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Non-Fatal Workplace Violence:

An Epidemiological Report and Empirical Exploration of Risk Factors

by

David O'Neil Washington

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Presented to the Faculty of

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and Associate Professor Debra Hope

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NON-FATAL WORKPLACE VIOLENCE: AN EPIDEMIOLOGICAL

REPORT AND EMPIRICAL EXPLORATION OF RISK FACTORS

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University of Nebraska, 1999

Adviser: Mario Scalora

While a fair amount of research has explored the epidemiology of homicides resulting from workplace violence, a disproportionately low amount of empirical research has addressed non-fatal incidents. Utilizing theoretical guidelines for risk assessment research developed by Monahan and Steadman (1994), this dissertation investigates nonfatal workplace violence from a cue-criterion perspective in order to develop practicallyapplicable information for those responsible for providing threat assessments in the workplace (i.e., mental health professionals, employment assistance programs). The investigation of a police department's criminal records of workplace violence incidents over an eighteen month period promoted a proactive and reactive cluster model for assessing risk factors associated with varying levels of violence intensity. As a result, the findings provide three major streams of information. First, it presents epidemiological information concerning non-fatal workplace violence. Second, it addresses the different types of workplace violence and differences across those types. Lastly, it provides multivariate analyses of risk factors associated with higher and lower intensity violence before discussing a few pragmatic applications of the dissertation's findings.

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CHAPTER I

Introduction

Overview

Despite the epidemic nature of workplace violence (Center for Disease Control, 1992), the National Institute of Occupational Safety and Health (NIOSH, 1996) and the International Labour Office (1998) note there is little existing empirical information, particularly with regard to its epidemiological characteristics and risk factors. Predictions of dangerousness and the threat assessment of risk factors associated with violent behavior is a role mental health professionals are increasingly being requested and required to perform. Not only will this dissertation contribute to the knowledge base of workplace violence with particular attention to non-fatal incidents, it will also provide clinicians with an empirical base for actuarial decisions.

First, the overall prevalence of workplace violence will be addressed. Second, psycho-social issues such as violence in our culture and factors which play a role in its expression will be discussed. Third, a more in-depth look at the types of workplace violence and relevant risk factors will be reviewed, and then an overview of the risk assessment literature and the legal implications of violence in the workplace will be provided. Finally, the rationale for the study will be explained, in addition to the relevant hypotheses.

Ultimately, the purpose of this dissertation is to provide empirical data to further the understanding of predictions of dangerousness and assist clinicians in their risk assessments of workplace violence. This will be achieved by incorporating guidelines set

forth by the preeminent researchers in the area of risk assessment (see, Monahan, 1981; Monahan & Steadman, 1994). In summary, the structural theme of this report within the introduction, hypotheses, results, and discussion sections is the presentation of non-fatal workplace violence epidemiological characteristics, differences across varying types of workplace violence, and lastly the interpretation of findings using Monahan and Steadman's (1994) cue-criterion guidelines for risk assessment.

Prevalence

To truly comprehend the prevalence of workplace violence, it is necessary to consider the scope of the phenomenon in a national context, while also observing its evolution over time. For instance, the United States Department of Labor (USDL) reported that in 1993, an average of three people per day died under violent circumstances while at work. USDL's national tally of homicides has risen consistently from 1,004 workplace homicides in 1992, to 1,063 homicides in 1993, to a high of 1,071 in 1994. The most recent NIOSH figures (June, 1996) indicate that currently an average of 20 workers are murdered and 18,000 are assaulted each week while at work or on duty. In addition, the USDL noted that although workplace homicide is the second leading cause of fatal occupational injury overall in the U.S., it is the leading cause of fatalities for female employees, even though males are the victims of work-related homicide more often. The Federal Bureau of Investigation (FBI) states workplace violence is the fastest growing form of murder in the U.S. (Resnick & Kausch, 1995).

In a broader context, each year nearly 1 million individuals become victims of violent crime while working or on duty (Bachman, 1996). These victimizations account

for 15% of the over 6 million acts of violence experienced by U.S. residents age 12 or older. Violence at work also costs our society financially. A national survey conducted by the Bureau of Labor Statistics (BSL) in 1992, which explored the extent of work-related injuries and illnesses in private industry, reported 22,400 workers were injured seriously enough in nonfatal assaults in the workplace to require days away from work to recuperate. Of these occurrences, almost two-thirds occurred in service industries (i.e., nursing homes, hospitals, and other residential care establishments). Retail trade industries, such as grocery stores and eating and drinking places accounted for about one-fifth of all assaults (USDL, 1997). Victimization from crime was also a problem with workplace violence, costing approximately half a million employees 1,751,100 days of work each year, an average of 3.5 days per crime, estimated at a total of \$55 million in lost wages (Bachman, 1994).

Other major crimes of our society; rape, assault, and robbery, are also present in the workplace (Carmel & Hunter, 1989; Collison, Bowden, Patterson, Snyder, Sandall, & Wellman, 1987; Flannery, Hanson, & Penk, 1994; Jackson, 1991; von Slagmott & Rapobank, 1992; Yarney, 1988). The Department of Justice's National Crime Victimization Survey reported that between 1987 and 1992 approximately 1 million persons annually were assaulted while at work or on duty. Of those workplace violence occurrences, 615,160 were simple assaults, 264,174 were aggravated assaults, 79,109 were robberies, and 13,068 were rapes (USDL, 1997). The National Crime Victimization Survey of workplace violence demonstrates the break-down of these categories (Bachman, 1994) (Table 1).

Table 1

Average annual number of Victimizations and Injuries

Type of crime	Victimizations	Injuries	· · · · · · · · · · · · · · · · · · ·
Crimes of violence	917,511	159,094	
Rape	13,068	3,438	
Robbery	79,109	17,904	
Aggravated assault	264,174	48,180	
Simple assault	615,160	89,572	

A survey of 480 members of the Society of Human Resources Management (1994) found that over the past five years 33% of the respondents had experienced violent acts (75% reported fist-fights, 17% reported stabbings, and 6% reported sexual assaults). A Northwestern National Life Insurance Company study (1993) reveals that although 7% report they have been threatened with physical harm and 3% have actually experienced such events, the stark majority of workplace violence experiences are the result of other forms of harassment at work (Baron & Neuman, 1996).

The overwhelming magnitude of the increasing trend of workplace violence cannot be overstated (Barling, 1996). Northwestern National Life Insurance's startling survey suggests that more than 2 million employees suffer physical attacks at work each year and that more than 6 million are threatened in some way at work (VandenBos & Bulatao, 1996). This information is additionally alarming when considered in the context of reports that for each incident of workplace violence reported, five incidents of violence

occur (Lion, Snyder, & Merrill, 1981). Workplace homicide also occurs three times as often now as it did 15 years ago, and as a whole it is far more widespread than previously considered (e.g., Barling, 1996; Hall & Spector, 1991; Schwarz & Kowalski, 1993; Sutker, Uddo, Brailey, Vasterling, & Errera, 1994). For instance, unique to New York State yet possibly indicative of trends to come, murder is now the single most common cause of death on the job, the leading cause of death for women in the workplace, and the third most frequent cause of death for men (Anfuso, 1994).

Introduction to the Literature

Although workplace violence's intrusion into the lives of Americans is undeniable (Harrison, 1996; Heskett, 1996; Elliott & Jarrett, 1994; Baxter & Margavio, 1996; California Occupational Safety and Health Association, 1994; Mantell, 1994; United States Department of Labor, 1994; United States Department of Justice, 1993; VandenBos & Bulatao, 1996) and reports indicated two-thirds of American workers do not feel safe at work (Kinney, 1995), little empirical research exists. Despite the social phenomenon of violence's far-reaching and multidisciplinary attention over the past few decades (Bachman, 1996; Monahan, 1981; VandenBos & Bulatao, 1996), when considered within the confines of the working environment, the social sciences have only started to take a serious look at its unique dynamics within the workplace.

While a fair amount of research has explored the epidemiology of homicides resulting from workplace violence (Bachman, 1994; Castillo & Jenkins, 1994; Centers for Disease Control and Prevention, 1993; Goodman, Jenkins, & Mercey, 1990; Jenkins Layne, & Kisner, 1992; U.S. Department of Labor, 1994), a disproportionately low

amount of empirical research has addressed non-fatal incidents of workplace violence (Bachman, 1994; Barling, 1996). Non-fatal workplace violence incidents receive significantly less attention and may even be substantially understated in existing statistics (Toscano & Weber, 1995). Likewise, NIOSH (1996) reports that limited information is available in the criminal justice and public health literature regarding the nature and magnitude of nonfatal workplace violence. The few studies that have been performed (see, Castillo, 1994; Collins & Cox, 1987; Lynch, 1987), reveal that the risk of workplace victimization is related more to the job performed than to the demographic characteristics of the person performing the task. Additionally, routine face-to-face contact with large numbers of people, the handling of money, and occupations that required routine travel or have multiple worksites, are factors related to an increased risk for workplace victimization (NIOSH, 1996). Recent estimates from the Annual Survey of Occupational Injuries and Illnesses (ASOII), which is an annual survey of approximately 250,000 private establishments, have provided helpful initial information about non-fatal incidents. For instance, unlike homicides in which men are most often the victims, nonfatal workplace assaults are distributed almost equally between both genders (men - 44%, women - 56%) (NIOSH, 1996). Data also indicated that non-fatal assaults occur in service industries 64% of the time and in retail industries 21% of the time. Service industries consisted of nursing homes (27%), social services (13%), and hospitals (11%). Retail industries consisted of grocery stores (6%) and eating and drinking places (5%) (NIOSH, 1996). This dissertation will further explore these and additional epidemiological factors associated with workplace violence and ultimately produce a

proactive – reactive cluster model demonstrative of the risk factors associated with varying intensities of non-fatal violence at work.

Definition of Workplace Violence

Violence in the workplace is defined by some researchers as "any form of behavior by individuals that is intended to harm current or previous coworkers or their organization" (Folger & Baron, p.52, 1996). This definition also encompasses other forms of aggression, ranging from spreading negative rumors about targeted peers to withholding information or resources needed by targets.

Conceptualizing workplace violence is challenging because the definition can be inclusive of all forms of violence and researchers have not always been consistent in their exploration of the topic (Barling, 1996). One reason for the disparity in some of the figures is that workplace violence is a relatively new field of study and as a result there is not a consensus on who and what types of incidents should be included in descriptive tolls (Baron, 1993). For instance, imagine the following scenario: a man leaves his house, drives to his former place of employment and shoots and kills two former co-workers, before killing himself outside on the street in front of the business in his parked car. Subsequent investigation reveals that before leaving his home, he had also murdered his wife. Is she a victim of workplace violence? Is he? As a result the figures fluctuate due to varying definitions and inconsistent categorizations of workplace violence (Baron, 1993).

These descriptive uncertainties resulted in remarkable variations of workplace violence in the literature (Barling, 1996), ultimately leading to confusion and incomparable results between studies (Lanza, Kayne, Hicks, & Milner, 1991). A

proposed solution to the discrepancies and an overall more accurate approach to the delineation of cases, is to address the topic as a range from the least physically injurious (e.g., pushing and shoving) to the most severe (e.g., assault and murder) (Slora, Joy, and Terris, 1991). This more inclusive approach would dispel the arguments of what truly constitutes workplace violence because an incident of any intensity, high or low, would be tallied.

Further, Baron and Neuman (1996) suggested a distinction should be made between workplace violence (physical, direct, and active) and workplace aggression (verbal, indirect, and passive) due to the difficulty conceptualizing the broad spectrum of possibilities. They cite that, contrary to popular belief, the gross majority of workplace violence instances are in connection with robberies when individuals are attacked by persons from outside their workplace who have entered it for criminal purposes (81.9%), and that most workplace violence does not involve the stereotypical disgruntled employee who suddenly opens fire on co-workers or supervisors (8.7%) (Baron & Neuman, 1996; see also, Bureau of Labor Statistics, 1992). This extreme viewpoint on the terminology of violence at work will not be instituted because the vast majority of relevant researchers (e.g., Baxter & Margavio, 1996; Bulatao, 1996; Cal/OSHA; CDC; Harrison, 1996; NIOSH; VandenBos & Resnick & Kausch, 1995) continue to utilize the term "workplace violence" as descriptive of all extremes of aggression and violence in the workplace or while on duty, physical or verbal.

Since a universally utilized definition of workplace violence does not exist, a selfcompiled comprehensive definition is instituted for this dissertation by incorporating consistently cited descriptives used by prominent authors in the field. For the purpose of this study, workplace violence is defined as:

any behavior by an individual that is intended to harm workers of an organization, including all instances of physical and verbal aggression and violence: ranging from verbal acts such as harassment and threats, to physical acts such as sabotage, stalking, assault, and homicide; be it aimed at a victim directly, a third party, or a material object (i.e., slashed car tire in workplace parking lot) (see, VandenBos & Bulatao, 1996; Folger & Baron, 1996; NIOSH, 1996).

This definition is utilized because it clearly indicates the broad perimeters of workplace violence. In short, the definition effectively provides examples of the incidents that could take place on the job and meet workplace violence criteria.

Types of Workplace Violence

For the purpose of this dissertation, California's Occupational Safety and Health Association (Cal/OSHA) categorization of workplace violence types is used. California instituted the first state-wide mandated workplace violence guidelines and is generally noted as the forebearer in preventative and intervention techniques addressing the problem of violence in the workplace (Heskett, 1996). Furthermore, Cal/OSHA's delineation of workplace violence provides a categorized system of different types of workplace violence incidents and their unique characteristics.

In the first type of workplace violence (Type I) the perpetrator has no legitimate relationship to the workplace and usually enters the workplace to commit a robbery or

other criminal act (Cal/OSHA, 1994). In the second category (Type II), the aggressor is either the recipient or the object of a service provided by the affected workplace or the victim (Cal/OSHA, 1994). Finally, in the third category (Type III) the perpetrator has an employment-related involvement with the workplace, be it an assault by a current or former employee, supervisor or manager; by a current/former spouse or lover; a relative or friend; or some other person who has a dispute involving an employee of the workplace (Cal/OSHA, 1994).

Type I incidents, when violence is perpetrator by an individual with no-legitimate relationship to the workplace, are usually the most frequent and consistently violent. Common examples of Type I incidents are gas station and convenience store robberies. Federal research revealed that several factors contributed to Type I's high incident and intensity rate of violence in the workplace (NIOSH, 1996). Commonly cited factors are employees or proprietors who have face-to-face contact with customers, when exchange of money with the public is involved, those who work late at night and early morning hours, and those who work alone or in very small numbers (Cal/OSHA, 1994; Bachman, 1994). Furthermore, and not often discussed in the workplace violence literature, a significant portion of victims are also supervisors or proprietors who are attacked while locking up their establishment for the evening or custodial staff who are assaulted while cleaning the workplace after it has closed (Cal/OSHA, 1994).

Type II workplace violence, which involves incidents in which the victim is performing some sort of job-related duty (i.e., police officer shot in the line of duty, mental health worker assaulted by a patient), is on the increase (Cal/OSHA, 1994).

Although Type I incidents are the most common fatal workplace violence occurrences, it is assumed that once non-fatal workplace violence reporting improves and a more universal understanding of what constitutes workplace violence is accepted, Type II reports will significantly increase (Cal/OSHA, 1994; NIOSH, 1996). Because Type II events involve assaults to service providers, especially the vast field of health care workers, this category may represent the most prevalent category of non-fatal workplace violence (Cal/OSHA, 1994).

Occupations chiefly at risk for Type II occurrences are public safety and correctional personnel, law enforcement, health care and social service providers, municipal and railway drivers, and other public or private service sector employees who provide professional, public safety, administrative or business services to the public (Cal/OSHA, 1994). Four years ago, Cal/OSHA noted five specific Type II arenas they believed especially vulnerable to workplace assaults:

- (1) Medical care providers in acute care hospitals, long-term care facilities, outpatient clinics and home health agencies;
- (2) Mental health and psychiatric care providers in inpatient facilities, outpatient clinics, residential sites and home health agencies;
- (3) Alcohol and drug treatment providers;
- (4) Social welfare providers in unemployment offices, welfare eligibility offices, homeless shelters, probation offices and child welfare agencies; and
- (5) Other types of providers, e.g., justice system personnel, customer service representatives and delivery personnel (p. 9).

Unlike Type I events which are non-job description related and as a result more commonly reported, in the Type II job-description related workplace violence context,

victims are inconsistent and less apt to report the incident to the appropriate authorities (Cal/OSHA, 1994).

Type III incidents occur when the perpetrator is a current or former employee, or has employment-related involvement with the workplace (i.e., ex-husband, estranged boyfriend). Cal/OSHA (1994) data indicates that Type III incidents are not associated with any particular type of workplace or occupation. Generally, this sort of workplace violence includes an act of aggression on an employee, supervisor or manager by one of the following individuals: (a) a current employee, supervisor or manager; (b) a former employee, supervisor or manager; (c) a person who is known to a current employee, supervisor or manager of the workplace, e.g., current/former spouse or lover, a relative or friend, or some other person who has a dispute with an employee of the workplace (p. 10).

The primary target of most Type III events is usually a co-employee, a supervisor or manager of the assailant (Cal/OSHA, 1994; Baxter & Margavio, 1996; Mantell, 1994). Research also reveals an increasing trend of workplace violence cases which involve domestic or romantic disputes in which an employee is confronted in their workplace by an individual with whom they have a relationship outside of work (Cal/OSHA, 1994; Mantell, 1994; Heskett, 1996; VandenBos & Bulatao, 1996; Harrison, 1996).

Type III workplace violence incidents occur significantly less often than the average person probably imagines. Yet due to fanaticized media representations of the stereotypical disgruntled employee who "goes postal," the general public has little

understanding of the breath of the epidemic and that they themselves may have already been, or easily could be, a victim of less intense forms of workplace violence.

CHAPTER II

The Scope of Workplace Violence

Psycho-Social Aspects of Violence

In conceptualizing violence, it is important to remember it reflects a process, as well as an act (Fein & Vossekuil, 1995). In other words, there is almost always a process of precursors and dangerousness indicators before a violent incident occurs. Fein and Vossekuil (1995) suggested that careful analysis of violent incidents show violent expression is often the culmination of long-developing, identifiable trails of problems, conflicts, disputes, and failures. Workplace violence is no different (Baxter & Margavio, 1996; Harrison, 1996; Mantell, 1994; VandenBos & Bulatao, 1996).

Within the process of violence, there is also a range of intensities through which an individual can choose to express his or her aggression. Regarding workplace occurrences, the majority of negative acts are less intense forms of violence. A possible reason for this small distribution of more intense forms of workplace violence (i.e., physical assault, murder) versus the large distribution of less intense workplace violence (i.e., verbal threats, intimidation) is the concept of the effect/danger ratio introduced by Bjorkqvist, Osterman, and Hjelt-Back (1994).

Effect/Danger Ratio

Effect/danger ratio refers to the aggressor's subjective estimates of the ability to perform behaviors that are effective in harming the victim, while at the same time permitting as little danger to themselves as possible (Bjorkqvist et al., 1994). Baron and Neuman (1996) hypothesized that several factors present in the workplace tend to further

strengthen the effect/danger preference. For instance, work environments often foster repeated and prolonged contact with one another and as a result, aggressors can reasonably expect to meet their victims again and again over relatively extended periods of time (Baron & Neuman, 1996). Therefore, perpetrators are likely to act in defendable manners (i.e., anonymous sabotage: erasing project on computer, slashing car tires) in which guilt is more covert than intense acts (i.e., physical assault) which are by nature more overt.

In addition, the likelihood that a witness would be present to an act of violence is high, therefore representing a high effect/danger ratio, subsequently suggesting to the perpetrator alternative forms of aggression should be sought in order to maximize their anonymity. Past research supports the reasoning that anticipated retaliation reduces subsequent aggression – especially overt forms of aggression (e.g., Baron, 1971, 1973; Rogers, 1980). Furthermore, aggression is additionally minimized when the witnesses can be expected to disapprove of the behavior (e.g., Borden, 1975; Richardson et al., 1979). In light of these findings, potential aggressors in the workplace tend to strongly prefer forms of aggression that allow them to disguise their identity and leave the victim uncertain as to whether the harm was intentional (Baron and Neuman, 1996). Effect/danger theory reasons that covert acts of aggression are preferred over overt acts of aggression because it minimizes the likelihood of apprehension.

