

## **Nonfatal Workplace Violence Risk Factors**

### **Data From a Police Contact Sample**

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*A total of 281 cases investigated by a Midwestern law enforcement agency were analyzed to identify risk factors relevant to liability. Two sets of multivariate analyses were performed to assess the role of external (i.e., nonemployees) as well as internal threats (i.e., coworkers or domestic violence). Discriminant analysis indicates that assaults stemming from persons external to the workplace are more likely to affect male staff members, be particularly related to customer service concerns, involve prior threats, and involve increased risk related to perpetrators' prior criminal histories. Regarding assaults perpetrated by people internal to the workplace, discriminant analysis indicates the significance of the perpetrator-victim relationship as well as relevant incident-related variables (i.e., prior threatening behavior, presence of weapons, and presence of witnesses). The relevant policy and legal implications of the findings are discussed in detail.*

**Keywords:** workplace violence; risk factors; law enforcement

**Recent media and legal attention** have highlighted the intrusion of violence, particularly of a serious nature, into American work sites (Baxter & Margavio, 1996; VandenBos & Bulatao, 1996). Government statistics indicate that between 1993 and 1999, on average annually, 1.7 million workers

were victimized while at work or on duty, with an average of 900 homicides annually (Bureau of Justice Statistics, 2001). Victimization within the workplace also accounted for 18% of all violent crime experienced by U.S. residents age 12 or older (Bureau of Justice Statistics, 2001). Despite the pervasive nature of the phenomenon, the research addressing nonfatal incidents of workplace violence pales in comparison to that addressing fatal workplace violence (Barling, 1996; Castillo & Jenkins, 1994). Moreover, existing statistics may substantially underreport nonfatal occurrences (National Institute of Occupational Safety and Health [NIOSH], 1996). However, interpretation of results of nonfatal violence across studies is hindered by insufficient agreement about how to define, categorize, or quantify violent incidents for the purpose of analysis (Barling, 1996; Lanza, Kayne, Hicks, & Milner, 1991). For the purpose of this study, VandenBos and Bulatao's (1996) definition of workplace violence is used as including any crimes of violence in the workplace while the victim is at work or on duty.

Informing the consideration of potential risk factors, employers face several sources of legal liability to prevent workplace violence from a variety of case law and statutory requirements to provide safe environments for their employees and guests (Brakel, 1998; Feliu, 1994; Kinney, 1995; Levin, 1996). Regardless of the source of threat, federal and state statutes require that employers furnish a safe and healthful working environment for their employees as well as implement reasonable precautionary measures (e.g., preventative training and intervention guidelines) toward such an end (Brakel, 1998; Kinney, 1995). Employers have been found negligent by the courts for not using reasonable care to prevent foreseeable risk of injury to others (*Garcia v. Duffy*, 1986; *Hart v. National Mortgage & Land Co.*, 1987; *Oakley v. Flor-Shin Inc.*, 1998; *Yunker v. Honeywell, Inc.*, 1993). Employees injured or assaulted in the workplace may bring suit against employers if the employers' security measures are inadequate or do not undertake the necessary precautions to protect others from reasonably foreseeable harmful acts by third parties (*Issacs v. Huntington Memorial Hospital*, 1985; Levin, 1996; *Preston v. Goldman*, 1986). Employers are also responsible for threats from within the work site, particularly as a result of negligent hiring due to the employer failure to properly investigate applicant backgrounds (*DiCosala v. Kay*, 1982; *Garcia v. Duffy*, 1986; Kinney, 1995) or for negligent retention of employees when not properly addressing the risk of violence that is reasonably foreseeable within the workplace or its related contexts (*Duffy v. City of Oceanside*, 1986; Feliu, 1994; Levin, 1996; *Walker v. Rowe*, 1986).

