The Analysis of Relationship between Self-Leadership Strategies and Components of Quantum Organization at Universities

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Abstract
Leadership plays an important role in flourishing of organizations. Now, more than ever, leaders must play the key role in helping organizations cope with the challenges they face from psychological matters. The purpose of this research was to study relationship between self-leadership strategies and components of quantum organization at universities. The research hypotheses were examined while considering self-leadership strategies based on demographic variables (field of study, scientific degree, and employment status). This study was conducted using the correlation method. The statistical population consisted of 1899 faculty members in the University of Tehran and University of Isfahan in academic year 2012 till 2013; from the 1899, 228 were chosen by using stratified randomized sampling. The information gathering tools were self-leadership questionnaire with 28 items and researcher-made quantum organization questionnaire with 27 items were distributed to targeted population. Out of 228 questionnaires we received 210 completed questionnaires. This represents a response rate is quite suitable for this type of study. The results indicate that self-leadership strategies and components of quantum organization are bigger than average and there is a significant relationship between self-leadership strategies and component of quantum organization at universities.

Keywords: Self-Leadership, Quantum Organization, University, Faculty Members, Higher Education
Introduction

In this age of change (because change is inevitable) nothing seems to be foreseen. Quantum organization is not a simple post-modern theory it is a new paradigm and evidence of reaching prosper in new age.

The organization of quantum age relies upon the emergence of unique solutions, ideas, and insights through the sharing of all members aligning their individual skills sets, talents, insights, personal experiences, and individual identities with the values and goals of the organization. Most organizations accept mediocre performance from individuals as well as from the organization itself, but quantum organizations are completely oblivious about the results they could achieve with desirable behavior patterns institutionalized with in the organization.

The components of quantum organization as quoted by Deardorff and Williams (2006) are:

**Trust:** The inclusion into communities-of- practice, with a sense of openness to self-awareness and personal courage.

**Values:** A perspective of Ownership, based upon positive values established from unquestioned integrity, accountability for the self actions of the members.

**Thinking together:** The ability to fully leverage synergy and exponential thought (realizing magnitudes more value from the output [ideas] through collective thought and problem solving).

**Dialog:** An open consciousness in communication, a self-presence and the ability to move through Paradigms

**Learning:** The ability to experience single loop, double loop and quantum learning.

**Spirit:** A vision which is perceivable, the understanding of personal balance and the practice of Stewardship.

What makes this Journey different from previous one’s is that none of the paths of the six interconnected features is the wrong path – they are all moving together, evolving and growing with the enterprise into a positive experience.

Is known that the leadership role is crucial to moving an organization forward in a positive direction. Effective leadership in a quantum organization requires new skills and behaviors from a managerial perspective (leader-manager). In this study is argued about organizational environment and leadership in higher education.

The increased complexity of the leadership role in the higher education Environment has gained attention as a subject for study over the past ten years (Cohen, 2004, Knight & Trowler, 2001). Kezar and Eckel (2002) suggest that academic leader should create leaning environments that include cultural awareness, strategic thinking, engagement, and a sense of collective identity as collaborators in developing knowledge and active investigators into practice. In fact, these traits suggested for prosper of higher education are what is planed in organizations of quantum age. Academic leader should be skilled facilitators who encourage interdisciplinary collaboration, collective responsibility, cultural change, and an interest in the public good. They lead via partnerships and teams in systems that are web-like and non-hierarchical. Aguirre and Martinez (2002) argue that universities should understand the importance of understanding the current culture and values of the organization, as well as locating the levers of change, creating a leaning environment, building relationships and interconnections, valuing diversity and inclusion, and sharing power.
In addition, Southwell and Gilding (2004) recommended in their dissemination strategies the need to: develop and support leadership and management capacity building programs that incorporate a distributed and multi-level concept of leadership practice in the higher education sector. In order for a new generation to lead universities, we need to prepare them to take on leadership roles for a very different higher education system (Knight & Trowler, 2001). It is proposed from this study that engaging new leadership style to achieve organizational change has never been more critical in universities. Self-leadership appears to have impressive potential for application in today’s dynamic organizations (Houghton, 2008).

Self-leadership (Manz & Neck, 1999) is a process through which people influence themselves to achieve the self-direction and self motivation necessary to behave and perform in desirable ways. This process of self-influence is facilitated through the use of both behavioral and cognitive strategies. Self-leadership strategies may be divided into three primary categories: behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies (Manz & Neck, 1999; Prussia et al., 1998). Behavior-focused strategies heighten self-awareness and facilitate personal behavioral management through methods such as self-goal setting, self-reward, self-punishment, self-observation, and self-cueing (Neck & Houghton, 2006). The Self-observation involves focusing on an individual’s awareness of how, when, and why they engages in specific behaviors. This type of self-awareness is a necessary first step toward changing or eliminating ineffective or unproductive behaviors. With accurate information regarding current behavior and performance levels, individuals can more effectively set effective behavior altering goals for themselves (Manz & Neck, 2004).

