, a rate more than twice as high compared to elementary schools (Kachur et al.).

A follow-up study indicates that students in senior high schools (Grades 9-12) or combined grade schools (schools that combined high school grades with lower grades) had a school-associated violent death rate per 100,000 students that was almost 14 times greater than students in elementary schools (pre-school-Grade 8) (Anderson et al., 2001). The number of school-associated violent deaths of students in elementary schools was 15 (of which 13 were homicide), 26 for middle/junior high school (of which 23 were homicide), and 129 for high school/combined (of which 108 were homicide) (Anderson et al.). The total number of homicides of students in middle/junior high school and high school/combined (131) is 10 times greater compared to student homicides in elementary schools. The study found that 19% of school-related homicides occurred in elementary schools, compared to 17% in middle/junior high schools and 64% in high school/combined schools (Anderson et al.). The percentage of homicide in high school/combined is more than 3 times as high compared to elementary schools.

A national study found that of the serious violent crime incidents, reported by schools to the police, high schools reported a rate 5 times higher than elementary schools (21% compared to 4%) (Heaviside et al., 1998). Nineteen percent of middle schools reported serious violent crimes to the police (Heaviside et al.). Elementary, middle, and high schools were defined as follows:
elementary schools includes grades 1 through 8, middle schools includes grades 4 through 9, and high schools includes grades 9 through 12 or grades 10 through 12 (Heaviside et al.).

The SSOCS study found that secondary schools were more likely to report a serious violent incident compared to elementary schools (29% of middle schools and 29% of secondary schools compared to 14% of elementary schools (Miller & Chandler, 2003). Combined schools ranked 21% (Miller & Chandler). Miller and Chandler classified the grade levels according to Heaviside et al. (1998). Of the serious violent incidents reported to police, middle and secondary schools ranked highest (25% and 28%, respectively), compared to combined schools (16%) and elementary schools (8%) (Miller & Chandler). The rate for middle and secondary schools is more than 3 times greater compared to elementary schools. As for violent incidents reported to the police, secondary schools ranked highest (71%), followed by middle schools (56%), combined schools (51%), and elementary schools (20%).

The 1999 SCS found that students in upper grades were generally less likely than students in lower grades to report victimization at school (Addington et al., 2002); however, the range between some grades is very similar (the lowest rate being 2% and the highest rate being 7%). The figures for violent victimization reported for grades 6 through 12 are as follows: 7% (grade 6), 5% (grade 7), 4% (grade 8), 5% (grade 9), 3% (grade 10), 3% (grade 11), and 2% (grade 12) (Addington et al.). Similarly, the previous SCS study found that younger students were more likely to experience violent victimization compared
to older students in both 1989 and 1995 (Chandler et al., 1998); however, the range is very similar. Violent victimization figures for students aged 12 through 19, from 1989 and 1995, are as follows: 6% in 1989 and 7% in 1995 (age 12), 5% and 6% (respectively) (age 13), 4% and 5% (age 14), 3% and 4% (age 15), 3% and 3% (age 16), 1% and 2% (age 17), 2% and 2% (age 18), and 1% and 3% (age 19) (Chandler et al.).

**Conclusion**

It is difficult to assess levels of school violence in the United States based on the studies reviewed in this thesis. The fact that most of the American studies are flawed by poor conceptual analysis makes their results questionable. Many of the studies lack clear definitions of the conceptual elements of the research, both in the research reports and questionnaires administered to subjects (e.g., Bachman et al., 1997c; Grunbaum et al., 2002, 2004; Johnson et al., 1995, 1997e, 2001a, 2001b, 2001c, 2001d, 2001e, 2003; Johnson, Bachman, O'Malley, & Schulenberg, 2003; Kann et al., 1995, 1996, 1998, 2000; Louis Harris & Associates, 1993; Nolin et al., 1996; PRIDE Surveys, 1995, 1997, 1998, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2002c, 2003a, 2003b). Researchers should define their terms in order that subjects understand the meaning and readers are clear as to the significance of the results. For example, PRIDE Surveys do not define the term “hurt” either in either the reports or questionnaires (PRIDE Surveys, 1995, 1997, 1998, 1999a, 1999b, 2000, 2001, 2002a, 2002b, 2002c, 2003a, 2003b). The survey used in the University of Michigan study