The framework of the effect/danger ratio and the concepts of covert versus overt incidents of aggression are clearly delineated in Buss's (1961) often cited classification system of aggressive human acts, defined by three different dichotomies: verbal –

physical, direct – indirect, and active – passive. Verbal aggression is the act of words, not actions, while physical aggression is demonstrated via some physical means. Direct forms of aggression are delivered in some manner directly to the victim, while indirect forms are delivered via some non-direct means such as a threat to a third party, or vandalism of a valued material object. Finally, active aggression is the result of a performed behavior, while passive aggression is the result of a non-performed behavior (i.e., purposely forgetting to deliver important documents before a board meeting).

Baron & Neuman (1996) subscribed to the conceptualization that, within the context of workplace violence, preferred forms of aggression would tend to be verbal, passive, and indirect rather than physical, active, and direct due to the effect/danger ratio. As noted before, the less overt and direct and act will minimize the subjective danger for the desired effect. Examples of each of the eight various combinations of Buss's (1961) aggression typology are presented (Table 2).

Table 2

Examples of Eight Types of Workplace Aggression

Type of aggression	Example
Verbal-passive-indirect	Failing to deny false rumors about the target
	Failing to transmit information needed by the target
Verbal-passive-direct	Failing to return phone calls
	Giving someone "the silent treatment"
Verbal-active-indirect	Spreading false rumors about the target
	Belittling someone's opinions to others
Verbal-active-direct	Insults; yelling, shouting
	Flaunting status or authority; acting in a condescending
	superior manner
Physical-passive-indirect	Causing others to delay action on matters of importance to
	the target
	Failing to take steps that would protect the target's welfare
	or safety
Physical-passive-direct	Purposely leaving a work area when target enters
	Reducing others' opportunities to express themselves
	(e.g., scheduling them at the end of a session so that
	they don't get their turn)
Physical-active-indirect	Theft or destruction of property belonging to the target
	Needlessly consuming resources needed by the target
Physical-active-direct	Physical attack (e.g., pushing, shoving, hitting)
	Negative or obscene gestures toward the target

(Baron & Neuman, 1996, p. 164)

Various Societal Influences

The search for valid scientific explanation of assaultive violence is confounded by conceptual and methodological problems, not to mention discipline-specific orientations of investigation (Baxter & Margavio, 1996). For instance, psychologists ponder the extent to which violence is a result of unique personality characters, in addition to the extent personality and behavior result form genetic or neurophsylological processes, and sociologists deliberate as to what extent economic deprivation and culture shape individual tendencies toward aggression, and the extent to which violent acts are among the effects of social interaction on individual perceptions of reality (Baxter & Margavio, 1996). The exploration of social factors such as corporate "downsizing," and individual factors such as past incidents of aggression attempt to fuse the two disciplines' contribution to understanding workplace violence.

One theory for the 1990's epidemic of workplace violence is the before mentioned concept of "downsizing," which is the economic restructuring of large corporations or plants. Historically speaking, unparalleled "downsizing" and subsequent layoffs occurred in U.S. workplaces during the 1980's. Traditionally, economic downturns had effected blue collar employees but in the late 1980's, and early 1990's, layoffs to the world of white collar employees occurred at a degree never before experienced in U.S. history (Hatcher, 1996). For instance, the extent of downsizing is illustrated by major corporate economic events (Hatcher, 1996, p. 3):

July, 1990 17,000 layoffs at 2 December, 1991 74,000 layoffs at 2

17,000 layoffs at McDonnell Douglas 74,000 layoffs at General Motors

50,000 layoffs at Sears, Roebuck January, 1993 February, 1993 28,000 layoffs at Boeing 60,000 layoffs at IBM July, 1993 14,000 layoffs at Philip Morris November, 1993 17,000 layoffs at GTE January, 1994 January, 1994 16,800 layoffs at Nynex 15,000 layoffs at Delta April, 1994 20,000 layoffs at Digital Equipment May, 1994 June, 1994 11,000 layoffs at Scott Paper 12,000 layoffs at Chemical/Chase Manhattan August, 1995 1994-95 12,000 layoffs at Delta Airlines

"Downsizing" does not only affect those who are fired. Remaining workers report increased feelings of anger, frustration, and anxiety following such changes in their workplaces (Brockner, Grover, Reed, & DeWitt, 1992; Konovsky & Brockner, 1993). It has also long been theorized that external event or conditions outside the control of the individual (i.e., "downsizing", economic deprivation) frustrate attempts at goal attainment, ultimately creating distress in the individual which triggers aggressive behavior (Berkowitz, 1989; Felson, 1992; Parker, 1989). The major overhauls in systematic organization presented in many major corporations (i.e., those cited above) and managerial re-structuring via rapid technological and organization change (i.e., U.S. Postal Service) caused classic disorganizing conditions (Baxter & Margavio, 1996), which make workplaces especially susceptible to alternative expressions of frustrations (i.e., violence).

The infamous number of workplace violence incidents in the United States Postal Services was theorized to at least partially be attributed to changes in managerial styles and increased "top-down" pressure on productivity (Baxter & Margavio, 1996). The

proposed link between management change and killings at post offices revealed "degradation of labor associated with the scientific management of technological change produced stress and frustration that weakened employee integration and undermined existing forms of social control" (Baxter & Margavio, 1996, p. 277). Researchers have utilized the concepts of social learning theory (Bandura, 1973) and suggested that due to the plethora of violence the layperson is exposed to in contemporary society, certain types of employees may reject normal coping mechanisms when egotism is threatened and instead act-out inappropriately (Baumeister et. al, 1996). Alternative patterns of behavior may develop, ultimately concluding with assaultive violence (Baxter & Margavio, 1996). Threatened egotism theory as a precursor of violence is supported by the statement that "when the experience of work fundamentally degrades a person's identity or self-control, especially in the uncertain context of rapid change, it can trigger assaultive violence" (Baxter & Margavio, 1996, p. 277).

Unique to environments similar to most U.S. Post Offices, employees become resentful and unappreciative of intensive work-environments which produce feelings of objectification, pressure, and intimidation by the authoritarian nature of scientific management (Baxter & Margavio, 1996). Relevant to all work settings where employees function in a capacity they perceive to lack the traditional employee coping options (i.e., suggestion box, grievance committees, personal days), feelings of frustration and alienation weaken employee integration and their commitment to the organization, which over time may catalyze alternative means of coping such as assaultive violence (Baxter & Margavio, 1996).

In conclusion, the social theories addressing workplace violence, with special attention to incidents involving current or former employees, can be synthesized into the following proposition by Baxter and Margavio (1996):

If authoritarian work organization fundamentally undermines a person's status, honor, or sense of self-control (e.g., self-respect or "masculinity"), especially in the context of economic crisis or rapid technological and organizational change, it creates grievances that undermine workplace integration and commitment, weaken individual and institutional forms of social control, and catalyze alternative definitions of situations that increase the probability of violence (p. 280).

Beyond the degradation of labor and the authoritarian notion of scientific management, additional factors are theorized to be associated with incidents of workplace violence, they are: geographical location, electronic surveillance, egotism, excessive alcohol use, frustration, and previous use of aggression (Greenberg, 1995; Heyman, O'Leary, & Jouriles, 1995; Pan, Neidig, & O'Leary, 1994; Graham, 1991; Mantell & Albrecht, 1994; Berkowitz, 1992).

Regional investigations of different geographical areas found that Southern

Americans are more inclined than Northerners to endorse violence in response to insults

(Nisbett, 1993). The South constituted 48.5% of the workplace homicides and the

Northeast 10.5% (Nisbett, 1993). The "culture of honor" commonly associated with the

South is by Southerners' reports that they are more likely than others to condone

defensive or retaliatory forms of violence (Ellison, 1991). Historically relevant, the

visible art of dueling, often popular as a form of dispute resolution in the South, usually directly resulted form inflated notions of personal (and familial) superiority and from egothreats (Baumeister et. al., 1996).

Electronic surveillance's presence in the workplace is relatively recent and dramatic (Schliefer, 1992). It was incorporated due to its perceived assistance in increasing worker productivity. Yet an attempt to achieve improved productivity, employee comfort level and workplace satisfaction may have been sacrificed, as demonstrated by the reports of increased psychological stress and strain since its utilization (Lund, 1992; Schliefer, 1992; Baxter & Margavio, 1996). Barling (1996) reports that settings in which electronic monitoring is used to increase the pace of work and exert greater managerial control are likely to also experience higher levels of perceived and real workplace injustices. Past assaultive violence in the U.S. Post Office specifically cites scientific advances and technological change as the source of workplace stress and the resulting increased likelihood for violent coping responses (Baxter & Margavio, 1996).

Psychological Factors

There are various societal influences and psychological factors associated with the occurrence and prevalence of workplace violence. Egotism, alcohol abuse, and a past history of aggression have been theorized to play significant roles in the exhibition of workplace violence (see Baxter & Margavio, 1996; VandenBos & Bulatao, 1996).

Contrary to social theorists' traditionally held view that violence and aggression are a product of low self-esteem, recent research implies the opposite view is

theoretically viable (Baumeister, Boden, & Smart, 1996). An interdisciplinary review of evidence about aggression, crime, and violence demonstrated that these antisocial traits were most commonly the result of threatened egotism, a highly favorable view of self that is disputed by some person or circumstance (Baumeister et. al., 1996). This theory is concerned with information known about the potentially violent employee's feelings of being threatened or helpless in some manner. Violent incidents may occur as a result of inflated, unstable, or tentative beliefs in an individual's perceived superiority, which can be countered by directing anger outward as a way of avoiding a downward revision of their self-concept (Baumeister et al., 1996). For instance, a confident long-standing employee is terminated in a callous fashion by a "pink slip" due to downsizing. This event conflicts with his especially favorable view of self. These circumstances create an unstable and tentative belief in his theretofore superior self-concept. Subsequently, the cognitive dissonance may insist subsequent perceptions of threats be countered with retaliations of violence, ultimately allowing the individual to mediate the process by dominating those individuals or circumstances which question his superior self-image (see Baumeister et al., 1996).

Under the proper circumstances, threatened self-esteem characteristics such as pride, egotism, arrogance, honor, conceitedness, and narcissism may illicit negative acts such as aggression when one's livelihood (i.e., one's job) is threatened. In other words, when favorable views about oneself are questioned, contradicted, challenged, mocked, or otherwise put in jeopardy, indiscriminate aggression may result, and more often than not

the aggression will be targeted towards the source of the threat (i.e., management, immediate supervisor) (Baumeister et. al., 1996).

Baumeister et al. (1996) also found that the potential for violence is strongest when there is a discrepancy between two views of self: a favorable self-appraisal and an external appraisal that is significantly less favorable. The conflict results from the dilemma of whether to turn the appraisal inward and lower one's self-esteem or to turn the appraisal outward and express it through aggressive acts. Ultimately, the violence results from those who refuse to lower their self-appraisals (Baumeister et. al., 1996). Beyond just external appraisals of self, an interpersonal context must also be considered, due to the fact that in most cases violence is not a random eruption of internal forces but instead a combined internal/external process targeted at someone as an attempt at meaningful communication (i.e., "you have taken away my livelihood and life by firing me and in turn, I will take away your life").

Another way to conceptualize workplace violence is as a dysfunctional coping mechanism. Imagine a form of self-affirmation in response to ego-threats (threats against one's perception of self). Violence achieves a symbolic dominance over the other person, therefore affirming one's esteem to the degree of being superior to the threatening victim (Steele, 1988; Baumeister et. al., 1996). Alternatively and simply put, violence and its various forms are a result of general cultural or subcultural norms supporting such behavior (Monahan & Steadman, 1994).

Research on psychopaths is somewhat supportive of the egotism literature.

Psychopaths' self-views are characterized as having a "narcissistic and grossly inflated

view of their self-worth and importance [and] truly astounding egocentricity and sense of entitlement, and see themselves as the center of the universe, as superior beings" (Hare, 1993, p.38). Based on over twenty-five years of empirical research (see Hare, 1970; 1980; 1985; 1986; 1991; 1996), Hemphill, Hare, and Wong (1998) reported that psychopaths lack characteristics such as empathy, close emotional bonds, fear of punishment, and guilt (Cleckley, 1976; Hare, 1991; McCord & McCord, 1964); qualities that are important for inhibiting antisocial and aggressive behavior (Miller & Eisenberg, 1988). Moreover, they have grandiose conceptions of their abilities and potentialities (Meloy, 1988). These characteristics fit the view of highly favorable opinions of self as a source of violence. Psychopaths' hypersensitivity to perceived insults or slights is reflected in their use of violence to ward off emotional distress (Hare, 1993; Baumeister et. al., 1996). Meloy (1988) supports the link between perceived insults or slights and violence, stating the affiliation is central to the psychopathic mentality.

Egotism theories are furthered by findings which reveal that although the majority of murders occur in connection with other crimes such as robbery, a significant portion of the homicides are the result of an altercation that begins with challenges and insults (Polk, 1993). Hence suggesting that the individual who feels they are loosing face in a confrontation may resort to violence and murder (Baumeister et al., 1996).

Alcohol abuse is associated with aggressive behavior across a variety of settings (e.g., Heyman, O'Leary, & Jouriles, 1995; Pan, Neidig, & O'Leary, 1994). Alcohol use may increase workplace violence because it increases the likelihood of a situation being misinterpreted, while simultaneously decreasing intellectual and verbal functioning (Cox

& Leather, 1994). If an employee already possesses a sense of egotism and is intoxicated, the perceived threat or slight significantly increases and subsequently poses an increased likelihood for workplace violence. Excessive alcohol consumption has been exhibited on reports of violent employees (Graham, 1991). In addition, Greenberg and Barling (1995) found that binge drinking is associated with psychological aggression against coworkers and subordinates. Finally, within this line of reasoning it should also be noted there are countless other non-workplace factors such as non-alcohol substance abuse. Familial problems, hopelessness, and depression which all have notable comorbidity rates with alcohol use and the resulting workplace violence potential, are but a few of the infected areas of a substance abuser's life. The chance an individual may act out violently in the workplace is likely to increase if they perceive there is little to look forward to and they lack external supports (i.e., family). Based on over twenty years of experience with the FBI, Ressler (1998) theorizes that the same types of individuals who kill former co-workers and supervisors in "postal" rampages are the same types of individuals who forty years ago committed suicide. The difference now is that instead of internalizing responsibility for their predicament and terminating their own life due to self-imposed shame and failure, they externalize the responsibility and attribute the blame to the workplace establishment for their lack of success (Ressler, 1998).

Frustration, interpretable as a social cause of aggression, is the interference with ongoing, goal-directed behavior (Berkowitz, 1989). Frustration is an aversive, unpleasant experience which can often result in aggression. It is not the only determinant of aggression, but it has been demonstrated as being directly related to aggression under

certain conditions (Folger & Baron, 1996). In particular, the literature reveals frustration can lead to increased aggression when individuals perceive that the interference has been produced by the purposeful actions of others and that those notions seem somewhat unfair, illegitimate, or unwarranted (Berkowitz, 1989; Folger & Baron, 1996). In the workplace there is ample opportunity for employees to become frustrated, especially considering the often noted circumstances under which employees are not involved in strategic planning associated with the installation of new technology and work structures that cause layoffs (Thomas, 1992).

Contrary to the theory that frustration is the prominent producer of aggression, social interactionists argue that "acts of aggression are not involuntary reactions generated by frustration and social disorganization but express longstanding grievances and serve as alternative mechanisms of social control" (Baxter & Margavio, 1996, p. 279). In other words, aggressive acts are more a product of long-term frustrations, as opposed to any short-term or single frustrating experience (i.e., "violence is a process" Fein & Vossekuil, 1995). In the context of workplace violence, aggressive acts can be viewed as public expressions of what typically would be inappropriate behavior for the work setting, or fantasies of resistance to the dominant structure (Scott, 1990; Baxter & Margavio, 1996). Baxter and Margavio (1996) further this thinking by suggesting that over time feelings of frustration and degradation accumulate and are "eventually manifested in calculated acts of goal-oriented violence directed at superiors and/or workers" (p. 279). Ultimately, by incorporating these theories to the prediction of workplace violence, the challenge becomes deciphering what type of environment, what

type of person, and what type of workplace "culture" (bank vs. construction cite) elicit a higher likelihood of violence's use as a form of communication.

Workplace violence research, coinciding with the universally accepted notion that past violent behavior is the best predictor of future violent behavior, has determined previous use of aggression is also strongly associated with aggressive behavior in the workplace (Graham, 1991; Mantell, 1994). Furthermore, aggression against peers and families while still a teenager is also a substantial predictor of psychological aggression against coworkers and subordinates (Greenberg & Barling, 1995). In summary, there are various societal influences and psychological factors associated with the occurrence and prevalence of workplace violence. Downsizing, managerial style, egotism, alcohol abuse, and a past history of aggression are characteristics currently believed to be significantly associated with the varying intensities of violence in the workplace.

Worksite Related Risk Factors

The U.S. Labor Department has identified that risk factors for fatal workplace violence injuries include: exchanging money with the public, working alone or in small numbers, working either late at night or early in the morning, working in high-crime areas, guarding valuable property, and working in community settings (e.g., taxicab drivers and police). Specifically applicable to this research project, risk factors for non-fatal injuries were identified as: contact with the public and the delivery of services and goods (USDL, 1997).

The growing understanding of workplace violence is complemented by the increasing empirical exploration of stalking (see, Meloy, 1998). At first glance the link

between the two may not be obvious but under further scrutiny, a logical trend is revealed. When an individual is a victim of stalking there are several preventative acts they can take to segregate contact from the perpetrator. They can change their phone number, change the vehicle they drive, and even move to a new house or apartment, but one obstacle that usually is not easily overcome is changing their job (Barling, 1996; Heskett, 1996). Hence after many precautionary steps have hypothetically been taken, the workplace becomes the remaining area of contact and possible confrontation (Barling, 1996).

To better understand the risk factors associated with workplace violence it is helpful to be familiar with the trends associated with the different types of violent incidents such as: (1) characteristics of Types I, II, and III (Table 3) (2) characteristics of nonfatal incidents of workplace violence (Table 4), and finally (3) characteristics of individuals who perpetrate nonfatal workplace violence (Table 5).

While the number of all workplace homicides experienced an increase from 1,004 in 1992 to 1,063 in 1993 (a 6% increase), Type III homicide incidents experienced a rise of 27% (45 to 57) during the same period (Baron, 1996). These homicide figures are low compared to the other two types of workplace violence but still garner a majority of the media attention and public sentiment concerning the epidemic nature of workplace violence. Baron (1996) insists that the issue of Type III violence must be understood beyond the prototypical notion of "going postal" due to the other end of the spectrum of less intense forms of workplace violence which disproportionately make up the majority of workplace incidents. For example, 11% of all violent crimes in the United States

occurred in the workplace (BSL, 1993), and of the approximate 670,000 American workers affected, assault, robbery, and rape were reported to have occurred while at work (Baron, 1996). An overview of the 3 "types" of workplace violence, a listing of non-fatal incident characteristics, and who the perpetrators are is demonstrated in Tables 3, 4, and 5.

Table 3

Types of Violence in the Workplace

	Туре І	Type II	Type III
Percent of homicides, by type	60%	30%	10%
Assailant's profile	No legitimate relationship with provider of service	Recipient or object of service	Employment-related involvement
Assailant's background	Stranger or feigned customer	Recipient of service	Current or former exempt or nonexempt employee; nonemployee who has a conflict with an employee of the affected workplace
Motive	Robbery	Various	Revenge, unfair treatment, domestic dispute

(Baron, 1996, p. 336)

Table 4

Nonfatal Incidents of Workplace Violence, July 1992-July 1993

Incidents of Workplace Violence*	% of Workers	Rate Per 100,000 Workers	# of incidents (Based on 86,234,000 Workers*)
Various forms of harassment	19	18,667	16.1 million
Threats to inflict physical harm	7	7,333	6.3 million
Physical attack	3	2,500	2.2 million

^{*}Sample size = 600

(Baron, 1996; Fear and Violence in the Workplace, 1993)

^{\$1991} Census Bureau data.

Table 5

The Perpetrators of Nonfatal Workplace Violence

I	Assailant Who Harassed	Assailants Who	Assailants Who Attached
Assailant	Victims	Threatened Victims (%)	Victims(%)
Customers, clients	15	36	44
Patients, inmate	s,		
And students			
Strangers	2	16	24
Exempt or nonexer	mpt 47	32	20
Coworker			
Direct report (Supe	er- 39	5	7
visors, managers	s)		
Former exempt or nonexempt emp	2 lovee	6	3
Others	2	7	3

Percentages total more than 100% when more than one person harassed; threatened, or attacked the worker.

