Workplace Violence Investigations and Activation of the Threat Management Teams in a Multinational Corporation

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Objectives: We examined threat management investigations conducted by a large multinational company. **Methods:** The company provided a database, removing any identifiers, of investigations by the corporate Threat Management Teams in 2009 and 2010. Rates were calculated using worker population data. **Results:** During the 2-year study period, the company investigated threat management cases at a rate of 13.9 per 10,000 employees per year. Cases that activated a Threat Management Team were more likely to lead to corrective action (odds ratio = 2.0; 95% confidence interval = 1.08 to 3.87) and referral to the Employee Assistance Program (odds ratio = 4.8; 95% confidence interval = 3.00 to 7.77), but were not related to likelihood of termination. **Conclusion:** When the multidisciplinary teams were involved, cases were more likely to result in some type of action but were not more likely to lead to termination.

Workplace violence is one of the leading causes of workplace death and traumatic injury,[1–3] and employers in the United States have identified security and violence prevention as one of their top three business priorities.[4–6] Worker-on-worker violence, which includes threatening behavior, threats and acts of violence by employees and past employees, is a primary component of business concerns. The overall cost of violent workplace events to businesses exceeds $35 million, and the overall financial loss to all parties exceeds $4.2 billion annually.[7]

Consequences of workplace violence events are serious and broad. Workplace consequences can include loss of productivity, employee turnover, erosion of employee trust and loyalty, and damage to the company's reputation and in severe situations can include worker injury, worker's compensation claims, lawsuits, and even business closure.[8–11] Losses to individual victims include potential psychological or physical injury, job loss, increased absences, and stress, which can lead to other adverse psychological and physical outcomes.[12–14] Companies thus have a strong motivation to create a workplace culture and environment to identify potentially threatening situations early to reduce harmful consequences.[4–6]

The majority of workplace violence and workplace threats are minor, and minor situations are usually handled within a single business unit by a manager, human resources, or security. More complex cases require a more coordinated response, especially if multiple individuals or multiple work organizations are involved. In response to a growing awareness of the potential for workplace

violence, companies have increasingly implemented a Threat Management Team (TMT) approach to help with early recognition and intervention of potentially violent situations.[5,6] Threat Management Teams involve members from multiple departments and specializations within a company, including but not limited to security, human resources, legal counsel, Employee Assistance Programs (EAPs), occupational medicine, ombudsmen, and administration.[5,15,16] The objective of a TMT is to assess, respond to, investigate, debrief, and document threatening behavior, threats and acts of violence early and intervene, through an integrated process that uses expertise from all team members, to reduce hazards and subsequent harm. Threat Management Teams require training and experience to move through the steps of a threatening incident effectively, and as teams mature and respond to more cases, we hypothesize that they will work together more efficiently.

Efficient activation of a TMT is important so that situations can be addressed quickly and hopefully resolved with the appropriate resources. No previous research has examined characteristics of workplace violence incidents that lead to activation of a TMT, nor have previous studies examined whether the caseload or experience of the TMT is related to how well the team works together. The main factors leading to team activation are likely to be based on the case itself, such as when there is a complex case that involves employees in several units or a persistent threat that continues over a long period of time. Nevertheless, activation of the team may also be related to team experience and resources. For example, members of inexperienced TMTs may be less familiar with other team member's contributions and may be less likely to activate a team response. Teams that have more experience may be more familiar with the types of resources available from different team members and more knowledgeable about when such resources are needed.

This study examines threat management investigations within a large multinational corporation. The company is well known for promoting a safe workplace for all employees and has instituted procedures and processes to deal with the potential for workplace violence. The company was chosen because it is recognized in the field of threat management as a leader, is routinely consulted by other companies and government agencies for input, and has a leadership role in threat management professional organizations. The company's leadership believes that the best prevention is early intervention and as such has embraced a site TMT concept supported by the company's Threat Management core team to track incidents and provide support to the these teams. To better understand the caseload and response activities of the TMT, we identified the rates of threat management investigations and identified case characteristics and investigation outcomes as they are associated with activation of the TMT.