The majority of studies do not indicate whether the incidents were violent in a criminal or more like “minor school yard scraps” (Janhevich, 1997, p. 20). In other words, most studies do not indicate the type of assault, for example, common/minor assault versus major assault (aggravated assault). The National Crime Victimization Survey is the only American study to differentiate between aggravated assault and simple assault in the definition of assault (U.S. Department of Justice, Bureau of Justice Statistics, 2003b) and serious violent
crime and violent crime (DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001). The NCVS is an exemplary study in terms of an extensive investigation of various types of physical attacks and threats (Bureau of Justice Statistics & U.S. Census Bureau, 2001). For example, respondents were asked to check how they were attacked:

1. Raped
2. Tried to rape
3. Sexual assault other than rape or attempted rape
4. Shot
5. Shot at (but missed)
6. Hit with gun held in hand
7. Stabbed/cut with knife/sharp weapon
8. Attempted attack with knife/sharp weapon
9. Hit by object (other than gun) held in hand
10. Hit by thrown object
11. Attempted attack with weapon other than gun/knife/sharp weapon
12. Hit, slapped, knocked down
13. Grabbed, held, tripped, jumped, pushed, etc.
14. Other - Specify. (Bureau of Justice Statistics & U.S. Census Bureau, 2001, p. 5)

Respondents were asked to check how they were threatened:

1. Verbal threat of rape
2. Verbal threat to kill
3. Verbal threat of attack other than to kill or rape
4. Verbal threat of sexual assault other than rape
5. Unwanted sexual contact with force (grabbing, fondling, etc.)
6. Unwanted sexual contact without force (grabbing, fondling, etc.)
7. Weapon present or threatened with weapon
8. Shot at (but missed)
9. Attempted attack with knife/sharp weapon
10. Attempted attack with weapon other than gun/knife/sharp weapon
11. Object thrown at person
12. Followed or surrounded
13. Tried to hit, slap, knock down, grab, hold, trip, jump, push, etc.
14. Other – Specify. (Bureau of Justice Statistics & U.S. Census Bureau, 2001, p. 4)
Most studies, reviewed in this thesis, did not investigate the severity of injury resulting from violent crime, that is, whether injuries were severe or minor and whether medical attention was required. Only two studies, the National Crime Victimization Survey and the New York State Education Department and New York State Division of Criminal Justice Services (1994), investigated whether victims suffered no injuries. Only two studies, relevant to this thesis, report results based on a standard of injury (Arndt, 1995; New York State Education Department & New York State Division of Criminal Justice Services). One of those studies found that bruises and scratches were the most frequently reported injuries among student and teacher victims of assault and robbery (New York State Education Department & New York State Division of Criminal Justice Services). The standard of injury used by the New York State Education Department and New York State Division of Criminal Justice Services is far superior to that of Arndt because it provides a variety of injuries for students to check off versus hospital treatment as the only criteria. The standard of injury used by the New York State Education Department and New York State Division of Criminal Justice Services is a model for future studies to apply for investigating types of injuries. An exemplary model for future research is the National Crime Victimization Survey injury category, question #31, where the following injuries are listed for respondents to check:

1. None
2. Raped
3. Attempted rape
4. Sexual assault other than rape or attempted rape
5. Knife or stab wounds
6. Gun shot, bullet wounds
7. Broken bones or teeth knocked out
8. Internal injuries
9. Knocked unconscious
10. Bruises, black eye, cuts, scratches, swelling, chipped teeth
11. Other - Specify. (Bureau of Justice Statistics & U.S. Census Bureau, 2001, p. 5)

The NCVS’s definition of serious and minor injury is an exemplary model for other researchers to use as a guide for determining what constitutes a serious injury versus a minor injury (Simon et al., 2001; U.S. Department of Justice, Bureau of Justice Statistics, 2003b).

Only one American study, reviewed in this thesis, provides both a satisfactory conceptual analysis and report the severity of injuries (New York State Education Department & New York State Division of Criminal Justice Services, 1994). However, the New York study is not national. The New York study is a good example of the importance of measuring types of injuries in order to help clarify the seriousness of the incidents as opposed to merely reporting rates of assault and robbery. Furthermore, the researchers defined their terms in both the research report and surveys used in the study (New York State Education Department & New York State Division of Criminal Justice Services).

Based on data from the National Crime Victimization Survey (years 1992 to 2001), students aged 12 to 18 were safer at school than away from school, that is, less likely to be victims of nonfatal serious violent crime (rape, sexual assault, robbery, and aggravated assault) when they were at school than away from school (DeVoe et al., 2003). From 1992 to 2000, the NCVS victimization rates for nonfatal violent crimes were lower at school than away from school (DeVoe et al., 2003). In 2001, no difference could be detected in the rate of violent victimization at school and away from school (DeVoe et al., 2003). The NCVS data indicate that simple assault is the most prevalent type of violence among American students and the most common school violence problem facing America (DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001).

