ANTICIPATING CRISES: TOP-LEVEL MANAGERS VERSUS EMPLOYEES

Milan D. Larson, Monfort College of Business, University of Northern Colorado, Kepner Hall, Campus Box 128, Greeley, CO 80639-0019
Karen Fowler, Monfort College of Business, University of Northern Colorado, Kepner Hall, Campus Box 128, Greeley, CO 80639-0019

ABSTRACT

This research is an empirical study that tests the theoretical model presented by [23]. Specifically, this study offers insights on how executives verses employees prepare for varying degrees of major crises or disasters. Mean differences were examined in preparedness for crises such as terrorist attacks, natural disasters, and workplace violence. Findings indicate that natural disasters were perceived most likely to occur while terrorist attacks were perceived as the least likely to occur. Further pairwise comparisons reveal significant differences within different levels of management and employees for major terrorist attacks, natural disasters, and accidental disasters. Further research, management implications, and limitations of the study are also offered.

CRISIS AND DISASTER PLANNING

Crisis management and disaster prevention/preparedness have long been topics of interest in the strategy, planning, decision making, and public administration literatures, however as pointed out by [18], the crisis management field solidified its modern importance following the Johnson and Johnson Tylenol incident in 1982. Many organizational crises followed, however the more recent devastations such as the Oklahoma City bombing, shootings at Columbine High School, tragic events of 9/11, Hurricane Katrina, and Virginia Tech shootings, have catapulted crisis management into the forefront of many scholarly disciplines. These horrific events have become part of today's reality. As a result, there is an urgent need to understand relationships between crisis management theory and practice on more than a case-by-case basis.

One week after 9/11, at the *Disaster Recovery Journal's* Fall World Conference in Orlando, a significant number of the companies already had crisis management plans in place, however 97% of these firms reported a need to have their crisis management plans changed [6]. Even after 9/11, corporate security chiefs said nearly half of their companies were still not prepared in basic areas [32]. Intrigued by this lack of preparedness, *The Wall Street Journal* published an entire section entitled "How Vulnerable Are You?" on Monday, September 29, 2003 addressing the issue of workplace security (*Wall Street Journal,* September 29, 2003). During this same timeframe, the *Academy of Management Executive* published an interview with Lee Korins, former CEO of the Security Traders Association, in which he recounted his personal experience in escaping from the North Tower of the World Trade Center immediately following the terrorist attack [5]. At the time of this writing, many constituents are asking how events at Virginia Tech could have been handled more appropriately. As these events suggest, crisis management and disaster preparedness are crucial topics in today's society and opportunities for empirical organizational research are numerous.

In the past, crisis events were often defined as low probability, high consequence events that could threaten organizational legitimacy, profitability and viability [28] and were characterized by ambiguity of cause, effect, and means of resolution [23]. Many of the recent tragic events already mentioned have affected our thinking with respect to some of these contentions. The numerous crises that can be readily

cited seem to suggest the probability for occurrence is increasing [11]. Certainly the events of Columbine, 9/11, Hurricane Katrina, and Virginia Tech have escalated the necessity for better crisis and emergency planning in all types of organizations and the related bodies of literature are being re-examined.

LITERATURE REVIEW OF CRISIS MANAGEMENT

One of the most comprehensive theoretical treatments of crisis management has been offered by Pearson and Clair [23]. Their crisis management process model provides a comprehensive descriptive model of pre-event environment, perceptual and organizational characteristics, and post-event reactions, responses, and outcomes. As with any crisis event, empirical assessment can be limited. Often researchers do not know what pre-event preparedness was in place, but they can assess visible damage that may have occurred. If no visible damage occurred, researchers may not know about the crisis at all, therefore making any pre-event or post-event assessment impossible. Pearson and Clair [23] have stressed there is little empirical knowledge available on crisis and disaster planning processes and many of the variables discussed in the literature have yet to be operationalized.

The research presented here focuses on pre-event constructs identified in Pearson and Clair's work. The three primary pre-event constructs in Pearson and Clair's work include environmental context, such as institutionalized practices, executive perceptions of risk, and adoption of organizational crisis management preparations.

As explained by Pearson and Clair [23], some may perceive a certain event as a potential crisis while others may see the same event as non-threatening. What a person can anticipate, adjust and act upon depends on his or her cognitive structure and decision making processes. If top-level managers do not acknowledge the potential consequences of a disaster, they will not do well with preparing the organization's reaction to the crisis. Additionally, a person's comfort level for different events comes from the level of intensity of the event itself as well as the perceived likelihood the event will occur. As an example, the more extreme (but less likely to occur) the event, e.g., terrorist attack, the less urgent a top-level manager might respond. Conversely, the less extreme (but more likely to occur) an event, the more prepared an organization will become. Based on Pearson and Clair's [23] theoretical framework that a manager's perception of a crisis event occurring is critical to an organization's preparedness, our study compares the perceptions of different levels of leadership in varying degrees of disaster.

> *Hypothesis 1:* Top-level managers will have a higher perception of crisis preparedness than mid-level managers in the organization.
> *Hypothesis 2:* Top-level managers will have a higher perception of crisis preparedness than entry-level managers in the organization.
> *Hypothesis 3:* Top-level managers will have a higher perception of crisis preparedness than employees in the organization.
> *Hypothesis 4:* Mid-level managers will have a higher perception of crisis preparedness than entry-level managers in the organization.
> *Hypothesis 5:* Mid-level managers will have a higher perception of crisis preparedness than employees in the organization.
> *Hypothesis 6:* Entry-level managers will have a higher perception of crisis preparedness than employees in the organization.

