

## Crisis Management

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Recent highly-publicized instances of severe crises, such as the 9-11 attacks, the Asian Tsunami of 2004, and the 2005 Kashmir earthquake, coupled with the increasing belief that dependency on vulnerable and critical infrastructure has made modern societies more vulnerable to crises, has elevated interest in crisis management among policy makers, managers, and researchers. There remains, however, considerable confusion over what constitutes a crisis situation vis-à-vis a normal decision making situation, how crises challenge the decision making process, and what variables are most important in explaining successful, versus failed, crisis response. The definitions and variables reviewed below are meant to provide some clarity on these questions by presenting a broad overview of how crises are currently conceptualized in the literature, why crisis management poses a particularly challenging set of constraints to decision-making processes, and what factors are currently believed to take center stage in accounting for ‘best practice’ in crisis management.

## Crises and Crisis Management

Crisis management refers to the decisions and actions taken by decision makers as they prepare for, react to, and recover from crises. Crises are dramatic interruptions in the day-to-day routines of organizations or societies, which severely test the management capacity of decision makers, and threaten the core values which that organization or society holds dear. Crises are endemic to all sectors of society, from government to the private sector, can emerge across any issue area

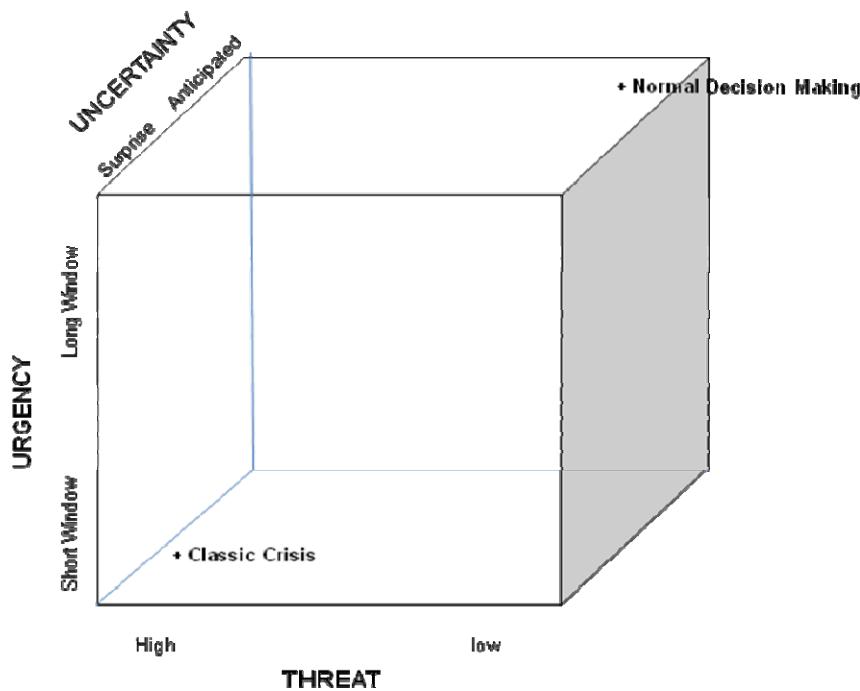
(e.g., economic, military, political), may be of human origin (e.g., military attack, financial breakdown, corruption) or of natural origin (e.g., earthquake, hurricane, health epidemic), and can last anywhere from hours, to several days, to several months. Yet all crises have certain elements in common. All crises have the capacity to reshape the socio-economic and political landscape and test the cognitive, moral, and leadership capacities of decision makers. The successful management of crisis situations helps to build public trust in organizations and institutions, and to cement faith in leadership. In contrast, failure to successfully manage a crisis can result in organizational fragmentation, public discontent, and even leadership change.

Researchers generally consider a situation to be a crisis if three conditions are met. First, the situation must be perceived as presenting a threat to core values; that is, the intrinsic principles or qualities that an organization or society sees as necessary for it to thrive. These might include, for instance, national security, honesty in accounting practices, or political autonomy. Second, the situation must be perceived to be urgent, with a short and finite time available for decision makers to respond to the situation, or a ‘window of opportunity’ in which to act. Third, and finally, the situation must be perceived as containing a high degree of uncertainty. In crisis situations, decision makers often have an incomplete understanding of the origin and risks of the problem being confronted, and an uncertain understanding of the impact that their actions will have on alleviating or exacerbating it.