Research on the identification and management of risk factors is beginning to produce information potentially helpful for the purpose of reducing the risk of workplace violence. It is not surprising that employee history of

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prior violence is a risk factor for subsequent violence within the work site (Greenberg & Barling, 1999). The NIOSH (1996) reported that in an annual survey of approximately 230,000 private establishments, nonfatal workplace assaults are distributed almost equally between men (44%) and women (56%), unlike homicides, in which the victims are usually men. Male workers are more likely to be threatened with weapons (Schulte, Nolt, Williams, Spinks, & Hellsten, 1998). Male victims were also more likely to be harmed by strangers (58%) as opposed to only 40% of the female employees victimized (NIOSH, 1996). Particularly for women within public service contexts, other research has indicated risk-enhancing situational factors such as being alone with members of the opposite sex and being subjected to sexualized comments (Schulte et al., 1998).

Job requirements and employment setting factors have been found related to the risk for nonfatal workplace violence from sources external to the work site. For example, routine face-to-face contact with large numbers of people, the handling of money, routine work-related travel, and multiple work sites have been related to an increased risk for workplace victimization (Castillo & Jenkins, 1994; Lynch, 1987; NIOSH, 1996). Furthermore, compared with homicides, nonfatal incidents occurred more often in the service industries and jobs involving public safety functions (e.g., nursing homes, human services, hospitals) and less often in retail sites (Lord, 1998; NIOSH, 1996).

Organizational factors have been described as contributing to workplace violence between coworkers. Human resource practices involving inconsistent employee discipline, limited willingness to confront behavior facilitating a hostile environment, an unwillingness to address safety-related concerns, as well as limited supervisory support of employees have been found to be related to the increased risk of workplace violence (Baron & Neuman, 1996; Cole, Grubb, Sauter, Swanson, & Lawless, 1997; Maggio, 1996; McClure, 1999; Nigro & Waugh, 1998). Changes in organizational culture suggesting a threat to employment security and retention such as downsizing, reorganization, increased workloads, and technological changes have also been framed as potential contributors to the risk of workplace violence (Greenberg & Barling, 1999; McClure, 1999).

Researchers using the concept of effect-danger ratio suggest the interaction between work-site contextual factors and aggressor estimates of consequences of harm may explain the presentation of nonfatal workplace violence (Baron & Neuman, 1996; Bjorkqvist, Osterman, & Hjelt-Back, 1994). This concept suggests that the intensity of violence is related to the aggressors' subjective estimates of the ability to perform harmful behaviors while permitting as little danger to themselves as possible (Bjorkqvist et al., 1994). In the case of violence between coworkers, for example, potential aggressors

who have prolonged contact with potential victims will also have difficulty distancing themselves from violent acts and concealing their identities (particularly from witnesses) and are more likely to engage in alternative forms of aggression to maximize anonymity (Borden, 1975; Richardson, Bernstein, & Taylor, 1979). Conversely, aggressors who are less likely to have subsequent contact with victims (e.g., robbery) are more likely to engage in more intense forms of violent or threatening behavior. However, the application of the effect danger theory to the cases of domestic violence intruding on the work site remains to be seen.

Facing various sources of legal liability, employers are challenged by the task of feasibly assessing the risk of workplace violence from the variety of sources previously described. Enhanced understanding of such risk factors would also shed more light into the concept of whether potential risk is "fore-seable" across sources either internal or external to the work site, as suggested by the legal standards previously described.

## METHOD

This study involved workplace violence during an 18-month period (from January 1, 1997 through June 30, 1998) investigated by the Lincoln Police Department in Lincoln, Nebraska. The department has 303 sworn officers serving a population of 225,518, according to the 2000 census. During 2001, Lincoln ranked 30 out of 44 cities in violent crime according to Uniform Crime Report data. Researchers identified workplace violence incidents as documented by the police department computer database. The identification of workplace violence incidents was achieved by targeting all combinations of police contacts and location codes that satisfied workplace violence definition parameters. Such contacts ranged from obscene phone call complaints to physical assaults, and location codes referred to businesses where such transgressions occurred. Cases not directly involving employees as victims or any harassing or threatening behavior were excluded from the analysis. All incident reports completed by police officers for incidents meeting this definition and alleged to have occurred between January 1997 and July 1998 were included, resulting in a sample of 281 reported incidents.