METHODS

To test the crisis preparedness of our participants, we designed and tested a 21-item scale. During the pilot testing of the instrument, we started with a 32-item scale that included items from the literature. Although the initial reliability (α=.80) was within an acceptable range [22], we observed the opportunity to increase the reliability of the scale by reducing the number of items. Through a step-by-step process of eliminating questions one at a time, we found a 21-item scale to have the highest reliability (α=.88), which is well above the acceptable level found in most behavioral science research [10] [22]. In addition to asking participants their perceptions of crisis preparedness, we also asked them to rank order the likelihood of different crisis events to occur. The five types of crises that appeared on the questionnaire included:

- secondary terrorist attack (anthrax in mail system, attack on computer system, etc.)
- natural disaster (flood, tornado, earthquake, forest fire, hurricane, blizzard, etc.)
- major terrorist attack (bombs, destruction of building, biological attack, etc.)
- accidental disaster (long-term power outage, building fire, chemical spill, radioactive leak, etc.)
- workplace violence.

The population selected for this research was the alumni database from a medium-sized, AACSB-accredited college of business at a state university in the southwestern United States. Every graduate from the college for the past 10 years was included in the population, resulting in an initial population of 2,296 graduates. The questionnaire, along with a cover letter explaining the research, was mailed to 2,283 alums. The final useable sample consisted of 2,179 alums. Of these, 363 alums completed the questionnaire, resulting in a response rate of 16.5%.

The majority of the respondents worked for for-profit organizations (80.4%), employing 100-499 employees at their work location (27.5%), employing over 500 total organizational employees (61.7%), and having over 25 work locations for their organization (43.3%). Respondents' work locations included 25 states with the majority represented by the state in which the college of business is located. Gender of the respondents was evenly split with 50.3 percent being female and 49.7 percent being male. The majority of respondents were non-management employees (45.2%), followed by middle-level managers (27.5%), then entry-level management (17.4%). Nearly 10% of the respondents indicated their positions to be top-level or executive-level.

ANALYSIS AND RESULTS

To compare the perceived readiness for a crisis prior to the actual event occurring, we used analysis of variance (ANOVA) methods for the different leadership levels in varying degrees of crisis preparedness for each of the types of disasters. To calculate the likelihood of each type of disaster, we averaged the rank order (1=most likely to occur to 5=least likely to occur) from each respondent's ranking of major terrorist attacks, secondary terrorist attacks, natural disasters, accidental disasters, and workplace violence. Therefore a lower mean ranking score suggests a higher perception that the disaster could occur. Further analysis shows there was a significant mean difference in the rank order of natural disasters $F(3,359) = 3.287$, MSE 3.916, p=.21 and accidental disasters $F(3,359) = 3.24$, Mse = 3.50 p = .022.

Further pairwise comparisons using LSD revealed that, consistent with research hypothesis 1, top level managers had a significantly different ranking of terrorist attacks, natural disasters, and accidental

disasters. Contrary to research hypothesis 1, however, top level managers do not have a notably different perception that workplace violence will occur than do the other levels of management or employees. Thus, hypotheses 2 and 3 are only partially supported with our sample. In our analysis for mid-level managers, the pairwise comparisons show a significant mean difference when considering natural disasters and accidental disasters but not in terrorist attacks or workplace violence. Therefore, hypotheses 4 and 5 are only partially supported. Investigating the perceptions of entry-level managers, our findings show a significant mean difference regarding accidental disasters. However, when it comes to terrorist attacks, natural disasters, and workplace violence, entry-level managers do not perceive any significant differences than the employees of the organizations used in this study. As a result, hypothesis 6 is only partially supported.

DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

The reality of our world suggests organizations can no longer ignore the possibility that major crises are a distinct possibility. Although it is impossible to predict all the different scenarios, having some plan in place is paramount. Research has demonstrated that having a crisis plan in place, even though it may not be completely spelled out, helps minimize the lasting effect of the disasters [8]. The presence of a crisis management plan also improves crisis decision making processes, even when the plan is dissimilar to the actual crisis faced [9].he only way to begin the process of planning is by anticipating some of the many possibilities of a disaster. Thus, the awareness by leaders can only facilitate and enhance the overall preparation and planning.

This research attempted to operationalize constructs previously identified in the crisis and disaster preparedness literature [23] and empirically assess variables identified as important to crisis and disaster preparedness research. Our findings suggest that there may be differences in perception of preparedness based on level of employment within an organization. In many cases, top level managers and middle level managers showed a higher level of perceived preparedness than employees. Additionally, entry-level managers demonstrated higher perceptions of accidental disasters. This makes intuitive sense because of very close day-to-day working relationships that entry level managers have with the employees. This finding does not support the contention that all employees in the organization be thoroughly familiar with the crisis or disaster plan but does support the notion that management may believe the organization is more prepared than may actually be the case.

One additional finding from this study highlights a common rank order perception of the different crisis events. In all cases except for mid-level managers, participants in this study perceived the following rank order (from least likely to most likely) of events to occur: major terrorist attacks, secondary terrorist attacks, workplace violence, natural disasters, and accidental disasters. Mid-level managers had similar perceptions of rank order except for the last two categories. Future research should investigate these rank orders to see if it holds true with larger samples from other parts of United States and in other industries not represented by our sample.

REFERENCES

Available upon request