Effects of Resilience on Productivity under Authentic Leadership

Cemal Zehira\textsuperscript{a}, Elif Narcikara\textsuperscript{b}\textsuperscript{*}

\textsuperscript{a}Yildiz Technical University, Istanbul, 34220, Turkey
\textsuperscript{b}Istanbul Medipol University, Istanbul, 34220, Turkey

Abstract

Flexible, storable and convertible dynamic capabilities ensures resilience in organizations and make them powerful in coping with problems and crises. In organizational level a resilient leadership is a prerequisite of resilient organizations. According to positive psychology and positive organizational literature authentic leadership is a suitable leadership model for resilient organizations with high levels of organizational efficiency. In this study we are specifically focusing on authentic leadership style, which is the most famous leadership style among positive organizational scholarship researchers, its effects on resilience of employees and individual productivity.

Keywords:

1. Introduction

Understanding the dynamics of resilience has assumed greater urgency and normative currency in the face of increasing terrorism, threat of war, recession, and a host of other recent sociopolitical, technological, and economic trends (Cameron & Dutton, 2013: 112). A resilience perspective promotes a new way of seeing, by arguing that organizations are more efficacious than threat rigidity and other deterministic perspectives allow (Cameron & Dutton, 2003: 112). Although leadership has always been more difficult in challenging times, but the unique stressors facing organizations throughout the world today call for a renewed focus on what constitutes genuine

\* Corresponding author. Tel. + 90-216-544-66-66  fax. + 90-216-339-44-44
Email address: enarcikara@medipol.edu.tr
leadership (Avolio and Gardner, 2005) and need for authentic leadership has became obvious. Given the various “shocks to the system” commonly faced today by organizational members, including severe financial setbacks, obsolescence, downsizing, rapid technological advances, workplace violence, and acts of terrorism, their ability to withstand and bounce back from such sudden and dramatic changes is becoming increasingly important. Crisis, wars, terrorist attacks and social problems resulted in a new focus on restoring confidence, hope, and optimism.

Developmental psychologist such Ann Masten often refer to resilience as “ordinary magic.” Once thought to be a rare attribute of individuals, resilience is now seen as a common strength of “ordinary” people that arises from basic human adaptive systems. As long as these systems are protected and functional, human development is robust—even when confronted with severe adversity. (Gardner ve Schermerhorn, 2004).

2. Literature Review and Hypothesis

2.1 Resilience

During the course of a normal life span, almost everyone is confronted with at least one or more times a very painful or stressful event (for ex. death of a relative, loss of a friend, physical or sexual assault or a life-threatening traumatic event). But luckily, although number of these traumatic events are quite high, only a relatively small number of people experience severe psychological illnesses (PTSD; American Psychiatric Association, 2000). In this point psychological resilience plays an important role in determining individuals power to resist difficulties in life. Resilience is, "successful adaptation to life tasks in the face of social disadvantage or highly adverse conditions" (Garmezy, 1993; Fin 1997) and maintenance of positive adjustment under challenging environmental and interior conditions such that the organization emerges from those conditions strengthened, more powerful and more resourceful (Vogus ve Sutcliffe, 2007). It is more than a specific adaptation. It is increases probability of adaptation, competence in one period increases the probability of competence in the next. (Vogus ve Sutcliffe, 2007) Moreover, resilience requires both a judgment that an entity is “doing okay” or “better than okay” with respect to a certain set of expectations for behavior, as well as a judgment that an entity has faced extenuating circumstances that posed a threat to good outcomes (Masten & Reed, 2002: 75).

In individual level resilience is directly proportional to positive emotions of individuals. Individuals who report resilience present zestful and energetic approaches to life, and they are curious and open to new experiences (Masten, 2001; Tugade, vd. 2004). Resilient individuals not only cultivate positive emotions in themselves, but also they transmit positive emotions to others as well, which creates a supportive social network to aid in the coping process (Tugade, vd., 2004). They have the ability to continue fulfilling personal and social responsibilities and to embrace new tasks and experiences (Bonanno, 2007).

Resilience is more likely when individuals have access to a sufficient amount of high quality resources such as human capital, social capital, emotional capital and material capital that they make individuals develop competence. And it is more likely to occur when individuals have experiences that allow them to encounter success and build self-efficacy that motivate them to succeed in their future endeavors (Masten & Reed, 2002).

2.2. Organizational Resilience

In organization theory, resilience refers to (1) the ability to absorb strain and preserve functioning despite the presence of adversity or (2) the ability to recover or bounce back from untoward events. Resilience from a developmental perspective does not merely emerge in response to specific interruptions or jolts, but rather develops over time from continually handling risks, stresses, and strains. (Sutcliffe ve Vogus, 2003).