Four trained coders reviewed the cases on a variety of factors, including the perpetrator-victim relationship (stranger or nonstranger), mention or use of a weapon, whether threats had been made, and the intensity level of violence. Prior police contact information was collected from local law enforcement databases. In addition, information was collected from incident reports and victim statements concerning the motives of the incidents, which

included monetary (related to monetary dispute or billing issue), relationship (related to relationship or domestic dispute), or sexual (sexualized language, attempted sexual contact) motives. The factors investigated were determined by what information would be most consistently provided within the database's incident reports while considering characteristics associated with violence, as determined by prior risk assessment literature (e.g., Monahan & Steadman, 1994; VandenBos & Bulatao, 1996).

To assess the reliability of coding activity, raters independently coded 20% of the 281 nonfatal workplace violence incidents in an overlapping fashion. Reliability was held at a threshold of .90, and no coding fell below .91 using a Kappa coefficient.

For the purpose of this analysis, cases were bifurcated into cases where threats posed were derived from sources either external or internal to the workplace. Internal threat cases involved conflicts between employees (e.g., coworkers or supervisors) or were the result of domestic struggles faced by employees (either involving both members of the couple as current or former employees or with one employee being the target of a nonemployee former or current intimate). External threat cases were classified as those involving threats posed by persons either not employed by or significantly related to persons employed within the workplace (e.g., consumer or stranger) regardless of the degree to which the parties may have been acquainted through a business relationship.

## RESULTS

Violent incidents from external sources ( $n = 189$ ) comprised 67.2% of the police contact sample. A substantial majority of the external threat cases (79.3%,  $n = 150$ ) involved parties with "no legitimate relationship" to the workplace (e.g., robbery) or customer service disputes. The remaining external threat cases involved "job duty-related" cases (e.g., mental health worker assaulted by patient,  $n = 39$ ).

Violent incidents within this police contact sample from sources internal to the workplace (coworkers or domestic perpetrators) accounted for 32.7% ( $n = 92$ ) of all the cases identified. Particularly noteworthy is that although internal workplace violence incidents are the most publicly known due to media coverage of particularly violent cases, they represent one third of the entire sample. Furthermore, two thirds of the internal threat incidents involved a domestic violence component (i.e., former boyfriend or ex-husband threatening female employee) and not the stereotypical disgruntled employee act-

ing out against a supervisor or coworkers. There were no incidents of fatal workplace violence during the investigated time span.

The most prevalent motives for contact for the overall sample, as indicated by perpetrator or victim statements, involved "perceived mistreatment" spanning 32% of the overall cases (e.g., a customer service dispute, a disgruntled employee threatening a supervisor subsequent to rejection of a promotion). On a related note, approximately 13.2% of workplace violence perpetrators reported a monetary dispute (e.g., consumer threatening during a billing dispute). The second largest motivating factor (21%) was "relationship" related. As predicted by domestic violence leaking into the workplace, these perpetrators were acquainted with the victims (e.g., boyfriends or ex-husbands) and in some manner were seeking retaliation or reconciliation of differences. Sexualized motives from nonintimates (e.g., an obscene telephone call to a secretary of a business) were associated in 12.5% of the cases. No particular motive for the threat or violent activity was cited in 21% of the police contacts.

Nearly half (47.6%) of the victims in this police contact sample were physically assaulted. Of the assault victims, police reports indicate that at least 61.5% suffered a detectable or medically verified injury. A third of the assault victims suffered internal or other more serious injuries (e.g., broken bones), and bruises (10.4%) and lacerations (17.7%) were noted by fewer of the assault victims reporting to police.

Across the total sample, nearly one third (31.1%) of the perpetrators threatened their victims before the incident in question. Furthermore, prior threat was inversely related to the presence of subsequent assaultive behavior,  $\chi^2(1) = 23.393, p < .0001$ . In other words, perpetrators of threats were significantly less likely to have engaged in assaultive behavior. Such a finding raises the question of whether some of the threats may have triggered a response on their own accord prior to further escalation.

