WRITTEN VIOLENCE POLICIES AND ASSAULT DETERRENTS IN MINNESOTA SCHOOLS: IMPACT ON EDUCATORS' RISK OF PHYSICAL ASSAULT

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DENISE MARIE GRANT FEDA

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SUSAN GOODWIN GERBERICH, PH.D.
BRUCE ALEXANDER, PH.D
ACADEMIC AND RESEARCH ADVISERS

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DEDICATION

This dissertation is dedicated first to my mother, Martha Feda, whose office door and heart were always open during my years of study. I would also like to thank my sisters, Jennifer Grant and Sarah Feda, and my father, Dale Feda, for their support.

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ABSTRACT

Educators have the fourth highest non-fatal occupational violence victimization rate in the United States. Few school violence policies and assault deterrents have been studied with quantitative methods to evaluate their impact on workplace violence. This study analyzed nine different written violence policies and seventeen assault deterrents to determine their impact on work-related physical assault in educational settings.

Data were obtained from the Minnesota Educators' Study. Screening of 26,000 licensed educators, randomly selected from the Minnesota Department of Education's database, identified 6,180 eligible educators who were enrolled in the comprehensive Phase I study. Cases (n = 372) who reported physical assault within the last year, and controls (n = 1,116) who did not, were included in the Phase II case-control study. Multivariate logistic regression analyses were used to estimate risk of assault. Directed acyclic graphs were used to establish potential confounders and sensitivity analyses were applied to determine the potential range of bias.

Overall response rates for the full study were: Phase I, 84% (78% full survey); Phase II, 84% (78% full survey). The rate of physical assault per 100 educators per year was 8.3. The multivariate analysis, after adjustment, suggested decreased risks of physical assault associated with the presence of video monitors (OR 0.72; 95% CI: 0.50 – 1.03), intercoms (OR 0.77; 95% CI: 0.55 – 1.06), routine locker searches (OR 0.49; 95% CI 0.29, 0.82), and school uniforms/dress codes (OR 0.74; 95% CI: 0.52 – 1.07). Decreased risk of physical assault was also associated with the awareness of policies regarding how to report sexual harassment, verbal abuse, and threat (OR 0.53, 95% CI: 0.30-0.95); assurance of confidential reporting (OR 0.67; 95% CI: 0.44-1.04); and zero

tolerance for violence (OR 0.70; 95% CI: 0.47-1.04). The presence of metal detection devices (OR 18.1; 95% CI 1.05, 311.5) appeared to enhance the risk of physical assault; however confounding may be present in this low-frequency finding.

Awareness of several policies and the presence of many assault deterrents may help prevent work-related physical assault. This study was an important first step in examining the impact of written violence policies and assault deterrents in educators' environments.

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ORGANIZATION

Initial chapters of this thesis include an introduction, a comprehensive literature review and a thorough explanation of the research study design and methods. These chapters are followed by two papers (Chapters 4 and 5) and a Discussion section (Chapter 6). Chapters 4 and 5 include the major study findings and were written with the intent of publication in scholarly journals. Therefore, some of the introductory material, background information, and methods found in Chapters 1-3 are repeated within Chapters 4 and 5 of the dissertation. Redundancy is also found in the final chapter regarding study validity and conclusions.

CHAPTER I

INTRODUCTION

Work-related violence is a serious and growing public health concern (OSHA, 2002). The Occupational Safety and Health Administration (OSHA) estimates that two million people encounter work-related violence each year and that the resulting cost is in billions of dollars (Merchant and Lundell, 2001b; OSHA, 2002). According to the National Crime Victimization Survey, from 1993 to 1999, there were 1.7 million violent victimizations against workers ages 12 and older (Duhart, 2001). Oftentimes, only the most extreme forms of violence are reported and, although these statistics are from high quality sources, the true magnitude of violence in the workplace may never be known.

In order to efficiently and accurately study violence in the workplace, OSHA defines workplace violence as physical violence or the threat of violence, ranging from threats to homicide, directed at an employee (OSHA, 2002). This definition is further parsed into four categories: criminal intent (type I), customer/client (type II), worker-on-worker (type III), and personal relationship (type IV) (Merchant and Lundell, 2001a; Ruff et al., 2004; OSHA, 2004). It is possible to find examples of each type of violence throughout many different occupations, including an educator's work environment.

