Human impact issues for crisis management in organizations

Human impact issues for crisis management

761

Rick A. Mver

School of Education, Duquesne University, Pittsburgh, Pennsylvania, USA

Christian Conte

Department of Counseling & Educational Psychology. University of Nevada-Reno, Reno, Nevada, USA, and

Sarah E. Peterson

School of Education, Duquesne University, Pittsburgh, Pennsylvania, USA

Abstract

Purpose – The purpose of this article is to describe the adaptation of an assessment model, the Triage Assessment System (TAS), which is widely used in crisis intervention to understand the human impact of a crisis within an organization.

Design/methodology/approach - After a literature review, the Triage Assessment System is adapted to be applicable to organizations in crisis. Nine characteristics associated with the impact of crises on employees of an organization are discussed.

Findings – Suggestions are made for ways in which organizations can use the TAS to improve their preparation for recovery efforts after a crisis. These suggestions outline ways to use the TAS as well as approaches that consultants may employ when working with organizations. Suggestions are also made for future research using the TAS with organizations. Although developed for individuals, the concepts used in the TAS can also be applied to organizations in crisis.

Originality/value - The article offers practical suggestions to help organizations manage the impact of organizational crises on their employees. Research in this area should help to refine the TAS for organizations, particularly assessment of the severity of organizational reactions.

Keywords Disasters, Organizational analysis, Organizational behaviour, Employees, Modelling

Paper type Conceptual paper

Assessment in organizational crisis management has traditionally focused on risk assessment (Paton et al., 2000) and business impact analysis (Laye, 2002; Myers, 1999). These efforts are designed to discover and mitigate potential disruptions caused by crises (Mitroff and Anagnos, 2001). Risk assessment identifies an organization's potential for crises by evaluating internal and external threats (Herbig, 2003; Hodge, 2003). Threats might involve the location of an organization or the adequacy of equipment and technology. The goal of identifying risks is to mitigate these as much as possible to prevent or minimize disruption of business. Business impact analysis, on the other hand, examines the effect of crises on business profitability (Slintak, 2003). The objective is to anticipate disturbances or interruptions to normal business and to develop procedures that minimize the impact of crises (Brown, 1997). Unfortunately, neither risk assessment nor business impact analyses are 100 percent effective in Disaster Prevention and Management preventing crises. Crises still occur in organizations (Fink, 2002).

Information obtained from risk assessment and business impact analysis is helpful © Emerald Group Publishing Limited but not sufficient for organizations experiencing a crisis (Myers, 1999). According to



Vol. 16 No. 5, 2007 pp. 761-770 0965,3562 DOI 10.1108/09653560710837055 Myers (1999), these processes often are compartmentalized and fail to consider the consequences of a crisis for the organization as a whole. This problem is especially true with respect to assessing impact on employees. Failure to obtain information on the effect of a crisis on employees could significantly disrupt the implementation of crisis management plans. Therefore, assessment strategies that provide additional information are needed for organizations to enhance the efficiency of the recovery process. These strategies should build on traditional organizational assessment (Levinson, 2002) by integrating an understanding of crisis management. The assessment strategies should involve gathering information beyond identifying technological problems such as computer failures or communication shutdowns, evaluation of mechanical difficulties such as broken or inoperative machinery, and estimating damages to the physical plant facilities. Strategies must recognize that an organization is an interdependent group of people (Levinson, 2002). Specifically, the assessment strategies should evaluate reactions with respect to the human impact of the crisis as seen in the culture of the organization. This process is important because successful implementation of a crisis management plan is dependent on people's capacity to perform assigned tasks (Lewis, 2003).

This article describes a model to understand the human impact of a crisis within an organization. First, we review the literature that addresses the importance of assessment in crisis management. Included in this review is the literature on crisis intervention and management as well as organizational behavior. Second, we discuss the adaptation of the Triage Assessment Model (TAS) (Myer, 2001) for understanding organizations' reactions to crises. Although developed for individuals, the concepts used in the TAS can also be applied to organizations in crisis. In addition, we identify and describe characteristics associated with the human impact of crises in organizations. Third, we offer suggestions for ways in which organizations can use this model to improve their preparation for recovery efforts after a crisis. These suggestions outline ways to use the TAS as well as approaches that consultants may employ when working with organizations. Fourth, suggestions are made for research using the TAS with organizations. Research in this area should help to refine the TAS for organizations, particularly assessment of the severity of organizational reactions.