There are two different perspectives on what organizational resilience means. First view resembles the definition of resilience in physical sciences, according to this view organizational resilience is simply an ability to rebound from unexpected, stressful, adverse situations (Gittell, Cameron, Lim, & Rivas, 2006; Sutcliffe & Vogus, 2003). The second perspective on resilience includes the development of new capabilities and an expanded ability to create and catch new opportunities (Freeman, Hirschhorn, & Maltz, 2004; Layne, 2001; Lengnick-Hall & Beck, Legninck,
2011). This second perspective goes beyond bouncing back and results in building new capabilities necessary for building a successful future (Layne, 2001; Lengnick-Hall & Beck, Legninck, 2011). In an organization’s overall competence and growth, enhancing the ability to learn and to learn from mistakes, enhancing the ability to quickly process feedback and rearranging processes to transfer knowledge and resources to deal unexpected situations are all important factors for building resilient organizations (Weick, Sutcliffe, & Obstfeld, 1999: 117). In fact Organizational resilience results from enhanced competencies, enhanced mindfulness and new ways for deployment of resources. as well as processes that enhance capabilities to recombine and deploy resources in new ways (Weick, Sutcliffe, & Obstfeld, 1999: 117).

Organizational resilience contributes to the development of organizations in many areas. It enhances firm product innovativeness by increasing the exploitation of ideas and information/knowledge. For example, people or departments refine existing ideas and information/knowledge and recombine them; they then transfer them into new practices during the product development process (Akgün ve Keskin, 2014). Resilience capacity also fosters prosocial behaviors, which occur when individuals or departments behave in ways that benefit other people/departments, to improve product development efforts (Batson 1994).

2.3 Psychological Capital

Because of the ever-challenging work environment, organizations are increasingly recognizing the importance of positivity and concentrating on developing employee strengths, rather than dwelling on the negative and trying to fix employee vulnerabilities and weaknesses (Avey, Luthans & Jensen, 2009). Positive organizational behaviour especially focuses on positive sides and strengths of individuals and organizations. One of the most important concepts of Positive Organizational Behaviour is Psychological Capital. The integration of hope, efficacy, resilience, and optimism represents the core construct of PsyCap. This PsyCap is identified by these four positive psychological resources (Avey, Luthans & Youssef, 2010) and characterized by: (1) having confidence (self-efficacy) to take responsibility and achieve challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope); and (4) when problem occurs, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans, Youssef, et al., 2007, p. 3). In Psychological Capital literature, resilience is accepted as the “developable capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility” (Luthans, 2002).

2.4 Authentic Leadership vs. Resilience

Authenticity as a construct dates back to at least the ancient Greeks, as captured by their timeless admonition to “be true to oneself” (Harter, 2002). As theoretically defined and operationalized by social psychologists, authenticity is associated with advanced levels of cognitive, emotional, and moral development (Deci & Ryan, 2000). Current conceptions of authentic leadership reflect their conceptual roots in positive psychology and adopt a more positive focus on what constitutes authentic leadership development (Luthans & Avolio, 2003).

According to positive psychology literature (Cameron, Dutton, & Quinn, 2003; Seligman, 2002; Snyder & Lopez, 2002), authenticity can be defined as owning one’s personal experiences, be they thoughts, emotions, needs, wants, preferences, or beliefs, processes captured by the injunction to know oneself (Harter, 2002). Avolio, Luthans, and Walumbwa (2004, p. 4) define authentic leaders as those who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others’ values/moral perspectives, knowledge, and strengths; aware of the context in which they operate; and who are confident, hopeful, optimistic, resilient, and of high moral character (as cited in Avolio, Gardner et al., 2004). Authentic leadership theory includes an in-depth focus on leader and follower self-awareness/ regulation, positive psychological capital, and the moderating role of a
positive organizational climate (Avolio ve Gardner, 2005, sf 329). In organizational context authentic leadership draws its roots from both positive psychological capacities and a highly developed organizational context, and this combination gives way to greater self-awareness and self-regulated positive behaviors on the part of leaders and associates and contributes to positive self-development (Gardner, et al., 2005, sf 345).

