

Research on connotation and implication of organizational resilience

---A comparison perspective

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Abstract—Resilience researches can be divided into three levels - micro, meso and macro level. Compared to resilience researches of the macro and micro levels, the organizational resilience researches of the meso level are far less abundant. This paper compares the organizational resilience with the psychological and community/social resilience, and summarizes the common points and differences of the three level researches. Then, the connotation and implication of the organizational resilience are elucidated.

Keywords-psychological resilience; community/social resilience; organizational resilience

I. INTRODUCTION

Modern organizations are in a complex environment. Natural disaster, financial crisis, unstable political situation and other uncertain factors may precipitate the organization into adversity in any time. The organizations which encounter the same environmental adversity have different responses. Some organizations survive after the crisis, some fail, and some develop in the process of dealing with adversities. Many organization practices show that the organizational resilience will influence the organization's long-term performance.

Resilience researches can be classified into three levels: micro, macro and meso-level. Compared to the micro and macro-level researches, the organizational resilience researches of the meso-level are far less abundant. Resilience has become an important topic in psychology and has struck a particularly resonant chord in the popular press. Although organizational resilience emerges as a kind of management fashion, the concept itself lacks a scientific definition.

II. THE MICRO-LEVEL RESILIENCE RESEARCHES

A. The Definition of Psychological Resilience

The current psychological resilience researches have three streams: the trait stream, the process stream and the result stream. The definitions of these three streams are as follows (Tab I).

TABLE I. THE DEFINITION OF PSYCHOLOGICAL RESILIENCE

Stream (Author)	Psychological Resilience
The Trait Stream	
Turner (2001)	Resilience is the capacity to bounce back in the face of adversity and to go on to live functional lives with a sense of well-being[1].
Connor&Davidson (2003)	Resilience embodies the personal qualities that enable one to thrive in the face of adversity[2].
Newman (2005)	Resilience is the human ability to adapt in the face of tragedy, trauma, adversity, hardship, and ongoing significant life stressors[3].
The Result Stream	
Hou,W.K.,et al.(2010)	Resilience denotes maintenance of health levels of psychological functioning in the face of highly disruptive or life-threatening events, not only at a single point in time but also as a stable trajectory across time despite transient perturbations[4].
The Process Stream	
Dyer,McGuinness (1996)	Resilience describes a process whereby people bounce back from adversity and go on with their lives[5].
Butler,Morland,Leskin (2007)	Good adaptation under extenuating circumstances; a recovery trajectory that returns to baseline functioning following a challenge[6].

The trait stream articles conclude the capacity or qualities that make people recover and develop after the crisis. The result stream articles think that healthy levels of physiological and psychological functioning are the outcome of psychological resilience. Healthy functioning may manifest in an absence of psychopathology such as depressive symptoms

This study is sponsored by the National Nature Science Foundation of China(Project No.90924007) , Post-Doctor Science Foundation of China(Project No.20090450605) and Funds of Humanities and Social Science in Ministry of Education(Project No. 10YJC630168)

or a presence of psychological well-being such as positive emotions. The process stream articles propose that the resilience is the interaction process of internal factors and external factors. Masten et al.(1990) ever proposed an integrative framework, viewing the resilience as the combination of the trait, the process, and the outcome/result[7]. However, since this integrative definition is hard to measure, following researches still adopt one of the three perspectives.

B. The Mechanism of Psychological resilience

Psychological mechanism is vital to the human recovery and development from the adversity. Leipold and Greve(2009) propose an integrative framework to clarify the mutual interrelation between person’s trajectories and coping reactions[8]. According to their opinion, a critical life event or a developmental stressor provokes the personal constellation that, by means of regulative processes, determines whether or not the stressor will even be recognized as such, and not be masked by defense mechanisms. If it is perceived as stressful, assimilative and accommodative processes are activated. In the assimilative reaction mode, individuals try to change their life situation or their own behavior toward a better alignment between their normative expectations and goals in relation to themselves. In the accommodative reaction mode, individuals revise standards and goals to the given action possibilities.