The Bureau of Justice Statistics reports that educators have the fourth highest rate of non-fatal victimization in the workplace, with 23 events per 1,000 educators annually (Duhart, 2001). More recent data from the U.S. Departments of Education and Justice's Indicators of School Crime and Safety, 2006, found that from 2003-2004, seven percent of teachers reported being threatened with injury or physically attacked by a student from their school within the previous twelve months (Dinkes et al., 2006). In addition, it is

estimated that one of every five educators leaves the profession because of the dangerous environment (Hoffman, 1996). In fact, it has previously been found that two in ten public school teachers (19%) indicated that violence in their school was a factor in teachers leaving their school (Binns and Markow, 1999). Most of the current literature on school safety focuses on student safety, and behaviors of students, rather than on individuals working in schools (Seifert, 2003; Casteel et al., 2007).

This dissertation aims to fill this research void, creating a greater understanding of the written violence policies and assault deterrents associated with violence against educators. This study was based on data collected for the Minnesota Educators Study (MES). The original study involved two phases, 1) a comprehensive phase to collect data on the magnitude and consequences of, and potential risk factors for, physical and non-physical violence and 2) a nested case-control design to identify risk (or protective) factors for physical assault. Approvals for the main study, and for the analyses for this effort, were obtained from the University of Minnesota Institutional Review Board.

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CHAPTER II

BACKGROUND AND SIGNIFICANCE

Overview

The following literature review reflects an effort to examine and synthesize the current knowledge regarding educators' risk of violence, work-related violence policies, and assault deterrents. First, the public health approach and theories associated with violence and policies are introduced, followed by an analysis of the problem of work-place violence, violence prevention policies, and assault deterrents in the educational environment. Brief synopses of research studies specific to violence, written policies, and assault deterrents can be found in **Tables 1 and 2**, compiled under a method adapted from Garrard (2004). This analysis concludes with a brief discussion on the limitations of the current literature and an exploration of potential paths for improvement upon those limitations, some of which are addressed by this dissertation.

Public Health Approach

The public health approach aims to identify risk or protective factors for specific adverse outcomes and to determine ways to prevent such outcomes in order to minimize, reduce, or eliminate the identified risk factors. These factors are commonly studied using aggregate data instead of the more clinical, individual case data. In any general public health text, a public health model with three levels can be found. The levels of prevention most commonly identified are: primary, secondary and tertiary (Gordis, 2000). Similarly, there are different levels of controls used to prevent outcomes, ranging from engineering controls to personal controls. There are generally three approaches: 1) environmental; 2)

organizational/administrative; and 3) behavioral/interpersonal (Merchant and Lundell, 2001) – or engineering, legislation, and education.

Specifically to the problem of violence, this approach is crucial to 1) preventing events from happening and 2) reducing harm associated with events that do occur. Similarly to how an infectious disease expert regards the common cold as preventable though proper hand washing techniques, a violence prevention expert will use the same analytical skills, within the public health approach and theory, to establish risk factors as a basis for development of prevention methods to reduce or eliminate violent events.

Violence and prevention theories

Questions regarding the source of violence often arise when serious and malicious events occur. The answer commonly comes from one of three main theories on violence: learned behavior theory, rational choice theory and biological theory (Cassella, 2002).

Bandura's theory of learned behavior implies that violence surrounds individuals in their everyday life and, thus, they consider violence the norm and adapt violence into their own life (Bandura, 1973). Using this theory, it is assumed that violence could be prevented through teaching that violence is wrong. If violence is wrong, it will no longer be the norm in someone's life and they would not commit violent acts.

Rational choice theory argues that individuals have a choice to commit a crime – they weigh the benefits and potential consequences and decide that committing the crime is worth the effort (Casella, 2002). According to this theory, violence could be prevented by using punishments and surveillance. Since the individual has already decided the crime is worth any punishment that may ensue, the only ways to prevent the act from occurring are to 1) increase the punishment so that the outcome is no longer as desirable

and inconsequential or 2) eliminate the opportunity. For example, if an individual decided to bring a gun into the classroom to commit a crime, their intended act of violence can be thwarted by using a metal detection device, screening for weapons and guns. The metal detection device did not erase the motivation for the intended crime; but, by using the metal detection device, the school was aware of such motivation and acted to sideline the effort.

Finally, the biological theory of violence implies that some individuals naturally are more violent and more likely to commit crimes; violence is inherent in their nature. A biological theorist might suggest medications or other medical solutions to "cure" a violent individual (Casella, 2002). By taking a medication, the individual would no longer have an inherent urge to commit violent acts or crimes, and crimes or violent acts would thus be eliminated.