Less than 1% of all homicides among school-aged children in the United States were school-related between 1992 and 1994: an estimated 0.62% of
homicides and suicides among school-aged children were school-related (Kachur et al., 1996). Similarly, a follow-up study found that, between 1994 and 1999, 0.9% of homicides and suicides among school-aged children were school associated (1.3% of all homicides and 0.3% of all suicides in the United States) (Anderson et al., 2001). The chances of a student dying as a result of a school-associated violent incident is less than one in a million (Anderson et al.). These national studies indicate that school-related homicides are an extremely rare occurrence.

The following chapter discusses limitations of the survey design which is an important topic considering that the majority of school violence studies are based on survey data.
CHAPTER FIVE
LIMITATIONS OF SURVEY DESIGN

The survey research design, typically used to assess rates of school violence is limited. Therefore, an awareness of the disadvantages of this methodology is crucial in order to put school violence statistics in perspective, that is, to interpret study findings with caution.

This brief chapter discusses limitations of the survey design, such as false reports, underreporting, overreporting, poor memory, telescoping, social desirability, and potential for misunderstanding and misinterpretation by respondents.

Underreporting

When interpreting school violence statistics, it is important to be aware that the true level of school violence is not known. The prevalence rates of school crime, reported in studies, are not necessarily accurate estimates. First, the true extent of school-related violent crime is not known due to the dark figure of crime. Second, "discretionary reporting practices on the part of victims, schools, and police limit our ability to measure the true extent of the problem through official police statistics," (Janhevich, 1997, p. 23). Third, there is the issue of fear. A study of junior high school students in Alberta found that students do not report most incidents of violence for a number of reasons such as "fear of reprisal" and a dissatisfaction with how victims and perpetrators are
handled by school staff (MacDonald & daCosta, 1996, p. 13). This unwillingness to report has been referred to as a "code of silence" (Mathews, conference presentation, 1994, cited in MacDonald, 1995, p. 16). The largest obstacle for effectively managing school violence is denial: "that code of silence that permeates the student and staff population and minimizes the true number of incidents that are taking place every day" (Mathews, conference presentation, 1994, cited in MacDonald, 1995, p. 16). This phenomenon is underscored by other researchers who have surveyed students on school violence (Duffee, 1994; Heath, 1994; MacDonald & daCosta; Ryan et al., 1993). Underreporting affects survey results when respondents elect not to report incidents. Furthermore, if principals are unaware of incidents occurring at their school, due to a code of silence, then surveys of principals, that solicit information concerning the number of incidents of violence, will not reflect true levels of violence.

Disadvantages of Survey Designs

Most of the research reports reviewed in this thesis are based on survey data. There are many limitations to the survey design, such as problems of validity (Babbie & Benaquisto, 2002; Cornell & Loper, 1998; Jackson, 1999; Maxfield & Babbie, 1995; Mosher et al., 2002; Nettler, 1978; O'Brien, 1985); generalizability (Champion, 1993; Mosher et al.); faulty memory (Nettler, 1978; Palys, 1997; Stern & Kalof, 1996); telescoping (Duffee, 1994; Gottfredson & Hindelang, 1977; Palys); false reporting (Cornell & Loper, 1998; Maxfield & Babbie; Mosher et al.; Nettler, 2003; Palys); response rates (Neuman et al., 2004; O'Brien, 1985); and social desirability distortion (Nettler, 2003).
Victimization surveys, in general, are limited; for example, false reports, overreporting, underreporting, and poor memory (Fattah, 1991; Gottfredson & Hindelang, 1977; Junger-Tas & Marshall, 1999; Maguire & Pastore, 2001; Neuman et al., 2004; O'Brien, 1985; Palys, 1997; Skogan, 1975, 1976, 1981, 1990; Sparks, 1981; Sparks, Genn, & Dodd, 1977).

There are limitations to using school surveys (Cornell & Loper, 1998). "All self-report surveys are limited by the potential for false reporting. Skeptics may be concerned that some students will make exaggerated claims of high-risk behavior, while other students will deny high-risk behavior," according to Cornell and Loper (1998, p. 328).