III. THE MACRO-LEVEL RESILIENCE RESEARCHES

A. The Definition of Community/Social Resilience

The macro-level resilience researches consist of two streams: the community resilience stream, and the social resilience stream. The definition of community resilience and social resilience are so similar that many scholars don’t differentiate these two concepts. Some representative definitions are listed in Tab II.

TABLE II. THE DEFINITION OF COMMUNITY/SOCIAL RESILIENCE

Author	Community/Social Resilience
Adger(2000)	The ability of communities to withstand external shocks to their social infrastructure [9].
Paton, Johnston (2001)	Community resilience involves ensuring that community members have the resources, capacities and capabilities necessary to utilize these physical and economic resources in a manner that minimizes disruption and facilitates growth [10].
Ganor and Ben-Lavy (2003)	Community resilience is the ability of a community to stick together and to help itself as a group, as well as the families and individuals in its midst [11].
Bruneau, et al.(2003)	The ability of social units to mitigate hazards, contain the effects of disasters when they occur, and carry out recovery activities in ways that minimize social disruption and mitigate the effects of future earthquakes [12].

There are similarities and differences between the community/social resilience and the psychological resilience. They all view the resilience as traits, processes or results. But the subject of community/social resilience is collective entity consisting of different persons, while the subject of psychological resilience is only one person. The functioning context of community/social resilience usually is the natural hazard or other major crisis which all of the community members encounter, while the functioning context of psychological resilience is the individual adversity. Community/social resilience focus more on the utilization of resources owned or accessed by the community or society, while the psychological resilience emphasizes the healthy functioning of individual psychology.

B. The Mechanism of Community/Social Resilience

Norris et al.(2008) studied the community resilience mechanism, and propose that community resilience is a process linking a network of adaptive capacities(resources with dynamic attributes) to adaptation after a disturbance or adversity[13]. Community resilience emerges from four primary sets of adaptive capacities---Economic Development, Social Capital, Information and Communication, and Community Competence---that together provide a strategy for disaster readiness (Fig.1).

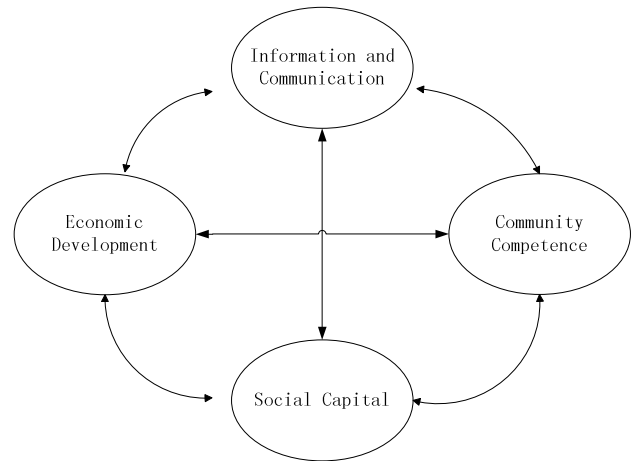


Figure 1. Community resilience mechanism (adapted from Norris et.al.,2008)

Figure 1 shows the four primary sets of networked resources that generate community resilience. There are innumerable possible linkages between elements in these sets. These resources qualify as resilience-resources (adaptive capacities) to the extent they are robust, redundant, or rapidly accessible.

IV. THE CONNOTATION OF ORGANIZATIONAL RESILIENCE

Management consultants propose some ways to enhance the organizational resilience, but management researchers don’t pay corresponding attention to this concept. Until now, management scholars don’t give organizational resilience a scientific definition. Some cross-disciplinary journals published several researcher papers which tried to define

organizational resilience. For example, McManus et al.(2008) define the organizational resilience as a function of an organization's overall situation awareness, management of keystone vulnerabilities, and adaptive capacity in a complex, dynamic, and interconnected environment. This definition focuses on the prevention of crisis (management of keystone vulnerabilities) and the recovery from crisis (adaptive capacity), and neglects organizational development through the crisis.