(Baron, 1996; Fear and Violence in the Workplace, 1993)

Profiles

Harpley of National Trauma Services stated: "the workplace murderer is likely to be a middle-aged Caucasian male, using an exotic weapon, such as an Uzi, an AK-47, or a Samurai sword, legally acquired ... [and] he usually has a fascination with such weapons" (Baron, 1993, p. 88). This statement represents a snippet of the opinions in the public sector about workplace homicides and workplace violence incidents in general. Yet Harpley and many of his associates usually cite no empirical research or evidence to support their "profiles" of workplace violence perpetrators. These means of presenting empirically unsubstantiated theories may result from the targeted reader's (i.e., Human Resources Coordinator, frightened supervisor, common employee) inability to critically review the legitimacy of provided information.

Although a template "profile" does not exist for a workplace violence perpetrator, certain factors have proved noteworthy as characteristics repeatedly associated with violent employees (Baron, 1993; Harrison, 1996; Mantell, 1994). As demonstrated by numerous case studies and field experience, threat management specialists have reported the perpetrator is usually:

- -male
- -25 to 40 years of age
- -has a history of violence or noticeable aggressive tendencies
- -is a loner
- -owns several guns
- -has, in the past requested some type of assistance
- -is an angry person with little outlet for that anger
- -has a history of interpersonal conflict, is often socially
- withdrawn and most likely has family/marital problems
- -will, after awhile, stop expressing himself verbally and become introverted, whereas earlier he constantly verbalized his complaints to management and about management
- -become paranoid about others
- -exhibit self-destructive behavior, such as taking drugs or excessive drinking. (Baron, 1993, p. 89)

Although this "profile" and many like it cite no specific empirical evidence as support, nor do they address the likelihood these characteristics are descriptive of a broader population who do not perpetrate workplace violence, law enforcement, professional threat assessment consultants, and corporate security entities have all favorably adopted these descriptives to assist them in identifying an individual at higher risk for acting-out violently at work.

Workplace violence profiles are often not respected by the social-science community due to the extent of divergence and lack of consistently of circumstances. For instance, these characteristics focus strictly on perpetrator factors and not environmental circumstances (i.e., recent life stressors). Furthermore, one workplace homicide perpetrator will fit the profile precisely (i.e., Michigan Post Office incident in which the death toll reached double digits and the violent employee had a history of discipline problems, military training, and violent outbursts; Baxter & Margavio, 1996). On the other hand, the Orange Glen Post Office murders resulted at the hands of what co-workers and employees described as the "model employee" who had no apparent gripes with anybody or anything. Even after the murder spree, co-workers of the murderer when interviewed after the incident reported that he was a nice guy, had a loving family, was an ideal employee, and that they had no ideal why it happened (Baxter & Margavio, 1996). His outburst was ultimately blamed on job stress. The implications of these two divergent case examples is that regardless of the advances in risk assessment and understanding of workplace violence, there will always be exceptions to a proposed rule because the future cannot be predicted; regardless of how good the actuarial tool developed is or how competent and experienced the threat specialist making the assessment is. What a risk assessment can say is: given a case's particular circumstances and past like-circumstances, this sort of scenario (i.e., workplace hostage taker) often results in violence (i.e., murder/suicide) unless certain interventions occur. This desire to be able to perform accurate risk assessments, taking into account the increasing

frequency and intensity of incidents, has also raised legal questions regarding the parameters of employer liability.

CHAPTER III

Legal Implications

Violence in the workplace is putting employers in increasingly vulnerable positions. Three of the primary sources of liability (see, Feliu, 1995; Kinney, 1995; Levin, 1995) for employers are: (1) vicarious liability, (2) the federal Occupational Safety and Health Act of 1970 (OSHA Act), and (3) negligence.

Vicarious Liability

Vicarious liability holds employers liable for the actions of their employees, if committed within the course and scope of employment (Epstien, 1995). However, employers usually are not liable for the violent behavior of their employees unless the acts are job-related duties (Alma W. v. Oakland Unified School Dist., 1981), or if the employee's actions were *reasonably* foreseeable (Hart v. National Mortgage & Land Co., 1987).

Occupational Safety & Health Association (OSHA)

The OSHA Act states that employers of a business have a duty to furnish a safe and healthful working environment for their employees (29 USC 651 et seq., 1985/1995). For instance, California requires employers to establish, implement, and maintain an injury and illness prevention program, workplace violence preventative-interventive-reactionary guidelines, and workplace sensitivity training to meet their duty to provide the safest possible work environment (Cal.Lab.Code 6401.7, 1995; Heskett, 1996; Kinney, 1995).

Negligence

Negligence involves the breach of a legal duty to use reasonable care to prevent a foreseeable risk of injury to others (Epstien, 1995). The duties of the employer in matters involving threats or acts of workplace violence is defined as "a duty to: provide a safe working environment, warn of dangerous conditions, hire and retain fit personnel, and provide adequate security" (Levin, 1995, p. 419). Within the negligence rubric, negligent hiring and negligent retention are claims gaining increasing attention in the workplace violence litigation context.

Negligent hiring occurs when the employer knows, or should have known, of an applicant's potential for dangerous or violent behavior, hires the individual, and provides the employee the opportunity to repeat such violent behavior (Garcia v. Duffy, 1986). Negligent retention addresses the employer's duty once violence from an employee is reasonably foreseeable within the workplace or its related contexts and the employer fails to take reasonable measures to prevent injury to others (Levin, 1995).

Duty of Care & Foreseeability

Adapting to the needs of workplace violence litigation, duty of care is imposed when an employer knew or should have known that an employee is violent or has acted in such a manner in the past to suggest the possibility of danger to others (<u>DiCosala v. Kay</u>, 1982). The employer's failure to take appropriate precautions to prevent injury in the workplace is at the core of their responsibility to their employees (see, <u>Yunker v. Honeywell, Inc.</u>, 1993; <u>Laird v. E-Z Mart</u>, 1994) (Cal/OSHA, 1994; OSHA, 1970; Levin, 1995; Feliu, 1995).

Foreseeability provides a framework under which employers can determine the degree and extent to which they must protect their employees. An employer's duty falls "within the zone of risks that are reasonably foreseeable by the [employer]" (Garcia v. Duffy, 1986, p. 492). As a result, the challenge is determining when the danger an employee may face is foreseeable. Scholars have likened the precarious duty of foreseeing the possibility of danger and predicting violence to the ability of a meteorologist to predict the weather several months in advance (Feliu, 1995; Monahan & Steadman, 1996).

Duty to Warn

Connected to negligent hiring and retention is the employer's duty to warn.

Similar to the <u>Tarasoff</u> warnings, a mental health workers' duty to notify a foreseeable victim when a legitimate threat has been made by a client or patient, courts are increasingly finding that employers have a duty to warn employees of a foreseeable risk of harm, especially where there is a specific identifiable threat made to a specific identifiable employee (<u>Walker v. Rowe</u>, 1982; <u>Tarasoff v. Regents of University of California</u>, 1976; Duffy v. City of Oceanside, 1986).

CHAPTER IV

Risk Assessment

Through competent assessment, violence can and should be predicted, the question is how can we do it better, or in other words: "more efficiently and more effectively" (Gottfredson & Gottfredson, 1988, p. 303; see, Monahan & Steadman, 1994; Lidz, Mulvey, & Gardner, 1993; VandenBos & Bulatao, 1996; Monahan, 1996; Monahan & Steadman, 1996). Taken a step further, the assessment of violence in various environments such as the workplace must also be made more efficient and effective.

Three of the primary terms used in risk assessment are "prediction," "dangerousness," and "base rate." Prediction refers to the items of information used, alone or in combination, to make a "guess about the probable future occurrence of some event or behavior (known as the criterion)" (Gottfredson & Gottfredson, 1988, p. 301). Dangerousness refers to the potential for violence, yet it is difficult to exactly assess because "it refers essentially to a state, rather than an act [and] it is a state that may not ever be actuated" (Gottfredson & Gottfredson, 1988, p. 302). The base rate of an incident or "any given event is defined as the relative frequency of occurrence of that event in the population of interest" (Gottfredson & Gottfredson, 1988, p. 302).

The type of predictions offered in risk assessment are often a result of the circumstances and environment in which it is provided (Limandri & Sheridan, 1995). For instance, an assessment of dangerousness is likely to vary significantly from an assessment provided in a controlled hospital setting regarding an adolescent girl who is

depressed and threatening to commit suicide compared to an assessment provided at a crime scene where a man known to have a mental disorder is holding a hostage, whom he believes is his abusive mother. Limandri and Sheridan report that in the less controlled settings "predictions" are likely to be "best guesses" based on the assessors "intuition, knowledge, experience, and biases" (1995, p. 3).

In an attempt to improve the art of predicting violence, clinicians have developed psychometrically sound measurements to assist their assessments (Limandri & Sheridan, 1995). Three major models: (a) the linear, rationalist model, (b) the hypothetico - deductive model, and (c) the risk assessment model (Gottfredson & Gottfredson, 1988), have been identified to provide complimentary information in clinical decision making situations (Limandri & Sheridan, 1995).

The strength of the linear model provides a logical, clear, and progressive decision process (Limandri & Sheridan, 1995). Using the linear model, an assessor can use probabilities to assist in decisions, as well as the weighing of outcomes according to objective standards or theory. On the other hand, a weakness in the model's objectivity is the non-incorporation of contextually relevant information ("contextual domain," see Monahan & Steadman, 1996). More concisely, the factors such as treatment outcomes, social support, and stabilization of stress do not play a role in making a linear model prediction. Ultimately, the decision processes is formulated predominantly by formula, and not by the specifics of the actual situation (Limandri & Sheridan, 1995).

The hypothetico-decductive model allows the clinician to weigh different factors within a particular context (Limandri & Sheridan, 1995). In addition, past experiences in

similar scenarios are accounted for in order to categorize cues into a pattern which would ideally allow the expert to establish a "pivotal cue" as the basis of a theoretical and experiential framework (Regan-Kubinski, 1991; Schon, 1983). This model is too complex for the purpose of a workplace violence tool, or most any other violence assessment device, because it requires the clinician to calculate the weights of different factors in different contexts, establish a pivotal cue and only then can a tentative assessment be made.

The final and most appropriate approach for this proposal is the risk assessment model. The eminent researchers in the field (see Monahan, 1981; Monahan & Steadman, 1996) have endorsed this approach to risk assessment. One of the most cited reasons is the model's improved accuracy due to the rejection of traditional binary notions (violent or not violent) often used in psychology research. Risk assessment literature acknowledges it cannot definitively predict if a person is dangerous, but it can offer a non-binary likelihood prediction, with a degree of accuracy beyond chance (see Monahan & Steadman, 1996; Fein & Vossekuil, 1998). Furthermore, this rejection of the traditionally accepted binary notion of violence, proposes a risk assessment matrix where the intensity level of the action is weighed with the likelihood of repetition (Gottfredson & Gottfredson, 1988). The risk assessment model affords the clinician the ability to incorporate several characteristics into their prediction. For instance, alcohol and drug abuse, history of violence, social and political climate, as well as the individual's internal climate may all be incorporated (Limandri & Sheridan, 1995). Ultimately, the risk assessment model allows the clinician to incorporate both the "the environment and

personal factors present in any given situation" (Limandri & Sheridan, 1995, p.8; Barling, 1996).

Reliability & Validity

Predictive reliability and validity are other paramount conceptualizations within the rubric of risk assessment. "The accuracy (validity) and consistency (reliability) of predicting dangerousness and violence depends on several factors" (Limandri and Sheridan, 1995, p. 9). Reliability and validity rely heavily on the base rate of the phenomenon attempting to be predicted. Using statistical probability, the more infrequent the event, the more difficult it is to predict (Lambert, Cartor, & Walker, 1988). For instance, homicide in the United States is more difficult to accurately predict and assess than family violence because the base rates are 9 in 100,000, and 16,000 in 100,000 respectively (Steadman, 1986). Therefore predictions of homicide are less likely to be accurate than predictions of family violence because the phenomenon is more rare (Limandri & Sheridan, 1995).

Other reasons a risk assessment model is ideal for this dissertation is its utilization of characteristics inherent to the data base proposed to be explored. For example, the type of violence (e.g., physical assault, intimidation, suicide, property damage); the actors or participants (e.g., strangers, intimates, acquaintances); the psychological status of the perpetrators (e.g. people who are mentally ill, criminals, socially deviant, or ordinary); and the time period of the prediction (e.g., acute or chronic danger) are all relevant risk factors (Limandri & Sheridan, 1995, p. 9) used in risk assessment model construction. And also used is whether there is a history of past violence, which mentioned previously is universally considered the best predictor of future violence (Klassen & O'Connor, 1988).

After a review of 19 selected empirical studies, Chaiken, Chaiken, and Rhodes (1994), in a National Research Council report, concluded that:

Violence can be predicted, meaning that within a given population we can assign different probabilities of violence to population members based on the characteristics of those members. . . . Nevertheless, there are significant concerns with the validity, reliability, and accuracy of predictions (pp. 279-280).

Skeptics have battled the validity of risk assessment for several decades. Many of the problems stem from a lack of unified guidelines and approaches to tackling the complex topic of predictions of dangerousness. Monahan & Steadman (1996), backed by the MacArthur Network and peer support for an empirically improved understanding of violence, have determined future studies in the field and proposed risk factors must be chosen with references to theories of violent behavior. In previous studies they determined a notable reason for the lack of progress in the field was that many of the studies, and proposed risk factors, had been chosen without reference to any theories of violent behavior (Monahan & Steadman, 1994).

Although first generation research (see Otto, 1992) has not faired well in support of the legitimacy of risk assessment, second generation research demonstrates significantly different findings (Otto, 1992). For instance, Lidz et al. (1993) report clinical judgement has been undervalued in previous research. Although the clinician's judgments are relatively inaccurate predictors of violence, their data also imparts that the accuracy of clinical predictions can be improved. As mentioned previously, this dissertation provides empirical data intended to further risk assessment knowledge and

assist clinicians in their evaluations of workplace violence by incorporating guidelines set forth by the preeminent researches in the area (see, Monahan & Steadman, 1994).

Violence Risk Factors

A review of violence risk factors as indicated by second generation research reveals there is plenty of room for improvement in the empirically based field of risk assessment. In the often cited actuarial review of hospital records, Harris and Rice (1997) reported the personal characteristics most consistently associated with violence and crime are: "young age; history of criminality and violence; psychopathic traits; interpersonal hostility; institutional rule breaking; antisocial values and sentiments; membership in antisocial peer groups; substance abuse; childhood antisociality and aggression; poor social problem-solving skills; deficits in vocational, academy and life skills; and, for sexual aggressors, deviant sexual preferences measured phallometrically" (p. 1172). Resnich and Kausch (1995) theorize the non-fatal workplace violence perpetrator often has many of the risk factors typically associated with violent behavior. For instance, they report such a person is often male, under 30 years of age, and has a prior history of violence and drug or alcohol abuse. While on the other hand, reports of perpetrators of fatal workplace violence are often over 30 years of age with no prior history of violence or substance abuse (Filipezak, 1993). Resnick and Kausch (1995) also urge that rather than get trapped in the minefield of predicting violent acts, clinicians should view their role as assessing the risk of violence.

Instituting the four domains of risk factors as defined by the MacArthur Risk

Assessment Study (Steadman, Monahan, Appelbaum, Grisso, Mulvey, Roth, Robbins, &

Klassen, 1994), this project addresses the majority of the guidelines. For instance, within the dispositional domain demographic factors of the perpetrator and victim will be explored. Within the historical domain prior police contact will be addressed. Within the contextual domain type of work setting and the availability and/or presence of a weapon will be addressed. Finally, within the clinical domain substance abuse, and other notable clinical characteristics will be analyzed.

In addition to the incorporation of actuarial assessments and the exploration of risk factors via the four domains, researchers Monahan and Steadman (1994; Monahan, 1996, p.115) insist future violence prediction methodology needs to incorporate the following eight characteristics (M1 – M8):

- M1. Dangerousness must be disaggregated into its component parts the variables used to predict violence (risk factors), the amount and type of violence being predicted (harm), and the likelihood that harm will occur (risk).
- M2. A rich array of theoretically chosen risk factors in multiple domains must be chosen.
- M3. Harm must be scaled in terms of seriousness and assessed with multiple measures
- M4. Risk must be treated as a probability estimate that changes over time and context.
- M5. Priority must be given to actuarial research that establishes a relationship between risk factors and harm.
- M6. Large and broadly representative samples of patients at multiple, coordinated sites must participate in the research.
- M7. Managing risk as well as assessing risk must be a goal of the research.
- M8. Risk communication [believed to become increasingly salient over the next 2 decades, see: Monahan & Steadman, 1996]

Base Rate

Mulvey and Lidz (1993), incorporating the findings of previous research (see, Gottfredson & Gottfredson, 1980; Meehl, 1996; Meehl & Rosen, 1955), report the most persistent problem in risk assessment research is that low base rate behaviors such as severe violence cannot be predicted without generating a fair amount of false positives, even when the predictive strategy is highly accurate. As mentioned previously, the closer the probability of the event in question is to .5 in the sample chosen, the more likely it is to detect potentially useful risk factors and as a result, the better any predictive strategy will appear (Gottfredson & Gottfredson, 1986). Yet on the other hand, the further the probability of an event is from .5 in the sample chosen, the less likely it is to detect relevant risk factors. In other words, base rate discussion is grounded in the question of whether or not an adequate quantity of violence can be found in order to be predicted (Mulvey & Lidz, 1993).

Monahan (1981) noted that "the most common and surely the most significant error made by clinicians in predicting violent behavior is the ignoring of information regarding the statistical base rate of violence in the population in question [and that] knowledge of the appropriate base rate is the most important single piece of information necessary to make an accurate prediction" (pp. 59-60). He cautions that assessors of dangerousness may fail in two ways: (1) one who does perform a later violent act may be predicted as safe; (2) one who does not may be predicted as dangerous. Therefore, for any series of predictions there are four possible statistical outcomes: a) true positive predictions--correctly predicting that a person is dangerous; b) false positive predictions-

incorrectly predicting that a person is dangerous; c) true negative predictions--correctly predicting that a person is not dangerous; d) and false negative predictions--incorrectly predicting that a person is not dangerous (Monahan, 1981). The goal is to maximize true positive and true negative predictions and minimize false positive and false negative predictions.

The small base rate of fatal workplace violence incidents presents unique challenges. A hurdle for risk assessment, and especially for workplace violence, is how to assess incidents of violence which occur so infrequently that empirical base rates suggest prediction of any kind is illogical (Monahan, 1981; Monahan, 1990; Lidz et. al, 1993). Lidz et al. (1993) verified theories by Monahan (1981, 1996), which suggest faulty clinical estimates of the prevalence of violence among certain populations (i.e., female patients, workplace violence) may be the origin of many errors in the clinical assessment of dangerousness. Similarly, because clinicians are under the faulty understanding that female patients are not violent and workplace violence does not occur often, incidents are detected less and therefore the base rate is inaccurately low. This reasoning is applicable to workplace violence and other incidents of less intense violence because the layperson, and most likely the non-forensic clinician is unfamiliar with the assessment of violence for particular populations.

In 1990, Monahan reported in an editorial on fatal workplace violence that the base rate was phenomenally low: 1 in 7 million. Yet nevertheless he stated that "while accurate prediction of an event with a base rate as low as this is clearly impossible, except in extreme circumstances, this observation does not mean that employers should (or

legally can) ignore workplace violence" (p. 1021). Monahan's comments that workplace violence could not afford to be ignored were accurate because the base rate has drastically increased from a reported 1 in 7 million in 1990 to a currently reported rate of approximately 1 in 100,000 (NIOSH, 1996). This significant increase does not appear to solely be a product of actual workplace homicides, but instead a combination of several factors: (a) improved accuracy of incident reporting, (b) evolving workplace definitions, (c) better understanding of workplace violence's importance and prevalence, and most noteworthy, (d) a legitimate increase in the number of homicide at work.

Theoretical Framework for Risk Assessment Research

In addressing risk assessment and predictions of dangerousness, The MacArthur Network has recommended the utilization of Social Judgment Theory (SJT) (see, Steadman et al., 1993). Under SJT's methodological orientation, the key to understanding decisionmaking is to accurately identify the cues decision-makers have access to and whether or not they are utilized. Once the available cues (i.e., potential risk factors) have been identified, there are three steps to conduct (see Monahan & Steadman, 1994):

- cue-judgment studies; examines the extent decision-makers' judgments are influenced by the available cues influence (i.e., clinical decision-making of violence risk)
- 2. <u>cue-criterion</u> studies; investigates the extent cues correlate with target behaviors (i.e., risk factors associated with workplace violence)
- criterion-judgment studies; determines the correspondence between judgments and target-behaviors (i.e., the accuracy of the violence prediction).
 (note: this dissertation will primarily address facets of step two)

The MacArthur Network's studies of violence risk assessment (see Grisso, 1996; Steadman et al., 1993; Steadman et al., 1994) incorporates the three categorical steps to convey the current state of science on violence risk assessment. This study focuses on better understanding the second category, the cue-criterion relationship, as it contributes to the predictive relationships between clinical factors and the occurrence of future violent behavior. For instance, the cue-criterion research thus far indicates that:

- demographic and dispositional variables, such as gender (male) and age (younger), and some personality attributes (e.g., anger, rage), correlate with dangerousness;
- historical factors, such as juvenile and adult arrest history and younger age of onset, correlate with future violent behavior;
- contextual factors found to correlate with dangerousness include the availability of weapons, potential victims, and lack of social support; and,
- clinical indicators, such as the presence of psychoses and problems with substance abuse, are associated with violence (Melton, Petrila, Poythress, and Slobogin, 1997).