METHODS

Study Design and Population

This is a cross-sectional study of threat management cases reported at this multinational company from January 1, 2009, through December 31, 2010. The company had 160,397 employees worldwide as of December 2010, divided into five regions on the basis of the location of employment. Population estimates were provided by region, and management or nonmanagement. This

study was reviewed and approved by the Human Subject Protection Offices of the University of Iowa and this multinational company.

TMT Organization

The Threat Management structure includes 22 TMTs that are overseen by the company's Threat Management core team. Each TMT has representatives from multidisciplinary organizations, including security, human resources, investigations, EAP, legal counsel, and health services departments. Each team has a team leader from the security organization who is responsible for leading the TMT and coordinating communication between the team and with the company's Threat Management core team. Teams have approximately six to eight members, and these members are selected on the basis of their job position and skill set. Members generally serve on the TMT for as long as they hold their position. As members leave their position, new members are selected.

Threat Management Teams are trained annually at regional training seminars that last 2 days. Training involves focused presentations on what is happening in the company and in the industry (ie, communicated threats, assaults and battery, stalking, and domestic violence), discussion of cases and case management, interactive tabletop scenario exercises, and identification of new trends in threat management at the company and in the industry. The enterprise TMT core team also offers quarterly and ad hoc specialized training sessions on topics such as crisis communication, legal counsel guidance, EAP guidance, and mini threat scenarios.

Potential threat management cases are usually first brought to the attention of a single organization, such as security or human resources. If the case presents more than a minor threat or the situation involves multiple departments, the company's investigation organization is brought in to conduct an investigation. TMT activation is done by the security leader who will assemble the team to discuss the case. Whereas some investigations lead to TMT activation, other investigations occur without engagement of the team. In this analysis, we examined case characteristics that were associated with activation of the TMT. We also examined whether or not TMT activation led to different types of case outcomes.

Threat Management Case Reporting

Threatening behaviors, threats, and acts of violence can be reported through various avenues at the company, such as human resources or security representatives, or a 24-hour ethics hotline. The majority of cases involve a low-risk level and are handled by the appropriate responding department. For example, a report of concern about an employee that is easily resolved will be handled through human resources, and a report of vandalism will be handled by security. Nevertheless, some cases involve more complex behaviors of concern, and in these situations an investigation is initiated through the corporate investigation organization. When an investigation is initiated, information is documented and maintained in a company-wide database. This database is the source of this analysis. Investigations entered into the database that were coded as Threat Management cases for the years 2009 and 2010 were included in this analysis. For this analysis, the company provided an electronic data file that excluded identifying information and included select variables from routinely collected data.

Threat Management Investigation Data

Information on suspects and victims (if applicable) included sex, management or nonmanagement, and date of hire. Thirty-five investigations involved an anonymous threat from outside the company, and for these cases the suspect was coded as "unknown." Information about the region of the event and dates that the investigation was opened and closed (if closed) were included in the data. Region was assigned a code to maintain de-identification. Teams were categorized as having more or less experience on the basis of

the caseload and the length of time that the team had worked together. Suspect length of employment was categorized generally by distribution in the lower third (<3 years, considered by the company to be a new employee), 3 to 20 years, and more than 20 years.

Threat Management cases were coded by type, using standard language from professionals in the threat assessment field.[5] The case types were coded in the database as abnormal behavior, assault, battery, communicated threats, domestic violence, homicide, possession of weapons, stalking, suicidal ideation, and suicide. Abnormal behavior reports included behavior that caused discomfort to others, deviations from typical patterns and actions, or demonstration of emotions of concern, in which the behavior raised concerns about the potential for violence in the workplace (most abnormal behavior reports were handled as a medical fitness for duty case). Reports of suicidal ideation were referred to the TMT when there were indications that suicide might occur in the workplace or be accompanied by violence (most suicidal ideation reports were handled by urgent referral to health services and the EAP). Communicated threats included any expression of an intention to injure another person, done verbally, in writing, by gesture, or through electronic means. Because of small numbers, we further categorized these cases. Abnormal behavior and suicidal ideation, attempt, and completion were categorized together because these cases do not involve overt threats to other parties. Assault and battery were categorized together because these cases involve overt aggression to others. Domestic violence and stalking were categorized together because these cases involve persistent use of multiple means of abuse from one person to another.