Based on the comparisons of micro-level and macro-level resilience researches, some common theoretical elements can be concluded, i.e., the subject, the context, the mechanism and the results of resilience. We can compare resilience concept of three levels, and conclude the connotation of organizational resilience (Tab III).

TABLE III. THE CONNOTATION OF ORGANIZATIONAL RESILIENCE

Common Elements	Three-level Resilience		
	<i>Psychological resilience (micro-level)</i>	<i>Community/social resilience (macro-level)</i>	<i>Organizational resilience (meso-level)</i>
Subject	individual	Community /society	organization
Context	Individual adversity, e.g., crisis, traumatic events and continuous pressure	Adversity which all community or society members encounter. Often triggered by major natural disasters and crises.	Adversity which all organizational members encounter.
Mechanism	The interaction mechanism between the adversity and the protective factors.	The utilization of community or society's economic and psychological resources. Emphasis on the collective action.	The organization and its members creatively utilize resources through improvisation.
Results	Individual recovery and development. Healthy psychological state.	Community or society's recovery and development	Organization's recovery and development

The subject of organizational resilience is the organization which is at the meso-level. Organization is consisted of individuals, and the collection of organizations forms community or society. The common context of three-level resilience is adversity. The context of psychological resilience had personal implications, while the contexts of organizational resilience and community/social resilience have the collective meaning, i.e., all members of the organization or the community/society are involved. There are some differences among resilience mechanism of three levels. Psychological resilience of the micro-level mainly focuses on the interactive mechanism between adversity and individual protective factors. The individual protective factors maybe are the personal traits, personal economic resources and human resources. The community/social resilience mechanism involves the utilization of the economic resources, information resources and psychological resources which the community or society owned or accessed. Organization can be classified into the

meso-level. The abundance of the resources which the organization owned or accessed is more than the individual and less than the community or society, and the extent of flexibility of the organization's response action is also at the middle. From the comparison of the three-level resilience concept, we can find there are two major characteristics of organizational resilience. The first characteristic is that the appropriate abundance of resources, i.e., the organization has relatively abundant resources to utilize. The second is the appropriate flexibility of organizational responses during the adversity, i.e., organizational improvisation is indispensable. From the results perspective, the common results of all the three-level resilience are recovery and development. The recovery is the baseline result, and the development is the higher result.

V. THE IMPLICATION OF ORGANIZATIONAL RESILIENCE

A. Implications for organization crisis management

Organization faces multiple risks. Traditional crisis management literatures adopt the prevention perspective which view the risk as harmful and emphasize the prevention of crisis. Once crisis occurs, the recovery viewpoint is dominant in the crisis management. The organizational development in adversity is ignored.

Most crises are uncontrollable and cannot be avoided by the organization. The organization should make the response plan before the crisis happens. "4R" model (Reduction, Readiness, Response, Recovery) proposed by Heath is the classic crisis management model, which pays much attention to the organizational recovery [14]. From the comparison of three-level resilience researches, we found the organizational development should be attached importance to, besides the organizational recovery.

Crisis is like a two-sided sword. It means both danger and opportunity. It's a trend transferring from the preventive measures into more active measures. The focus of crisis management should be that how to improve the organizational cohesiveness and cultivate the trustful atmosphere through the adversity. Organization members in adversity have more pressure to work well, so they will actively seek for any kinds of resources they can access, so the communication channel and the work redesign are more easily accepted by them. Immediate, consistent and active organizational responses help to form the trustful atmosphere, so the collective efficacy and organizational competence will be improved. The dynamic organizational competences achieved in the adversity are not only the foundation of organizational recovery, but also the guarantee of organization development in the long run.