Threat to core values, urgency, and uncertainty are not static variables, but exist on a continuum. Normal decision making situations can thus be conceptualized as those where core values are not being seriously threatened, where a long-window of opportunity to act is available, and where

the situation being confronted was anticipated. The exact opposite conditions are in place when decision makers confront classic crisis situations. Here the problem being confronted is unanticipated, the window in which to act is short, and core values are being immediately threatened. This contrast between the normal decision making environment and the crisis management environment along these three dimensions is presented in Figure 1 below, adapted from Charles Hermann's (1969) work on foreign policy crisis.

**Figure 1: Crisis Cube**



Researchers studying crises often examine them by breaking them into 'occasions for decision'; distinct moments in time during the crisis where those in authority must make a decision about what actions, if any, should be taken. Some crises, such as the crash of a plane or the collapse of

a bridge, may involve only a few occasions for decision over a short period of time. Other crises, such as interstate or intrastate war, may involve hundreds of such decisions, by multiple actors, across months or even years.

Decision making is particularly difficult during crises precisely because of the psychological and institutional challenges brought on by the combination of threat, urgency, and uncertainty.

Managing problems which present a threat to core values complicates decision making processes in several possible ways. It can increase the complexity of the decision making process by pitting one value against another, it can create a stalemate as different stakeholders argue over the relative merits of one critical value versus another, and it can create conflicts as different organizations or institutions with different interests seek to achieve their goals simultaneously.

Urgency, likewise, challenges the decision making process. Urgency increases the likelihood that decision makers will make quick and possibly rash decisions, it may result in decision makers overlooking critical aspects of the problem at hand, it can exacerbate stress, and it may cause a contraction of authority whereby mid or low-level managers are quickly replaced by senior decision makers in the chain of command, or where dissenting viewpoints are marginalized in the interest of quick response. Finally, in uncertain situations, different decision-makers can frame and define a problem in vastly different ways. It is when these three traits are combined, however, that crisis decision making is particularly difficult. Conflicting values require significant time to sort out, but urgency makes it impossible to carefully consider all options. Uncertainty requires time to sort-out the operational environment and to clarify unknowns, but the need for urgent response may force a decision before all the facts are known.

## The Ubiquity of Crises

A common thread in crisis management research is the general sense that the severity of crises has increased over time, and that the nature of modern, highly technical, and interdependent societies makes them particularly prone to devastating crises. Many researchers now argue that crises are likely to increase in intensity in the years to come as societies become increasingly dependent on critical infrastructure for day-to-day transactions, as modernization processes create networks of interdependencies that cause dramatic ripple effects when one part of the system fails, and as technological advances amplify the potential consequences of the crises that do occur. Moreover, crisis researchers point to the loss of self-sufficiency and a drift toward reliance on centralized rather than local management capacity in modernized societies as another worrisome trend. In cases of wide-spread systems failure, it is essential that local stakeholders have the ability to mobilize crisis management resources themselves through decentralized means, rather than waiting for crisis managers in far-away places to reach them. Finally, researchers argue that the modern crisis is characterized by its ability to traverse across multiple jurisdictional boundaries, both national and organizational. This new mobility of crises—exemplified by such challenges as global climate change, economic recessions, and transnational health pandemics, or for example the Avian Flu—increases their complexity and makes cross-national, inter-agency, and other forms of cross-jurisdictional cooperation, essential.

## Crisis Management Research

The academic study of crisis decision making is a relatively new field. Indeed, it was not until the late 1960s and early 1970s that researchers began to define crises as special kinds of decision making problems that challenged decision makers in ways that normal decision making

situations did not. Currently, crisis management research resides largely in four fields: public administration; business administration/management; psychology; and international relations. While each of these disciplines has a distinct outlook on crisis management, each is unified by their focus on one overarching question: what dynamics and variables best explain success and failure in crisis preparation, management, and recovery? In answering this question, the field of crisis management is now focusing on a distinct collection of social-psychological and bureaucratic / organizational variables that seem to come into play each time a decision maker deals with a crisis. Often referred to as the ‘cognitive-institutional’ approach to crisis research, the variables of greatest interest, and the set of research questions being asked, includes the following:

(1) Issue Framing. What were the effects of the initial definition of the situation and framing of the problem on the subsequent management of the crisis being confronted? In particular, what definitions, metaphors, or analogies were used by key decision makers, and how did these problem representations dictate or constrain future action? For example, after the September 11<sup>th</sup>, 2001 terrorist attacks in the United States, President Bush declared a “war” on terrorism. This initial framing foreclosed certain pathways for action (such as pursuing the terrorists through normal criminal justice channels) while opening up others (fighting terrorism using the military and conducting aggressive surveillance of people and groups in the “homeland”).