Several case characteristics and investigation outcomes were examined. TMT activation was included as a code in the database and designated whether or not the full team was brought into the investigation. Cases were coded on the basis of whether or not the case involved a substantiated threat. Cases were substantiated as a legitimate threat if evidence in the investigation supported the initial concerns. For example, if a report identified an employee as having abnormal behavior, the case was substantiated if the investigation confirmed abnormal behavior suggestive of potential workplace violence and required intervention. It should be noted that both substantiated and unsubstantiated cases required investigation because both could have underlying motivations that required action. Investigation outcomes included issuance of a corrective action memo, time off with or without pay, and job termination or resignation. Corrective action memos were official documents that identified problem behavior and included specific remediation for the behavior. Referrals to the EAP were also recorded. The length of the case investigation was examined as an investigation outcome, and case length was categorized at the median of above or below 4 days. In many instances, the "end" of the case involved ongoing monitoring (case management) of the situation and did not indicate that no further action was taken.

Data Analysis

Rates of Threat Management investigations were calculated by dividing the number of reports over the 2-year period by the 2010 end-of-year population, and dividing by two to create an average annual rate. The 2010 population was used because the employee population between 2009 and 2010 did not vary enough to lead to differences in rates using annual employee numbers. Rates were calculated overall, and rates and rate ratios were calculated by team experience, management or nonmanagement, and region.

Characteristics of cases were examined by whether or not the TMT was activated. Logistic regression models were used to predict TMT activation using the independent variables of suspect sex, suspect length of employment, if management or nonmanagement, case type, and team experience. Odds ratios and 95% confidence intervals (CIs) were calculated.

Case outcomes included whether or not the case was substantiated, whether or not a corrective action memo resulted from the investigation, if the case led to termination, if an EAP referral was made, and the length of the case. Logistic models were used to predict the odds of each case outcome (independent variables) on the basis of whether or not the TMT was activated (dependent variable), controlling for case type, team experience, and sex of the suspect. Models also included a random-effects term to cluster on TMT. Logistic models were run in SAS v9.0 (Cary, NC).

RESULTS

Rates of Threat Management Investigations

Over the 2-year study period, the company investigated a total of 445 threat management cases, for an annual rate of only 13.9 reports per 10,000 employees (Table 1). Region 1 had the lowest rate among US regions, with 9.3 reports per 10,000 employees. With the exception of region 2, rates in other regions ranged from 1.44 times higher for region 3 to 1.92 times higher for region 5. More experienced teams had a rate of 14.6 per 10,000 employees, which was slightly but not significantly higher than the rate of 13.0 for less experienced teams. Nonmanager paycode classifications had a rate of 14.6 reports per 10,000 employees in this paycode, compared with 4.7 for managers.

Characteristics of Threat Management Investigations by Team Activation

The main person of interest was male in 89.1% of investigated cases (Table 2). In 37.1% of cases, the person of interest had been employed at the company for more than 21 years, and for an additional 38.9% of cases, employment was between 3 and 20 years. Nearly half of investigated cases were communicated threats, followed in frequency by assault or battery (22.0%) and abnormal behavior/suicidal ideation suggestive of potential workplace violence (15.2%). Domestic violence/stalking comprised less than 5% of cases.

