Organizational Resilience Perspective: Facilitating Organizational Adaptation Analysis

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Abstract. The purpose of this paper is to argue that the incorporation of organizational resilience perspective will serve not only to advance the scientific knowledge of organizational adaptation, but also to inform efforts to make up crisis management and help organizations in the face of adversity to build adaptive capacity. Conceptualization of organizational resilience is put forward and comparison of crisis management with organizational resilience perspective is carried out.

Keywords: organizational resilience, organizational adaptation, crisis management.

1. Introduction

The essence of management is coping with change (Chakravarthy, 1982). Understanding how organizations overcome significant adversity and function adaptively has captured the imagination and interest of entrepreneurs and scholars throughout the ages. The incorporation of resilience perspective into the study of organizational adaptation will result in a more sophisticated and comprehensive portrayal of this phenomenon that will serve to advance the scientific knowledge of organizational adaptation and to help organizations promote resilient response in face of adversity and trauma.

In the paper, we conduct a conceptualization on organizational resilience, which includes targeting of organizational resilience research and proposing indicators of organizational resilience. Then, we proceed with comparison between crisis management and resilience perspective to emphasize the main concern of organizational resilience is to build adaptive capacity. Finally, we highlight that organizational resilience can be regarded as emerging insights into organizational adaptation research.

2. Conceptualizing Organizational Resilience

Given that high functioning organizations also have crises, how can we best understand what accounts for strong organizations? What are the organizational hallmarks of success enabling organizations to flourish even under stressful events, whereas others succumb to hazards? Many organization scientists are explaining the phenomenon of rising above adaptation challenges by building organizational resilience; examining positive coping factors rather than deficits.

The concept of the "resilient organization" has gained popularity as a concept that might aid organizational adaptation. Horne and Orr (1998) suggest that resilience is fundamental for organizations to respond productively to significant change that disputes the expected pattern of events without engaging in an extended period of regressive behavior. Lengnick-Hall and Beck (2005) propose that resilience capacity influences an organization's response to environmental change. In the same spirit, Hamel and Välikangas (2003) believe that resilience can help corporations reinvent business models and strategies as circumstances change.

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We argue that, in organizational adaptation area, studies of resilience focus on subgroups of organizations which are at high adversity but somehow avoid unfavorable outcomes (Group4 in Figure1). Furthermore, research of resilience investigates the differences between Group2 (high adversity/unfavorable outcome) and Group4 (high adversity/favorable outcome).

Outcome

	Adversity Low	Adversity High
Unfavorable	Group1: Low adversity Unfavorable outcome	Group2: High adversity Unfavorable outcome
Favorable	Group3: Low adversity Favorable outcome	Group4: *Resilience* High adversity Favorable outcome

Adversity   Low   High

Fig. 1: Targets of organizational resilience research

Organizational resilience is a multidimensional construct at the organizational level that describes the organizational adaptation to adversity. And organizational resilience can be conceptualized from both capacity and process view.

From the capacity perspective, organizational resilience is defined as organizational capability to cope with adversity or trauma. There are three central features of organizational resilience: (1) the ability of organization to absorb or buffer disturbances and still maintain its core functioning; (2) the ability of organization to self-organize; and (3) the capacity for learning and adaptation in the context of change. From the process perspective, organizational resilience is defined as a dynamic process encompassing positive adaptation within the context of significant adversity. So the organizational resilience indicators include (1) disturbance which can be absorbed before, and (2) the rate of recovery from perturbation (see Figure 2). (Figure 2). In this aspect, organizational resilience involves a developmental progression, such that significant environmental change can be perceived quickly, accepted broadly, and adaptive responses implemented early.
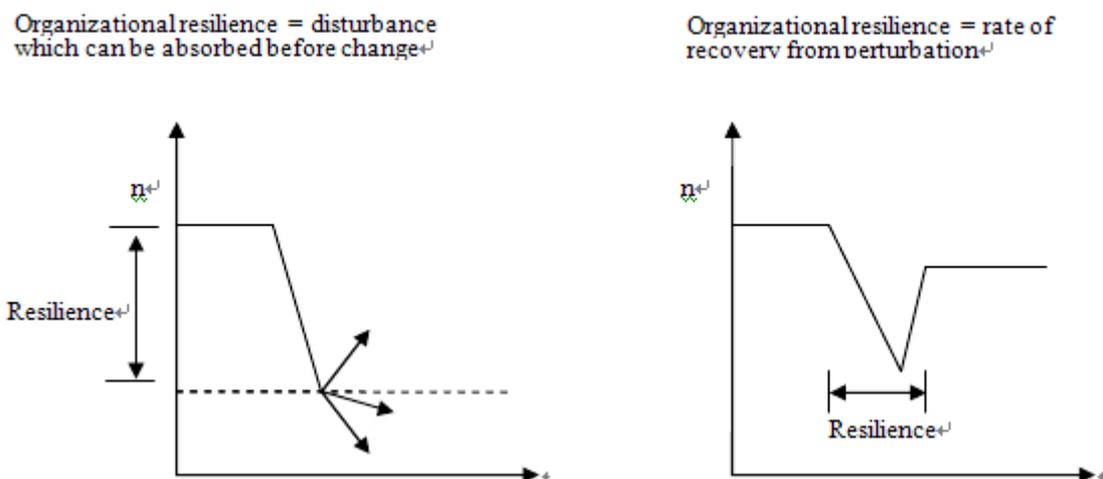
Fig. 2: Indicators of organizational resilience