The importance of assessment in crisis management

A number of books focus on organizational preparation for and recovery from crises (e.g. Augustine, 2000; Braverman, 1999; Fink, 2002; Mitroff, 2004; Mitroff and Anagnos, 2001; Mitroff *et al.*, 1996; Myers, 1999; Schonfeld *et al.*, 2002). Most of these books approach crisis preparation and recovery from a broad perspective and describe a general model that organizations can use to get ready for crises. Other books concentrate on specific topics such as violence in the work place and outline strategies to prepare for a particular crisis (Braverman, 1999).

A common pattern found in books addressing crisis management for organizations is the use of examples that describe successes and failures in crisis management. Typically, the examples summarize the crisis and explain the process used to address it. Authors discuss topics such as correct and mistaken decision-making procedures (Braverman, 1999), beneficial and damaging public relations (Caponigro, 2000), leadership successes and blunders (Brenneman, 2000; Mitroff, 2004), and strengths and weaknesses of crisis management plans (Fink, 2002; Myers, 1999). Although the examples provide valuable descriptive information, only minimal attention is given to

assessment. Authors assume that organizations understand the course of action that is needed. Yet, accurate assessment of reactions is critical for organizations to respond appropriately to crises (Braverman, 1999; Mitroff, 2004). Information gathered following crises is essential if resources are to be directed to areas of greatest need. A clear model to assess an organizational crisis, particularly the human impact, is absent.

Organizations, like individuals, need a model with which to assess crises. Currently, few models of organizational assessment can be found (e.g. Brown *et al.*, 2001; Fink, 2002; Levinson, 2002). Although the available literature describes assessment models organizations can use to collect data at times other than following a crisis (e.g. Levinson, 2002), a gap in the literature exists when it comes to specific post-crisis organizational assessment models, specifically related to the human impact of crises.

Adaptation of the Triage Assessment System

The TAS (see Figure 1) was developed by Myer *et al.* (1992) to assess individuals in crisis. Since that time the model has received increasing attention (e.g. Gilliland and James, 1993; Collins and Collins, 2005; Hendricks *et al.* 2003; Wiger, 2003). According to Myer *et al.* (1992), the TAS integrates research in crisis intervention describing people's affective, behavioral, and cognitive reactions to a crisis. Like people, organizational reactions can be characterized as affective, behavioral, and cognitive (Pearson and Clair, 1998). Understanding these reactions, according to Pearson and Clair, is important in providing assistance to organizations. However, these authors do not identify characteristics within these reactions.

Affective reactions

Assessment of affective reactions is focused on three human characteristics that have been identified as changing due to crises. The characteristics are:

- (1) rumors (DiFonzo and Bordia, 2000; Paton, 2003);
- (2) morale (Brenneman, 2000; Paton et al., 2000); and
- (3) loyalty to the organization (Schein, 1985).

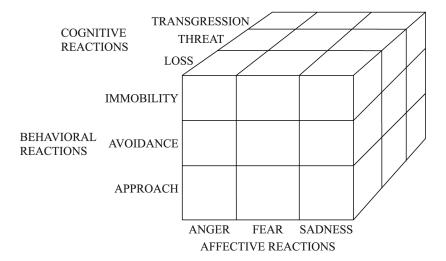


Figure 1. Triage Assessment Model

Failure to accurately assess an organization typically leads to inappropriate handling of the situation at hand (Levinson, 2002). Thus, failure to recognize specific characteristics of affective reactions of organizations to crises, namely rumors, morale and loyalty, impedes organizations' ability to recover from crises.

The first characteristic that helps to assess affective reactions in organizations is rumors. Rumors are defined as unconfirmed bits of information that are important to people (DiFonzo and Bordia, 2000). Rumors play a significant role in organizational crisis reactions because crises leave many questions unanswered or unconfirmed. Rumors inflict damage on organizations because they produce uncertainty (Wetlaufer, 2000). Mitroff *et al.* (1996) view rumors as defense mechanisms (Mitroff *et al.*, 1996) designed to help bring meaning and control to overwhelming situations (DiFonzo and Bordia, 2000). Because rumors are unconfirmed bits of information, more often than not, they are misleading and generally not true. As history has demonstrated, presenting false answers as a quick solution is never an effective way to solve a crisis (Barton, 2001).