Among the 445 reports, 194 (43.7%) led to TMT activation, 249 (56.3%) did not lead to TMT activation, and 3 did not have information on activation. Increased length of employment was associated with a higher odds ratio of the TMT being activated, especially for persons of interest who had been employed between 3 and 20 years (odds ratio = 1.7; 95% CI = 0.99 to 2.83). Compared with investigations of abnormal behavior or suicidal ideation with the potential of violence, investigations of assault and battery were significantly less likely to lead to TMT activation (odds ratio = 0.5; 95% CI = 0.24 to 0.89). Investigations of domestic violence/stalking and possession of a weapon were also less likely to lead to TMT activation than with abnormal behavior, but this result was not statistically significant. Investigations by TMTs with more experience were four times more likely to lead to TMT activation than investigations by less experienced teams.

Outcome From Threat Management Investigations by Case Type

Nearly three quarters of investigations led to a substantiated case (Table 3). Actions in response to investigations included a corrective action memo in 36.7% of cases: 18.8% of investigations led to a corrective action memo in addition to mandatory employee time off whereas 17.9% of corrective action memos were not accompanied by time off. Termination or employee resignation occurred in 11.2% of investigations. Referral to resources such as the EAP occurred in 9.9% of investigations.

Assault/battery cases were the most likely to lead to a substantiated report (80.4%), and communicated threat and possession of a weapon were the least likely (69.8% and 68.3%, respectively). Corrective action memos were most frequently issues in response to assault/battery cases (48.5%), communicated threats (41.9%), and were less common among cases of possession of a weapon (24.4%), abnormal behavior (19.1%), or domestic violence/stalking cases (14.3%) ($P < 0.05$). Although not statistically significant, mandatory time off was most frequent for cases of assault/battery and communicated threats. Termination or employee resignation was most frequent in cases of assault/battery, domestic violence/stalking, and possession of a weapon. Fewer than 10% of investigations for communicated threats or abnormal behavior led to termination.

Although EAP referrals were noted in only 9.9% of investigations, the majority of these were for cases of abnormal behavior,

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TABLE 1. Rates of Threat Management Team Investigations by a Multinational Company, 2009–2010

Category	Number of Reports (2009 and 2010)	Worker Population (December 2010)	Average Annual Rate of Reports per 10,000 Employees	Unadjusted Rate Ratio	95% CI	
Company-wide	445	160,397	13.87			
Team experience						
More experienced	312	106,910	14.59	1.13	0.89	1.37
Less experienced	133	51,296	12.96	1.00		
Region						
Region 1	29	15,582	9.31	1.00		
Region 2	238	82,015	14.51	1.56	1.17	1.95
Region 3	84	31,244	13.44	1.44	1.02	1.87
Region 4	55	18,454	14.90	1.60	1.15	2.05
Region 5	39	10,911	17.87	1.92	1.44	2.40
Suspect classification						
Management	14	14,956	4.68	1.00		
Nonmanagement	399	136,901	14.57	3.11	2.90	3.33
Other/unknown	32	NA				

CI, confidence interval; NA, not applicable.

TABLE 2. Characteristics of Threat Management Reports by Threat Management Team Activation in a Multinational Company, 2009 to 2010

Characteristic	Total N (%)	Threat Management Team Activated N (%)	Threat Management Team Not Activated N (%)	Unadjusted Odds That Threat Management Team Was Activated OR (95% CI)
Total	445[a]	193 (43.7)	249 (56.3)	
Suspect sex				
Male	376 (89.1)	174 (90.6)	202 (87.8)	1.0
Female	46 (10.9)	18 (9.4)	28 (12.2)	0.7 (0.40–1.40)
Unknown	23			
Suspect length of employment				
<3 yrs	94 (23.9)	38 (20.4)	56 (27.3)	1.0
3–20 yrs	152 (38.9)	81 (46.6)	71 (34.6)	1.7 (0.99–2.83)
≥21 yrs	145 (37.1)	67 (36.0)	78 (38.1)	1.3 (0.75–2.14)
Unknown	54			
Case type*				
Abnormal behavior/suicidal	67 (15.2)	32 (16.6)	35 (14.1)	1.0
Assault/battery	97 (22.0)	29 (15.0)	68 (27.3)	0.5 (0.24–0.89)*
Communicated threat	216 (48.9)	110 (57.0)	106 (42.6)	1.1 (0.66–1.97)
DV/stalking	21 (4.8)	7 (3.6)	14 (5.6)	0.5 (0.20–1.53)
Possession of a weapon	41 (9.3)	15 (7.8)	26 (10.4)	0.6 (0.29–1.40)
Unknown	3			
Team experience*				
Less experienced	133 (30.1)	28 (14.5)	105 (42.2)	1.0
More experienced	309 (69.9)	165 (85.5)	144 (57.8)	4.3 (2.68–6.90)*
Unknown	3			