(2) Preparedness. How prepared were those involved in managing the crisis? Were there early warning sensors in place that could have alerted decision makers earlier? Where

key leaders aware of the risks associated with the crisis? Were the necessary resources and communication structures in place to help decision makers navigate the crisis? After the 2004 Asian tsunami, for example, it was revealed that none of those nations impacted had tsunami warning sensors in place in the Indian Ocean, and most people in coastal communities were not prepared to recognize the signs of an impending tsunami or to know what to do if one hit.

(3) Decision Processes. How were decisions made in the institutional system? What political unit had authority to make decisions? What rules governed the decision making process as key actors interacted? What group dynamics emerged as crisis decision makers interacted to identify and solve the problem? During the 1962 Cuban Missile Crisis, for example, much has been made of the role of a small group of advisors, led by President Kennedy's brother, in defining the risks and outlining potential response options to the discovery of Russian missiles in Cuba. The processes by which such groups make decisions (majority rule, consensus, veto power, etc.) and the pathways they set up to communicate with each other often become key determinants of effective or ineffective crisis management.

(4) Value Conflicts. Which value conflicts were at stake and how did these conflicts exacerbate or help contain the crisis at hand? How did decision makers manage conflicting values? For example, during the Iranian hostage crisis Jimmy Carter struggled to balance the value of safeguarding the lives of the hostages through slow diplomatic

maneuvering with preserving the image of America abroad through swift and decisive action.

(5) Information Management. How was information managed and disclosed throughout the crisis? How did leaders interact with the public? To what extent, and in what way, did the media influence events over the course of the crisis? The initial public reaction of some government officials in China during the 2003 outbreak of ‘bird flu’, for instance, is generally seen as one of concealment and/or denial. Efforts to obfuscate the facts during crises often backfire, as they did in that case, eroding public faith and extending the scope and duration of the emergency.

(6) Bureaucratic Conflict and Cooperation. Did the crisis force different bureaucratic or organizational entities to interact and what was the result of their interaction? What patterns of organizational cooperation and conflict emerged across these entities throughout the crisis? The heavily bureaucratic organizational structure of the United Nations, for instance, is seen as contributing to its slow and ineffectual response to the unfolding genocide in Rwanda in 1999.

(7) Sequencing. How were decisions sequenced over the course of the crisis and did this sequencing create a perception of path-dependency (a tendency for the current course of action to be reinforced by previous decisions) or sunk costs (an unwillingness to change course because of prior investment)? The escalation of commitment to the war in Vietnam by the Johnston and Nixon administrations, for instance, is evidence of how

leaders often stick to a course of action in crisis situations even when confronted with evidence showing that their efforts are ineffective or even counterproductive.

(8) Lessons learned. How did decision makers capture lessons learned from the crisis that became the basis for improved performance once the crisis concluded? For example, after the September 11<sup>th</sup> attacks, the United States government set up a commission to account for failures of intelligence prior to the 9-11 attacks and to make recommendations on changes needed to reduce the likelihood of such attacks occurring in the future.

### **Debates in the Field**

While the crisis management research agenda does focus on a common set of variables, some important areas of disagreement in the field remain. Foremost among these is the debate over the degree to which modern societies can anticipate crises and design systems that are effective in significantly reducing risk and producing ‘nearly error-free operations’ (high-reliability theory), versus the argument that crises are too unpredictable to ever effectively anticipate and prevent, or as Arjen Boin puts it, “crises are the normal outcome of a coincidental mix of widely available ingredients” (normal accident theory). This debate has dramatic implications for the way that decision makers prepare for crises. From a high-reliability theoretical perspective, crisis management is about adequate preparation, planning, developing redundancies in critical systems, and adequately training crisis managers. Crises management from this point of view is about prevention; that is, efforts to anticipate, predict, and preempting crises before damage is extensive. By contrast, from a normal accident theory point of view, crisis management focuses

not just on prevention (activities designed from keeping crises from happening) but also on resilience (programs, ideas, information that help communities rebound once inevitable crises do occur).

## **Lessons Learned**

Given the high degree of variability in the conditions and context that lead to and sustain crises, practitioners have been wary of offering lessons learned in crisis management that are broad enough to apply to all cases. Nonetheless, a number of observations about good crisis management do appear across the literature. Among them are the following.

(1) Don't prepare for the last crisis. Crises never happen in exactly the same way twice.

Yet organizational leaders have a tendency to focus most directly on the most recent crisis that they experience as a guide for preparing for the next one.