Morale is a second characteristic that can be used to assess affective reactions with organizations. Brenneman (2000) noted morale is the basic tenet by which organizations gauge their emotional selves. Managers are often seen as effective if they have the ability to boost morale (Greenstone and Leviton, 2002). Specifically, morale is the courage, discipline, confidence, enthusiasm, and willingness to endure hardship within a group (Guralnik, 1980). Morale can be boosted or dismembered through communication (Williams, 1978). Therefore, it is the employer's responsibility to bolster communication, and thus morale, in times of crises (Martin, 2004).

The third characteristic helpful in assessing affective reactions within organizations is loyalty. Loyalty is the degree to which an organization uses a set of language and symbols that produces an effective conformity in the organization and the individual (Sagini, 2001). Cohesiveness within an organization is a typical outcome of loyalty. Sagini (2001) states that if loyalty is absent, an organization's strength can rapidly deteriorate. In fact, Braverman (1999) noted that when loyalty is low, the potential for violence increases. Violence may become evident through a range of behaviors from verbal disagreements to physical attacks. After a crisis the potential for aggressive behaviors can increase due to the disruption of an organization's homeostasis that results in changes to employees' loyalty. Seen in this context, loyalty is a vital characteristic of an organization's affective response to crises.

Behavioral reactions

Behavioral reactions are observed in changes of:

- (1) meeting agendas (Wetlaufer, 2000);
- (2) roles within the organization (Paton et al., 2000); and
- (3) impact on normal business (Myers, 1999) or altered levels of functioning.

These three characteristics comprise behavioral reactions to crises because all three are observable events. Because behavioral reactions affect the entire organization, it is imperative to understand them (Banner and Gagne, 1995).

Human impact

issues for crisis

Meeting agendas are the first and generally most visible characteristic that can be used to assess organizational behavioral reactions to a crisis. Meeting agendas dictate the direction of an organization (Moorhead and Griffin, 1989). When organizations are in crises, their meeting agendas can be significantly altered (Greenstone and Leviton, 2002). In fact, we would argue that the degree of the organization's preoccupation with the crisis at hand is directly correlated with the severity of the crisis. In other words, an organization undergoing a mild crisis will not need to alter its meeting agenda much. However, an organization undergoing a severe crisis will spend the majority of its meeting time responding to the present crisis. Common sense dictates that whatever time an organization devotes to resolving a crisis takes time away from the normal business agenda.

A second characteristic that can be used to assess an organization's behavioral reactions is shifts in the roles of employees as a result of the crisis. Roles are obviously vital in organizations because, as Moorhead and Griffin (1989) noted, roles are the part human beings play in the organization. Specifically, roles include sets of expected behavior patterns ascribed to individuals occupying a given position in the organization. Paton *et al.* (2000) noted that organizational roles become distorted during a crisis because day-to-day routines become disrupted. In other words, distorted roles cause problems for organizations because they hinder effective distribution of responsibilities. Assessing who is occupying which roles therefore becomes a necessary step for appropriate responsibilities to be assumed.

The ability to conduct daily business or function in a normal manner is a third characteristic that can be used to assess the behavioral reactions of organizations to a crisis. As a system, organizations function at a certain level and strive to maintain homeostasis in regard to their functioning (Sagini, 2001). By definition, a crisis has an impact on an organization's level of functioning. Greenstone and Leviton (2002) noted that an organization's level of functioning is directly impacted by crises because employees tend to take excessive time off work after crises. Also, crises can put decision-makers out of communication with the rest of the organization (Fink, 2002), which would have a direct effect on the organization's level of functioning.

Cognitive reactions

The severity of cognitive reactions can be assessed by measuring changes in:

- decision-making protocols (Fink, 2002; Paton, 1999; Pearson and Clair, 1998);
- dynamics within the system (Braverman, 1999; McEntire, 1999; Paton, 1999); and
- organizational goals (Mitroff et al., 1996).

It is our contention that all three of these organizational cognitive responses are interdependent. For instance, organizational decisions can affect organizational goals, which can in turn affect the dynamics within the system. As with the affective and behavioral responses, we believe it is important to assess ineffective cognitive responses early.

The first characteristic that can be used to assess organizations' cognitive reactions is decision-making protocols. Decision-making in the organization and organizational goals both directly affect the dynamics within the system. The dynamics within the system are the interactions among individuals and groups

within the organization. Crises affect the homeostasis of organizations, and this disequilibrium directly affects the system dynamics. For example, when decision-makers shift blame for situations, the system's dynamics are affected in a negative way (Banner and Gagne, 1995). Regardless of the specific cause, crises tend to affect the dynamics within the system.