More recently, Tardiff (1998) reports that other factors are related to future dangerousness, including history of neurological problems or organic brain injury, diagnosis of post-traumatic stress disorder or mania, and noncompliance with treatment.

Lastly, Bonta, Law, and Hanson (1998) conducted a meta-analysis of 58 cuecriterion studies of violence risk. Calculations indicated the following factors are consistently positively correlated with both criminal and violent recidivism: objective risk assessment results, adult criminal history, juvenile delinquency, antisocial personality, non-violent criminal history, previous psychiatric hospital admissions, substance abuse, family problems, violent history, marital status (single), and availability of weapons. They also found the following factors are consistently negatively correlated with both criminal and violent behavior: age, violent index, sex offense, psychosis, not guilty by reason of insanity, mood disorder, and offense seriousness.

Nonetheless, Bonta et al. acknowledge their findings may have been affected by incorporation of differing populations, and therefore their results should be considered with caution. In particular, they note that studies on non-disordered and disordered offenders were included together in their meta-analysis, which hypothetically explains why factors such as psychosis or mood disorder were negatively correlated with criminality and violence. In conclusion, while much has been learned about risk factors, difficulties from this meta-analysis highlight that more work is needed to better understand violent behavior and its correlates.

Still, in recent years, several useful instruments have been designed for the clinical prediction of dangerousness that are based on such cue-criterion research. For instance, the Dangerous Behavior Rating Scheme (DBRS: Webster & Menzies, 1993) is a psychometrically validated instrument that focuses on a patient's personality attributes. The Violence Risk Assessment Guide (VRAG: Harris, Rice, & Quinsey, 1993) focuses on more clinical components. The HCR-20 is an assessment tool especially designed for use of predicting dangerousness in criminal and psychiatric populations. Currently, the MacArthur Risk Assessment Study is in the process of developing a decision-tree that is

designed to assist clinicians' assessing risk of violent behavior. Another forensicassessment tool is the Psychopathy Checklist-Revised (PCL-R), which has psychometrically been shown to effectively identify psychopaths. With criminal populations, researchers have also found that certain scales on the PCL-R are useful in predicting violence and recidivism (Hare, 1991). McNeil and Binder (1994), targeting psychiatric inpatient populations, developed a brief actuarial screening tool to aid in the assessment of patients' potential for violence when initially admitted to an inpatient unit. Their screening checklist resulted in a total predictive value of 65%, with a 28% relative improvement over chance in distinguishing which patients would display any type of aggressive behavior (e.g., assaultive and/or threatening behavior) on the ward. Finally, Gardner et al. (1996) developed a simple actuarial-based decision tree for clinicians to use in identifying persons with mental disorder, who were at risk for frequent incidents of physically violent behavior in the community.

Actuarial Approaches

Statistically (actuarially) developed prediction devices outperform clinical judgement in virtually every decision-making situation the issue wherein has been researched (e.g., Meehl, 1996; Dawes, 1975, 1979; Ennis & Litwack, 1974; Gough, 1962; Meehl, 1954, 1965). The superiority of actuarial to clinical methods of prediction is a result of several factors (Gottfredson & Gottfredson, 1988, p. 313):

- (a) assessors do not use information reliably (e.g., Ennis & Litwack, 1974);
- (b) they do not pay heed to base rates (Meehl & Rosen, 1955; Carroll, 1977);

- (c) they inappropriately weight items of information that are predictive, and they assign weight to items that in fact are not predictive (Gottfredson & Gottfredson, 1986);
- (d) they are overly influenced by causal attributions (e.g., Carroll, 1978)
- (e) and spurious correlations (Monahan, 1981).

Although the literature indicates that actuarial prediciton is more accurate than clinical predicition, in practice actuarial methods appear to be used rarely because they are less practical than using one's clinical judgement (Gardner, Lidz, Mulvey, & Shaw, 1996). Dawes, Faust, and Meehl (1989) concur, argueing that because actuarial assessments are cumbersome due to the amount of time they take to perform and/or their complexity, clinical assessments have traditionally continued to prevail. Although researchers such as Monahan and Steadman (1994) and Lidz et al. (1993) urge clinicians to incorporate actuarial assessments into their predections of dangerousness, it appears that unless a truly user-friendly tool is made available, intended to complement clinical judgement and not replace it, actuarials will continue to experience infrequent use.

Gardner et al. (1996) support this line of reasoning suggesting that the hesitance to consistently incorporate actuarial assessments in the predictions of dangerousness can be alleviated by simpler screening tools. For instance, research revealed that when regression trees and two-stage screening were compared with accuracies against conventional actuarial methods, the results showed the regression tree and two-stage accurate. Subsequently, the belief is that if both approaches

are equally effective, the simpler version will be superior due to the likelihood more clinicians will incorporate its use into their assessments.

Due to the pressured circumstances under which predictions of dangerousness are often requested, and the limited resources available to assessors in many situations, a practical tool that is user friendly and efficient is ideal. A regression tree (a structured sequence of yes/no questions that lead to the classification of a case) is just such a tool (Gardner et al., 1996). The argument being, statistical predictions which require calculations may be infeasible in many clinical settings, while a decision procedure specified by a tree is easy to perform (Gardner et al., 1996). Additionally, because it generates a series of statements about a patient that provides reasons for the prediction, a regression tree is easy to grasp and explain, ultimately implying that clinicians will prefer regression trees to numerical formulas as methods for making a actuarial predictions (Gardner et al., 1996). Finally, Gardner (1996) theorizes that studies "demonstrate that actuarial predictions can be generated by using a simple list of yes/no question, and that special batteries of tests can be avoided for all but a small minority of high-risk individuals, and both of these goals can be accomplished without a significant tradeoff in the accuracy of prediction" (p. 47).

Communicating Risk

The eighth characteristic necessary of future risk assessment, as cited by Monahan and Steadman (1994), is effective communication of risk. For several years much of the predictions of dangerousness research revolved around how to assess individuals for violence and whether or not those assessments were accurate. Means by which the

opinions were reveiwed, determined risk factors evaluated, and how the clinicians came about their decisions were all explored (see, Monahan and Steadman, 1994; Monahan, 1996; McNeil & Bender, 1994; Lidz et al., 1993). Yet few if any studies thoroughly addressed the manner in which the risk assessments were communicated (Monahan & Steadman, 1996).

As a result, one suggestion to improve the accuracy of risk communication is the non-dichotomous examination of violence. In truth, a non-dichotomous approach to communicating dangerouss is more accurate (Monahan & Steadman, 1994, 1996; Lidz et al., 1993). Elementry determinations of "violent" or "not violent" could significantly endanger an individual who is exposed to a perpetrator that falls somewhere in between the two extremes and as a result is categorized as one or the other incaccuately (false positive or false negative). In response to this reasoning, Monahan and Steadman (1996) argue that the incorporation of a scaled system similar to the one weather forecasters use would greatly strengthen the field of risk assessment. Two primary points applicable from meterology are the temporal specificity and the contextual specificty of weather forecasts (Monahan & Steadman, 1996). The temporal aspect addresses the need for shorter term and more frequently updated risk assessments of violence. Contextual specificity addresses the given forecast area, suggesting the importance of context in behavioral prediction (Monahan & Steadman, 1996). The ultimate challenge is to effectively communicate these improved methods of dangerousness predictions to those who need to know them (see Murphy & Daan, 1985; Murphy & Winkler, 1987, 1992).

Although at first glance a parallel between meterology and risk assessment may seem odd, a more in-depth observation of their similarities exposes a kinship.

Conceptually, meterologists and clinicians both assess risk from similar domains:

- (a) Someone credentialed as a professional
- (b) assesses risk factors derived from past experience or from theories and
- (c) processes these risk factors with the aid of explicit or implicit prediction models.
- (d) The professional then constructs a likelihood estimate (or "forecast") of the event of interest occurring, and, finally,
- (e) the professional issues a risk communication containing this forecast to various audiences of relevant decision makers (Monahan & Steadman, 1996, p. 932)

This dissertation provides the "past experience" and "aid" referenced in points (b) and (c), in addition to complimentary information to other shortcomings currently present in much of the risk assessment research. For instance, although Monahan's (1996) review of the past 20 and the next 20 years of violence prediction suggests risk assessment research sprung from modest and questionable methodological roots (i.e., reasonableness of offering courts predictions of dangerousness when if fact clinicians were only accurate in approximately 1/3 of the cases), recent triumphs in which actuarial tools assist risk assessments have added legitimacy to clinician's predictions of dangerousness. Probably the most comprehensive and sophisticated study to date published on the clinical prediction of violence, published by

Lidz, Mulvey, and Gardner (1993), assessed predictions of dangerousness for male and female patients examined in the acute psychiatric emergency room of a large civil hospital. They found that nurses' and psychiatrists' ability to identify the male patients who would be dangerous significantly exceeded chance levels, but they were unsuccessful in identifying the potentially dangerous female patients. Monahan (1996) suggests the better of the current research involves (a) both male and female (b) civil patients (c) who are subject to acute, rather than lengthy, hospitalization and (d) about whom short-term, rather than long-term, predictions are made, (e) with the predictions being validated by multiple criterion measures.

Taking all this information into account as to where the state of risk assessment science currently is, expanding this rationale and cue-criterion approach to research, one can deduct that cross gender, non-exclusively institutionalized, short-term assessments of dangerousness research will produce noteworthy results. Therefore, the strategy for this non-fatal workplace violence report followed that rationale. It examined male and female perpetrator and victim cues (factors), incorporated a non-institutionalized sample, investigated an empirically derived criterion (violence intensity), and provided a legitimate basis for a dissertation positioned to further risk assessment knowledge. Ultimately, this approach is consistent with Monahan and Steadman's (1994, 1996) cue-criterion discussions and M1 – M2 guidelines.

CHAPTER V

Hypotheses

Nine years ago Monahan (1990) proposed three activities which needed to be undertaken in order to reduce employee exposure to violent behavior. First, he stated that large firms should have a clear written policy regarding internal communications and how to deal with overt and covert acts of violence from workers, and have on tap a professional to deal with crisis situations. Second, clear written policies regarding responses to possible violence as a result of terminations or the handling of formal grievances should be present. Finally, he urged that more studies be performed in order to develop a body of clinical experience, knowledge, and empirical research on the subject of workplace violence. In the spirit of Monahan's third proposal and his guidelines for future risk assessment, this dissertation expands the base of empirical knowledge by investigating non-fatal workplace violence epidemiological characteristics, the differences across varying types of workplace violence, and non-fatal workplace violence cue-criterion relationships. Four general hypotheses guide this research:

- (1) Midwestern workplace violence(wpv) incidents will parallel national trends (NIOSH, 1996):
 - a) there will be slightly more female victims than male victims
 - b) frequency of non-retail, retail, and government incidents will be similar
- (2) Relationship factors will result in additional domestic issues confronted at work, particularly:
 - a) significant portion of workplace violence will be perpetrated by non-strangers (domestic-related)
 - b) danger/effect ratio
 - -intimate perpetrators will perform less intense violence
 - -non-intimate perpetrators will perform more intense violence

- (3) The workplace violence typologies as defined by Cal/OSHA (Types I,II,III) will be associated with varying intensities of violence due to the effect/danger ratio (see p. 9)
 - a) Type I (non-work related perpetrator) will have more high intensity workplace violence incidents and fewer low intensity incidents than Types I and II due to perpetrators not being known by the victims b) Type II (job-description related) will have more high intensity incidents than Type I due to the job description (police, mental health worker). Under-reporting (see p. 20) may also challenge findings. c) Type III (co-worker/domestic) will have more low intensity violence incidents and less high intensity violence incidents than Types I
- (4) Specific *cues* will be significantly associated in specific directions with specific *criterion* variables and can be done so in a manner that maximizes its usefulness to risk assessors:

and II due to perpetrators being known by the victims

A multivariate model of workplace violence was constructed in order to identify combinations of workplace, perpetrator, victim, motivational, and demographic characteristics associated with higher and lower intensity levels of violent behavior (i.e., verbal abuse vs. physical abuse). In constructing the model the primary objective was to provide employers, mental health professionals, and others responsible for performing risk assessments with a tool to assist them in identifying employees more likely to perform higher intensity violent acts. The model thus emphasized proactive and reactive factors; differentiating between characteristics an employer should be aware of prior to any indication of a violent incident and characteristics closely associated with the possibility of violence. Proactive factors comprised those characteristics about which an employer should be automatically cognizant (i.e., workplace location, employee demographics) and should have the ability to consider when making hiring decisions. Such factors included gender of the victim, the type of workplace, and the presence of prior police contact. Reactive factors comprised characteristics an employer could become aware of after a hiring decision (i.e., a motive for dissatisfaction, mention of a weapon). Reactive factors included the mention of a weapon, whether

threats were made, type of relationship between perpetrator and victim, and motives for dissatisfaction. Violence intensity in the model was an aggregate variable consisting of whether the violent behavior was physical or verbal, whether or not there had been an assault, and the level of injury (ranging from "bruises" and "cuts" to "broken bones" and "hospital stay").

Cues (Independent Variables)

Predicted Relationship

Proactive Factors

Type of workplace violence (I, II, III)

dependant on effect/danger theory

Witness present

! intensity wpv (effect/danger ratio)

Prior police contact

û intensity wpv

Victim demographics

Reactive Factors

Was a threat made prior to incident

û intensity wpv

Motive for contact (non-impulsive act)

û intensity wpv

-Relationship

û intensity wpv

-Job displeasure/\$

û intensity wpv

-Sexual

û intensity wpv

-Other (misc.)

û intensity wpv

Weapon

û intensity wpv

Level of intimacy of victim to suspect û intimacy level - \$\mathcal{Q}\$ intensity wpv

-boyfriend/husband

(effect/danger ratio)

-ex-boyfriend/husband

-co-worker

-subordinate

Suspect demographics

Criterion (Dependent Variable)

"Violence" – composite of:

- -intensity of assault
- -intensity of physical/verbal aggression
- -intensity of injury (bruises, laceration, bone fracture, hospital stay, other)

Project Summary

This project reaches several new milestones in workplace violence research. The study is the first of its kind to empirically investigate actual workplace violence cases and analyze individual (i.e., prior police contact) and environmental (i.e., workplace type) risk factors from the cue-criterion perspective: an investigation of the extent cues correlate with target behaviors (see, Steadman et al., 1994; this document: p. 42). In addition, the research follows Monahan's (see, 1996) suggestions for future risk assessment research. For instance, five of his guidelines (M3, M4, M5, M7, M8) resulting from previous research are specifically incorporated (Monahan, 1996, p. 115; this document, p. 42).

- M1. Dangerousness must be disaggregated into its component parts the variables used to predict violence (risk factors), the amount and type of violence being predicted (harm) and the likelihood that harm will occur (risk).
 - Variables (risk factors) hypothesized to be associated with violence (harm) have been chosen to assist in accounting for dangerousness (risk).
- M2. A rich array of theoretically chosen risk factors in multiple domains must be chosen.
 - The questionnaire consists of risk factors theoretically chosen from previous risk assessment literature (see, Monahan & Steadman, 1994; 1996) (Appendix 1).
- M3. Harm must be scaled in terms of seriousness and assessed with multiple measures.
 - A violence compilation variable, using level of injury ("bruises" to "hospital stay") and whether or not an assault occurred, serves as the primary dependent variable for multiple measures: a proactive factor model, a reactive factor model, and an entire risk factor model.
- M4. Risk must be treated as a probability estimate that changes over time and context.
 - Results are presented as epidemiological characteristics and the risk factors are presented as being "associated with" violence because prediction of dangerousness is not feasible.
- M5. Priority must be given to actuarial research that establishes a relationship between risk factors and harm.
 - The dissertation as a whole.
- M6. Large and broadly representative samples of patients at multiple, coordinated sites must participate in the research.
 - The dissertation serves as a pilot study for future replication studies.

- M7. Managing risk as well as assessing risk must be a goal of the research.
 - A primary purpose of the study is to better understand the risk of workplace violence with the intention of improving the ability to manage and assess future incidents of risk.
- M8. Improvement of risk communication [believed to become increasingly salient over the next 2 decades, see: Monahan & Steadman, 1996].
 - The actuarial model produced in this study will enable risk assessors to more accurately communicate the varying levels of likelihood that violence will occur in a particular workplace under particular conditions (especially considering the dependent variable [violence] is non-dichotomous, hence providing a more accurate prediction).

The M1 and M6 guidelines are not incorporated because they cannot be addressed by the database. Although portions of M1 are explored such as the cuecriterion relationship between risk factors and harm (violence intensity), in order to provide a compilation variable which deduced "harm" from the police records the various forms of violence (assault, verbal or physical aggression, level of injury) were not disaggregated. Due to limits on sites willing to participate in the study, in addition to financial and temporal restraints, this guideline was not addressed.

CHAPTER VI

Method

This project investigates workplace violence in a metropolitan Midwestern city (population approximately 200,000) over an 18 month period (1/1/96 - 6/30/97). Data collection incorporated California's Occupational and Safety Health Association's (Cal/OSHA, 1995) three prong typology. This typology was used due to its extensive application to state and educational prevention activities (Heskitt, 1996) and because it provides a specific delineation of different types of workplace violence. Type I incidents consist of perpetrators who have "no legitimate relationship" to the workplace (i.e., random acts of violence such as a liquor store or gas station robbery). Type II incidents involve "job-description related" duties in which a service is provided (i.e., work-related acts of violence such as a police officer assaulted in the line of duty, or a mental health worker assaulted by a patient). Type III incidents involve violence perpetrated by a current or former employee, supervisor, manager, and other people with employmentrelated involvement with an establishment, such as an employee's spouse, boyfriend, friend, or relative ("co-worker/domestic" acts of violence such as a disgruntled employee's shooting of his supervisor or an ex-husband's assault of his former wife at her place of work) (Kraus & McArthur, 1996).

Under the auspice of the Lincoln Police Department and direct supervision of Chief of Police Tom Casady, researchers identified workplace violence incidents in the police department computer database. The identification of workplace violence incidents was achieved by targeting all combinations of police contacts (i.e., rape, physical assault)

and location (businesses) codes which satisfied workplace violence definition parameters (p. 8 this document). Police incident and location codes are the means by which the department classifies all law enforcement interventions.

Workplace Violence Incident Identification Criteria

Locations

Any type of business/workplace

Occurrence

Abduction/kidnapping Extortion

Abduction/attempting Sex offense rape

Assault non-domestic Sex offense rape, attempted

Assault domestic Sex offense indecent exposure

Assault domestic, victim under prot. Order Sex offense sex assault with an object

Protection order violation Sex offense sodomy

Bomb suspicious package/device Sex offense other

Bomb threat Stalking

Bomb unknown call type Telephone obscene calls

Bomb explosion or incendiary device Telephone threatening calls

Suicide attempt mental investigation Trespassing

An initial computer search tagged approximately 1,000 cases. Closer scrutiny of the criminal incident summaries on the computer print-out enabled researchers to rule-out ineligible cases that did not meet the parameters of the workplace violence definition. This portion of the project produced approximately 400 eligible incident reports. The next step involved the manual retrieval of actual criminal incident records. This final stage of identification resulted in a net total of 254 incidents filed with the Lincoln Police Department over the investigated 18-month period (1/1/96 – 6/30/97) that qualified as workplace violence incidents.

Events that did not meet the predetermined workplace violence definition where not considered. For instance, rollerblading (trespassing) in a business parking lot (location) was discarded. Nevertheless, "trespassing" and "business" could have easily met workplace violence standards. For example, that particular police code combination could describe a man suspected of stalking an ex-girlfriend, who is ticketed for trespassing as he waits at her car in the parking lot of her workplace.