(2) Trust in planning but not the 'plan'. Unforeseen combinations of system failures are normal in crisis situations. Consequently, standard operating procedures, set protocols, and pre-established management plans almost never address all of the unexpected contingencies that emerge in real crisis situations. For this reason crisis researchers often encourage managers to trust in the planning process but not the plan.

(3) Distinguish between prevention and resilience in crisis planning. Good crises management systems focus not just on *prevention* (activities designed from keeping crises from happening) but also on *resilience* (programs, ideas, information that help

communities bounce back once inevitable crises do occur). Resiliency planning can make the difference between a crippling blow to a community, organization, institution, and successful recovery.

(4) Develop a crisis management capacity at the grassroots, not just leadership level.

The failure of crisis management plans often occurs because they are top-heavy and hierarchical. In real crisis situations centralized crisis managers may find it difficult to reach the grassroots as the crisis unfolds. For this reason, it is critical for citizens to have the skills, knowledge, training, and conceptual tools needed to manage crises by themselves.

(5) Build a devil's advocate voice into the decision making process. Poor decision making by institutional leaders in times of crisis often results because of the tendency for decision groups to coalesce around one dominant way of framing the problem being confronted without asking questions. This tendency has been referred to as 'group think' in the literature. To counter this tendency, crisis researchers suggest always having a person on the management team whose role it is to bring up contrary viewpoints, alternative fames, and to push the group to consider decision making options that have not yet been considered.

(6) Develop social capital within organizations to facilitate interpersonal familiarity, effective communication, and effective problem-solving. The best technology in the

world will be rendered useless if it is not backed up by the social capital required to navigate crisis situations in concert with others.

(7) Simulations, while not perfect, have proven to be effective instruments for crisis management. Case after case shows that institutions and organizations that engaged in simulations as part of the crisis planning process were able to more effectively manage crises when they occurred.

(8) Exploit opportunities for learning during crises. Part of the crisis management planning process should include a discussion of how to capture ‘lessons learned’ so that the same mistakes won’t be made from crisis to crisis. Consider vehicles (people, processes, information database, etc.) for capturing lessons as crises are occurring.

### **In Sum**

In times of crisis, the public immediately turns toward its leaders to help it make sense of the situation being confronted, to minimize the threat being confronted, and to identify what went wrong so that a similar situation will not arise again. The consequences of failure with these tasks can be devastating. History is filled with examples of decision makers who misunderstood the nature of an emerging threat and failed to act responsibly, or who made poor choices in the midst of a crisis, amplifying its consequences. The modern study of crisis management, therefore, seeks to better understand the variables that contribute to both poor and to successful crisis management so that decision makers and organizations can better prepare for, react to, and recover from crises.

## Bibliography

Allison, Graham, *Essence of Decision: Explaining the Cuban Missile Crisis*. Boston: Little Brown, 1971.

Axelrod, Robert, *The Structure of Decision*. Princeton NJ: Princeton University Press, 1976

Boin, Arjen, Paul 't Hart, Eric Stern, Bengt Sundelius, *The Politics of Crisis Management*. Cambridge: Cambridge University Press, 2005

Boin, Arjen, Patrick Legadec, Erwann Michel-Kerjan, and Werner Overdijk, "Critical Infrastructures under Threat." *Journal of Contingencies and Crisis Management*. 11:3 (2003): 99-104.

Dayton, Bruce, editor, "Managing Crises in the Twenty-First Century." *International Studies Review*. 6 (2004): 165-194.

Jervis, Robert. *Perception and Misperception in International Politics*. Princeton: Princeton University Press. 1972.

Hermann, Charles, "International Crisis as a Situational Variable." In *International Politics and Foreign Policy*, edited by James Rosenau. New York: Free Press, 1969.

Hermann, Charles, editor, *International Crises: Insights from Behavioral Research*, New York: Free Press, 1972.

Janis, Irving, *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*, 2<sup>nd</sup> edition, Boston: Houghton Mifflin, 1982.

Janis, Irving, *Crucial Decisions: Leadership in Policymaking and Crisis Management*. New York: The Free Press, 1989.

Uriel Rosenthal, Arjen Boin, and Louise K. Comfort, editors, *Managing Crises: Threats Dilemmas, Opportunities*. Springfield: Charles Thomas. 2001

Uriel Rosenthal, Paul 'T. Hart, and Michael T. Charles, *Coping with Crises: The Management of Disasters, Riots, and Terrorism*. Springfield: Charels C. Thomas, 1989.

Vertzberger, Yaacov, *Risk Taking and Decision Making: Foreign Military Intervention Decisions*. Stanford: Stanford University Press, 1998.