The relationship between victim gender and type of victimization is noteworthy. Across the total sample, male victims (48%) were significantly more likely than women to have been victims of physical aggression,  $\chi^2(1) = 38.075, p < .0001$ , and to have been threatened with a weapon,  $\chi^2(1) = 13.782, p < .0001$ . One might speculate that men are less likely to report the less intense forms of workplace violence, such as minor physical altercations, as a majority of the incidents involved prior threat or contact. Because nearly comparable numbers of male and female victims noted threats prior to the incidents in question and men were more likely to suffer more serious injury, a question arises whether women may also be more universal in their reports of various intensities of workplace violence.

Perpetrators in these workplace violence incidents had prior contact (i.e., domestic assault, driving while intoxicated, or larceny) with the police in

approximately half of the cases (48%). Such prior police contact was strongly associated with the presence of assaultive behavior,  $\chi^2(1) = 22.543, p < .0001$ .

### External Threat Incidents

Table 1 details the demographic and offense information related to external threat incidents involving both assaultive and nonassaultive behavior. Regardless of the type of violence displayed, men perpetrated a substantial majority of incidents. Although the average perpetrator age for this subgroup equaled 28.56 years, age did not significantly differ between the assaultive and nonassaultive conditions. Whereas women were the majority of victims overall, men were substantially more likely to have been the victims of physical assault,  $\chi^2(1) = 50.252, p < .0001$ . Although mentally ill perpetrators represented a small minority of the overall external threat sample (10.8%), they were significantly more likely to have engaged in assaultive behavior,  $\chi^2(1) = 5.334, p < .02$ . The 41.1% of the external threat perpetrators with prior criminal records were significantly more likely to have engaged in assaultive behavior,  $\chi^2(1) = 18.463, p < .0001$ . Furthermore, nearly one third (32.3%) of the external threat cases involved nonstranger relationships (e.g., acquaintances or consumers). This is particularly noteworthy in that assaults were more likely to have occurred when the parties involved were acquainted with each other prior to the incidents,  $\chi^2(1) = 8.289, p < .0004$ , as nearly half of the assaults were perpetrated by service recipients,  $\chi^2(1) = 36.690, p < .0001$ .

Regarding incident characteristics, univariate analysis indicates that weapons (4.4% of cases overall) were more likely to have been used in cases resulting in physical violence,  $\chi^2(1) = 5.090, p < .02$ . Furthermore, prior threats were again inversely related to assaultive behavior,  $\chi^2(1) = 18.804, p < .0001$ . Concerning the motives articulated to police subsequent to the incident, assaultive behavior was substantially more likely to occur in disputes related to customer service (e.g., contract issues, whether service performed to satisfaction),  $\chi^2(1) = 50.252, p < .0001$ . This finding was rather noteworthy, as this motive was articulated in 44.7% of the external threat cases overall. It is interesting that monetary disputes (7.6% of cases overall) did not result in higher risk of physical assault. Regarding location, external threat incidents were almost evenly split between retail and nonretail settings (41.8% and 48.7%, respectively), with the remaining cases occurring within government facilities (9.5%). Location was not statistically related to the presence of assaultive behavior,  $\chi^2(1) = 3.370, p < .185$ . Witnesses were present in 38% of the external threat cases overall. However, univariate analysis indicates that contrary to the effect-danger ratio, assaultive behavior was more likely to occur with witnesses present,  $\chi^2(1) = 41.059, p < .0001$ .