The second characteristic helpful for assessing the cognitive reactions of an organization is dynamics, both internal and external. The foundation of every organization is decision-making (Moorhead and Griffin, 1989). After all, organizational goals cannot exist without decision-making (Moorhead and Griffin, 1989; Sagini, 2001). Systems theory demonstrates that everything affects everything else (Banner and Gagne, 1995), and thus the decisions made during a crisis affect the entire organization. Unfortunately, as Greenstone and Leviton (2002) noted, it is common for organizations to have difficulty with decision-making during a crisis.

Changes in organizational goals are the third characteristic that helps to assess cognitive reactions. Both during and after a crisis, the goals of organizations change (Mitroff *et al.*, 1996). As with meeting agendas, the severity of the crisis determines how much organizational goals change. The more severe the crisis, the more altered the organizational goals become. Assessing organizational goals after crises can thus determine the severity of crisis at hand.

Use of Triage Assessment Model with organizations

The most obvious use of the TAS is in the recovery process following a crisis. A key issue in the recovery process is the effective and efficient use of resources. Channeling resources should not be left to trial and error. Rather, management in organizations needs information to direct resources to specific areas of need. The TAS provides a framework that will permit the systematic gathering of such information. For example, a number of issues related to affective, behavioral, and cognitive organization-wide reactions would occur if a mid-sized business with multiple locations is reorganizing and closing one or more locations. The obvious and immediate issue is the reactions of employees who will be out of work and face being jobless. Management may choose to provide these employees with a number of services including outplacement counseling, access to employee assistance professionals, and financial planning services. A less obvious but just as immediate issue is the impact on employees who are retained. The TAS gives management a model to identify problem areas and subsequently focus resources as needs arise. A possible concern that may arise is a decline in the morale of employees who are retained. Loyalty may also suffer, resulting in a shift in the dynamics within the organization. Once problem areas are recognized, management can either address the situation themselves or provide consultants with information needed to construct solutions to resolve the problems.

A second important use of the TAS is that it provides a comprehensive framework for designing human impact components of crisis management plans or for reviewing existing plans. Traditionally, crisis management plans have focused attention on counseling employees for their individual reactions. However, the human impact issue goes well beyond providing a venue and opportunity for crisis intervention counseling or debriefing of individuals. In fact, research shows that most people do not need these interventions (Shaw, 2001). Interventions are needed that address the system-wide

Human impact

issues for crisis

impact of the crisis on the organization (Myer and Moore, 2006). For example, the human impact on organizations in lower Manhattan after the terrorist attacks of 9/11 went far beyond the trauma of that day. No organization was prepared for the multitude of problems, specifically involving human impact (Duffy and Shaefer, 2002). Organizations were forced to put together plans in a reactive manner. Although these efforts were helpful, the benefit of hindsight suggests that a more effective strategy would be to proactively include plans for addressing human impact of a disaster in the organizational crisis management plan. Management and consultants can use the TAS to evaluate crisis management plans for the inclusion of guidelines to address issues related to the human impact of crises.

The TAS can also be used as a framework for designing staff development training for crisis management (Myer *et al.*, 2004). Such training is critical in preparing personnel to manage actual crises (Prince and Salas, 2000). Technical issues that arise from crises are more readily apparent than human impact issues. Therefore, training must help crisis management teams identify human impact issues as well (Lewis, 2003). A holistic awareness is necessary in order for teams to consider all variables that are influencing the organization's response to the crisis (Paton and Jackson, 2002). Crisis management teams can use the TAS to discuss simulated cases in order to identify problems relating to human impact of the crisis. The team can also practice developing solutions that will direct resources to areas in most need. Training might be conducted solely in-house or with the help of consultants. Simulated cases can be written that incorporate selected characteristics of affective, behavioral, and cognitive reactions. Evaluation following the training should be instructive in order to increase learning and preparedness for actual crises.

Summary

Understanding of the human impact of organizational crises has received limited attention in the literature on crisis management. Yet, the importance of a holistic understanding of organizational reactions to crises, specifically including the human impact, is essential. Failure to appreciate this aspect of crisis management can hinder the recovery process whereas recognition of its importance leads to more efficient use of resources in the wake of crises. The TAS outlines a framework for understanding the human impact of organizational crises by identifying characteristics associated with affective, behavioral, and cognitive reactions. These characteristics provide organizations with concrete variables to assess and monitor during the recovery process.