The first task of the authentic leader is building their followers self-efficacy, by expressing confidence and trust in their followers authentic leaders make their followers recognize their own capabilities (Gardner ve Schermerhorn, 2004). The second task of the authentic leader is to create hope. According to Luthans, people with high levels of hope tend to be more certain about and challenged by their goals, more likely to value goal progress and goal attainment, more adaptable to change, more adept at forming new and cooperative relationships, and more emotionally stable in stressful and evaluative situations and Luthans’ preliminary research suggests that the work units of more hopeful managers have higher profits, more satisfied employees, and lower turnover (Gardner ve Schermerhorn, 2004, sf 275). In fact, a resilient organization is a hopeful system because hope is a confidence grounded in a realistic appraisal of the challenges in one’s environment and one’s capabilities for navigating around them (Groopman, 2004) thus promoting hope is a very important point that makes authentic leadership necessary for a resilient organization. The third task of the authentic leader is to raise optimism. There is a two-step mechanism by which authentic leaders influence followers’ optimism, namely by first identifying with followers and then evoking followers’ positive emotions. (Avolio, vd., 2004, sf 814). Such leaders are able to interpret information, exchanges, and interactions with followers from a positive perspective, thus evoking positive emotions. Work by Grossman (2000) also suggests that leaders who understand emotions appear to motivate followers to work more effectively and efficiently. Moreover, because optimism can be acquired through modeling (Peterson, 2000), we suggest that one way authentic leaders can influence their followers’ optimism is to increase follower identification with the leader by modeling desired positive emotions, leading to realistic optimism, which in turn fosters positive attitudes and high levels of performance (Avolio et al., 2004; Luthans & Avolio, 2003). The fourth task of the authentic leader is strengthening resilience, they achieve this by giving support when needed (1) helping their followers to recover from adversity, and (2) by not only withstanding but also thriving when faced with high levels of positive change. In fact authentic leaders have high levels of awareness regarding potential adversities and can make contingency plans to support and help employees to cope with these adversities (Gardner ve Schermerhorn, 2004).

In this study, Walumbwa et al., (2008)’s definition of authentic leadership has been used as a framework. According to Walumbwa et al. (2008) authentic leadership is a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development.

Self-awareness refers to demonstrating an understanding of how one derives and makes meaning of the world and how that meaning making process impacts the way one views himself or herself over time and understanding of one’s strengths and weaknesses and the multifaceted nature of the self (Walumbwa, et al., 2008). Relational transparency refers to presenting one’s authentic self to others. Whereas balanced processing refers to leaders who show that they objectively analyze all relevant data before coming to a decision, internalized moral perspective refers to an internalized and integrated form of self-regulation (Ryan & Deci, 2003).

In order to investigate the relationships between Authentic leadership, Psychological Capital and productivity three hypothesis have been used.

Hypotheses:

H1: There is a significant relationship between Resilience and Productivity.
H2: There is a significant relationship between Authentic Leadership and Resilience
H3: There is a mediating effect of Resilience on the relationship between authentic leadership and productivity.
3. Methodology

3.1 Research Goal

At the individual level, there is growing evidence that an authentic approach to leadership is desirable and effective for advancing the human enterprise and achieving positive and enduring outcomes in organizations (George, 2003).

In this study as in the case considering performance (Ryan & Deci, 2001) in extant literature, it is suggested that when organizational leaders know and act upon their true values, beliefs, and strengths, while helping others to do the same, higher levels of employees’ well-being will accrue, which in turn have been shown to positively impact follower productivity.

On the other hand exploring the intersection of POB with the emerging literature on transformational/full range leadership development and moral/ethical leadership, the construct of authentic leadership encouraged us to see the relationship between authentic leadership and resilience one of the least studied dimension of psychological capacities.

In this study we focused on the relationship between authentic leadership and resilience and their effect on productivity, being inspired by the extant literature claiming that authentic leaders capitalize on individual resilience by ensuring that others have the support they need to (1) recover from adversity, and (2) not only withstand but thrive when faced with high levels of positive change (Gardner and Schermerhorn, 2004).

3.2 Sample and Data Collection

In this study specifically the relationship among authentic leadership, psychological capital and productivity will be investigated. Walumbwa et al. (2008) Authentic Leadership Questionnaire with 4 dimensions (Transparency, Internalized Moral Perspective, Balanced Processing, Self-Awareness) and 16 questions has been used for measuring Authentic leadership level of leaders, in order to measure psychological capital Luthans (2007) 4 dimensions (hope, optimism, resiliency, self-efficacy), 24 questions have been used and 5 items that measures productivity have been borrowed from Fry (2003)’s spiritual leadership theory.

Related survey has been applied to 693 white collar employees working in private sector with more than 1000 employees. In collecting randomly chosen applicants have been used. 1000 questionnaires have been sent and 645 usable responses have been obtained by making face to face interviews. Data of the research have been analyzed by using SPSS 20.00 (Statistical Package for Social Sciences) for Windows.