TABLE 1: Demographic Characteristics of Internal and External Threat Cases

	External Threat (%)		Internal Threat (%)	
	Assault	Nonassault	Assault	Nonassault
Perpetrator characteristics				
Sex				
Male	75.7	19.3***	82.4	77.8
Female	24.3	80.7	17.6	22.2
Mean age (years)	26.97	31.00	33.27	34.93
Relationship to victim (%)				
Stranger	55.7	77.3**		
Nonstranger	44.3	22.7		
Service recipient	47.1	5.7***		
Prior police contact	60.0	26.1***	68.6	48.9*
Mental illness suspected	17.1	5.7*	7.8	26.7**
Motives				
Job dissatisfaction			33.3	13.3*
Relationship			43.1	73.3**
Monetary dispute	10.0	5.7		
Customer service dispute	75.7	19.3***		
Victim sex				
Male	75.7	19.3***	51.0	17.8***
Female	24.3	80.7	49.0	82.2
Mean victim age	32.59	33.10	30.68	32.00
Prior threat	10.0	40.9***	21.6	55.6***
Use of weapon	8.6	1.1*	15.7	0.0***
Witness present	65.7	15.9***	60.8	33.3**
Location characteristics				
Retail	40.0	43.2	21.6	40.0
Nonretail	45.7	51.1	72.5	48.9
Government	14.3	5.7	5.9	11.0

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Discriminant analysis was used to determine if perpetrators in the external threat situations who assaulted versus those who did not assault differed with regard to the workplace, perpetrator, victim, motivational, and demographic characteristics studied. Multivariate analysis revealed that the function reliably differentiated among the offender groups,  $\chi^2(12) = 131.308, p < .0001$ ,  $R^2$  canonical = .583. Table 2 shows the structure weights for the discriminant function related to the external threat situations. The function indicates that men were more likely to be victims of assault. Furthermore, such assaults were more likely to have occurred within the context of a customer service dispute. Threats were significantly less likely to precede assaults. The func-

**TABLE 2: Standardized Structure Weights From the Linear Discriminant Analysis of External and Internal Threat Groups**

Variable	Structure Weights	
	External Threat	Internal Threat
Customer service dissatisfaction motive	.577	
Coworker relationship		.501
Domestic violence motive		-.455
Victim gender	.577	.414
Witness present	.501	.320
Sexual contact motive	-.374	
Prior threats made	-.311	-.419
Prior police contact (perpetrator)	.307	.230
Stranger relationship to victim	-.199	
Mental illness suspected (perpetrator)	.158	-.292
Use of weapon	.154	.331
Retail versus nonretail setting	-.027	-.229
Perpetrator gender	.016	.064
Monetary dispute	.087	

tion also indicated that perpetrators with prior criminal history were significantly more likely to engage in assaultive behavior within the workplaces studied. As noted in Table 3, the resulting discriminant functions correctly reclassified 86.7% of the external threat cases (84.3% of the assaultive and 88.6% of the nonassaultive perpetrators, respectively). Figure 1 provides a graphical depiction of the discriminant function.

### Internal Threat Incidents

Demographic and incident information related to internal threat incidents involving both assaultive and nonassaultive behavior are detailed in Table 1. Regardless of type of violence displayed, men perpetrated a substantial majority of incidents. Despite the fact that the average perpetrator age for internal threat subgroup (34.02 years) was substantially higher than that for the external threat group, age did not significantly differ between the assaultive and nonassaultive conditions within the internal threat group.

Regarding location, a majority of internal threat incidents occurred within nonretail as opposed to retail settings (61.5% and 30.2%, respectively). Remaining cases occurred within government facilities (8.3%). Location was not statistically related to the presence of assaultive behavior,  $\chi^2(1) = 5.650, p < .06$ , although a trend was noted with higher likelihood of assaultive

**TABLE 3: Classification Results of External Threat Discriminant Function**

Group Membership	Predicted Group Membership (%)	
	Nonassault	Assault
Nonassault	88.6	11.4
Assault	15.7	84.3

NOTE: 86.7% of the cases overall were correctly classified.

Nonassault	Assault
-1.049	1.318
-1	1
Sexual contact motive	Customer dissatisfaction motive
Prior threats made	Male victim
	Witness present
	Prior perpetrator police contact

**Figure 1: Graphical Depiction of Group Centroids of Canonical Discriminant Functions of Assault and Nonassault Cases Within External Threat Condition**

behavior within nonretail settings. Unlike the external threat cases, witnesses were present in nearly half (47.9%) of the internal threat cases overall. Again, however, univariate analysis indicates that contrary to the effect-danger ratio, assaultive behavior was more likely to occur with witnesses present,  $\chi^2(1) = 7.218, p < .007$ .

