

## **Relational And Operational Resilience Capacity At Individual Level: A Scale Development Study**

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### **Extensive Summary**

#### **Introduction**

Resilience means having the capacity to be able to restore to the original form or to adapt/ transform to a more suitable form against disruptive events (Lengnick-Hall and Beck, 2009). In the original usage of resilience concept, the term had a recovery emphasis (Holling, 1973). Later, with a strategic perspective the term evolved to encompass the capacity to change whenever it is required (Hamel and Valikangas, 2003). Resilience capacity demonstrates itself in cases of unpredictable, disturbing crisis situations and adversities. Resilience works against both natural disasters such as earthquakes and tsunamis and human-made events such as accidents and death of a manager. Any kind of unexpected, abrupt and challenging occurrence of events can call for resilience. Organizational resilience involves survival and sustainability of an organization against challenging conditions. Organizational survival indicates coping with crises and restoring pre-crisis performance levels. On the other hand, organizational sustainability means giving adaptation, change or transformation responses to adverse conditions. One main difference between resilience and flexibility is the fact that while resilience is expected to demonstrate itself in unpredictable/ abrupt cases, flexibility is expected to be a part of a system's strategic existence (Lengnick et al., 2011). Moreover; although resilience concept evolved in time to include change, sustainability, transformation and renewal dimensions, flexibility cover only ability to recover and turn back to the original form. With this understanding, we may conclude that resilience is a higher order construct covering flexibility.

Organizational resilience capacity is examined in two dimensions as relational and operational resilience capacity. Operational resilience capacity refers to job-related survival and sustainability abilities, while relational resilience capacity means the ability to sustain and transform the relationship networks both within and the outside of the organization (Yılmaz Börekçi, 2014). There are cognitive, behavioral and contextual

components of operational and relational resilience capacity at the individual level. Organizations support the operational and relational resilience capacities of their employees with various applications.

Relational resilience is generally a concept that emerges from studies related to supply chain management. Relational competencies are said to be able to improve the performance of the supply chain by influencing supply chain management. (Paulraj, Lado and Chen, 2012, Yilmaz Borekci, Rofcanin and Gurbuz, 2015). Organizations are defined as a system of relationships among people who are coordinated to carry out the activities necessary to achieve specific tasks, goals and objectives. These relationships exist within and between the departments, teams, functions and other units that make up the organization. Since they involve complex social interactions and collaborations, relationships can be thought of the nervous system of the organizations (Kahn, Barton and Fellows, 2013). Relations within the organization are realized within a formal and non-formal structure.

Sutcliffe and Vogus (2007) describe the concept of resilience as the ability to make positive adjustments under challenging conditions. Challenging conditions are faults, scandals, crises, shocks, events that stop the progress of the ongoing routine in the organization. Risks that appear harmless may become dangerous and threaten the functioning of the organization as a system (Sutcliffe and Vogus, 2007; Rudolph and Reppenning, 2002).

Organizational resilience capacity is thought to be developed through individual resilience (Lengnick-Hall et. al.,2011). Organizational resilience capacity refers to gaining the knowledge, skills, abilities and routines necessary to survive and if necessary, renew and transform in the face of crises and unexpected events. Organizational resilience is studied in two dimensions as operational and relational resilience. Operational resilience is related to the activities and processes in an organization. Relational resilience is related to business relationships both within and outside the organization. Relational and operational resilience capacity is supported at the individual level by the presence of cognitive and behavioral items such as knowledge, skills, abilities and habits which employees possess. In this study, a measurement tool for assessing relational and operational resilience capacity at the individual level was developed.

## **Method**

In this study, it was aimed to develop a measurement tool that will be used to determine relational and operational resilience capacity at the individual level. During the scale development process, the theoretical background of relational and operational resilience was investigated, an item pool was established, pilot sample was selected and item analyzes were conducted (DeVellis, 2014). Exploratory factor analysis was performed after the items were evaluated, and confirmatory factor analysis was performed on the main study sample.

The concept of resilience is generally studied as a feature of matter in science. In social sciences psychology, education, business and economics, it has been seen that studies on the concept of resilience at the individual level are related with "durability", and "self-recovery power". The concept of "resilience" or "psychological resilience" in the fields of business and economics is generally examined under the name of

"endurance" or "psychological endurance" as a sub-dimension of positive psychological capital. As part of the psychological capital, the psychological endurance / robustness feature seems to be assessed more generally in terms of the individual's ability to cope, survive, and solve problems (Luthans, Avolio and Avey, 2007). On the other hand, organizational resilience capacity refers to work-related activities and business relations within the organization which leads survival and adaptation to unexpected situations. Therefore, general psychological resilience scales for individuals do not contain accurate representations of individual organizational resilience capacity. Some limited amount of measures of organizational resilience are used to measure overall resilience climate of the organization and only from operational perspective (Ponomarov, 2009; Wieland and Wallenburg, 2013). Therefore, it was decided to develop a scale for examining the relational and operational resilience capacity at the individual level.

### **Findings**

Exploratory factor analysis (EFA) was conducted after the items were evaluated and confirmatory factor analysis (CFA) was performed on the main study sample. EFA results showed that the scale structure consisting of 4 factors and 18 expressions was obtained on the pilot study sample consisting of 208 participants. Factors emerging from the EFA were called "operational resilience survival dimension", "operational resilience sustainability dimension", "relational survival survival dimension" and "relational resilience sustainability dimension". Hence, it was seen that the results of the EFA were in the same direction as the theoretical background of relational and operational resilience. The chi-square value ( $\chi^2$ ) 183,57 (sd = 129, p <0,01) and the ratio of the chi-square value to the degree of freedom ( $\chi^2 / sd$ ) obtained from CFA on the main sample of 206 participants. RMSEA index was 0.050; standardized RMR index was 0.025; NNFI index was 0.98; NFI index was 0.96; IFI index was 0.99; CFI index was 0.99 and GFI index was 0.90 and all the indices were found to be in acceptable fit. Model fit indices were interpreted as in acceptable fit. Thus, scale structure was confirmed with CFA.

### **Results**

In the face of uncertainty, volatility and turbulence in today's business environment, there is a need for individuals with resilience capacity who will be able to manage crises and stress, gain experience for new challenges. With the scale developed in this study, it is thought that the organizations will be able to measure their current relational and operational resilience capacities, observe their current situation and perform necessary development activities.

The findings of this study are limited to the data obtained in study samples. In future studies it may be suggested to retest the scale on different samples.