3.3 Research Model:

![Figure 1. Research Model](image-url)
3.4 Statistical Analysis

Table 1. Factor Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>% of Variance</th>
<th>Cronbach's alfa</th>
</tr>
</thead>
<tbody>
<tr>
<td>al_selfaw_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,67</td>
<td>0,81</td>
</tr>
<tr>
<td>al_selfaw_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,612</td>
<td></td>
</tr>
<tr>
<td>al_selfaw_3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,757</td>
<td></td>
</tr>
<tr>
<td>al_selfaw_4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,638</td>
<td></td>
</tr>
<tr>
<td>al_balancedp_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,727</td>
<td>0,884</td>
</tr>
<tr>
<td>al_balancedp_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,8</td>
<td></td>
</tr>
<tr>
<td>al_balancedp_3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,722</td>
<td></td>
</tr>
<tr>
<td>al_balancedp_4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,79</td>
<td></td>
</tr>
<tr>
<td>al_inmp_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,692</td>
<td>0,739</td>
</tr>
<tr>
<td>al_inmp_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,71</td>
<td></td>
</tr>
<tr>
<td>al_inmp_3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,765</td>
<td></td>
</tr>
<tr>
<td>al_inmp_4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,581</td>
<td></td>
</tr>
<tr>
<td>al_trans_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,708</td>
<td>0,841</td>
</tr>
<tr>
<td>al_trans_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,763</td>
<td></td>
</tr>
<tr>
<td>al_trans_3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,718</td>
<td></td>
</tr>
<tr>
<td>sl_product_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,695</td>
<td>0,884</td>
</tr>
<tr>
<td>sl_product_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,797</td>
<td></td>
</tr>
<tr>
<td>sl_product_3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,832</td>
<td></td>
</tr>
<tr>
<td>sl_product_4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,815</td>
<td></td>
</tr>
<tr>
<td>sl_product_5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,824</td>
<td></td>
</tr>
<tr>
<td>psycap_resilience_1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,743</td>
<td>0,818</td>
</tr>
<tr>
<td>psycap_resilience_2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,787</td>
<td></td>
</tr>
<tr>
<td>psycap_resilience_3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,663</td>
<td></td>
</tr>
<tr>
<td>psycap_resilience_6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,79</td>
<td></td>
</tr>
<tr>
<td>psycap_resilience_5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,755</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Total variance was % 69.9 after factor analysis. KMO and Barlett analysis show that since KMO score is under 0.925, it is 0.914 and Barlett score is under 0.001 significance level, so it was meaningful to make factor analysis.

According to correlation analysis all factors are related to each other in 1/1000 significance level. The strongest correlation relationship resides in the relationship between balanced processing and self awareness (r=0.651; p = 0.000 <0.001). For the details you can see the correlation matrix.
In testing hypothesis of the study, we used path analysis method based on structural equation model. In path analysis new variables developed by calculating arithmetic averages of research variables have been used. Since the total effect of authentic leadership on resilience and productivity is investigated. Dimensions of authentic leadership (self awareness, balanced processing, internalized morality, transparency) and authentic leadership measurement model has been designed as in the following. Since our AVE (average variance extracted) values and CR (composite reliability) values are satisfactory our model’s validity and reliability has been ensured (Fornell and Larcker, 1981).

As a result of path analysis it was inferred that both authentic leadership (B; 0.258; p<0.001) and resilience (B;0.217; p<0.001) effects productivity positively and meaningfully thus H1 and H2 has been supported. We also conducted a series of analyses in order to understand the availability of mediator effect of resilience in the relationship between authentic leadership and productivity. Whereas in model 1 where mediator is not included, authentic leadership effects productivity positively (B; 0.477; p<0.001), when mediator is used in the model this effect has been decreased but not disappeared (B;0.417; p<0.001) thus it can be inferred that there is a partial mediator effect of resilience between authentic leadership and productivity. (Baron and Kenny, 1986). And in % 95 confidence level authentic leadership’s indirect effect on productivity has been demonstrated thus H3 is accepted.
4. Conclusion and Recommendations

Previous theory building has indicated that authentic leaders can influence follower performance (e.g., Lord & Brown, 2004, Wang, et al., 2014). Leading by example demonstrates a leader’s commitment to his or her work and provides guidance to followers about how to remain emotionally and physically connected and cognitively vigilant during work performance (Wang, et al., 2014). Walumbwa et al. (2010) argued that ethical behaviors of authentic leaders are likely to guide their followers because of their attractiveness and credibility as role models.

When extant literature is examined we see that Walumbwa et al. (2008, 2010, 2011) found that AL behavior is positively related to supervisor-rated job performance, organizational citizenship behavior, and work engagement and George (2003) found that authentic leaders motivate followers by means of modeling and transferring a deep sense of responsibility to thrive long term goals.

Our study supported the extant literature by proving with a considerable important sample in Turkish context, the availability of a meaningful relationship between authentic leadership and the mediating effect of resilience in this relationship.

References


Fredrickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it’s good to feel good. American scientist, 91(4), 330-340.


leadership theory and practice: Origins, effects, and development, 387-406.


Masten, A. S., & Reed, M. G. J. (2002). Handbook of positive psychology. Handbook of positive psychology.