Victim gender statistics parallel external threat cases, as women were the majority of the victims overall (64.6% of internal threat sample) and men were significantly more likely to have been the victims of physical assault,  $\chi^2(1) = 11.522, p < .001$ . As with the external threat cases, mentally ill perpetrators represented a small minority of the overall internal threat sample (16.7%) but (unlike the external threat sample) were significantly less likely to have engaged in assaultive behavior,  $\chi^2(1) = 6.099, p < .014$ .

It is surprising that significantly more of the perpetrators in the internal threat cases (59.4%) had prior criminal records compared with the external threat counterparts. Internal threat perpetrators with prior criminal records were significantly more likely to have engaged in assaultive behavior,  $\chi^2(1) = 3.861, p < .05$ . Concerning other incident related factors, univariate analysis

indicated that weapons (8.3% of cases overall) were more likely to have been used in cases resulting in physical violence,  $\chi^2(1) = 7.701, p < .006$ . As with the external threat condition, prior threats were inversely related to assaultive behavior violence,  $\chi^2(1) = 11.782, p < .001$ .

Given the high prevalence of problematic incidents from significant others within the internal threats group, it is not surprising to find that relationship problems was the most prevalently stated perpetrator motive within this subgroup (57.3%). Such domestic violence concerns significantly heightened the presence of assaultive behavior,  $\chi^2(1) = 8.909, p < .003$ . Concerning other motives detailed by the investigating officers, approximately 24% of the total internal threat sample described some aspect of job dissatisfaction as a primary motive for incidents. Job dissatisfaction as a motive also significantly differentiated assaultive versus nonassaultive perpetrators,  $\chi^2(1) = 5.249, p < .022$ .

For the internal threat cases, discriminant analysis was used to determine if assaultive versus nonassaultive perpetrators differed with regard to workplace, perpetrator, victim, and incident characteristics studied. Multivariate analysis revealed that the function was reliably differentiated among the offender groups,  $\chi^2(10) = 52.085, p < .0001, R^2$  canonical = .443. Table 2 displays the structure weights for the discriminant function related to the internal threat situations. The function reflects differences between assaultive and nonassaultive perpetrators related to the nature of the perpetrator-victim relationship, with coworkers being more likely to engage in assaultive behavior. As with the external threat cases, prior threatening behavior was inversely related to assaultive behavior, whereas men were more likely to suffer assaults. Regarding incident characteristics significant within the multivariate model, the presence of weapons as well as witnesses was more likely to have been noted in internal threat situations related to assault. As noted in Table 4, the resulting discriminant functions correctly reclassified 83.3% of the internal threat cases (84.3% of the assaultive and 82.2% of the nonassaultive perpetrators, respectively). Figure 2 portrays a graphical depiction of the discriminant function. Consistent with the classification results indicated in Table 3, the function provides reasonable differentiation between the two groups within the external threat condition.

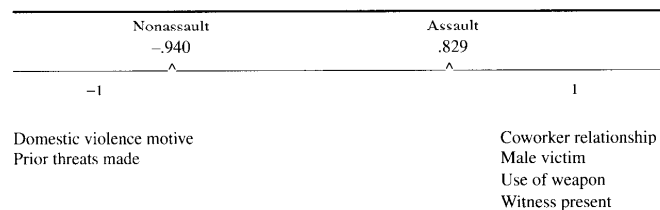
## DISCUSSION

This study is unique in its attempt to study conditions that pose a risk from sources either internal or external to the workplace in light of potential sources of legal liability faced by employers. Although many of the findings,

**TABLE 4: Classification Results of Internal Threat Discriminant Function**

Group Membership	Predicted Group Membership (%)	
	Nonassault	Assault
Nonassault	82.2	17.8
Assault	15.7	84.3

NOTE: 83.3% of the cases overall were correctly classified.