*P < 0.05.
[a]TMT met missing 3.
CI, confidence interval; DV, domestic violence; OR, odds ratio.

of which 36.8% resulted in an EAP referral. Investigations for assault/battery, communicated threats, and domestic violence/stalking were the longest, with more than 35% of investigations lasting longer than 2 weeks.

Outcomes From Threat Management Investigations, by TMT Activation

Nearly three quarters of investigations led to a substantiated case (Table 4). Actions in response to investigations included a corrective action memo in 36.7% of cases; 18.8% of investigations led to a corrective action memo in addition to mandatory employee time off whereas 17.9% of corrective action memos did not require time off. Termination or employee resignation occurred in 11.3% of investigations. Referral to resources such as the EAP occurred in 9.7% of investigations.

Corrective action memos were two times more likely to be initiated when the TMT was activated than when the team was not activated (odds ratio = 2.0; 95% CI = 1.08 to 3.87). The odds for corrective action memos that required time off were 2.3 times more frequent when the TMT was activated. TMT activation was associated with small increased odds of termination or employee resignation of 1.8 (95% CI = 1.02 to 3.23). TMT activation was strongly associated with referral to the EAP (odds ratio = 4.8; 95% CI = 3.00 to 7.77).

DISCUSSION

This study provides important information for companies that have relatively new threat management procedures and processes. No previous studies have reported the anticipated caseload for TMTs. This large multinational company with more than 160,000 employees conducted investigations for threat management incidents at a rate of 13.9 per 10,000 employees per year. In the absence of comparative data, it is difficult to comment on whether or not this frequency of investigation is within the industry norm. Investigated cases likely underestimate the total number of incidents, but the extent to which these incidents are underreported is unknown. The company has an organized infrastructure to report and investigate threat events, so their reporting is likely more complete than in companies without such an infrastructure. Many situations may also not meet the threshold for reporting in this system. If the event was resolved without an investigation, as could happen if a manager resolved the situation without input from security, human resource, or other units involved in threat management, an investigative report might not have been initiated. Information about the frequency of TMT responses can help companies plan for and most effectively use threat management resources.

The majority of investigations were for communicated threats and concern over abnormal behavior suggestive of violence, which are often cited as precursors for more severe situations that could include assault or homicide.[6,17,18] Although the majority of these situations are not likely to escalate to homicide, workplaces such as

TABLE 3. Threat Management Team Investigation Outcomes by Case Type, 2009 to 2010