In reality, it may be a combination of the above theories and others that drive violent behavior. Current education policies and assault deterrents have defined punishments and consequences (e.g., zero tolerance policies) with the underlying assumption that individuals in the school environment choose to commit crimes based on weighing the pros and cons of that choice. Violence prevention in an educational setting is, thus, found more in the policies and environmental assault deterrents focused on catching or punishing the crime, rather than on medicating violent people or removing violence from everyday life.

Violence in the workplace

Although the National Crime Victimization Survey from 1993-1999 estimated that there were 1.7 million non-fatal acts of violence annually in the workplace (Duhart,

2001), the true prevalence of violence for any specific population is relatively unknown. The literature is limited by definitions of assaults and by the populations studied. Too often, only the most extreme manifestations of violence, such as homicide, are studied. As a consequence, unreported events such as threats and assault are understudied and potential prevention measures are lost -- for both mild and extreme forms of violence. Educators have been studied to a limited extent, but comprehensive, methodologically sound research is limited.

Risk Factors

Several potential risk factors of workplace violence for educators have already been identified and include: working in special education (68 per 1,000); working in junior high (54 per 1,000) or high school (38 per 1,000); being male; and being strict (Duhart, 2001; Hoffman, 1996).

The most recent national data from the U.S. Department of Education's and U.S. Department of Justice's *Indicators of School Crime and Safety, 2006*, found similar risk factors analyzing the School and Staffing Survey (SASS) from 2003-2004. Private and public school teachers were asked about violent incidents in their school during the past twelve months. Educators in public versus private schools were more likely to be threatened with injury by a student (7% vs. 2%), and were more likely to be attacked by a student (4% vs. 2%) (Dinkes et al., 2006). Educators in the central city were also more likely to be threatened (10%) with injury by a student and attacked (5%) than their peers in urban fringe (6% and 3%, respectively) or rural (5% and 2%, respectively) schools (Dinkes et al, 2006). Additionally, males (versus females) continued to be more likely to

be threatened with injury (9% vs. 6%); however Dinkes et al. (2006), found that females were more likely to actually be attacked by a student than males (4% vs. 3%).

The climate of a community may also impact violent behavior, especially if the climate does not produce a sense of identity or community for individuals within the school environment (Baker, 1998). In contrast, Casteel et al. (2007), suggest that environmental changes could potentially reduce the risk of assault against teachers. In this study, risk of assault was also associated with total years of education, gender and education level. When students are under the influence of drugs or other substances, or there is a climate or culture of drug use in the school, there is an increase in risk of school violence (Furlong et al., 1997). In addition, working with students in special education may also increase educators' risk of violence (Bon et al., 2006).

From general workplace violence studies, older workers have also been identified as having a higher risk of fatal assault (Richardson and Windau, 2003). Potentially protective factors such as policies and assault deterrents have been examined, to a limited extent, for their impact on student and general safety but have not specifically been studied regarding their impact on violence against educators.

Physical and non-physical violence against educators

The research that has been completed is stunning; the teaching environment is dangerous. The increasing number of research studies on school violence, dating back to the 1980's, indicate violence against educators has been a public health problem of concern (Eisenbraun, 2007). The MetLife study results indicated that one in six public school teachers (16%) have been the victim of a violent act on or around school, and of those, 90% reported that a student committed the act (Binns and Markow, 1999). In a

study sponsored by the formerly named US Department of Health, Education and Welfare, in which 4,000 elementary and secondary schools were surveyed, they reported 125,000 high school educators were threatened with physical harm and half of all teachers indicated they experienced verbal abuse (Schroth, 2003).

Another similar study of Chicago schools by Menacker, Weldon, and Hurwitz, in 1989, reported that 15% of students admitted to hitting a teacher during the year and 42% of teachers hesitated to confront violence due to safety concerns (Schroth, 2003). A 1993 survey conducted by the Saskatchewan Teachers' Association found that 40% of responders experienced some kind of abuse; 29% of the violent acts were committed by students in their classroom, 18% by students not in their class, and 15% by students' parents (Seifert, 2003; Thompson, 1994). The rates of violence differ by study because of different populations, definitions and methods; however, violence is clearly a problem in educators' work environments. More recent data from the U.S. Departments of Education and Justice's Indicators of School Crime and Safety, 2006, found that from 2003-2004, seven percent of teachers reported being threatened with injury or physically attacked by a student from their school within the previous twelve months (Dinkes et al., 2006). The problem goes far beyond the initial act of violence – potentially affecting educators' mental health, physical health, and career.