Cornell and Loper (1998) investigated the methods used to assess rates of school violence and how reliability and validity "screening" affects rates of reported school violence (p. 319). They found that discarding invalid surveys that did not meet their screening criteria resulted in a reduced level of reported incidents of school violence. For example, reported gun-carrying at school declined from 16% to 6%, knife-carrying declined from 18% to 8%, and the rate of physical fighting declined from 29% to 19%. A total of 24% (2,636) of the surveys failed to meet their "validity criteria" (p. 327). The researchers' criteria for invalid surveys are as follows: "surveys completed in a careless manner as indicated by missing or inappropriate information on critical items, and surveys completed in an exaggerated manner that involved consistent endorsement of all 6 high risk behaviors" (Cornell & Loper, p. 322). However, their criteria for excluding surveys that answered yes to all high risk behaviors (carried a knife,
carried a gun, carried other weapon, physical fight, used drugs, and drank alcohol) is suspect. It is possible that some students who answered yes to all of these items were responding truthfully. By excluding these potentially valid surveys Cornell and Loper may have weakened their study.

Far too many school violence surveys have “presumed that responses are accurate without inquiry into their reliability or accuracy,” according to Rosenblatt and Furlong (1997, p. 199). A study of the reliability and validity of student self-reports of school violence found that surveys that were rejected on the grounds of reliability and validity reported much higher ratings of school violence victimizations compared to surveys classified as valid (Rosenblatt & Furlong).

Although a guarantee of confidentiality and anonymity usually influences adolescents to disclose delinquent behavior, survey information should be used as a “component of a comprehensive school assessment,” according to Cornell and Loper (1998, p. 328). In other words, surveys should be used in addition to other data sources such as school records, and interviews with teachers, counselors, students, and parents (Cornell & Loper).

Most surveys are generally weakened by validity (Babbie & Benaquisto, 2002; Maxfield & Babbie, 1995). Champion (1993) summarizes the disadvantages of survey designs. He states:

1. Surveys are superficial reflections of population sentiments.
2. Surveys, particularly political surveys, are unstable reflections of population characteristics.
3. Researchers have little or no control over individual responses in surveys.
4. Statements about populations from which samples are drawn are tentative. (Champion, 1993, p. 65)
“By designing questions that will be at least minimally appropriate to all respondents, you may miss what is most appropriate to many respondents. In this sense, surveys often appear superficial in their coverage of complex topics,” according to Maxfield and Babbie (1995, p. 235). Maxfield and Babbie further state, “Survey research is generally weak on validity and stronger on reliability . . . In comparison with field research, the artificiality of the survey puts a strain on validity.”

Surveys are limited by the problem of telescoping, that is, “misplacing events in time . . . . an event may be remembered as having occurred more recently than it actually occurred, or it may be remembered as having occurred earlier than it actually did” (Gottfredson & Hindelang, 1977, p. 206). Subject responses may be false due to telescoping, “whereby faulty memories result in too much reported victimization, too little reported victimization, and/or victimization reported outside of the time-frame provided for the reported victimization” (Duffee, 1994, p. 17). Telescoping can result in inflated figures for the reference year (Gottfredson & Hindelang, 1977; Skogan, 1976).

Subject responses may be false due to “misunderstanding, misinterpretation, fabrication, and psychological blocking,” (Duffee, 1994, p. 17). Questionnaire surveys rely upon the honesty and accuracy of respondents (Marshall & Rossman, 1999; Nettler, 2003). Lying is a problem in criminal justice research that asks people about criminal behavior (Maxfield & Babbie, 1995; Mosher et al., 2002; Nettler, 1978, 2003); therefore, it is possible that student respondents may lie about crime they have committed at school. A guarantee of
anonymity should help to prevent this; however, the "social desirability" factor may still have an affect. Social desirability distortion (SD bias) is the "tendency to describe ourselves in better light than we behave" (Nettler, 2003, p. 136). Social desirability occurs when "subjects may be saying what he/she 'should' believe" (Stern & Kalof, 1996, p. 75). Some student respondents may deny victimizing other students in their responses because they may not want to admit to themselves that they are guilty of such antisocial violent behavior. However, SD bias does not apply to students who may be proud of their macho violent behavior. Aggressive behavior may be perceived by some youth in a positive way: "Aggressive youths tend to believe that aggressive behavior increases status among their peers" (Webster, 1996, p. 208).