B. Implications for organization strategic management

Organizational strategic management in the dynamic environment should pay attention to the adaptive measures along with the change of environment. Organizational is the composite of competences, processes and results. In the competences level, organizational resilience is dynamic and strategic, which can be improved by the dynamic interaction between the organization and the adversity. Through the organizational improvisation, the innovative competence and

problem-solving skills of organizational members are enhanced, which are hard to imitate by other organizations and help to create the competitive advantage.

Organizational resilience is the strategic competence. As the resilience researches emphasize the interaction mechanism between the subject of resilience and the environment, so the cultivation of organizational resilience is through the interaction between the organization and the adversity. Especially, the resources which already existed but have not uncovered by the organization is important resource base in adversity. Through the interaction, organization actively develops the available and potential resources to enhance the organizational resilience.

The strategy of organizational learning and knowledge management are embodied in the organizational improvisation. As the emergency context is fast-changing, organization and its members should abandon the constraints of experiences and competences in regular contexts. The creative utilization of the resources inside and outside the organization in emergency is beneficial to the escalation of organizational resilience.

REFERENCES

- [1] S.G. Turner, "Social and ecological resilience: Are they related," *Families in Society*, 82(5), pp.441-448, 2001.
- [2] K.M. Connor, J.R.T. Davidson, "Development of new resilience scale: The Connor-Davidson resilience scale (CD-RISC)," *Depression and Anxiety*, 18(2), pp.76-83, 2003.
- [3] R. Newman, "APA's resilience initiative, *Professional Psychology: Research and Practice*, 30(3), pp.227-229, 2005.
- [4] W.K. Hou, C.C. Law, J. Yin, Y.T. Fu, "Resource loss, resource gain, and psychological resilience and dysfunction following cancer diagnosis: A growth mixture modeling approach," *Health Psychology*, 29(5), pp.484-495, 2010.
- [5] J.G. Dyer, T.M. McGuinness, "Resilience: Analysis of the concept," *Archives of Psychiatric Nursing*, 10(5), pp.276-282, 1996.
- [6] L. Butler, L. Mortland, G. Leskin, "Psychological resilience in the face of terrorism," in *Psychology of Terrorism*, B. Bongar, L. Beutler, J. Breckenridge and P. Zimbardo, Eds., New York: Oxford University Press, 2007, pp. 400-417.
- [7] A. Masten, K. Best, and N. Garmezy, "Resilience and development: Contributions from the study of children who overcome adversity," *Development and Psychopathology*, 2(4), pp.425-444, 1990.
- [8] B. Leipold, and W. Greve, "Resilience: A conceptual bridge between coping and development," *European Psychologist*, 14(1), pp.40-50, 2009.
- [9] W. Adger, "Social and ecological resilience: Are they related," *Progress in Human Geography*, 24(3), pp.347-364, 2000.
- [10] D. Paton, and D. Johnston, "Disasters and communities: Vulnerability, resilience, and preparedness," *Disaster Prevention and Management*, 10(4), pp.270-277, 2001.
- [11] M. Ganor, and Y. Ben-Lavy, "Community resilience: Lessons derived from Gilo under fire," *Journal of Jewish Communal Service*, 79(2-3), pp.105-108, 2003.
- [12] M. Bruneau, S. Chang, R. Eguchi, G. Lee, T. O'Rourke, A. Reinhorn, et al., "A framework to quantitatively assess and enhance the seismic resilience of communities," *Earthquake Spectra*, 19(4), pp.733-752, 2003.
- [13] F.H. Norris, S.P. Stevens, B. Pfefferbaum, K.F. Wyche, and R.L. Pfefferbaum, "Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness," *American Journal of Community Psychology*, 41(1-2), pp.127-150, 2008.
- [14] R. Heath, *Crisis Management For Managers And Executives: Business Crises-The Definitive Handbook To Reduction, Readiness, Response And Recovery*. London, London: Financial Times Management, 1998.