Physical and non-physical violence: Minnesota educators

Among the workers affected, violence against educators has captured media attention not only nationally but, also, in Minnesota. Within recent years, several schools in Minnesota have been under the spotlight of media attention for violent incidents, including the murder of an educator. The events at both Rocori High school in 2004

(student shot two classmates), and at Red Lake High School in 2005, (student shot eight classmates, an educator and himself), color the perception of safety that many have toward Minnesota schools. These examples are extreme and are only the outer visible layer of reported violent incidents that occur. Based on Minnesota Workers' Compensation data and previous efforts by the principal investigator of the original study, Violence Against Teachers: Etiology and Consequences, the original proposal estimated that there would be a minimum of five physical assaults and 20 non-physical assaults per 100 Minnesota educators (Gerberich et al., 2002).

Education-Specific Laws – history behind policies

There are no federal regulations or laws governing workplace violence (Merchant and Lundell, 2001). Employers are required to abide by the Occupational Health and Safety Act of 1970 (OSH Act), also known as the "general duty clause," whereby the employer must maintain a good faith effort to provide a work environment free of hazards (OSHA, 2004; Ruff et al., 2004). In order to receive a citation for violating the general duty clause, the following conditions must be met: the employer failed to keep the workplace free of a hazard to which employees of that employer were exposed; the hazard was recognized; the hazard was causing or was likely to cause death or serious physical harm; and there was a feasible and useful method to correct the hazard (OSHA, 2003).

Federal OSHA attempted to incorporate workplace violence under the 'general duty' clause but lost in an appeal. In the case *Secretary of Labor v Megawest Financial, Inc.,* a judge ruled that OSHA failed to prove the employer recognized assault as a hazard. The judge also noted that the industry as a whole failed to recognize assault as a

hazard, basically implying that the assault was part of the job (Barish, 2001; OSHRC, 1995). Any protections that an employee may seek against violence must be a policy of their employer or of their individual state, as they will not be protected by federal law.

Within schools, there are several federal laws regarding guns and weapons on school campuses, but none specific to physical violence, non-physical violence or violence prevention. The Guns Free School Act (GFSA) of 1994, public law 103-382, was an attempt to enact a "zero tolerance" policy for guns in virtually all schools and is commonly cited as the beginning of "zero tolerance" policies in schools (Pipho, 1998; Ashford, 2000; Casella 2001). Passing the Improving America's Schools Act (IASA) of 1994 (formerly the Elementary and Secondary Education Act of 1965), virtually ensured that all schools would enforce the GFSA; the IASA withheld federal funds from schools that did not enforce the GFSA (Rozaliski and Yell, 2004; Pipho 1998). Under this act, a one-year expulsion was given to any student who brought a weapon to school (Ashford 2000). Additional acts such as the Violent Crime Control and Law Enforcement Act of 1994, and the Safe Schools Act of 1994 also provided funds for certain prevention efforts and programs (Rozalski and Yell, 2004).

These federal laws serve as a basis for laws that are currently in place in Minnesota schools. In addition, Minnesota Statute 609.2231, subdivision 5, clearly states "whoever assaults a school official while the official is engaged in the performance of the official's duties, and inflicts demonstrable bodily harm, is guilty of a gross misdemeanor." The statute continues on to define "school official" to include teachers, school administrators and other employees of a public or private school (Minnesota Statutes, 2005). Also required under state law is expulsion of a student for possession of a

firearm and suspension of a student for disruptive behavior (Report by Advancement Project, 2000).

Although these laws are written, their enforcement is not guaranteed. General violence policies fail for many reasons; among those identified in the literature are: employees are resistant because they do not want to change; lack of training; lack of resources; and lack of administrative support (Lord, 2001).

Policies

In the literature, there are several policies and programs described with qualitative methods, but few studies have included quantitative analyses on the effect of policies on an outcome of interest. Below, are relevant findings from the literature from both qualitative and quantitative studies.

Training

Although no studies are available to assess the impact of training policies on educators' risk of physical violence, a similar study was conducted to assess the impact of having a written training policy on nurses' risk of physical violence. This portion of the Minnesota Nurses' Study found that 38% of cases and 37% of controls indicated their workplace had a written policy requiring violence prevention training (Nachreiner et al., 2005a). Through multivariate analysis, having a written policy on work-related violence training was not associated with a reduced risk of physical violence against nurses (Nachreiner et al., 2005a).

Behaviors that are prohibited against students and educators

Although there are no specific studies that have examined whether written policies, regarding behaviors that are prohibited, have an impact on physical violence