Investigation Outcome	Total *N* (%)	Abnormal Behavior/ Suicidal *N* (%)	Assault/Battery *N* (%)	Communicated Threat *N* (%)	DV/Stalking *N* (%)	Weapon *N* (%)
Report substantiated*						
Yes	321 (72.6)	49 (72.1)	78 (80.4)	150 (69.8)	16 (76.2)	28 (68.3)
No	121 (27.3)	19 (27.9)	19 (19.6)	65 (30.2)	5 (23.8)	13 (31.7)
Corrective action memo*						
Yes	164 (36.9)	13 (19.1)	47 (48.0)	91 (41.9)	3 (14.3)	10 (24.4)
No	281 (63.1)	55 (80.9)	51 (52.0)	126 (58.1)	18 (85.7)	31 (75.6)
Corrective action memo with time off						
Yes	83 (18.7)	7 (10.3)	24 (24.5)	45 (20.7)	2 (9.5)	5 (12.2)
No	362 (81.3)	61 (89.7)	74 (75.5)	172 (79.3)	19 (90.5)	36 (87.8)
Corrective action memo without time off*						
Yes	81 (18.2)	6 (8.8)	23 (23.5)	46 (21.2)	1 (4.8)	5 (12.2)
No	364 (81.8)	62 (91.2)	75 (76.5)	171 (78.8)	20 (95.2)	36 (87.8)
Case led to termination*						
Yes	50 (11.2)	1 (1.5)	19 (19.4)	19 (8.8)	4 (19.0)	7 (17.1)
No	395 (88.8)	67 (98.5)	79 (80.6)	198 (91.2)	17 (81.0)	34 (82.9)
No action required*						
Yes	152 (34.2)	19 (27.9)	22 (22.4)	77 (35.5)	13 (61.9)	21 (51.2)
No	293 (65.8)	49 (72.1)	76 (77.6)	140 (64.5)	8 (38.1)	20 (48.8)
EAP referral*						
Yes	44 (9.9)	25 (36.8)	2 (2.0)	16 (7.4)	1 (4.8)	0 (0.0)
No	401 (90.1)	43 (63.2)	96 (98.0)	201 (92.6)	20 (95.2)	41 (100.0)
Length of case*						
<4 d	115 (26.2)	31 (46.3)	16 (16.5)	46 (21.5)	5 (25.0)	17 (41.5)
≥4 d	324 (73.8)	36 (53.7)	81 (83.5)	168 (78.5)	15 (75.0)	24 (58.5)

*$P < 0.05$.
DV, domestic violence; EAP, Employee Assistance Program.

the company studied here that identify and address such situations early reduce the risk for escalation[5,6] and also reduce consequences such as poor work performance, poor workplace morale, and reduced productivity.[12,19]

We found several characteristics of cases that are of interest to prevention. Consistent with previous research, most of the suspects were male.[20,21] We also found that a high percentage of suspects had been employed with the company for a long period—over 37% of suspects had worked with the company for 21 years or more. Many workplace violence prevention policies focus on screening for newly-hired employees, such as criminal background checks and drug screens.[19,22] Furthermore, cases involving employees who had worked at the company for 3 years or more were marginally more likely to involve activation of the TMT. Although the reasons for these findings are unknown and deserve further examination, it is possible that cases involving employees with longer tenures are more complex. For example, employees with longer tenures may be more likely to have management or supervisory duties or highly specialized skills. The presence of a TMT and administrative procedures and processes is necessary to address issues that arise in a large and diverse workforce.

Threat Management Teams require training and interaction to work together most effectively. The company conducts annual training for its TMTs, but within the organization the team has various levels of experience. We found that more experienced teams with higher caseloads were much more likely to meet than less experienced teams with a small number of cases, and in fact team experience was a stronger predictor of TMT activation than any case

characteristic. We hypothesize that through their shared experience in responding to different types of cases, experienced teams become knowledgeable of the roles and resources of each team member and learn the advantages of using these resources. In addition, with experience the teams become more familiar with the other team members, which may reduce barriers to contacting them. This study demonstrates for other companies the importance of investing in team training and communication. Companies in the process of developing their first threat assessment teams need to be aware that less experienced teams may need input in making decisions, which will facilitate uniform processes and decision making across the company.

TMT activation was associated with many of the case outcomes. Cases with TMT activation were three times more likely to be substantiated and two times more likely to lead to a corrective action on the basis of the facts and data gathered. Although TMTs are not directly involved in the corrective action process, the facts from the case investigation are brought to another organization for this determination. More complicated cases are more likely to lead to TMT activation, and these cases may be more likely to require corrective action. Nevertheless, an alternate interpretation could be that corrective action is more likely to occur when the TMT is activated and involved in the decision-making process. TMT activation was only slightly related to termination. From the company perspective, retention is an important issue because employees are valued and resources are expended to train them.