A survey questionnaire can be a source of error due to "limited field testing, complexity, and comprehensiveness," according to Duffee (p. 4). Questionnaires must be worded clearly and the vocabulary used must be understood by respondents (Cornell & Loper, 1998; Jackson, 1999; Palys, 1997; Sommer & Sommer, 2002; Neuman et al., 2004). As discussed in this thesis, lack of definitions in the questionnaire can weaken a study if subjects do not clearly understand terms applied in the questionnaire. In regards to school violence research, the level of education of student respondents should be considered when developing a questionnaire. Furthermore, subjective interpretation of questions is an inevitable problem of surveys, that is, words and phrases that have different meanings for different demographic groups (Mosher et al., 2002).
Conclusion

Statistical findings of all school violence studies should be critically analyzed. Critical interpretation is crucial because some studies are methodologically flawed in terms of research methods and design. Not all research studies are equal. Quality can differ, as shown by varying methodological rigor, from one study to another. One must be cautious and consider the quality of studies before making sweeping generalizations about school violence.
Defining school violence is the tip of an iceberg of problems associated with determining rates of school violence in Canada and the United States. Assessing rates of school violence and establishing trends can be both difficult and confusing because of inconsistent and varying definitions. Furthermore, Canadian national studies of violent crime and victimization of students in elementary and secondary schools have not been conducted to date.

**Canadian Statistics**

It is difficult to assess levels of school violence in Canada based on the studies reviewed in this thesis. The Statistics Canada annual figures on violent incidents in schools, based on UCR2 Survey data, are neither national nor representative of Canada (Statistics Canada, 2003). Furthermore, Statistics Canada's definition of “school” is not limited to elementary and secondary schools (Statistics Canada, 2003). In 1997, a total of 67% of violent incidents in schools involved common assault, followed by major assault (16%) and robbery (7%) (Stevenson et al., 1998). This rate for common assault is only 7% higher than the minor assault rate reported for 1995 in a previous Statistics Canada study (Janheivich, 1997). Although these findings, based on UCR2 Survey data, are not representative of Canadian elementary and secondary schools (Statistics
Canada, 2003), it provides at least some indication that simple assault is perhaps
the most prevalent type of violent behavior in schools.

The fact that most of the Canadian studies, reviewed in this thesis, are
flawed by poor conceptual analysis makes their results questionable. Few
studies demonstrate good conceptual analysis (e.g., Duffee, 1994; Janhevich,
1997; Kasian, 1992; Lyon & Douglas, 1999; Saskatchewan Teachers’
Federation, 1994; Stevenson et al., 1998). Many of the studies of violence
against Canadian teachers provide definitions that are too broad (e.g.,
Malcolmson, 1994; Manitoba Teachers’ Society, 1990, 1993; Nova Scotia
Teachers’ Union, 1999a; Ontario Teachers’ Federation, 1991b).

Many Canadian studies of teacher and student victimization lack clear
definitions of the conceptual elements of the research, both in the research
reports and questionnaires administered to subjects (e.g., Gomes et al., 2000;
King et al., 1999; MacDonald, 1995; McCreary Centre Society, 1998, 1999;
Manitoba Teachers’ Society, 1990, 1993; New Brunswick Teachers’ Association,
1994; Ryan et al., 1993; Smith et al., 1995; Wall, 1995). Another study, reviewed
in this thesis, also lacks definition in the questionnaire; however, the terms are
defined in the report (Ontario Teachers’ Federation, 1991b).

If respondents do not clearly understand terms applied in the
questionnaires, this weakens the validity of claims, findings, and conclusions
made from the study. Researchers should define their terms in order that
respondents understand the meaning and readers are clear as to the significance
of the results.
It is also difficult to assess levels of violence against teachers and students in Canada, based on the studies reviewed in this thesis, because of incomparable studies that vary in definitions of terms, types of investigations, and time-frames of when respondents were to recall victimization incidents. The only two Canadian studies of student violence that could be compared (Gomes et al., 2000; Smith et al., 1995) are not national and are limited to one province in Canada (Alberta).

The majority of studies, reviewed in this thesis, do not indicate whether the incidents were violent in a criminal sense or more like "minor school yard scraps" (Janhevich, 1997, p. 20). With the exception of some Statistics Canada studies (e.g., Frank, 1992; Janhevich, 1997; Stevenson et al., 1998), most studies do not report the type of assault, for example, common/minor assault versus major assault (e.g., aggravated assault). Statistics Canada annually report the total percentage of assault incidents (level 1, 2, 3), collapsed into one figure, occurring at school, but do not annually report the percentage of each type of assault occurring at school (i.e., assault level 1 versus level 2 or 3) (Statistics Canada, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002a, 2003).