Four researchers (2 Ph.D. candidates, 2 research assistants) coded the cases on a total of 17 factors (Table1) including the type of workplace violence (I, II, III), the intimacy level of the perpetrator (boyfriend/husband, ex-boyfriend/husband), whether a weapon was mentioned, whether threats had been made, and the intensity level of violence. The factors investigated were determined by what information would be most consistently available in the database (police department incident reports), while considering characteristics associated with violence as determined by prior risk assessment literature (i.e., access to weapon, history of violence; see, ILO, 1998;

Monahan & Steadman, 1996; VandenBos & Bulatao, 1996). Further utilizing the information available in violence assessment research literature, interaction variables between weapon and prior police contact, weapon and threat, prior police contact and threat were formulated. The interactions between these particular cues were investigated because these variables have been specifically demonstrated to have strong associations with violent behavior (see, Monahan & Steadman, 1994; Fein & Vossekuil, 1995). Due to the anticipated presence of domestic-related factors contributing to non-fatal incidents of workplace violence, the interactions between victim gender and the relationship and sexual motives are also investigated.

Table 1: Description of Variables Investigated

Cues

Proactive

Victim Gender - male or female

Location – type of workplace: retail, non-retail, government/other

Type I – "non-work related, random" type of non-fatal workplace violence

Type II – "job-description related" type of non-fatal workplace violence

Type III – "co-worker, domestic" type of non-fatal workplace violence

Witness present – was there a witness present at the time of the incident

Prior Police Contact – perpetrator contact with police prior to incident

Reactive

Mention of a Weapon — whether a weapon is mentioned at the time of the incident

Threats Made — where threats made at the time or prior to the incident

Job/\$ Motive — was the motive voiced related to job or money disgruntlement

Relationship Motive — was the motive voiced related to relationship/domestic dispute

Sexual Motive — was the motive voiced solely sexual in nature

Other Motives — misc. motives not covered by other categories

Ex-husband/boyfriend — was the perpetrator an ex-intimate

Husband/boyfriend — was the perpetrator a current intimate

Co-worker — was the perpetrator a peer in the workplace

Subordinate – was the perpetrator a subordinate in the workplace

Two teams (A and B), consisting of one graduate student and one research assistant, randomly coded 20% of the 254 non-fatal workplace violence incidents. Teams A and B were separated and instructed to individually code their half of the 20% randomly chosen cases, exchange the cases once done, and discuss discrepancies that may have occurred. Reliability for the initial step was held at a threshold of .90 and no coding fell below .91 using a Kappa coefficient. Subsequent to the first round of coding, cases were exchanged between teams A and B and the initial process repeated. Finally, the teams A and B came back together to discuss discrepancies. Issues discussed addressed challenging coding items. For example, an initially challenging coding item was the type of workplace violence (I, II, III). After the coders were briefed with summary exerts from articles on the distinction of the different workplace violence types, consensus was less difficult to achieve. Other inconsistencies, such as the too narrow "intimate" rating, were discussed and satisfied by mutual consensus towards a more accurate rating: current boyfriend/husband, ex-boyfriend/husband.

Outliers, cases identified by cross-tabulation techniques which did not specifically fit the definition of workplace violence (i.e., person assaulted in a workplace; but the victim or perpetrator was not employed by that workplace), were excluded. Power analysis, incorporating linear discriminate function analyses and hierarchical linear regression, indicates a power greater than .90 for a correlation as small as .2. In other words, there is a .90 probability that an effect of .2 or larger will achieve statistical significance incorporating an alpha equal to .05.

In an effort to assure high reliability and validity in the violence measure, a composite variable, violence intensity, was constructed to serve as the principle dependent variable (see, e.g., Menzies, Webster & Sepejak, 1985; Quinsey & Maguire, 1982; Yudofsky, Silver, Jackson, Endicott & Williams, 1986). The composite combined the following standardized variables: level of injury (measured on a 5-point scale; ranging from "bruises" to "hospital stay"), presence of physical aggression (yes/no), and whether there was an assault (yes/no). Resulting correlations with the composite "violence intensity" variable yielded .861, .920, and .861 respectively.

When performing actuarial violent behavior research, Mulvey and Lidz (1993) report that police records are one of the 5 commonly used sources of information.

Because many workplace violence incidents do not occur in mental health settings, the other traditional sources of information (treatment records, unit incidents and seclusion reports, interviews with patients, and collateral interviews) are not available. Although under ideal circumstances, interviews with the perpetrators and victims of workplace violence, as well as collateral interviews with third parties would significantly strengthen the findings of any study; confidentiality considerations attributable to the legal nature of the cases makes this impossible in the present study.

CHAPTER VII

Results

This chapter discusses the confirmation of three of the four hypotheses. First, Midwestern non-fatal workplace violence does parallel national trends. Second, domestic-related relationship factors have infiltrated the workplace and are associated with violence intensity in certain settings. Third, the effect/danger ratio that theorizes strangers commit more violent behavior due to anonymity was not supported. Finally, specific cues were significantly associated in specific directions with specific criterion variables.

This section will first provide the epidemiological data on non-fatal workplace violence. Characteristics such as number and types of cases coded, incident locations, types of aggression, motives, incident characteristics, risk enhancing factors and assaultive behavior factors, and perpetrator and victim demographics are presented. Subsequently, Type I, II, and III workplace characteristics are addressed. Lastly, multivariate analysis of cues (risk factors) and their associations with the criterion ("violence") are discussed as a culmination of this project's findings.

Epidemiological Characteristics

A total of 254 non-fatal workplace violence incidents were coded. Consistent with national findings (NIOSH, 1996), violence occurred less often in retail work settings than in service settings (Table 1). Retail sites such as department stores, grocery stores, and convenience stores accounted for 37% of the workplace violence incidents (NIOSH: retail incidents = 21%). Non-retail sites such as office buildings and construction sites

constituted 53% of the cases and government facilities such as a state and county agencies constituted 10% of all cases (NIOSH: non-retail incidents = 64%).

Table 1

Comparison of NIOSH and Lincoln Police Department (LPD) Workplace Violence

Comparison of 1410bit	and Emecon I once Department (DI D) WOIRPIACE VIOICINE
Industries		
	NIOSH (1996)	<u>LPD (N = 254)</u>
Industry		
Non-Retail	64%	53% (N = 135)
Retail	21%	37% (N = 94)
Government, other	15%	10% (N = 25)

Type of Aggression

Verbal aggression constituted the majority of workplace violence incidents (53%), reflective of similar trends in neighboring countries such as Canada where verbal aggression is even more prominent (70%) (Table 2; Chappell & Di Martino, 1998).

There were no incidents of fatal workplace violence during the investigated time span.

Table 2

Type of Workplace Aggression Comparison for NIOSH, LPD, and Canada

	NIOSH	<u>LPD</u>	<u>Canada</u>	
Type of Aggression				
Verbal	53.5%	53%	70%	
Physical	46.5%	47%	30%	

Motives

Motives for contact (Table 3), as indicated by the police records, indicated that 12% of workplace violence perpetrators were motivated by a "job or money" dispute. For example, partners in a business venture arguing over a transaction became violent or a dispute about services rendered erupted into a physical argument. Motives identified as "sexual," such as an obscene telephone call to a secretary of a business, were associated with 14% of the cases. The second largest motivating factor (21%) was "relationship" related. As hypothesized by the theory concerning domestic violence's increase in the workplace, home-life related perpetrators were acquainted with the victim (i.e., courtier, boyfriend, ex-husband) and in some manner were seeking retaliation or reconciliation of differences. The largest motivating workplace violence factor (32%) was "perceived mistreatment." For example, a disgruntled employee threatened his boss due to the rejection of a promotion request or an inpatient reacted violently to a request by a mental health worker to comply with directions. Twenty-one percent of the police records cited no particular motive for the workplace violence.

Table 3

Motives for Non-Fatal Workplace Violence

Motive	Percent	<u>N = 254</u>
Job/Money related	12%	33
Relationship related	21%	53
Perceived mistreatment ("Other")	32%	81
Sexual	14%	34
No particular motive noted	21%	. 53

Risk Enhancing and Assaultive Behavior Characteristics

Additional incident characteristics indicated non-fatal workplace violence perpetrators had prior contact (i.e., domestic assault, DWI, larceny) with law enforcement in approximately half of the cases (48%). One third of the perpetrators threatened their victims before the violent workplace incident and over half of the victims reported that they personally knew the assailant. In some incidents such as death threats on a business' voice mail system, the victim was not entirely sure who the perpetrator was but "believed" they knew. For instance, this belief was often based on a reoccurring theme of harassment from a particular suspect of whom the victim was aware (i.e., the perpetrator mentioned an identifying piece of information only known by a select few). Descriptive data analyses indicated there were non-stranger perpetrators 51% and witnesses were present 40% of the time (Table 4).

Assaultive behavior characteristics (Table 4) consisted of whether or not an assault occurred (48%), verbal aggression (46%), physical aggression (53%), and whether prior threats had been made (31%). Weapons were used or mentioned 11% of the time.

Table 4:

<u>Assaultive Behavior Characteristics</u>

	Frequency	Percent		
Behavior				
Did an assault occur?	121	47		
Physical aggression	136	53		
Verbal aggression	118	46		
Where prior threats made?	79	31		
Mention of Weapon	29	11	ete.	
Non-stranger perpetrator	129	51		
Witness present	102	40		
Prior Police Contact	122	48		

Epidemiological Review of Perpetrator and Victim Demographic Characteristics

Investigation of the role of victim and perpetrator gender in non-fatal workplace violence revealed one significant association. Male victims (57%) were significantly more likely than women (42%) to have been victims of physical aggression ($\chi^2 = 32.595$; $\underline{F} = 38.1$ (1, 254), p < .0001). Other demographic information indicated the average age for perpetrators was approximately 31 and for the victims 32 (Table 5). Breakdown of ethnicity amongst perpetrator and victim roughly mirrored the diversity of the database's city of origin (Table 5).

Table 5:

Perpetrator and Victim Demographics

Summary Statistics of Perpetrator and Victim Age

	<u>N</u> <u>N</u>	Minimum	<u>Maximum</u>	<u>Mean</u>	Std. Deviation
Perpetrator Age	191	10	67	31.14	11.26
Victim Age	223	11	68	32.20	10.68

	Frequency		<u>Percent</u>
Ethnicity	Perpetrator	Victim	Perpetrator Victim
White	130	189	51.2 74.4
Black	44	13	17.3 5.1
Hispanic	19	5	7.5 2.0
Asian	5	7	2.0 2.8
Mixed	24	1	9.4 .4
None noted	7	8	2.8 3.1

Perpetrator and Victim Gender

	Female		Male	
	N	<u>%</u>	N	<u>%</u>
Perpetrator	52	20.5	202	79.5
Victim	150	59.1	104	40.9

Differences Amongst Type of Workplace Violence (I, II, III)

Analyses of the variance among type of workplace violence indicated that Type I "no legitimate relationship" incidents constituted 53% of the entire database (i.e., liquor store robbery). "Job duty related" cases (Type II, i.e., mental health worker assaulted by patient) constituted 14% of the incidents and "co-worker/domestic" perpetrators (Type III) accounted for 33% of all the violent workplace cases identified. It is of note that although Type III workplace violence incidents are the most publicly known due to media coverage of particularly violent cases, these incidents represent only one-third of the entire sample. Furthermore, two-thirds of this type of incident involved a domestic violence component (i.e., former boyfriend/ex-husband threatening female employee) and not the stereotypical disgruntled employee acting out against a supervisor or co-workers (Table 6).

Within Type III, several variations of the non-stranger variable existed. For instance, perpetrators included current boyfriend/husband, ex-boyfriend/husband, co-worker, and subordinate employees (Table 6). The industry breakdown of types was evenly distributed between non-retail and retail (N = 66) for Type I, with a small remaining portion in government settings (N = 4) (Table 7). Type II locations were approximately evenly distributed between non-retail (N = 14) and government settings (N = 13), and Type III consisted primarily of non-retail (N = 25) settings. Similar to Types I and II settings, Type III's fewest incidents occurred in government-related locations (N = 6).

Verbal and physical aggression across workplace settings varied. In Type I the majority of incidents were verbal (n = 78; physical = 60), while in Type III the majority of incidents were physical (N = 50; verbal = 30) (Table 8).

Table 6:

Incident Characteristics (N=254)

	Frequency	Percent
Workplace Type		
Type I: random/non-work related	138	54.3
Type II: job-description related	31	12.2
Type III: co-worker, domestic related	85	33.5
Types of Type III Non-Stranger Perpetra	tors	
Boyfriend	9	8.2
Husband	3	2.7
Friend	8	7.3
Ex-boyfriend/husband	34	30.9
Work Supervisor	6	5. 5
Co-Worker	17	15. 5
Subordinate	8	7.3
Acquaintance	25	21.9



Table 7

Workplace Violence Industries According to Workplace Violence Type (I,II,III)

	Type I	Type II	Type III
Industry			
Non-Retail	25% (66)	5.5 % (14)	20.5% (54)
Retail	25% (66)	1.6% (4)	9.5% (25)
Government, other	1.5% (4)	5.1% (13)	2.3% (6)

Table 8

Type of Workplace Aggression Comparison for Types I, II, III

	Type I	Type II	Type III
Type of Aggression			
Verbal	30% (78)	2% (5)	13% (35)
Physical	23% (60)	10% (26)	19% (50)

Effect/Danger Ratio

The effect/danger ratio theory was not supported by this project's findings. Instead of the theorized relationship that non-stranger (i.e., domestic-related) perpetrators would conduct lower intensity violence and stranger perpetrators would conduct higher intensity violence, the opposite effect was found ($\chi^2 = 2.36$ (10), p < .993) (Table 9). Results concerning the differences in stranger/non-stranger perpetrators in particular types of workplace settings also did not corroborate the effect/danger ratio (Table 10).

Table 9

Low/High Intensity Violence Comparison of Stranger/Non-Stranger Perpetrators

	Low Intensity Violence	High Intensity Violence
Stranger	32% (82)	17% (43)
Non Stranger	24% (61)	27% (68)

Table 10

Low/High Intensity Violence Comparison of Workplace Types

	Low Intensity Violence	High Intensity Violence	
Type I	38% (97)	16% (41)	
Type II	3% (8)	9% (23)	
Type III	15% (38)	19% (47)	

Proactive/Reactive Multivariate Clusters of Workplace Violence

Hierarchical linear regression and multivariate analyses indicated that the proactive and reactive clusters of factors are significantly associated with violence intensity (Figure 1). Step 1 (proactive cluster) of the analyses accounted for 36 % of the variance (adjusted \underline{R}^2 = .36 (6, 247), \underline{F} = 24.6, \underline{p} < .0001) (Table 11). The proactive cluster demonstrates that victim gender (male) is associated with higher intensities of violence (β = .347, \underline{p} < .001). It also indicates that Type II and III workplace violence are significantly associated with higher intensities of violence (β = .208, \underline{p} < .0001; β = .206, \underline{p} < .010). Finally, prior police contact (β = .050, \underline{p} < .004) and whether a witness was present (β = .281, \underline{p} < .0001) were also associated with higher violence intensity.

Step 2 (proactive and reactive clusters) accounted for an additional 13% of the variance (adjusted \underline{R}^2 = .49 (16, 237), \underline{F} = 19.6, \underline{p} < .0001) (Table 11). The proactive and reactive clusters of the analyses revealed that when threats were made by the perpetrator, less intense forms of violence occurred (β = -.290, \underline{p} < .0001). It also indicated that when the perpetrator's motive was "relationship" or "sexual/non-relationship," the intensity level of violence was less (β = -.238, \underline{p} < .036; β = -.305, \underline{p} < .0001). The addition of the reactive factors caused the proactive variables Type II workplace violence and prior police contact to become insignificant (β = .096, \underline{p} > .05; β = .045, \underline{p} > .05).

Step 3, a combined cluster of proactive factors, reactive factors, and interaction effects accounted for an additional .02% of the variance (adjusted \underline{R}^2 = .51 (23, 230), F = 12.5, p. < .0001) (Table 11). Interactions between the variables threat and weapon, and

prior police contact and threat were significantly associated with violence intensity. The presence of a threat and mention of a weapon together were associated with higher intensity violence (β = .120, p < .05). Interaction between prior police contact and threat was also associated with lower violence intensity (β = -.277, p < .05). Step three provided the strongest clustering model, accounting for a total .51 of the variance compared to .49 and .36 of the variance accounted for in Steps 1 and 2 respectively. The proactive factor victim gender became insignificant in the final step (β = .083, p. > .05) due to the investigation of the interactions between victim gender and the relationship and sexual motives (β = .131, p > .05; β = -.185, p> .05).

Table 11

Summary of Hierarchical Regression Analysis for Proactive & Reactive Factors

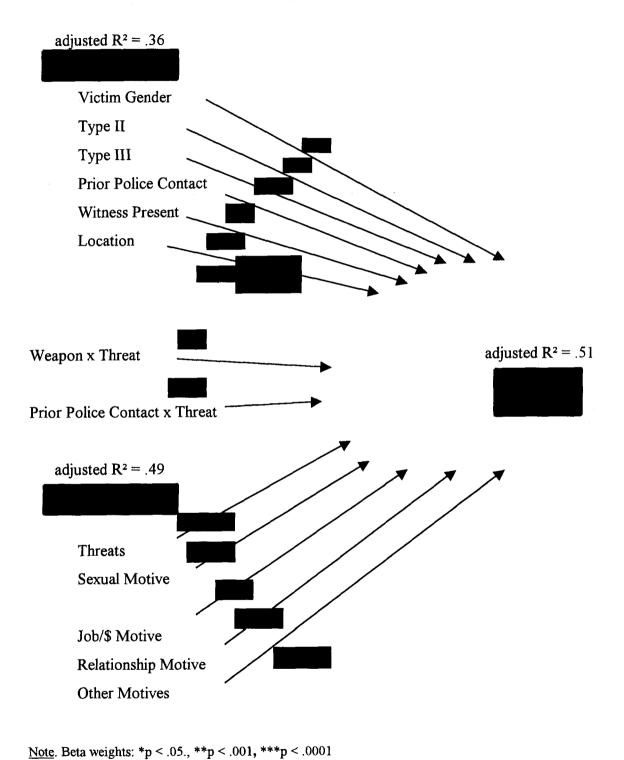
Associated Higher (+) or Lower (-) Violence Intensity (N = 254)

			
	Step 1	Step 2	Step 3
Variable	<u>β</u>	<u>B</u>	β
Step 1(Proactive)			
Victim Gender	.347**	.178**	.083
Location	.131	011	002
Type II	.208***	.096	.078
Type III	.140*	.196*	.382**
Prior Police Contact	.150**	.045	.101
Witness present	.261***	.179***	.165**
Step 2 (Proactive/Reactive	<u>e)</u>		
Weapon		063	116
Threats		290***	323***
Sexual Motive		305***	324***
Job/\$ Motive		076	174
Relationship Motive		238*	331*
Other Motives		202**	214***
Ex-husband/boyfriend		059	105
Current Husband/boyfriend		.042	.031
Co-worker		020	.029
Subordinate		.038	.045
Step 3 (Proactive/Reactive	e/Interactions)		
Weapon x Prior Police C		046	
Weapon x Threat		.105	
Prior Police Contact x Th		.120*	
Victim Gender x Relation		.131	
Victim Gender x Sexual 1	•		185

Note. Adjusted $\underline{R}^2 = .36$ for Step 1; $\Delta \underline{R}^2 = .13$ for Step 2; Δ Step 3 for $\underline{R}^2 = .02$ (ps < .0001). Correlation matrix (Appendix 1).

p < .05, **p < .001, ***p < .0001

Figure 1. Proactive/Reactive Risk Factor Model: Cue – Criterion Relationship of Risk Factors Associated with Non-Fatal Workplace Violence



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Multivariate Analyses of Workplace Violence Types I, II, and III

Paralleling the strategy of examining proactive and reactive factors as they relate to violence intensity, hierarchical linear regression analyses were performed to examine proactive and reactive risk factors, using type of workplace violence as the criterion. Type I and Type II settings produced significant proactive and reactive clusters similar to the proactive and reactive violence intensity clustering (adjusted $R^2 = .64$ (22, 231), $\underline{F} = 21.2$, $\underline{p} < .0001$; adjusted $R^2 = .38$ (22, 231), $\underline{F} = 8.628$, $\underline{p} < .0001$) (Table 12; Table 13).

The Type III analyses indicated the significant presence of non-stranger perpetrators associated with violence in these settings. For example, in step 2 of the analysis the variables current boyfriend/husband, co-worker, and subordinate were associated with the criterion (β = .126, p < .05; β = .295, p < .001; β = .161, p < .001) (Table 15). In Step 3 when the interaction terms were added into the analyses, exhusband/boyfriend remained significant (β = .096, p < .05), and victim gender became significant (β = -.138, p < .05). The interactions between victim gender and job/\$ motive and victim gender and relationship motive were also significant (β = -.231, p < .0001; β = -.363, ρ < .0001). Type III's cluster of proactive variables were not significantly associated with the criterion variable (adjusted R^2 = .011 (4, 249), F = 1.681, p < .155)(Table 14).