**Figure 2: Graphical Depiction of Group Centroids of Canonical Discriminant Functions of Assault and Nonassault Cases Within Internal Threat Condition**

regardless of the source of threat posed, were generally consistent with prior research concerning risk factors, some interesting differences were noteworthy. Contrary to prior research (NIOSH, 1996), men were substantially more likely to be assaulted than women across both internal and external threat conditions despite the fact that women were the majority of the victims overall. Consistent with prior research (NIOSH, 1996; Schulte et al., 1998), men were significantly more likely to have been the victims of assault at the hands of strangers and were more likely to have been threatened with a weapon. In addition, for perpetrators either internal or external to the work site, a history of prior violence proved to be a risk factor for subsequent violence within the work site (Greenberg & Barling, 1999). This sample also noted a relatively higher number of assaults occurring within nonretail versus retail sites contrary to other studies (Lord, 1998; NIOSH, 1996). Such a finding is not surprising given the limited prevalence of robberies within this sample.

Regardless of the nature of the incident, the most intense levels of violence surprisingly were demonstrated in the presence of witnesses. Such findings contradict the implications of the effect-danger ratio (Baron & Neuman, 1996; Bjorkqvist et al., 1994). Although it is difficult to generalize the applicability of this finding because this sample included only police-involved

incidents, the lack of support this theoretical notion poses has significant implications for risk assessment professionals. One cannot always assume the intuitive notion of "safety in numbers" when conceiving of strategies to minimize the risk of assaultive violence.

Although prior threat was inversely related to physical aggression, a substantial number of cases across the internal and external threat conditions involving prior threat still culminated in assaults, suggesting an escalating process took place. This finding suggests that the legal construct of "foreseeability" may not be evasive across many workplace violence cases, regardless of the source of the threat. Furthermore, such results are consistent with the threat assessment literature, suggesting that targeted violence is often the result of a discernible and detectable process that can be addressed via prevention and early intervention (Fein & Vossekuil, 1995, 1998). The finding that prior threats are associated with less intense violence can be interpreted several different ways. First, the threat itself is a form of workplace violence and may in itself trigger a response. The incident may raise attention to the problem that affords employers the opportunity to intervene at a manageable juncture. Furthermore, the threat may serve as a release of frustrations and may result in de-escalation. Regardless, the motives identified concerning many of these incidents across risk conditions (i.e., disputes involving customer service, monetary issues, relationships, and employment dissatisfaction) also support the view that many such incidents center on identifiable risk contexts and patterns. The presence of a discernible pattern of precursors to violence and threat in many cases implies the need to review training regarding diffusing conflict, especially for male staff members. The issue of victim gender cannot be ignored, given the findings that men were more likely to have been assaulted and that prior threat was more related to nonassault cases, suggesting different reporting thresholds displayed between male and female victims. It appears that in cases involving prior threats, female victims are more likely to have reported earlier to police as events unfolded.

Nearly two thirds of the internal threat incidents from this police contact sample involved domestic violence. This highlights the often discussed intrusion of domestic violence into the workplace (Burns, 1999; Lord, 1998; Perin, 1999). Such a finding is contrary to popularized notions of workplace violence generally involving conflicts between coworkers. Despite the fact that many victims of domestic violence can change their residences, changing their workplaces is not as easy—particularly with increased financial vulnerability due to domestic concerns. The substantial presence of domestic violence within this police contact sample also highlights the need for employers to assist and provide support to employees with domestic prob-

lems, particularly in light of recent legal decisions noting employer liability in such cases based on notions of "foreseeability" as well as negligent security (Perin, 1999). Finally, discussion of applicable risk factors and community resources in employee and employer training may better prepare supervisory staff members and coworkers to assist potentially vulnerable employees. Prevention strategies also need to take into account the potential reticence of workers to report domestic violence concerns due to a variety of concerns (e.g., embarrassment and fear of how they will be perceived by supervisors and coworkers) and consider approaches to address such concerns (Lord, 1998).