Threat Management Teams can be extremely valuable to companies if they assist in defusing threatening situations early and

TABLE 4. Case Outcomes by Threat Management Team Meeting (Adjusted Models)

Outcome	Total N (%)	Threat Management Team Activated N (%)	Threat Management Team Not Activated N (%)	Odds of Outcome by Threat Management Team Activation OR (95% CI)[a]
Report substantiated				
Yes	319 (72.5)	157 (81.8)	162 (65.3)	3.1 (1.86–5.05)*
No	121 (27.5)	35 (18.2)	86 (34.7)	1.00
Corrective action memo				
Yes	162 (36.7)	91 (47.1)	71 (28.5)	2.0 (1.31–3.19)*
No	280 (63.3)	102 (52.9)	178 (71.5)	1.00
Corrective action memo with time off				
Yes	83 (18.8)	51 (26.4)	32 (12.9)	2.3 (1.33–3.88)*
No	359 (81.2)	142 (73.6)	217 (87.1)	1.00
Corrective action memo without time off				
Yes	79 (17.9)	40 (20.7)	39 (15.7)	1.2 (0.73–2.12)
No	363 (82.1)	153 (79.3)	210 (84.3)	1.00
Case led to termination				
Yes	50 (11.3)	25 (13.0)	25 (10.0)	1.8 (0.94–3.53)
No	392 (88.7)	168 (87.0)	224 (90.0)	1.00
No formal action required				
Yes	152 (34.4)	37 (19.2)	115 (46.2)	0.3 (0.17–0.45)*
No	290 (65.6)	156 (80.8)	134 (53.8)	1.00
EAP referral*				
Yes	43 (9.7)	32 (16.6)	11 (4.4)	4.8 (2.12–11.03)*
No	399 (90.3)	161 (83.4)	238 (95.6)	1.00
Length of case				
<4 d	115 (26.3)	35 (18.4)	80 (32.4)	1.00
≥4 d	322 (73.7)	155 (81.6)	167 (67.6)	1.8 (1.09–3.03)*

[a]Controlled for case type, team experience, and sex of the suspect.
*$P < 0.05$.
CI, confidence interval; EAP, Employee Assistance Program; OR, odds ratio.

identifying resources and making referrals, which may contribute to retention of employees as well as workplace productivity. The company believes that having a robust Threat Management program has resulted in early intervention of managing incidents and moreover provides the ability to monitor trends in threatening behaviors, threats and acts of violence. This ultimately affords the ability to quickly mitigate an incident before escalating into a severe situation. For example, we found that TMT activation was strongly associated with referral to resources such as the EAP. Because the team approach involves input from multiple organizations, including EAP, team involvement may increase the appropriate use of employee support resources.

Limitations

As with all research studies, this study has several limitations. Any data reporting source may have the potential for data entry errors and some missing data, although a complete review of the data elements was undertaken during the development of the de-identified analytic data file. We found a very low prevalence of missing or unknown data values. The potential for underreporting also exists. Nevertheless, because this database is the source for information on all investigations, it is unlikely that many incidents go unreported. Although we used 2 years of data, the dataset was not sufficiently large to identify interaction between variables. As more data become available, it will be important to examine interactions between case and team characteristics in threat management response.

This study was conducted with a large multinational company with a long-standing threat management and workplace violence structure. The trends may not be generalizable to smaller companies or companies with a different infrastructure (eg, retail industries with public access).

CONCLUSION

This is the first scientific and published analysis of a multinational company's TMT activation and investigations. This is the first multinational company to share threat management (workplace violence) case data for peer-reviewed publication. The company has set an important precedent by leveraging research, dealing with threat management to evaluate its programs and processes in an effort for continuous quality improvement. Hopefully, as we can use such data to learn about trends and characteristics of threat management, more companies will be willing to share their experiences to create an evidence base.

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