Although the TAS used existing research to develop the model, we believe research is needed to test and refine the model. This research should involve studying the soundness of the characteristics used in the TAS. It is possible that characteristics other than those we identified may also be used to understand the human impact of crises in organizations. In addition, research is needed that explores methods to gather information identified by the TAS. Research in this area may investigate the development of interview protocols that can be used to obtain information. Interview protocols will need to be broad or easily adaptable since crisis situations as well as organizations are unique. Research that assesses the severity of reactions is also needed. This research will help organizations become more efficient in the use of

resources in the recovery from crises. The development of a survey instrument may be the most practical method to gather this information.

Crisis management in organizations has received intense attention in the past several years. Sensational events such as the terrorist attacks of 9/11 have increased the sensitivity to the need for having up-to-date crisis management plans. We believe that a crucial component of those plans is addressing the impact of crises on employees and others associated with an organization. Addressing this issue must go beyond using employee assistance professionals to provide counseling services. Organizations must recognize that attending to the human impact of crises accelerates the recovery process by helping it to be more efficient in the use of resources.

References

- Augustine, N.R. (2000), "Managing the crisis you tried to prevent", *Harvard Business Review on Crisis Management*, Harvard Business School Press, Boston, MA, pp. 1-32.
- Banner, D.K. and Gagne, T.E. (1995), *Designing Effective Organizations: Traditional and Transformational Views*, Sage Publications, Thousand Oaks, CA.
- Barton, L. (2001), Crisis in Organizations, 2nd ed., South-Western College Publishing, Mason, OH.
- Braverman, M. (1999), Preventing Workplace Violence, Sage Publications, Thousand Oaks, CA.
- Brenneman, G. (2000), "Right away and all at once: how we saved Continental", *Harvard Business Review on Crisis Management*, Harvard Business School Press, Boston, MA, pp. 87-118.
- Brown, D., Pryzwansky, W.B. and Schulte, A.C. (2001), *Psychological Consultation: Introduction to Theory and Practice*, Allyn & Bacon, Boston, MA.
- Brown, E.H. (1997), "Improving organizational health by addressing organizational trauma", *Journal of Organizational Change*, Vol. 10, pp. 175-8.
- Caponigro, J.R. (2000), The Crisis Counselor: A Step-by-Step Guide to Managing a Business Crisis, Contemporary Books, Chicago, IL.
- Collins, B.G. and Collins, T.M. (2005), *Crisis and Trauma: Developmental-Ecological Intervention*, Lahaska Press, Boston, MA.
- DiFonzo, N. and Bordia, P. (2000), "How top PR professionals handle hearsay: corporate rumors, their effects, and strategies to manage them", *Public Relations Review*, Vol. 26, pp. 173-90.
- Duffy, J. and Shaefer, M.S. (2002), Triumph over Tragedy: September 11 and the Rebirth of a Business, Wiley, New York, NY.
- Fink, S. (2002), Crisis Management: Planning for the Inevitable, iUniverse, Inc., Lincoln, NE.
- Gilliland, J.B. and James, R.K. (1993), Crisis Intervention Strategies, 2nd ed., Brooks Cole, Belmont, CA.
- Greenstone, J.L. and Leviton, S.C. (2002), *Elements of Crisis Intervention: Crises and How to Respond to Them*, Brooks Cole, Pacific Grove, CA.
- Guralnik, D.B. (Ed.) (1980), Webster's New World Dictionary of the American Language, 2nd ed., Prentice-Hall, New York, NY.
- Hendricks, J.E., McKean, J. and Hendricks, C.G. (2003), Crisis Intervention: Contemporary Issues for On-site Interveners, Charles C. Thomas, Springfield, IL.
- Herbig, J. (2003), "Understanding and communicating risk assessment", *Disaster Recovery Journal*, Vol. 16 No. 3.