A small number of internal threat cases involved sexual harassment between coworkers. However, the escalating nature of these cases highlights how such harassment and hostile environment issues relate to workplace violence. Courts have also upheld findings against employers failing to remedy such harassment when foreseeable or reported (*Burlington Industries v. Ellerth*, 1998; *Hernandez v. Miranda Velez*, 1994; *Oncale v. Sundowner Off-shore Services, Inc.*, 1998).

The presence of identifiable symptoms of mental illness by perpetrators provided some interesting findings. Although identifiable signs of mental illness were more prevalent in the internal threat situations, such behaviors were more statistically related to assaults from persons outside of the workplace than from coworkers. Regardless of the difference in the presentation of mental illness between external and internal threat cases, these findings suggest the potential value of employee training related to dealing with difficult clientele (e.g., defusing conflict) as well as with the use of employee assistance or other supportive services in the case of troubled employees.

Because many of the incidents studied involved precipitating incidents that are amenable to early intervention, the findings suggest that workplace violence may serve as an opportunity to expand the implementation of the community policing approach (e.g., Harwin, Hague, & Malos, 1999). This model has been implemented in other areas of targeted violence such as school violence (Stewart-Brown, 2001). The value of this model is that it incorporates a prevention-oriented strategy through partnership among interested entities within a community. This may particularly be beneficial to overburdened law enforcement agencies through providing threat assessment consultation to the business community as a preventative measure. Furthermore, given the extensive role of work within people's lives, work sites are often a neglected part of community involvement efforts by many government entities.

Awareness of risk factors for nonfatal workplace violence from either internal or external sources implies several management, training, and policy

implications for employers. Employers and employees must remain aware of advances in the risk assessment literature that may inform potential risk factors indicative of both internal and external threats to the work site. The findings further support the need for consistent policies and approaches to preventing potential threats to employees. Such approaches need to anticipate threats from internal and external sources—particularly in light of legal considerations concerning liability related to negligent security or unaddressed foreseeable harm (McClure, 1999; Perin, 1999). Policy and its implementation should focus on consistent approaches to the early warning signs that can fester or escalate to more serious incidents. Written policies (see Monahan, 1990) will also assist employers and employees through clear, objective criteria of what constitutes unacceptable behavior in the workplace. Employer actions should also address the potential concern of some workers that reporting is perceived as inconsequential or may result in negative perceptions of the employees. Policy should relate to hiring and retention activity. For example, to avoid allegations of negligent hiring, employers should expend reasonable efforts to obtain and verify risk factor information such as history of prior violence (Brakel, 1998; *DiCosala v. Kay*, 1982; *Garcia v. Duffy*, 1986).

Reasonable and effective implementation of workplace violence policies can be quite challenging. For example, a recent survey of government entities noted a reticence to develop adequate workplace violence policies due to the beliefs that such violence is not a problem for the organizations, risk of exposure to violence is perceived as minimal, and such policies were not necessary (Nigro & Waugh, 1998).

Some weaknesses in the study should be considered. Because the database consists solely of police department records, the absence of private sector incidents and cases not handled by law enforcement personnel limit the universal application of findings to workplace violence in general. Furthermore, the documentation of risk factors studied was sometimes difficult given the variable levels of detail related to documentation of key factors across police reports. For example, data regarding factors such as motivations for contact as well as the nature of mental illness were generally limited to third-party behavioral descriptions as well as self-reported statements by the perpetrators. Furthermore, the researchers were also limited to the details reported by the investigating officers for the purposes of documenting a crime and potentially assisting with prosecution, not necessarily for risk assessment purposes. Despite such limitations, this police contact sample provided valuable insight into the nature of nonfatal cases that were perceived as escalating to the level warranting law enforcement intervention.

To conclude, future research is needed to more thoroughly investigate the risk factors detailed in this study in addition to considering the implications of how different perspectives (e.g., employer, employee, police) affect reporting and response to perceived risk. Particular attention to the comparative analysis of reported versus unreported incidents may provide critical insights regarding efforts to intervene with risk conditions as they emerge. Additional research is also needed regarding the effectiveness of various intervention and prevention strategies.

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