Table 12

Summary of Hierarchical Regression Analysis for Proactive & Reactive Factors

Associated with Type I Workplace Violence

	Step 1	Step 2	Step 3
Variable	β	β	β
Step 1(Proactive)			
Victim Gender	010	069	.324
Location	273***	255***	.000***
Prior Police Contact	158*	.006	083
Witness present	147*	052	050
Step 2 (Reactive)			
Weapon		.011	029
Threats		.126*	.086
Sexual Motive		.174**	.072
Job/\$ Motive		147*	151*
Relationship Motive		443***	359***
Other Motives		.085	.030
Ex-husband/boyfriend		111	001
Husband/boyfriend		035	019
Co-worker		190***	.097
Subordinate		137*	.798
Step 3 (Interactions)			
Weapon x Prior Police Contact			.052
Weapon x Threat			015
Prior Police Contact x Threat	044		
Victim Gender x Relationship Motif	.261*		
Victim Gender x Sexual Motive			.221*

<u>Note</u>. Adjusted $\underline{R}^2 = .13$ for Step 1; $\Delta \underline{R}^2 = .33$ for Step 2; Δ Step 3 for $\underline{R}^2 = .31$ (ps < .05) *p < .05., **p < .001, ***p < .0001

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Table 13

Summary of Hierarchical Regression Analysis for Proactive & Reactive Factors

Associated with Type II Workplace Violence

	Step 1	Step 2	Step 3
Variable	<u>B</u>	β	β
Step 1(Proactive)			
Victim Gender	.152*	.040	.052
Location	.325***	.356***	.299***
Prior Police Contact	.099	.356***	.123
Witness present	.116	.071	.033
Step 2 (Reactive)			
Weapon		.055	.062
Threats		178*	152*
Sexual Motive		328**	164*
Job/\$ Motive		260***	183
Relationship Motive		328**	371*
Other Motives		148*	069
Ex-husband/boyfriend		013	136
Husband/boyfriend		014	044
Co-worker		136*	207**
Subordinate		024	089
Step 3 (Interactions)			
Weapon x Prior Police Contact			001
Weapon x Threat			.082
Prior Police Contact x Threat		.117	
Victim Gender x Relationship Moti	Victim Gender x Relationship Motive .126		
Victim Gender x Sexual Motive			.113

Note. Adjusted $\underline{R}^2 = .17$ for Step 1; $\Delta \underline{R}^2 = .01$ for Step 2; ΔS tep 3 for $\underline{R}^2 = .20$ (\underline{p} s < .05) *p < .05., **p < .001, ***p < .0001

Table 14

<u>Summary of Hierarchical Regression Analysis for Proactive & Reactive Factors</u>

<u>Associated with Type III Workplace Violence</u>

	Step 1	Step 2	Step 3
Variable	<u>B</u>	<u>B</u> ,	<u>B</u>
Step 1(Proactive)			
Victim Gender	095	.045	138*
Location	.063	.022	004
Prior Police Contact	.099	051	.001
Witness present	.074	.006	.029
Step 2 (Reactive)			
Weapon		049	012
Threats		009	.015
Sexual Motive		.002	.038
Job/\$ Motive		.336***	.286***
Relationship Motive		.695***	.636***
Other Motives		.012	.016
Ex-husband/boyfriend		.126*	.096*
Husband/boyfriend		.046	020
Co-worker		.295**	.041
Subordinate		.161**	.050
Step 3 (Interactions)			
Weapon x Prior Police Contact			056
Weapon x Threat			- .041
Prior Police Contact x Threat		035	
Victim Gender x Relationship Mot		166**	
Victim Gender x Sexual Motive		185*	

Note. Adjusted \underline{R}^2 = .011 for Step 1 (sig. = .155); $\Delta \underline{R}^2$ = .696 for Step 2; Δ Step 3 for \underline{R}^2 = .121 (ps < .05) *p < .05., **p < .001, ***p < .0001

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CHAPTER VIII

Discussion

Through competent assessment, violence can and should be predicted, the question is how can we do it better, or in other words: "more efficiently and more effectively" (Gottfredson & Gottfredson, 1988, p. 303)

This project addresses how risk assessment can be performed "more efficiently and more effectively." It also contributes to the workplace violence research base by the being the first of its kind to empirically investigate actual non-workplace violence incidents from a cue-criterion perspective (see, Steadman et al., 1994; this document: p. 47).

This chapter first discusses the epidemiological findings on non-fatal workplace violence and factors such as incident settings, type of aggression, motives, incident characteristics, types of non-stranger perpetrators, and assaultive behavior characteristics. Secondly, descriptive characteristics unique to the types of workplace violence (I, II, III) are reviewed. Thirdly, the multivariate analyses of the association of cues (risk factors) with the criterion ("violence") are discussed. In closing, the implications of these finds for Monahan's guidelines for risk assessment are discussed.

Epidemiological Comparisons

This project indicates the epidemiology of workplace violence at the local level mirrors several national characteristics. For instance, both this database and NIOSH (1996) data report that the majority of non-fatal workplace violence incidents occur in

non-retail settings, the second highest location in retail settings, and the least often occurrence in government-related facilities.

The types of aggression demonstrated also parallel national and international findings. Verbal aggression constitutes the majority of incidents locally, nationally, and internationally. Taken a step further, verbal aggression sometimes provides for the disclosure of a motive. Such motives are often expressive of perceived mistreatment, but also indicative of a money dispute or domestic-related issues in the workplace. The domestic-related motives and the presence of sexually-laced motivation indicate the strong presence of relationship issues in the workplace.

The fact that half the time non-fatal workplace violence perpetrators are non-strangers is another indication of the invasion of domestic violence into the workplace (i.e., current boyfriends/husbands, ex-boyfriends/husbands, and acquaintances constituted two-thirds of Type III violence incidents and were responsible for the higher violence intensity offenses). Nevertheless, although psychology research has thoroughly investigated the phenomenon of domestic violence, few empirical publications address the apparent link between workplace violence and domestic violence (see, Younger, 1994; Ewing, 1998).

Beyond the portion of perpetrators that are known to victims such as domestic acquaintances, approximately half of the assailants were strangers. Considering that the workplace was once commonly believed to be a safe-haven from the greater ills of society, it is disheartening to realize many no longer feel any safer at work than in other arenas of their every day lives. For instance, compared to an inaudible portion of

workers several decades ago two-thirds of American employees currently do not feel safe at work (Kinney, 1995).

Other reasons for decreased safety at work is the finding that perpetrators had prior police contact a significant portion of the time. Supported by other risk assessment research (see Monahan & Steadman, 1994), prior police contact in approximately half of the incidents suggests the possibility for prior criminal and/or violent behavior. Such findings are most applicable to Type III settings in which the perpetrator is an employee or directly connected to an employee. Ultimately, employers are put in a precarious position when weighing thorough initial hiring decisions and employee retention issues. On one hand, employers' legal responsibilities have to honor the privacy of their employees and on the other hand they have a duty to provide a safe workplace. For instance, if an employee is victimized at the hands of a co-worker who, known to management, has made threats and had prior police contact, the victim may have a right to bring charges of negligence against the employer. This right stems from the employer not taking reasonable precautions, given the state of the social science regarding risk assessment and predictions of dangerousness (Oakley v. Flor-Shin Inc., 1998). Consistent with the opinions in Laird v. E-Z Mart, 1994, Oakley v. Flor-Shin Inc., 1998, and Yunker v. Honeywell, Inc., 1993, when an employer demonstrates little proactive intervention they are more often found guilty of some form of negligence, because the specific violent act has been linked to their failure to take preventive measures. Because of the complexity of balancing the rights of the individual employee and the need for safety in the workplace as a whole, the specific circumstances of individual cases is what

determines what are the reasonably appropriate precautions on the employer's part when considering workplace violence liability.

Effect/Danger Ratio

Another characteristic that played a role in the occurrence of non-fatal workplace was the effect/danger ratio. The effect/danger ratio refers to the aggressor's subjective estimates of the ability to perform behaviors that are effective in harming the victim, while at the same time permitting as little danger to themselves as possible (Bjorkqvist et al., 1994). Baron and Neuman (1996) hypothesized that several factors present in the workplace tended to further strengthen the effect/danger preference. For instance, work environments often foster repeated and prolonged contact with one another and as a result, aggressors can reasonably expect to meet their victims again and again over relatively extended periods of time (Baron & Neuman, 1996). In addition, the likelihood that a witness would be present to an act of violence is high, therefore representing a high effect/danger ratio, subsequently suggesting to the perpetrator that alternative forms of aggression should be sought in order to maximize their anonymity. Nevertheless, although the effect/danger theory reasoned that covert acts of aggression are preferred over overt acts of aggression because it minimizes the likelihood of apprehension, this project's findings revealed the opposite. Not only did the presence of a witness have a negligible effect on the occurrence of non-fatal workplace violence, it was associated with higher intensity incidents of violence. In addition, offenders who were better known to the victim (boyfriend, ex-husband) perpetrated more incidents of higher intensity violence while strangers perpetrated more incidents of lower intensity violence. This

antithesis of the effect/danger ratio suggests workplace violence perpetrators may specifically seek out a high "effect/danger" ratio because they wish to make a statement, have that statement be identified (high non-stranger offenders), and observed (large presence of witnesses).

Types of Workplace Violence

Differences among types of workplace violence (I, II, III) indicate that employers should focus their resources on addressing safety issues salient to their particular setting. Although findings addressing the Type II setting were challenged by under-reporting (Cal/OSHA, 1994), data indicates that Type I ("random act, non job-related") and Type III ("co-worker, domestic-related") settings are more susceptible to certain kinds of workplace violence. The high frequency of Type I incidents supported NIOSH (1996) risk factors that routine face-to-face contact with large numbers of people and the handling of money increase the risk for workplace victimization. In addition, Type I settings indicated that the gender of the perpetrator and the perpetrator's motive for the offense played a significant role in the intensity of violence that occurred. For instance, when female employees were victims of relationship and sexually motivated workplace violence higher intensity incidents of violence were also likely to occur. This is consistent with the discovered trend that non-work related motives, often involving domesticrelated perpetrators, result in higher violence intensity incidents. The finding also suggests that female employees are especially prone to sexual harassment oriented workplace violence (i.e., lewd sexual advances) when working in settings such as quick shops and gas stations.

By definition Type III settings are more often confronted with domestic and coworker related incidents of workplace violence. Results of this sub-category of non-fatal workplace violence minimize the stereotypical notion of the "disgruntled employee" who violently assaults co-workers in an impulsive rage is a small subset of a larger classification. In fact, disgruntled employees represent only a third of what otherwise can accurately be categorized as "within workplace domestic violence." As a result of these findings, employers could benefit from appropriate preventative and supportive steps to combat domestic violence that affects the workplace. For starters, workplace education of the domestic-related issues present at work should be provided (Ewing, 1998), including education regarding relevant community resources. Secondly, open-forums, hotlines, and private meeting opportunities with Employment Assistant Programs (EAP) could be offered so that potential victims know it is alright and are encouraged to share knowledge regarding a potential perpetrator. Thirdly, training policies should exist in written form so all employees know proper intervention techniques, such as the circulation of an employee's threatening ex-husband's picture amongst office staff for future identification purposes should he try to gain entrance to the workplace.

Incorporation of the proactive risk factor cluster was not beneficial for the Type III workplace violence setting. The lack of prior police contact and threats suggests Type III perpetrators provide little proactive information observable to those at the work setting. It would seem many of these perpetrators are domestic violence offenders whose violent behavior would be best known by the potential workplace victim (the current girlfriend, ex-wife). As a result, it becomes especially important in Type III settings that

female employees feel comfortable notifying employers of potential domestic-conflicts affecting the workplace. For instance, although there were no significant proactive risk factors for the Type III setting, the reactive factors of domestic-related motives and the presence of ex-boyfriends and ex-husbands was significantly associated with higher intensity violence. Consistent with findings as a whole, the presence of a female employee and the relationship-related motive was significantly associated with higher intensity level incidents. This suggests that a component of the domestic-related incidents, be it impulsively, love, passion, or some other factor, promotes higher intensity non-fatal workplace violence.

Because a significant portion of Type III incidents are domestic related, there appears to be a need for a fourth categorical type of workplace violence: domestic-related (Type IV). Given the popular culture's familiarity with Type III disgruntled employee images, the domestic-related portion of these cases are done a disservice. This is deemed a disservice because when workplace violence is mentioned the image that most often floods the layperson's mind is a disgruntled employee seeking retribution against their boss and not the image of the more frequent occurrence of a recently divorced husband stalking his ex-wife at her workplace. Such a categorical breakdown may also provide opportunities for more accurate future investigations into the proactive and reactive risk factors associated with this type of workplace violence occurrence.

This dissertation provides insight into several of the guidelines that Monahan set forth for risk assessment (p. 43). A rich array of theoretically chosen risk factors (i.e.,

prior police contact, weapon) in multiple domains (Type I, II, III) were investigated (M2). Harm (violence intensity) was scaled in terms of seriousness (low or high intensity) and assessed with multiple measures (M3). Risk, the association of cues with the criterion, was assessed as a probability (beta weight) with changes from setting to setting (proactive/reactive, I, II, III types) taken into account (M4). Priority was given to actuarial research (epidemiological characteristics), which established a relationship between risk factors and harm (M5). Managing risk, in addition to initially assessing it, is addressed in the suggestions for future research such as workplace education, seminars, hotlines, and written safe-workplace polices (M7). Finally, the improvement of risk communication is achieved by the development of a four-tier non-fatal workplace violence identification system as subsequently discussed (M8).

Earlier in this report (p. 52) the need for improving the communication of risk is addressed. An initially odd but clever parallel is drawn between risk assessment and meteorology (Monahan & Steadman, 1996). Utilizing this formula, a categorical warning system has been created for non-fatal workplace violence (Table 16). Ideally such a scale can be used as a base to begin unifying the discrepancies amongst definitions in the workplace violence literature (see p. 8) and the assessment of dangerousness in the workplace while also serving as an empirical base for future studies to improve upon. Uniform use of such a scale would also assist different risk assessors in communicating standardized messages regardless of training background.

Table 16

Proposed Employee Threat Assessment Guideline (E.T.A.G.) (see, Monahan & Steadman, 1996)

Category 1 "Low violence risk" –few risk factors are present

- Example: Type I setting, female employee
- Category 2 "Moderate violence risk" –several risk factors are present, gather additional information and monitor the individual more closely than usual
 - Example: Type I setting, male employee, many customers have had prior police contact
- Category 3 "High violence risk" –a number of key risk factors are present. Give priority to gathering additional information and close employee/workplace monitoring. Make preparations for preventive action should the situation deteriorate.
 - Example: Type III setting, female employee reports domestic abuse and recent separation, workplace is only location ex-boyfriend knows to locate her
- Category 4 "Very high violence risk" –many key risk factors are present. Enough information is available to make a decision. Take preventive action now.
 - Example: Type III setting, female employee reports ex-husband with prior police contact has voiced particular motives and an intention to confront employee at work when she least expects it.

Limitations

This project's findings represent the "tip of the iceberg." First and foremost, the results are limited due to the law enforcement database. Any limitations in the original criminal incident records and the manner in which initial investigations and reports were taken, such as a lack of reliability across police officers, are reflected in the analyzed data. Because the data analyzed in this dissertation stems solely from a local police department's records, any workplace violence that did not request law enforcement intervention was not available for coding. For instance, it is commonly recognized in the workplace violence and risk assessment fields that many incidents of violence in the business community are dealt with privately. Be it the utilization of private security or threat assessment specialists, companies usually do not want to "air their dirty laundry." In other words, companies who can afford private intervention (i.e., a risk assessment performed by a top-notch forensic psychologist) utilize such options because they view covert actions as being in the best interest of their business as a whole. As a result, many incidents of lower intensity workplace violence in companies with alternative resources are not reported to law enforcement and are instead dealt with privately. Monahan (1999) reports that many companies are not receptive to research being performed on their private records of workplace violence because of fears that resulting researchfindings could at some point be used against the company legally (i.e., duty to warn, foreseeability issues).

Another limitation that likely affected this project's findings is fear and underreporting. "Fear" is one factor recently proposed to explain impediments in obtaining complete reports and thorough documentation of violence incidents at work (i.e., fear of reporting due to various potential reprisals: shunning by co-workers, guilt for reporting, and possible future victimization) (Gelles, 1998). It is theorized that contemporary workers shy away from "causing problems" and avoid possible persecution from the accused and/or peers that may be triggered by coming forward and identifying individuals responsible for less intense incidents of workplace violence (i.e., verbal insults, physical posturing) (Gelles, 1998). In order to understand the challenges facing the uniform reporting practices of non-fatal incidents, a comparison of workplace violence to sexual harassment 10 years ago, in terms of co-workers willingness to report inappropriate workplace incidents is useful (Omberg, 1998). The workplace violence phenomenon is still in its relative infancy and the average employee and employer is only beginning to become aware that for workplace violence to occur, several victims do not need to be shot-down and murdered in an office rampage.

Implications

This project's implications are numerous. First, results suggest there are particular risk factors and epidemiological characteristics associated with varying degrees of intensity. Second, differences across types of workplace (I, II, III) suggest employers can proactively gear resources towards addressing workplace violence usually associated with their setting. Third, limits presented by this purely law enforcement database imply there is significant research yet to be performed in other areas such as private companies and the business community (which would provide invaluable information on Type III and Type IV incidents). Fourth, workplace violence risk factors are increasingly being

determined and as a result suggest employers should stay abreast of the latest social science research if they wish to minimize litigation resulting from negligence and duty of care (see, Levin, 1995; Laird v. E-Z Mart, 1994; Oakley v. Flor-Shin Inc., 1998; Yunker v. Honeywell, Inc., 1993). Lastly, although some indications have been discussed as to what factors play roles in workplace violence, the phenomenon's upsurge to epidemic status remains perplexing.

Elliot and Jarett (1994) report that events both local and national have contributed to the upsurge in workplace violence. The economic climate, the impact of the Baby Boom, multiculturalism in the workforce, and drug and substance abuse have been cited as probable factors contributing to the possibility of violence in the workplace. Elliot and Jarett (1994) go as far as to say:

"Present economics is blamed as the number one cause for the dramatic increase in workplace violence. The boom years of the 1980's followed by the economic crash, recession, and slow recovery, have all contributed to stress factors such as lay-offs by many companies, and increase in the number of unemployed, and increased competition for available jobs. People that are employed face tougher competition for promotions. Many companies and organizations have had to tighten their budgets and, if not in fact trim benefits for employees, at least put a halt to or stiffen the restrictions on giving raises and increasing benefits" (Elliot & Jarett, 1994, p. 289).

Another argument for the increase of workplace violence (particularly Type III) is the evolution over the last 20 to 40 years from people taking internal responsibility for life's misgivings and other individual shortcomings to externally blaming society as a whole and those around them for their ill-wills (Hatcher, 1996; Resseler, 1998). Parallels to this reasoning are evident in the rash of school shootings over the past few years. Disgruntled existence, a feeling that others are to blame, and a last "hoorah" as you pass on the pain to those you feel responsible is a relatively recent phenomenon (Ressler, 1998). Ressler, an FBI Special Agent with over 40 years of experience, reports that the types of individuals who perform severe acts of workplace violence due to experiences of shame and extreme disappointment associated with their job, 30 years ago were the types of individuals who committed suicide for the same reasons (1998). Yet for some reason, today's attitude is "if I'm going down, somebody's going down with me" (Ressler, 1998).

On the other hand, the increase of Type IV workplace violence may be less of a zeitgeist shift and more a reflection of the diversification of the workplace (Elliot & Jarett, 1994); and the arguable extinction of the "house-wife." Due to women's decreased presence at home and increased presence in the workplace, domestic-violence perpetrators must seek out new locations for their abuse and the workplace is often the most dependable location.

Subsequent to these ideas on a few of the possible causes of workplace violence is the larger question: what can be done? The bad news is violence cannot always be predicted. What we can do, given the state of the social science in the area of risk assessment, is become more knowledgeable and continually improve our skills at assessing situations in which the likelihood for violence is greater. Furthermore, it is irresponsible for a risk assessor to say: this person is going to be violent because x, y, z

because the nature of the science indicates this cannot be done with any consistent accuracy. Ultimately what can and should be said with ethical and professional vigor, is that: in my experience and from what I know of the empirical research addressing these particular factors, an individual with x, y, z characteristics acts out violently more often than an individual without x, y, z characteristics in these particular circumstances.