Only a few Canadian studies investigated the severity of injury (Duffee, 1994; Gomes et al., 2000; Janhevich, 1997; Lyon & Douglas, 1999; Stevenson et al., 1998). Most studies did not investigate the severity of injury resulting from assault, that is, whether injuries were major or minor and whether medical attention was required. Most studies did not investigate whether victims suffered no injuries, with the exception of the following studies: Duffee (1994), Janhevich
(1997), Lyon & Douglas (1999), and Stevenson et al. (1998). Of the studies that collected data for medical attention/treatment (e.g., Duffee, 1994; Janhevich, 1997; Lyon & Douglas, 1999; Stevenson et al., 1998), the researchers do not define or establish a criteria for the term "medical attention" in either the report or the questionnaire. It is not clear whether seeing a nurse for a band-aid constitutes medical attention.

According to Statistics Canada, only 5% to 6% of reported violent incidents occurring at school resulted in serious injury (Janhevich; Stevenson et al.). However, data is not collected separately for elementary and secondary schools in Janhevich's study, and in the Stevenson et al. study, it is not clear whether the reported injury rates pertain to youth and elementary/secondary schools specifically or if the rates also include universities and colleges. Based on the figures of serious injury, reported in these Statistics Canada reports (Janhevich, 1997; Stevenson et al, 1998), it is plausible that only a small proportion of elementary and high school students in the sample suffered major injuries from violent incidents.

The results of these flawed studies cannot be used as indicators of school violence in Canada. Of the studies that provide a satisfactory conceptual analysis and investigated the severity of injuries resulting from assaults (Duffee, 1994; Janhevich, 1997; Lyon & Douglas, 1999; Stevenson et al. 1998), these studies are not national and there are too few in number to generalize about the level of violence in Canadian schools.
American Statistics

Most studies do not indicate the type of assault, for example, common/minor assault versus major assault (aggravated assault). The National Crime Victimization Survey is the only American study to differentiate between aggravated assault and simple assault in the definition of assault (U.S. Department of Justice, Bureau of Justice Statistics, 2003b) and serious violent crime and violent crime (DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001).

Most studies did not investigate the severity of injuries resulting from assaults. Only one study reports whether student victims suffered no injuries (New York State Education Department & New York State Division of Criminal Justice Services, 1994). This kind of information is important for interpretation of rates of reported violence, that is, in order to help clarify the seriousness of the incidents. Only two studies, relevant to this thesis, report results based on a standard of injury (Arndt, 1995; New York State Education Department & New York State Division of Criminal Justice Services). For example, the New York State Education Department & New York State Division of Criminal Justice Services found that bruises and scratches were among the most frequent injuries for both teachers and students that occurred during either an assault or robbery.


Only one American study, reviewed in this thesis, provides a satisfactory conceptual analysis and investigated the severity of injuries (New York State Education Department & New York State Division of Criminal Justice Services, 1994). However, the New York study is not national. The study is a good example of the importance of measuring types of injuries in order to help clarify the seriousness of the incidents as opposed to merely reporting rates of assault and robbery (New York State Education Department & New York State Division of Criminal Justice Services). Furthermore, the researchers defined their terms in both the research report and surveys used in the study.

National Crime Victimization Survey data indicate that, from 1992 through 2001, students aged 12 to 18 were safer at school than away from school that is, less likely to be victims of nonfatal serious violent crime (rape, sexual assault, robbery, and aggravated assault) when they were at school than away from school (DeVoe et al., 2003). From 1992 to 2000, the NCVS victimization rates for nonfatal violent crimes were lower at school than away from school (DeVoe et al., 2003). In 2001, no difference could be detected in the rate of violent victimization at school and away from school (764,000 at school and 758,000
away from school) (DeVoe et al., 2003). The NCVS data indicate that simple assault is the most prevalent type of violence among American students and the most common school violence problem facing America.

Less than 1% of all homicides among school-aged children in the United States were school-related: they estimated that 0.62% of homicides and suicides among school-aged children were school-related (Kachur et al., 1996). Similarly, Anderson et al. (2001) found in a follow-up study that between 1994 and 1999, 0.9% of homicides and suicides among school-aged children were school associated (1.3% of all homicides and 0.3% of all suicides in the United States). The chances of a student dying as a result of a school-associated violent incident is less than one in a million (Anderson et al.). These national studies indicate that school-related homicides are an extremely rare occurrence.