3. Comparing Organizational Resilience with Crisis Management

After conceptualizing organizational resilience, we compare it with crisis management, which is considered as the main method of coping with adversity and hazards facing organizations for decades.

The essential frames of crisis management and organizational resilience are different, and this difference has important implications for organizations dealing with adversity. In organizational resilience perspective, adaptive the main concerns of organizations are to foster learning in the context of change and uncertainty, such as a willingness to learn from mistakes, engage in organizational development, and encourage organizational flexibility (see Figure 3). As with crisis management, key attributes might be an outcome of slow-moving variables that create stability, such as organizational routine, values, and memory and the critical concern of organization revolves around the maintenance of stability domains.
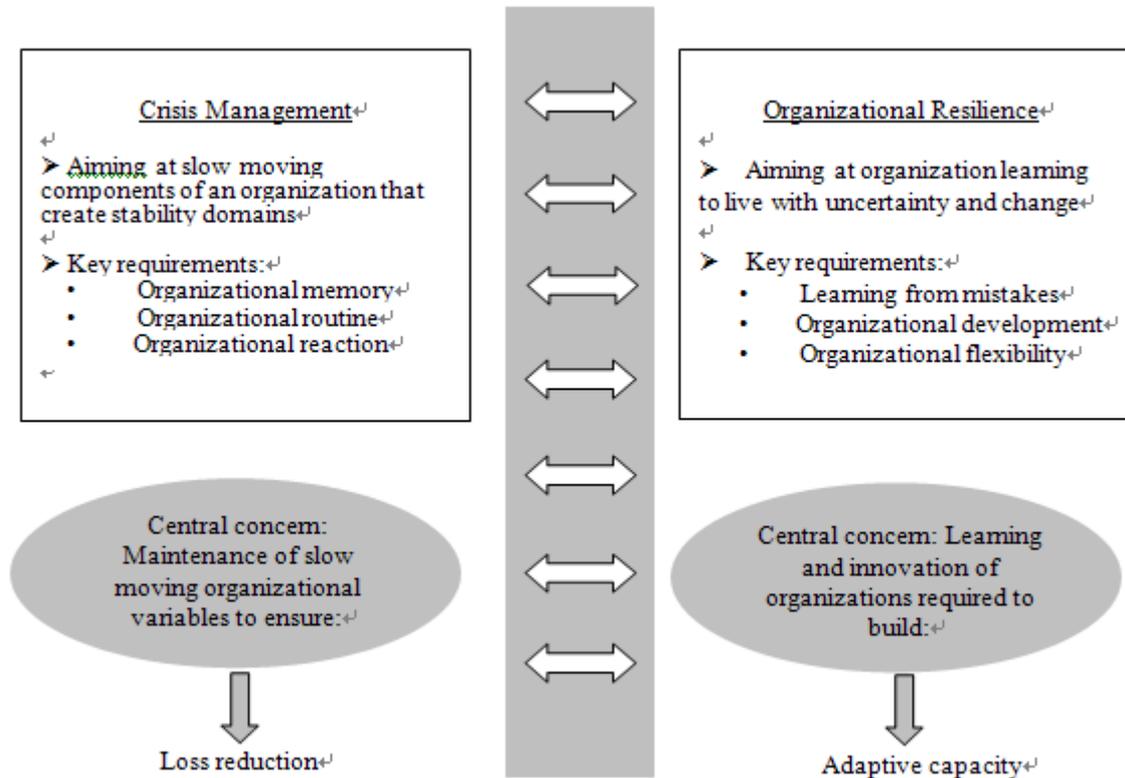
Fig. 3: Comparison of organizational resilience with crisis management

Although crisis management process will reduce loss of organization, organizational sustainability, nevertheless, depend on learning through uncertainty and crises, learning from mistakes in practice, linking different knowledge systems to support learning and adaptation, and collaborating and power sharing in order to promote tight feedback loops and maintain organizational diversity and redundancy. From the perspective of organizational resilience, organizational adaptation urges organizations to promote rather than dampen environmental uncertainty and complexity. On one hand, organizational adaptation requires direct, unfiltered information, erecting barriers to protect a firm from environmental fluctuation may simultaneously prevent the firm from obtaining the information it needs to respond effectively (Lengnick-Hall and Beck, 2005). On the other, organizations will capitalize on environmental change to fuel the development of new capabilities, which can be named as adaptive capacity.