Conclusion

Despite the epidemic nature of workplace violence (CDC, 1992; International Labour Office, 1998), NIOSH (1996) reports limited information is available in the criminal justice and public health literature regarding the nature and magnitude of non-fatal workplace violence. This dissertation begins to address the absence of research in the area of non-fatal workplace violence by incorporating the guidelines for violence prediction research set forth by Monahan and Steadman (1994; 1996). This dissertation also provides an empirical knowledge base that mental health professionals and others who are interested in proactively and reactively reducing incidents of non-fatal workplace violence can incorporate into their assessments, and hopefully improve upon in the future.

Although the findings of this project shed some light on the phenomenon of workplace violence, the results of this study by no means present a "prediction" model of the characteristics indicative of violent behavior for all types of employees in all types of workplace settings. The appeal of applying these or future findings indiscriminately when performing risk assessments may become increasing attractive as workplace violence litigation increases. In the meantime, those fighting workplace violence should institute multi-disciplinary safe-workplace teams who are trained in proactive and reactive

interventions. For instance, Employment Assistance Programs (see Appendix 3), Human Resources Divisions, law enforcement, and mental health professionals can all provide invaluable and unique expertise in combatting the problem of workplace violence.

Specific proactive actions are appropriate along several fronts, especially the NIOSH risk factors (handling money, working after dark, interaction with the public) and this dissertation's examination of proactive and reactive factors, in addition to the significant presence of domestic-issues confronted at work.

The presence of domestic-related incidents suggest anti-workplace violence initiatives would wisely invest time and resources in addressing domestic violence issues, in addition to providing counseling services, hot-lines, and other resources for female employees who believe the potential for domestic issues leaking into the workplace exist. Finally, more research investigating diverse databases (i.e., private business) needs to be performed in order to develop a well-rounded and more generalizable understanding of the workplace violence.

References

American Bar Association. (1989). <u>ABA criminal justice mental health standards</u>. Chicago: Author.

American Medical Association (1994). National Conference on Family Violence: health and Justice. Conference Proceedings. Washington, DC, March 11 – 13, publication AA64:94-669:3M:11/94.

Anfuso, D. (1994). Workplace violence. Personnel Journal, 73, 66-77.

Auletta, K. (1993). "What won't they do?" The New Yorker, May 17, 45-46.

Bachman, R. (1994). Violence and theft in the workplace. Bureau of Justice Statistics Crime Data Brief. U.S. Department of Justice.

Bachman, R. (1996) Epidemiology of violence and theft in the workplace. In Harrison, R. (Ed.), Occupational Medicine: State of the Art Reviews. Vol. 11, No. 2, April-June. Philadelphia, Hanley & Belfus, Inc.

Barling, J. (1996). The prediction, experience, and consequences of violence. In VandenBos, G. R., & Bulatao, E. Q. (Eds.), Violence on the job: Identifying risks and developing solutions. Washington D.C., American Psychological Association Press.

Bachman, R. (1994). Violence and theft in the workplace. Bureau of Justice Statistics, U.S. Department of Justice, National Criminal Justice publication. 148199.

Bachman, R. (1996). Epidemiology of violence and theft in the workplace. In Harrison, R. (Ed.), Occupational Medicine: State of the Art Reviews. Vol. 11, No. 2, April-June. Philadelphia, Hanley & Belfus, Inc.

Bandura, R. (1973). Social Learning Theory. Englewood Cliffs, NJ: Prentice Hall.

Barefoot v. Estelle, 463 U.S. 880 (1983).

Baron, R. A., (1971). Exposure to an aggressive model and apparent probability of retaliation from the victim as determinants of adult aggressive behavior. <u>Journal of Experimental Social Psychology</u>, 7, 343-448.

Baron, R. A. (1993). <u>Violence in the Workplace: A Prevention and Management</u>

<u>Guide for Businesses.</u> Pathfinder Publishing, CA.

Baron, R. A., & Neuman, J. H. (1996). Workplace violence and workplace aggression: Evidence on their relative frequency and potential cause. <u>Aggressive</u>

Behavior, 22, 161-173.

Baumeister, R. F., Boden, J. M., & Smart, L. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. <u>Psychological Review</u>, 103 (1), 5-33.

Baxter, V., & Margavio, A. (1996). Assaultive violence in the U.S. Post Office. Work and Occupations, 23 (3), 277-296.

Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. Psychological Bulletin, 106, 59-73,

Bjorkqvist, K., Osterman, K., & Hjelt-Back, M. (1994). Aggression among university employees. <u>Aggressive Behavior</u>, 20, 173-184.

Blair, D. T. (1991). Assaultive behavior: Does provocation begin in the front office? <u>Journal of Psychosocial Nursing</u>, 29, 21-26.

Bonta, J., Law, M., & Hanson, K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. <u>Psychological</u>

<u>Bulletin, 123</u> (2), 123-142.

Borden, R. J., (1975). Witnessed aggression: Influence of an observer's sex and values on aggressive responding. <u>Journal of Personality and Social Psychology</u>, 31, 567-573.

Brakel, S., Parry, J., & Weiner, B. (1985). The mentally disabled and the law (3rd ed.). Chicago: American Bar Foundation.

Budd, J. W., Arvey, R. D., & Lawless, P. (1996). Correlates and Consequences of Workplace Violence. <u>Journal of Occupational Health Psychology</u>, 1 (2), 197-210.

Buss, A. H., (1961). The Psychology of Aggression. New York: Wiley.

Brockner, J., Grover, S., Reed, T., DeWitt, R. L. (1992). Layoffs, job insecurity, and survivors; work effort: Evidence of an inverted-U relationship. <u>Academy of Management Journal</u>, 35, 413-425.

Brockner, J., Grover, S., Reed, T., DeWitt, R. L., O'Malley, M. (1987).

Survivors' reactions to layoffs: We get by with a little help from our friends.

Administrative Science Quarterly, 32, 526-541.

Cal.Lab.Code 6401.7 (Supp. 1995).

Cal. Penal Code 387 (Supp. 1995).

Cal/OSHA (1995). <u>Guidelines for Workplace Security</u>. Preventing Violence in the Workplace: A Second Conference on Workplace Security (11/3/94). San Francisco, CA.

Carmel, H. & Hunter, M. (1989). Staff injuries from inpatient violence. Hospital and Community Psychiatry, 40, 21-46.

Carroll, J. S. (1977). Judgments of recidivism risk: conflicts between clinical strategies and base-rate information. Law and Human Behavior, 1(2), 191-198.

Castillo, D. N. (1994)...Nonfatal violence in the workplace: directions for future research. In: questions and answers in lethal and non-lethal violence: proceedings of the Third Annual Workshop of the Homicide Research Working Group. Washington, DC: National Institute of Justice.

Castillo, D. N. & Jenkins, E. L., (1994). Industries and occupations at high risk for work-related homicide. <u>Journal of Occupational Medicine</u>, 36, 125–132.

Center for Disease Control. (1992). <u>Homicide in the U.S. workplace: A strategy</u>

for prevention and research (NIOSH Publication No. 92-103). Washington, DC: U.S.

Government Printing Office.

Centers for Disease Control and Prevention (1993). <u>Preventing homicide in the</u> workplace. National Institute of Occupational Safety and Health. Publication 93-109.

Chaiken, J., Chaiken, M., & Rhodes, W. (1994). Predicting violent behavior and classifying violent offenders. In A. J. Reiss, Jr., & J. A. Roth (Eds.), <u>Understanding and preventing violence</u>. Volume 4. Consequences and control (pp. 217-294). Washington, DC: National Academy Press.

Chappell, D., & Di Martino, V. (1998). <u>Violence at work</u>. Geneva, International Labour Office.

Cleckley, H. (1976). The Mask of Sanity, 5th ed. St Louis, MO: Mosby

Collins, J. J., & Cox, B. G. (1987). Job activities and personal crime victimization: implications of theory. Social Science Research, 16, 345-360.

Collison, B. B., Bowden, S., Patterson, M., Snyder, J., Sandall, S., & Wellman, P. (1987). After the shooting stops. <u>Journal of Counseling and Development</u>, 65, 389-390.

Cowan, J. S. (1994). Lessons from the Fabrikant file: A report to the Board of Governors of Concordia University. Unpublished manuscript, Concordia University, Montreal, Quebec, Canada.

Davis, S. (1991). Violence by psychiatric inpatients: A review. <u>Hospital and Community Psychiatry</u>, 42, 585-590.

Dawes, R. M. (1975). Case by case versus rule-generated procedures for the allocation of scarce resources. In M. Kaplan & S. Schwartz (Eds.), <u>Human judgment and decision processes in applied settings</u> (pp. 83-84). New York: Academic Press.

Dawes, R. M. (1979). The robust beauty of improper linear models indecision making. American Psychologist, 34(7), 571-582.

Dawes, R. M., Faust, D., & Meehl, P. E. (1989). Clinical versus actuarial judgment. Science, 243, 1674-1688.

DiCosala v. Kay, 91 N.J. 159, 450 A.2d 508, 515 (1982).

Dietz, P. E. (1987). Patterns in human violence. In: Hales, R.E., & Frances, A. J. (Eds.). <u>Psychiatric Update: American Psychiatric Association Annual Review.</u>

Washington, DC: American Psychiatric Press, 6, 465-490.

Dobash, R. E., & Dobash, R. (1979). Violence against wives. New York: Free

Press.

Dobrin, A., Wiersema, B., Loftin, C., & McDowall, D. (1996). Statistical handbook on violence in America. Phoenix, AZ: Oryx.

Drummond, D. J., Sparr, L. F., & Gordon, G. H. (1989). Hospital violence reduction among high-risk patients. <u>Journal of the American Medical Association</u>, 261(17), 2531-2534.

Duffy v. City of Oceanside (1986). 179 Cal. App 3d 666.

Economic Report of the President, (February, 1990). Washington, DC: Government Printing Office.

Elliott, R. H., & Jarrett, D. T. (1994). Violence in the workplace: The role of human resource management. <u>Public Personnel Management</u>, 23, (2).

Epstien, R. A. (1995). <u>Cases & Materials on Torts.</u> Sixth Edition. Little, Brown & Company: Boston.

Ennis, B. J., & Litwack, T. R. (1974). Psychiatry and the presumption of expertise: flipping coins in the courtroom. <u>California Law Review</u>, 62, 693-752.

Ewing, C., P. (1998, August). <u>Domestic Violence in the Workplace: From Understanding to Prevention</u>. Paper presented at the meeting of the American Psychological Association, San Francisco, CA.

Federal Bureau of Investigation (1992). <u>Crime in the United States</u>. Washington, DC: National Institute of Occupational Safety and Health, Division of Safety Research.

Fein, R. A., & Vossekuil, B. (1995). <u>Threat Assessment: An approach to prevent targeted violence</u>. Series: NIJ Research in Action. NCJ 1555000.

Fein, R. A., Vossekuil, B., & Holden, G. A. (1995, September). Threat

Assessment: An approach to prevent targeted violence. Series: NIJ Research in Action.

NCJ 155000.

Feliu, A. G. (1994/95). Workplace violence and the duty of care: The scope of an employer's obligation to protect against the violent employee. Employee Relations, 20, (3), 381-406.

Felson, R. B., (1992). Kick 'em when they're down: Explanations of the relationship between stress and interpersonal aggression and violence. <u>The Sociological Quarterly</u>, 33(1), 1-16.

Filipezak, B. (1993, July) Armed and dangerous at work. Training, 30, 40.

Flannery, R. B., Hanson, M. A., & Penk, W. E. (1994). Risk factors for inpatient assaults on staff. <u>Journal of Mental Health Administration</u>, 21, 24-31.

Folger, R., & Baron, B. A., (1996). Violence and hostility at work: A model of reactions to perceived injustice. In G. R. VandenBos & E. Q. Bulatao (Eds.), <u>Violence on the Job: Identifying Risks and Developing Solutions</u>. Washington, D.C., American Psychological Association Press.

Frieze, I. H., & Schafer, P. C. (1984). Alcohol use and marital violence: Female and male differences in reactions to alcohol. In S. C Wilsnack & L. J. Beckman (Eds.),

Alcohol problems in women: Antecedents, consequences, and intervention (pp. 260-279).

New York: Guilford.

Gardner, W., Lidz, C. W., Mulvey, E. P., & Shaw, E. C. (1996). A comparison of actuarial methods for identifying repetitively violent patients with mental illness. <u>Law and Human Behavior</u>, 20, 35-48.

Garcia v. Duffy, 492 So.2d 435, 438-39 (Fla. 1986).

Geise v. Phoenix Co., 615 N.E.2d 1179, 1184 (Ill. 1993).

Gelles, M. (1998, August). Responding to Violence and Fear in the Workplace.

Paper presented at the meeting of the American Psychological Association, San

Francisco, CA.

George, W. H., Dermen, K. H., & Nochajski, T. H. (1989). Expectancy set, self reported expectancies and predispotional traits: Predicting interest in violence and erotica. Journal of Studies of Alcohol, 50(6), 541-551.

Goodman, R. A., Jenkins, E. L., & Mercey, J. A. (1990). Workplace-related homicide among health care workers in the United States, 1980 through 1990. <u>Journal of American Medical Association</u>, 272: 1686-1688.

Goodman, R. A., Mercy, J. A., & Loya, F. (1986). Alcohol use and interpersonal violence: Alcohol detected in homicide victims. <u>American Journal of Public Health, 76</u>, 144-146.

Goodman, R. A., Mercy, J. A., & Rosenberg, M. L. (1986). Drug use and interpersonal violence. <u>American Journal of Epidemiology</u>, 124(5), 851-855.

Gottfredson, D. M., & Gottfredson, S. D. (1980). Screening for risk: A comparison of methods. <u>Criminal Justice and Behavior</u>, 7, 315-330.

Gottfredson, D. M., & Gottfredson, S. D. (1988). Stakes and risks in the prediction of violent criminal behavior. <u>Violence and Victims</u>, 3, 247-262.

Gottfredson, D. M., & Gottfredson, S. D. (1986). The accuracy of prediction. In A. Blumstein and J. Cohen (Eds.). Research on criminal careers. Washington, D.C.:

National Academy of Sciences. National Academy Press.

Gough, H. G. (1962). Clinical versus statistical prediction in psychology. In L. Postman (Ed.). Psychology in the making (pp. 526-584). New York: Knopf.

Graham, J. P. (1991). Disgruntled employees: Ticking time bombs? <u>Security</u>

<u>Management</u>, 36, 83-85.

Greenberg, L., & Barling, J. (1995). <u>Predicting employee aggression: Roles of person behaviors and workplace factors</u>. Manuscript in preparation.

Hall, J. K., and Spector, P. E. (1991). Relationships of work stress measures for employees with the same job. Work and Stress, 5, 29-35.

Hare, R. D. (1970). Psychopathy: Theory and Research. New York: Wiley.

Hare, R. D. (1980). A research scale for the assessment of psychopathy in criminal populations. <u>Personality and Individual Differences</u>, 1, 111-119.

Hare, R. D. (1985). Comparison of procedures for the assessment of psychopathy. <u>Journal of Consulting and Clinical Psychology</u>, 53, 7-16.

Hare, R. D. (1986). Twenty years of experience with the Cleckley psychopath. In W. H. Reid, D. Dorr, J. I. Walker & H, W, Bonner, Ill (Eds), <u>Unmasking the Psychopath:</u>
Antisocial Personality and Related Syndromes, pp. 3-27, New York: Norton.

Hare, R. D. (1996). Psychopathy: A clinical construct whose time has come.

Criminal Justice and Behavior, 23, 25-54.

Hare, R. D. (1991). <u>The Hare Psychopathy Checklist-Revised</u>. Toronto, Canada: Multi-Health Systems.

Hare, R. D. (1993). Without conscience: The disturbing world of the psychopaths amongst us. New York: Simon & Schuster/Pocket.

Harris, G. T., & Rice, M. E. (1997). Risk appraisal and management of violent behavior. Psychiatric Services, 48, 1168-1176.

Harris, G., Rice, M., & Quinsey, V. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. <u>Criminal Justice and Behavior</u>, 20, 315-335.

Harrison, R. (1996). Occupational Medicine: Violence in the Workplace. State of the Art Reviews, 11 (2). Hanley & Belfus, Inc., Philadelphia.

Hart, S. J., Webster, C. D., & Menzies, R. J. (1993). A note on portraying the accuracy of violence predictions. <u>Law and Human Behavior</u>, 17, 695-700.

Hatcher, C. (1996). Workplace violence: assessment and response. National Assessment Services, Inc. San Francisco, CA.

Hemphill, J. F., Hare, R. D., & Wong, S. (1998) Psychopathy and recidivism: A review. Legal and Criminological Psychology, 3, 139-170.

Heskett, S. L. (1996). Workplace Violence: Before, During, and After. Butterworth-Heinemann.

Heyman, R., O'Leary, K. D., & Jouriles, E. N. (1995). Alcohol and aggressive

personality styles: Potentiators of serious physical aggression against wives? <u>Journal of</u> Family Psychology, 9, 44-57.

Issacs v. Huntington Memorial Corp., 38 Cal. 3d 112, 134 (1985).

Jackson, T. L. (1991). A university athletic department's rape and assault experiences. Journal of College Student Development, 32, 77-78.

Jenkins, E. L., Layne, L. A., & Kisner, S. M. (1992). Homicide in the workplace.

AAOHN J 40: 215-218.

Jenkins, E. L., (1996). Workplace homicide: Industries and occupations at high risk. In Harrison, R. (Ed.), Occupational Medicine: State of the Art Reviews. Vol. 11, No. 2, April-June. Philadelphia, Hanley & Belfus, Inc.

King, P., & Murr, A. (June 1, 1998). A son who spun out of control. Newsweek, p. 32.

Kinney, J. A. (1993). <u>Breaking Point: the Workplace Violence</u>

<u>Epidemic and What to Do About It.</u> National Safe Workplace Institute.

Kinney, J. A., (1995). <u>Violence at Work: How to Make Your Company Safer for Employees and Customers</u>. Prentice Hall: Englewood Cliffs, NJ.

Klassen, D., & O'Connor, W. A. (1988). A prospective study of predictors of violence in adult male mental health admissions. Law and Human Behavior, 12, 143-158.

Labig, C. E. (1995). <u>Preventing Violence in the Workplace</u>. RHR International Co.

Laird v. E-Z Mart, D-137, 310, D.Ct., Jefferson Co., Tx (1994).

Lambert, E. W., Cartor, R., & Walker, G. L. (1988). Reliability of behavioral versus medical models: Rare events and danger. <u>Issues in Mental Health Nursing</u>, 9, 31-44.

Lanza, M. L., Kayne, H. L., Hicks, C., & Milner, J. (1991). Nursing staff characteristics related to patient assault. <u>Issues in Mental Health Nursing</u>, 12, 253-265.

Leather, P. J., Cox, T., & Farnsworth, M. G. (1990). Violence at work: An issue for the 1990s. Work and Stress, 4, 3-5.

Lenke, L. (1982). Alcohol and crimes of violence: A causal analysis.

Contemporary Drug Problems, 11, 355-365.

Levin, R. L. (1995). Workplace violence: Sources of liability, warning signs, and ways to mitigate damages. <u>Labor Law Journal</u>, <u>July</u>, 418-428.

Lidz, C., E. Mulvey, and W. Gardner. (1993) The accuracy of predictions of violence to others. Journal of the American Medical Association 269, 1007-1011.

Limandri, B. J., & Sheridan, D. J. (1995). Prediction of intentional interpersonal violence: An introduction. In J. C. Campbell (Ed.), <u>Assessing Dangerousness: Violence by Sexual Offenders, Batterers, and Child Abusers</u>. Interpersonal Violence: The Practice Series. Sage Publications.

Lion, J. R., Snyeder, W., & Merrill, G. L. (1981). Underreporting of assaults on staff in a state hospital. Hospital and Community Psychiatry, 32, 497-498.

Lund, J. (1992). Electronic performance monitoring: A review of research issues.

<u>Applied Ergonomics</u>, 23, 54-58.

Lynch, J. P. (1987). Routine activity and victimization at work. <u>Journal</u>

<u>Quantitiative Criminol</u>, 3, 283-300.

Mantell, M. (1994). Ticking Bombs: Defusing Violence in the Workplace. Irwin Professional Publishing. Burr Ridge, Illinois.

Martin, W. T. (1989). <u>Problem employees and their personalities:</u> A guide to behaviors. Greenwood Press, Inc.

McCord, W. & McCord, J. (1964). <u>The Psychopath: An Essay on the Criminal</u>
Mind. Princeton, NJ: Van Nostrand.

McGarvey, R. (1994, January). Loose cannons. Entrepreneur, 22, pp. 242, 244-246, 248.