**General Limitations of School Violence Statistics**

When interpreting school violence statistics it is important to be aware that the true level of school violence is not known. The prevalence rates of school crime, reported in studies, are not necessarily accurate estimates. First, there is the aforementioned "dark figure" of crime. Second, "discretionary reporting practices on the part of victims, schools, and police limit our ability to measure the true extent of the problem through official police statistics" (Janhevich, 1997, p. 23). Third, there is the "code of silence" (Mathews, 1994, conference presentation, cited in MacDonald, 1995, p. 16) and "fear of reprisal" (MacDonald & daCosta, 1996) issues.
There are limitations to using school surveys such as false reporting and potential lack of reliability and validity screening (Cornell & Loper, 1998) or lack of "inquiry into their reliability or accuracy" (Rosenblatt & Furlong, 1997, p. 199). The survey design, in general, has many disadvantages, such as problems of validity (Babbie & Benaquisto, 2002; Cornell & Loper, 1998; Jackson, 1999; Maxfield & Babbie, 1995; Mosher et al., 2002; O'Brien, 1985), generalizability (Champion, 1993; Mosher et al.); faulty memory (Nettler, 1978; Palys, 1997; Stern & Kalof, 1996); telescoping (Duffee, 1994; Gottfredson & Hindelang, 1977; Palys); false reporting (Cornell & Loper, 1998; Maxfield & Babbie; Mosher et al.; Nettler, 1978, 2003; Palys); response rates (Neuman et al., 2004; O'Brien, 1985); and social desirability distortion (Nettler, 2003).


Statistical findings of all school violence studies must be subjected to critical analysis. An evaluation of research is necessary because studies can vary in terms of the quality of research designs and methods. Skepticism of the studies is necessary before any substantive conclusions or generalizations can be asserted.

**Future Research**
There is a need for more research of school violence in Canada. The United States has a far greater wealth of information on this topic in addition to annual government publications on this topic (e.g., DeVoe et al. 2002, 2003; Grunbaum, 2002, 2004; Kann et al., 1995, 1996, 1998, 2000; Kaufman et al. 1998, 1999, 2000). The joint effort of the National Center for Education Statistics and the Bureau of Justice Statistics in publishing a series of annual reports on school crime and safety is exemplary research for Canada to follow in terms of wide coverage/evaluation of the topic (Bureau of Justice Statistics & U.S. Census Bureau, 2001; DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001). Currently, the statistics from Statistics Canada on school violence are insufficient compared to those gathered by the United States Department of Justice, Bureau of Justice Statistics. It is recommended that Statistics Canada implement a model similar to the National Crime Victimization Survey, which provides national annual reports of criminal victimization that occur at schools in Canada for students age 12 through 18.

Questions related to types of victimization and injury should be added to Statistics Canada’s General Social Survey (GSS) (Statistics Canada’s national victimization survey). The GSS is limited in terms of coverage of types of criminal victimization (e.g., physical assault, threats, and injuries) compared to the NCVS (see page 122 of this thesis; Bureau of Justice Statistics, U.S. Census Bureau, 2001) (Statistics Canada Housing, Family & Social Statistics Division, 1999). For example, the GSS does not investigate specific types of injuries suffered, as does the NCVS, and, instead, limits the investigation to questions
regarding whether the victim received medical attention from a doctor or nurse or
whether the victim received treatment at a hospital as a result of the incident.
The GSS questionnaire is not designed for the interviewer to document various
types of threatening behavior, other than to establish if the threat was physical in
nature or was face-to-face, over the telephone, etc., compared to the NCVS that
includes a list of 13 different types of threatening behavior (see page 122, of this
thesis, for examples) with boxes next to each item for the interviewer to check (if
applicable). The GSS collapses sexual assault and attempted sexual assault
into one category, unlike the NCVS that separates rape and attempted rape. The
GSS is limited in questions related to weapon involvement. For the investigation
of weapon-related incidents, the GSS only solicits information concerning
whether the victim was "shot, knifed or hit with object held in hand" and whether
the perpetrator had a weapon present and, if so, the type of weapon present
(Statistics Canada Housing, Family & Social Statistics Division, 1999, p. 6-
Section V). The category of "shot, knifed or hit with object held in hand" is too
broad: by designing the category in this way, the proportion of shot versus hit
with object incidents is not known. In comparison, the NCVS lists various
separate items for the interviewer to check if applicable; for example, shot, shot
at (but missed), hit with gun held in hand, stabbed/cut with knife/sharp weapon,
attempted attack with knife/sharp weapon, hit by object (other than gun) held in
hand, hit by thrown object, and attempted attack with weapon other than
gun/knife/sharp weapon (Bureau of Justice Statistics, U.S. Census Bureau, 2001,
p. 5).
In comparison to the GSS, the NCVS solicits detailed information concerning specific types of victimization (e.g., types of victimization and injuries) and then groups the data into serious violent crimes and violent crimes categories for reporting purposes. The GSS's reports of assault do not indicate the nature of the incidents, that is, simple assault versus aggravated assault (Besserer & Trainor, 2000; Mihorean et al., 2001). The GSS needs to be conducted, minimally, on an annual basis in order to provide current information and for comparison purposes (there was a 6 year gap between the 1993 GSS and the 1999 GSS) (Besserer & Trainor, Mihorean, et al.). Even though the GSS investigates rates of incidents occurring at school separately from other locations, the findings are collapsed into one figure for commercial place/public institutions in the research report (Besserer & Trainor, 2000; Mihorean et al.; Statistics Canada Housing, Family, & Social Statistics Division, 1999). The GSS does not investigate the type of school where an incident occurs (e.g., secondary school as opposed to university) and, instead, only determines whether the incident occurred inside a school or on school grounds (Statistics Canada Housing, Family & Social Statistics Division, 1999). The design of the NCVS is no different in this respect. However, an analysis of NCVS data for students, age 12 through 18, victimized at school is conducted and reported on an annual basis by the Bureau of Justice Statistics (e.g., DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001), which is necessary in order to assess levels of violence in elementary and high schools.
Longitudinal data collection that would allow for annual comparisons of rates of school violence is recommended for research in Canada. Trend or panel studies are examples of ideal types of longitudinal studies that are recommended and should, ideally, always be used for research. A trend study involves sampling from the same population at different points in time: “Trend studies are useful for studying changes in general populations that change constantly in terms of the individuals who are members of the population, for example, high school students” (Gall et al., 1996, p. 377). Follow-up studies (e.g., longitudinal studies) are useful in order to help determine levels of violence in schools over time. Panel studies, a type of longitudinal study used in the NCVS (Menard, 2002), help to avoid telescoping through the use of a bounded interview (see page 79, of this thesis, for description of bounded interview). Panel studies involve interviews of the same set of people at two or more time periods (Maxfield & Babbie, 1995, p. 80). Longitudinal studies have been described as “often the best way to study changes over time” (Babbie & Benaquisto, 2002, p. 88). Longitudinal studies are, however, limited by attrition and expense (Farrington, 1992; Gall et al., 1996; Hagan, 1997; Menard, 2002). Longitudinal studies are usually more complex and costly than cross-sectional research (Neuman et al., 2004).