Adaptive capacity refers to the ability of a system (social or ecological) to adapt to change and respond to disturbances, although a number of authors have expanded on this basic concept. For example, Walker et al (2002) defined adaptive capacity as an aspect of capability that reflects learning, flexibility to experiment and adopt novel solutions, and development of generalized responses to broad classes of challenges. Olsson at al (2004) described adaptive capacity as an attribute of socio-ecological systems that permits coping with disturbance and change while retaining critical functions, structures, and feedback mechanisms. Likewise, Adger (2003, p. 32) defined adaptive capacity as the "...ability of a system to evolve in order to accommodate perturbations or to expand the range of variability within which it can cope". We elaborate on the concept and identify four dimensions of adaptive capacity (Figure 4): (1) learning to live with uncertainty

and change by allowing and/or encouraging small scale disturbance events before there is a buildup of pressures leading, inevitably, to some sort of collapse; (2) supporting and promoting diversity and highlighting the positive connection between diversity and redundancy (Williams and O'Reilly, 1998); (3) combining different types of knowledge; and (4) maintaining opportunities for self-organization in the direction of sustainability. The four dimensions are inter-related. For purposes of the organizational resilience discussion, it is essential to recognize the importance of adaptive capacity that emerges out of organization's response to crises and adversity.

Component	Subcomponent
Learning to live with uncertainty, change	· Learn from crises
	· Expect the unexpected
	· Evoke disturbance
Nurture diversity for reorganization and renewal	· Nurture organizational flexibility
	· Sustain organizational development
	· Enhance organizational change
Combine different types of knowledge for learning	· Combine experiential and experimental knowledge
	· Integrate knowledge of structure and function
	· Incorporate process knowledge into institutions
	· Encourage complementarities of knowledge systems
Create opportunities for self-organization	· Recognize relationship between diversity and disturbance
	· Deal with organizational dynamics

Fig. 4: Dimensions of adaptive capacity

4. Contributions of Organizational Resilience Perspective

Resilience perspective is important for the analyses of organizational adaptation. Whereas much of the adaptation literature is focused on reducing vulnerabilities of organizations to identified risks, a resilience approach is concerned with developing sources of resilience in order to create robustness to uncertainty and to maintain the flexibility necessary to respond to change.

Furthermore, because it deals with the dynamics of adaptation, resilience is forward-looking and helps to explore strategic options for organizations' dealing with uncertainty and change. Resilience provides a way for thinking about strategies for future environmental change, an important consideration in a world full of unprecedented hazards and transformations (Folke, 2006).

In the end, as Tompkins and Adger (2004) put it, building resilience into human–environment systems is an effective way to cope with change characterized by future surprises or unknowable risks. Analogously, building resilience into organization also is an effective way to cope with change characterized by adversity, trauma or stresses. As resilience puts the emphasis on the capability of an organization to deal with adversity, it allows for the multiple ways in which an adaptation may occur, including the capability of the organization to adapt to the disturbance, or to learn from it and to reorganize following it.

5. References

[1] Chakravarthy, B.S, Adaptation: A Promising Metaphor for Strategic Management, *Academy of Management Review*, 1982, **7**:35-44.

[2] Folke, C. Resilience: the emergence of a perspective for social–ecological systems analyses, *Global Environmental Change*, 2006, **16**(3): 253–267.

[3] Hamel. G. and Välikangas. L. The quest for resilience, *Harvard business review*, 2003, Sept: 52-63.

[4] Horne, J.F., & Orr, J.E., Assessing Behaviors that Create Resilient Organizations, *Employment Relations Today*, 1998, winter: 29-39.

[5] Lengnick-Hall, C.A., & Beck, T.E., Adaptive fit versus robust transformation: how organizations respond to environmental change. *Journal of Management*, 2005, **31**: 738-757.

[6] Olsson, P., C. Folke, and Hahn.T., Socio-ecological Transformation for Ecosystem Management: The Development of Adaptive Co-management of a Wetland Landscape in Southern Sweden. *Ecology and Society* 2004, **9**(4):2. Available at: http://www.ecologyandsociety.org/vol9/iss4/art2.

[7] Tompkins, E.L. and Adger, W.N. Dose adaptive management of natural resources enhance resilience to climate change, 2004, available at: http://www.ecologyandsociety.org/vol9/iss2/art10.

[8] Walker, B., S. Carpenter, J. Anderies, N. Abel, G. Cumming, M. Janssen, L. Lebel, J. Norberg, G. Peterson, and R. Pritchard. 2002. Resilience Management in Socio-ecological Systems: A working Hypothesis for a Participatory Approach. *Conservation Ecology,* 2002, **6**, Available at http://www.consecol.org/vol16/iss1/art14.

[9] Williams, K., & O'Reilly, C. Demography and diversity in organizations: A review of forty years of research. *Research in Organizational Behavior*, 1998, **20**: 77-140.