management

Human impact

issues for crisis

- Hodge, D. (2003), "Risk assessment workshop", paper presented at the Fall World 2003 Disaster Recovery Journal Conference, San Diego, CA, September.
- Laye, J. (2002), Avoiding Disaster, Wiley, Hoboken, NJ.
- Levinson, H. (2002), Organizational Assessment, American Psychological Association, Washington, DC.
- Lewis, G. (2003), "The human(e) side of business continuity/disaster response plans", *Disaster Recovery Journal*, Vol. 16 No. 3.
- McEntire, D.A. (1999), "Issues in disaster relief: progress, perpetual problems, and prospective solutions", *Disaster Prevention and Management*, Vol. 8, pp. 351-61.
- Martin, T.E. (2004), "A model for business resiliency", Continuity Insights, Vol. 2 No. 6, pp. 30-3.
- Mitroff, I.I. (2004), Crisis Leadership: Planning for the Unthinkable, Wiley, Hoboken, NJ.
- Mitroff, I.I. and Anagnos, G. (2001), Managing Crises before They Happen, American Management Association, New York, NY.
- Mitroff, I.I., Pearson, C.M. and Harrington, L.K. (1996), *The Essential Guide to Managing Corporate Crises: A Step-by-Step Handbook for Surviving Major Catastrophes*, Oxford University Press, New York, NY.
- Moorhead, G. and Griffin, R.W. (1989), Organizational Behavior, Houghton Mifflin, Boston, MA.
- Myer, R.A. (2001), Assessment for Crisis Intervention: A Triage Assessment Model, Brooks Cole, Belmont, CA.
- Myer, R.A. and Moore, H. (2006), "Crisis in context: an ecological model", *Journal of Counseling and Development*, Vol. 84 No. 2, pp. 139-47.
- Myer, R.A., James, R.K. and Addy, C. (2004), "Triage Assessment Model for organizations", paper presented at the 30th Disaster Recovery Journal World Conference, Orlando, FL, March.
- Myer, R.A., Williams, R.C., Ottens, A.J. and Schmidt, A.E. (1992), "Crisis assessment: a three-dimensional model for triage", *Journal of Mental Health Counseling*, Vol. 14, pp. 137-48.
- Myers, K.N. (1999), Manager's Guide to Contingency Planning for Disasters, Wiley, New York, NY.
- Paton, D. (1999), "Disaster business continuity: promoting staff capability", Disaster Prevention and Management, Vol. 8, pp. 127-33.
- Paton, D. (2003), "Stress in disaster response: a risk management approach", *Disaster Prevention and Management*, Vol. 12, pp. 203-9.
- Paton, D. and Jackson, D. (2002), "Developing disaster management capability: an assessment centre approach", *Disaster Prevention and Management*, Vol. 11, pp. 115-22.
- Paton, D., Smith, L. and Violanti, J. (2000), "Disaster response: risk vulnerability and resilience", Disaster Prevention and Management, Vol. 9, pp. 173-9.
- Pearson, C. and Clair, J. (1998), "Reframing crisis management", *Academy of Management Review*, Vol. 23 No. 1, pp. 59-76.
- Prince, C. and Salas, E. (2000), "Team situation awareness, errors, and crew response management: research integration for training", in Endsley, D.J. and Garland, M.R. (Eds), Situation Awareness, Analysis, and Measurement, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 325-48.
- Sagini, M.M. (2001), Organizational Behavior: The Challenges of the New Millennium, University Press of America, Lanham, MD.

DPM 16,5

770

- Schein, E. (1985), Organizational Culture and Leadership, Jossey-Bass, San Francisco, CA.
- Schonfeld, D.J., Lichtenstein, R., Kline Pruett, M. and Speese-Linehan, D. (2002), *How to Prepare for and Respond to a Crisis*, 2nd ed., Association for Supervision and Curriculum Development, Alexandria, VA.
- Shaw, R. (2001), "Don't panic: behaviour in major incidents", *Disaster Prevention and Management*, Vol. 10, pp. 5-10.
- Slintak, P. (2003), "Real-time business impact analysis", paper presented at the Fall World 2003 Disaster Recovery Journal Conference, San Diego, CA, September.
- Wetlaufer, S. (2000), "After the layoffs, what next?", *Harvard Business Review on Crisis Management*, Harvard Business School Press, Boston, MA.
- Wiger, D.E. (2003), Essentials of Crisis Counseling and Intervention, Wiley, Hoboken, NJ.
- Williams, J.C. (1978), *Human Behavior in Organizations*, South-Western Publishing, Cincinnati, OH.

Corresponding author

Rick A. Myer can be contacted at: myerra@duq.edu