McKenna v. Fargo, 451 F. Supp. 1355 (D. NJ 1978).

McLean Parks, J. & Kidder, D. L. (1994). "Till death us do part . . .": Changing work relationships in the 1990s. In C. L. Cooper & D. M. Rousseau (Eds.), <u>Trends in organizational behavior</u> (pp. 112-136). New York: Wiley.

McNiel, D., & Binder, R. (1991). Clinical assessment of the risk of violence among psychiatric inpatients. American Journal of Psychiatry, 148, 1317-1321.

McNiel, D., Binder, R. & Greenfield, T. (1988). Predictors of violence in civilly committed acute psychiatric patients. <u>American Journal of Psychiatry</u>, 145, 965-970.

Meehl, P. E. (1996). Clinical versus statistical prediction: A theoretical analysis and a review of the evidence. (1954 reprint). Northvale, NJ: Jason Aronson, Inc.

Meehl, P. E. (1954). <u>Clinical versus statistical prediction</u>. Minneapolis, MN: University of Minnesota Press.

Meehl, P. E. (1965). Seer over sign: The first good example. <u>Journal of</u> Experimental Research in Personality, 1, 27-32.

Meehl, P. E., & Rosen, A. (1955). Antecedent probability and the efficiency of psychometric signs, patterns, or cutting scores. <u>Psychological Bulletin 52(3)</u>, 194-216.

Meloy, J. R. (1988). <u>The psychopathic mind: Origins, dynamics, and treatment.</u>

Northvale, NJ: Aronson.

Meloy, J. R. (1998). The Psychology of Stalking: Clinical and Forensic Perspectives. Academic Press.

Melton, G. B., Petrila, J., Poythress, N. G., & Slobogin, C. (1997). <u>Psychological Evaluations for the Courts: A Handbook for Mental Health Professionals and Lawyers</u>
(2nd Edition). The Guilford Press: NY.

Menzies, R. J., Webster, C. D., & Sepejak, D. S. (1985). The dimensions of dangerousness: Evaluating the accuracy of psychometric predictions of violence among forensic patients. Law and Human Behavior, 9, 35-56.

Miller, P. A. & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. <u>Psychological Bulletin</u>, 103, 324-344.

Milner, J. S., & Campbell, J. C. (1995). Prediction issues for practitioners. In J. C. Campbell (Ed.), <u>Assessing Dangerousness: Violence by Sexual Offenders, Batterers, and Child Abusers</u>. Interpersonal Violence: The Practice Series. Sage Publications.

Everly, G., & Mitchell, J. (1995). <u>Critical Incident Stress Debriefing: An Operations Manual for the Prevntion of Traumatic Stress Among Emergency Services and Disaster Workers</u>. Ellicott City, Maryland: Chevron Publishing Corporation.

Monahan, J. (1999, July). <u>Scientific-Practitioner Applications of Risk Assessment Findings</u>. Chaired symposium at the international meeting of the Psychological and Law Societies, Dublin - Ireland.

Monahan, J. (1981). The clinical prediction of violent behavior (DHHS Publication No. ADM81-921). Washington, DC: U.S. Government Printing Office.

Monahan, J. (1990). Violence in the workplace (Editorial). Journal of
Occupational Medicine, 32, 10.

Monahan, J. (1996). Violence prediction: The past twenty and the next twenty years. Criminal Justice and Behavior, 23, 1.

Monahan, J., & Steadman, H. (1994). Toward the rejuvenation of risk research. In J. Monahan & H. Steadman (Eds.), <u>Violence and mental disorder: Developments in risk assessment</u> (pp. 1-17). Chicago: University of Chicago Press.

Monahan, J., & Steadman, H. J. (1996). Violent storms and violent people: How meteorology can inform risk communication in mental health law. <u>American Psychologist</u>, 51, 9, 931-938.

Mulvey, E. P., & Lidz, C. W. (1993). Measuring patient violence in dangerousness research. Law and Human Behavior, 17(3), 278-288.

Murphy, A., & Brown, B. (1984). A comparative evaluation of objective and subjective weather forecasts in the United States. <u>Journal of Forecasting</u>, 3, 269-393.

Murphy, A., & Daan, H. (1985). Forecast evaluation. In A. Murphy & R. Katz (Eds.), <u>Probability, statistics, and decision making in the atmospheric sciences</u> (pp. 379-437). Boulder, CO: Westview Press.

National Center for State Courts. (1996). Guidelines for involuntary commitment. Mental and Physical Disability Law Reporter, 10, 409-514

National Research Council (1989). Improving Risk Communication.

Washington, D.C., National Academy Press.

National Weather Service. (1991). Storm surge and hurricane safety.

Washington, DC: U.S. Department of Commerce.

Nebraska Health and Human Services System (1997). <u>Policy on Workplace</u>
<u>Violence</u>, 6.

Northwestern National Life Insurance (1993). Fear and Violence in the Workplace. Minneapolis, NNLI.

Norton, R. N., & Morgan, M. Y. (1989). Improving information on the role of alcohol in interpersonal violence in Great Britain. <u>Alcohol and Alcoholism</u>, 24(6), 577-589.

Oakley v. Flor-Shin Inc. (1998). Ky CtApp, No. 96-CA-002109-MR

Occupational Safety and Health Act (1970). 29 USC 651 et seq. (1985 & Supp. 1995).

Ohlin, L. E. & Duncan, O. D. (1949). The efficiency of prediction in criminology.

American Journal of Sociology, 54, 441-451).

Otto, R. K. (1992). Prediction of dangerous behavior: A review and analysis of "second-generation" research. <u>Forensic Reports</u>, 5, 103-133.

Pan, H. S., Neidig, P. H., & O'Leary, K. D. (1994). Predicting mild and severe

husband-to-wife physical aggression. <u>Journal of Consulting and Clinical Psychology</u>, 62, 975-981.

Parker, R. N. (1989). Poverty, subculture of violence, and types of homicide.

<u>Social Forces</u>, 67(4), 983-1007.

Polk, K. (1993). Observations on stranger homicide. <u>Journal of Criminal Justice</u>, 21, 573-582.

Preston v. Goldman, 42 Cal. 3d 108, 123 (1986).

Quinsey, V. L., & Maguire, A. (1982). Maximum security psychiatric patients:

Actuarial and clinical prediction of dangerousness. <u>Journal of Interpersonal Violence</u>, 1,

143-171.

Regan-Kubinski, M. J. (1991). A model of clinical judgment processes in psychiatric nursing. Archives of Psychiatric Nursing, 5(5), 262-270.

Resnick, P. J., & Kausch, O. (1995). Violence in the workplace: Role of the consultant. Consulting Psychology Journal: Practice and Research, 47 (4), 213-222.

Ressler, (1998, September). "Serial Killers, Sexual Violence and the Criminal Mind". Nebraska Wesleyan University Forum, Lincoln, NE.

Richardson, D. R., Bernstein, S., & Taylor, S. P. (1979). The effect of situational contingencies on female retaliative behavior. <u>Journal of Personality and Social</u>

<u>Psychology</u>, 37, 2044-2048.

Rogers, R. W., (1980). Expressions of aggression: Aggresion-inhibiting effects of anonymity to authority and threatened retaliation. <u>Personality and Social Psychology</u> <u>Bulletin, 6, 315-320</u>.

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Schliefer, L. M. (1992). Electronic performance monitoring. <u>Applied</u>
<u>Ergonomics, 23</u>, 4-5.

Schon, D. (1983). From technical rationality to reflection in action. In J. Dowie & A. Elstein (Eds.), <u>Professional judgment: A reader in clinical decision making</u> (pp. 60-77). Cambridge, UK: Cambridge University Press.

Schwarz, E. D., & Kowalski, J. M. (1993). Malignant memories: Effect of a shooting in workplace on school personnel's attitudes. <u>Journal of Interpersonal Violence</u>, 8, 468-485.

Scott, J. C. (1990) <u>Domination and the arts of resistance</u>. New Haven, CT: Yale University Press.

Shah, S. A. (1978). Dangerousness: A paradigm for exploring some issues in law and psychology. <u>American Psychologist</u>, 33, 224-238.

Singer, R. G. & Gardner, M. R. (1996). <u>Crimes & Punishment: Cases, Materials,</u> and Readings in Criminal Law. Matthew Bender & Company.

Society of Human Resource Management, (1994). <u>Workplace Violence Survey.</u>
Washington, DC, SHRM.

St. Paul Fire & Marine Ins. Co. v. Knight, 764 S.W.2d 604 (Ark. 1989).

Sutker, P. B., Davis, J. M., Uddo, M., & Ditta, S. R. (1995) War zone stress, personal resources and PTSD in Persian Gulf war returnees. Journal of Abnormal Psychology, 104, 444-452.

Slora, K. B., Joy, D. S., & Terris, W. (1991) Personnel selection to control employee violence. <u>Journal of Psychology and Business</u>, 5, 417-426.

Steadman, H. (1991). <u>Research to strengthen the Case Classification System of the United States Secret Service</u>. Delmar, NY: Policy Research Associates.

Steadman, H. J. (1996). Predicting violence leading to homicide. <u>Bulletin</u> of the New York Academy of Medicine, 62(5), 570-578.

Steadman, H., Monahan, J., Appelbaum, P., Grisso, T., Mulvey, E., Roth, L., Robbins, P., & Klassen, D. (1994). Designing a new generation of risk assessment research. In J. Monahan & H. Steadman (Eds.), Violence and mental disorder:

<u>Developments in risk assessment</u> (pp. 297-318). Chicago: University of Chicago Press.

Stuart, P. (1992). Murder on the job. Personnel Journal, 71, 72-84.

Swanson, J. W., Holzer, C. E., Ganju, V.K., & Jono, R. T. (1990). Violence and psychiatric disorder in the community: evidence form the epidemiologic catchment area surveys. <u>Hospital and Community Psychiatry</u>, 41, 761-770.

Tarasoff v. Regents of University of California, 17 Cal. 3d 425, 435 (1976).

Tardiff, K., & Sweillam, A. (1980). Assault, suicide, and mental illness.

Archives of General Psychiatry, 37, 164-169.

Tardiff, K. (1998). Prediction of violence in patients. <u>Journal of Practicing</u>

<u>Psychiatry and Behavioral Health, 4, 412-419.</u>

Thomas, R. J. (1992). Organizational change and decision making about new technology. In T.A. Kochan & M. Useem (Eds.), <u>Transforming organizations</u> (pp. 280-299). New York: Oxford University Press.

Toscano, G., & Weber, W. (1995, April). Violence in the workplace.

Compensation and working conditions. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics.

United States Department of Health and Human Services (June, 1996). Violence in the Workplace: Risk Factors and Prevention Strategies. Current Intelligence Bulletin 57. KHHS (NIOSH) Publication No. 96-100.

United States Department of Labor (1994). <u>Fatal workplace injuries in 1992: A collection of data and analysis</u>. Bureau of Labor Statistics, report 870.

United States Department of Labor (1997). Occupational Safety and Health Administration [On-line]. Available: www.osha.gov/oshinfo/priorities/violence.html

United States Department of Justice (1993). National Crime Victimization

Survey. Washington, DC, Bureau of Justice Statistics.

United States Office of Personnel Management (February, 1998). <u>Dealing with</u> workplace violence: a guide for agency planners. Office of Workforce Relations. OWR-

Walker v. Rowe, 535 F. Supp. 55 (N.D. Ill. 1982).

Webster, C. D., Harris, G. T., Rice, M. E., Cormier, C., & Quinsey, V. L. (1994).

The violence prediction scheme: Assessing dangerousness in high risk men. Toronto,

Canada: University of Toronto, Center of Criminology.

VandenBos, G. R., & Bulatao, E. Q. (1996). <u>Violence on the job: Identifying</u>
risks and developing solutions. Washington D.C., American Psychological Association
Press.

van der Kolk, B. A. (Ed.) (1987). <u>Psychological trauma</u>. Washington, DC: American Psychiatric Press.

Yang, B., & Lester, D. (1988). The participation of females in the labor force and rates of personal violence. Suicide and Life Threatening Behavior, 18, 270-278.

Yarney, A. D. (1988). Victims and witnesses to deadly force. <u>Canadian Police</u>

<u>College Journal</u>, 12, 99-109.

Younger, B. (1994). Violence against women in the workplace. Employee

Assistance Quarterly, 9, 113-133.

Yudofsky, S. C., Silver, J. M., Jackson, W., Endicott, J., & Williams, D. (1986).

The Overt Aggression Scale for the objective rating of verbal and physical aggression.

American Journal of Psychiatry, 143, 35-39.

WORKPLACE VIOLENCE QUESTIONAIRE (DZ VER) ***Please fill in ovals completely (i.e., O = good, O O O = not acceptable)***

LPD CASE #: Time of Incident: Occupation of Victim:					ŕ		·	ŕ				
Witness pr Y N O O				Relationship of witness to victim or suspect? supervisor friend co-worker subordinate family other O O O O O								
Gender of M F O O		s(es)		Age of Witness(es)								
If Type III ("co-worker/non-stranger") wpv, what descriptor below best describes the relationship between the victim and the perpetrator?												
INTIMAT Boyfriend husband	_	husbaı	nd	friend (non-stranger, non-romantic)					Ex-boyfriend		ex-	
0		0 0)			Ο		O	
WORK RE	ELATE	D:										
supervisor O						co-worker/peer O			subordinate O			
RANDOM: Acquaintance (known to victim but not well) O O Stalker unidentif									fied			
OTHER: (please describe thoroughly)												
Perpetrator warned to cease behavior? If police intervention, what?												
Y	N O			threatened O	arrest	V	erbal war O	ning	citation O	other O		
Verbal or Physical Aggression?												
Was there a	an assa	ult?										
Motive mer	ntioned	?										
If physical a punch I	<u>assault:</u> kick O	grab O	threaten	ed w/weapo O	n :	injured	w/weapo	on				

Appendix 1

Initially, the EAP's role generally begins with participation on the agency planning group where decisions are made about the role the EAP will play in the workplace violence program (United States Office of Personnel Management [USOPM], 1998).

Many companies usually have EAP play an active role in early prevention efforts. For instance, sometimes they participate on the incident response team and often assist with organizational recovery after an incident of workplace violence occurs.

The provide EAP programs are staffed by professional counselors who are available to discuss problems that can adversely affect job performance, conduct, and reliability such as risk factors past arrest record and prior violent behavior (USOPM, 1998). EAPs are required to assist employees dealing with alcoholism or drug abuse problems and other circumstances that may affect work performance in a negative fashion. The counselors also have the knowledge and resources to refer employees to other professional services within the community for further information, assistance, or long-term counseling (USOPM, 1998). Due to the seriousness of many of the issues presented to EAP personnel, confidentiality is extremely important.

Under law, employees who seek EAP services are afforded considerable privacy (USOPM, 1998). Due to the extent of the protections and the various circumstances under which confidentiality may be broken (i.e., Tarasoff warning) it is common practice for EAPs to inform employees in writing about the limits of confidentiality on their first visit. Although much of the services EAP provides contributes to the well-being of employees, they also provide resources and services for employers.

One of the more effective uses of EAP by employers is the utilization of EAP's sharing of knowledge on topics such as dealing with angry coworkers and customers, conflict resolution, and communications skills. Because of EAP's expertise in the area of employee assessment, their staff is in an excellent position to explain the delicate balance between identifying problem behavior early on and labeling an individual as potentially violent to supervisors (and coworkers), as opposed to getting catch-up in diagnosing an employee's problem (USOPM, 1998).

Despite extensive proactive intervention and the best-laid company preventative plan, workplace violence can and does happen. In as thorough and an effective manner as agencies should develop policies to deter these occurrences, agencies must be equally prepared to deal with the aftermath of such incidents (USOPM, 1998). From a business point of few, often the management's focus will be on getting the operational side of the workplace back in working order yet it is of equal importance, if not more, to attend to the impact such incidents can have on job-personnel (USOPM, 1998). One demonstrated effective strategy is the Critical Incident Stress Management. In addressing critical incident stress there must also be general management steps to help an organization recover.

Ten management steps in assisting an organization to recover are: (a) ensure a management presence in the worksite, (b) share information with employees, (c) include union leadership, (d) bring in crisis response professionals, (e) support informal debriefing, (f) support care-giving within work groups, (g) handle critical sites with care, (h) buffer those affected from post-event stresses, (i) help employees face feared places

or activities, (j) remember the healing value of work (USOPM, 1998). Critical Incident Stress Management (CISM) is an effective intervention when addressing points (d) – (h) of the ten management steps.

CISM (Everly & Mitchell, 1995) utilizes a formal crisis intervention process for victims of critical incidents such as workplace violence. Its purpose is to provide an integrated system of services and procedures in order to achieve several goals:

- Prevention of traumatic stress.
- Mitigation of traumatic stress,
- Intervention to assist in recovery from traumatic stress,
- Acceleration of recovery whenever possible,
- Restoration to function, and
- Maintenance of worker health and welfare (USOPM, 1998, p. 136).

The CISM team, which is the contemporary version of Monahan's (1990) suggestion that a mental health professional be available to consult in the wake of a workplace violence incident, is generally comprised of mental health professionals and trained peer support personnel, qualified to provide a variety of services. For instances, activities such as (a) defusings, (b) demobilizations after a disaster, (c) debriefings, (d) informal discussions, (e) significant other support services, (f) individual consults (one-on-one), and (g) follow-up services (USOPM, 1998, p. 136).

Everly & Mitchell's (1995) report that the impact of a critical incident on an individual's life appears to be mitigated, to a certain extent, by the availability of

resources that may intervene at various stages following the incident. The Critical Incident Stress Debriefing (CISD) is a model designed to provide such a service (USOPM, 1998). Ideally, the CISD model provides victims assistance with recover from critical incidents. The model incorporates seven phases:

- Introductory Phase,
- Fact Phase,
- Thought Phase,
- Reaction Phase,
- Symptom Phase,
- Teaching Phase, and
- Re-entry Phase.

The purpose of the debriefings is to provide a group setting in which participants have an opportunity to discuss their thoughts and feelings about a distressing event in a controlled and rational manner, while at the same time helping them to understand that they are not alone in their reaction to the incident (USOPM, 1998). Formal debriefings should be held within 24 to 72 hours after an incident and depending on the number of participants and the severity of the incident, they generally last anywhere from one to three hours (Everly & Mitchell, 1995). The CISD Team represent a partnership between mental health professionals and peer support personnel, with all members receiving training in crisis intervention, stress, post-traumatic stress disorder, and the debriefing process regardless of individual background or expertise level (USOPM, 1998).

A more in-dept look at each of the seven stages of CISD (USOPM, 1998) demonstrates the mental health focus of the intervention. During the introductory stage the leader and team members introduce themselves to the participants and the leader describes how a debriefing works. Ground rules are established with rules such as (a) no one is compelled to talk but participation is strongly encouraged, (b) no notes or recordings of any kind are taken during the debriefing, (c) strict confidentiality is maintained, and (d) the debriefing is not intended to be therapy (USOPM, 1998, p. 138). Importance is attributed to the necessity to convey to participants that their chances for a successful debriefing increase when participants are made fully aware of what to expect during the process.

The second "fact" phase begins with the team leader asking participants to identify themselves and briefly mention their level of involvement with incident. For instance, group participants may relate their role in the incident, how they heard about it, and where they were when they received the news. This stage is intended to say the groundwork for the remaining phases of the process.

The third "thought" phase asks the participants what their first thoughts were concerning the incident in order to personalize the experience for each group member.

Participant's reluctant to share at this stage is not uncommon.

The fourth "reaction" phase requests participants to discuss the "worst part of the event for them personally" (p. 139). Depending on the intensity of the event and size of the group, this segment may last thirty minutes to one hour because participants begin exploring some of their deeper and responses to the event.

The fifth "symptom" phase allows participants a chance to describe the signs and symptoms of any distress they experienced, such as feeling nauseated, trouble sleeping, sweating palms, or having difficulty making decisions. Three particulars are of signs and symptoms can be discussed: (1) those that appeared at the time of the incident, (2) those that arouse during the next few days, and (3) those that they are still experience at the time of the debriefing.

The sixth "teaching" phase provides an opportunity for the team members to share information regarding the relationship between the critical incident and the subsequent cognitive, emotional, behavioral, and physiological reactions that others involve in such events have experienced.

The seventh "re-entry" phase signals the end of the debriefing and the participants are encouraged to ask questions and explore other issues related to the incident that may have not surfaced earlier. At this stage team members are asked to provide some summary remarks and the tam leader should provide a few additional statements in an effort to bring closure o the debriefing. Crucial to this stage is the message that the participants' reactions are normal responses to an abnormal event.

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