Future research should aim to clearly define terms applied in both the research report and questionnaires administered to subjects. It is important to investigate injuries suffered in order to establish the severity of incidents. A standard of injury should be used in order to indicate the seriousness of criminal
incidents (e.g., Bureau of Justice Statistics & U.S. Census Bureau, 2001; Duffee, 1994, Lyon & Douglas, 1999; New York State Education Department & New York State Division of Criminal Justice Services, 1994). The scale of severity of injuries provided in the National Crime Victimization Survey is an exemplary model for a scale of severity of injury) (Bureau of Justice Statistics & U.S. Census Bureau, 2001). In order to help with interpretation of results, assault should be divided into aggravated assault and simple assault categories, and investigated separately, as seen in the National Crime Victimization Survey (DeVoe et al., 2002, 2003; Kaufman et al., 1998, 1999, 2000, 2001; U.S. Department of Justice, Bureau of Justice Statistics, 2003b). The category of assault is too broad otherwise. The NCVS’s definition of serious and minor injury is an excellent guide for determining what constitutes a serious injury versus a minor injury (Simon et al., 2001; U.S. Department of Justice, Bureau of Justice Statistics, 2003b). The NCVS is also exemplary in terms of conducting an extensive investigation of various types of assault and threatening criminal incidents (Bureau of Justice Statistics & U.S. Census Bureau, 2001).

Contribution

This thesis provides an extensive critical review of Canadian and American studies of school violence. The majority of Canadian and American studies reviewed, in this thesis, are methodologically flawed (e.g., poor conceptual analysis) and fail to report the seriousness of incidents (e.g., aggravated assault versus simple assault and the nature and extent of injuries).
Hopefully, my critical analysis will raise awareness among researchers of school violence regarding potential fatal flaws in research designs that can be avoided or at least minimized. This thesis points out exemplary models of research (e.g., the National Crime Victimization Survey) that can be used as a guide for other researchers. It is important that researchers learn from the shortcomings of past research in order to avoid recycling the same mistakes.

This thesis points out that at present it is not possible to determine levels of violence in Canadian elementary and secondary schools, on a national level, due to a lack of national statistics.

This thesis is useful in confirming that school-related homicides are extremely rare events and that simple assault appears to be the most prevalent type of violence among American students and the most common school violence problem facing America.
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