Rewards set by an individual along with self-set goals, can aid significantly in energizing the effort necessary to accomplish the goals (Mahoney & Arnkoff, 1978). Self-rewards may be simple or intangible such as mentally congratulating oneself for an important accomplishment, or more concrete like a special vacation at the completion of a difficult project. Self-punishment or self-correcting feedback can consist of a positively framed and introspective examination of failures and undesirable behaviors leading to the reshaping of such behaviors. However, the excessive use of self-punishment involving self-criticism and guilt can be detrimental to performance and should be avoided (Manz & Sims, 2001). Finally, concrete environmental cues can serve as an effective means of encouraging constructive behaviors and reducing or eliminating destructive ones (Manz & Sims, 2001). Lists, notes, screensavers, and motivational posters are just a few examples of external cues that can help keep attention and effort focused on goal attainment. Thus behavior-focused self-leadership strategies are designed to encourage positive, desirable behaviors that lead to successful outcomes, while suppressing negative, undesirable behaviors that lead to unsuccessful outcomes.

Natural reward strategies help people build pleasant and enjoyable features into their activities so that the tasks themselves become naturally rewarding (Manz & Neck, 2004). Natural reward strategies increase intrinsic motivation, self-determination, and feelings of competence (Neck & Houghton, 2006).

Constructive thought strategies create positive habitual ways of thinking and negative destructive self-talk is replaced by optimistic self-talk (Neck & Houghton, 2006). Constructive thought strategies can change thinking patterns (Prussia et al., 1998) and positively impact outcome expectations (Manz & Sims, 2001).
Constructive thought pattern strategies are designed to facilitate the formation of constructive thought patterns and habitual ways of thinking that can positively impact performance (Manz & Neck, 2004). Constructive thought pattern strategies include identifying and replacing dysfunctional beliefs and assumptions, and practicing mental imagery and positive self-talk. Individuals should first examine their thought patterns, confronting and replacing dysfunctional irrational beliefs and assumptions with more constructive thought processes (Neck & Manz, 1992). Negative and destructive self-talk should be identified and replaced with more positive and enabling internal dialogues. Self-talk is defined as what people covertly tell themselves (Neck & Manz, 1996) and involves mental self-evaluations and reactions (Ellis, 1977; Neck & Manz, 1992). By carefully analyzing self-talk patterns, negative or pessimistic self-talk can be suppressed or eliminated and replaced with more optimistic self-dialogues (Seligman, 1991). Finally, mental imagery is the symbolic and covert cognitive creation of an experience or task prior to actual overt physical muscular movement (Neck & Manz, 1996). Individuals who envision successful performance of an activity in advance of actual performance are more likely to perform successfully when faced with the actual task (Manz & Neck, 2004).

The overall research concept is that modern organizations, such as universities, face unprecedented challenges in today’s fast-paced, high-tech, information-based competitive environments. As more and more organizations move toward decentralized, organic-type organizational structures, organizational members at all levels are being encouraged to take greater responsibility for their own job tasks and work behaviors. This trend toward more flexible and decentralized organizational forms has focused attention on a variety of participatory management concepts such as thinking together, dialog, learning environment and other component of organization of quantum age.

Related & similar research
Shipper and Manz (1992) presented a case study of W. L. Gore and Associates in which they suggested that self-management and self leadership techniques were a central part of the empowerment efforts within that organization.
Self-leadership strategies are likely to facilitate empowerment by enhancing perceptions of meaningfulness, purpose, self-determination, competence and self-efficacy (Lee & Koh, 2001). Neck and Manz (1996) found significantly higher levels of self-efficacy in a group of employees trained in self-leadership strategies as compared to a no-training control group. Subsequently, Prussia et al. (1998) demonstrated a direct significant relationship between self-leadership behaviors and self-efficacy perceptions, with self-efficacy fully mediating the relationship between self-leadership and performance.
Robert and Foti (2002) analyzed the relationship between “self leadership, job structure and their relationship with job satisfaction. Job satisfaction level was high in two groups of the personnel, 1- those who had a high self leadership ability working in a weakly structured environment and 2- those who had low levels of self leadership ability working in a highly structured environment. Therefore if individuals with high self leadership work in highly structured environments, their job satisfaction considerably drops. Studies show that organizations cannot reach their purposes unless both the organizational and personnel purposes are met.
Phelan and Young (2003) specifically talked about creative self-leadership, which refers to a reflective internal process by which an individual consciously and constructively navigates her or his thoughts and intentions towards the creation of desired changes, improvements and innovations. Phelan and Young (2003) found a significant relationship between self-leadership and creativity.

Pearce (2004) argued that self-leadership is necessary in those organizations that need continuous innovation.

According to Houghton and Yoho (2005), self-leadership may mediate the influence of an organization’s leadership style on the creativity of its members. When employees are encouraged to lead themselves in defining problems, solving problems, making decision, and identifying opportunities and challenges both now and in the future, their creativity is encouraged.

Powell (2007) in his mixed method study explored the relationship between organizational leadership and strategic direction of organization. The specific conclusion evolved from the study: adoption of a positive orientation to install trust and commitment, creating a learning environment that foster both individual and organizational growth, and never stop providing meaningful communication.

Justice (2007) studies how leader in work organization influenced the values of subordinates. He fined that having good communication with people was important to motivate collective work, and provide trust and meaningful environment.

Elloy (2009) started working on the relationship between self leadership behaviors and organizational variables in a self management work team’s environment. He found that what we can do to improve the efficacy of self performing teams is creating a climate of trust, boosting team interactions, giving feedbacks, rewarding, creating noble behaviors and making decisions.

Hypotheses
H1: self-leadership strategies (behavior-focused, natural reward and constructive thought) and components of quantum organization are bigger than average.
H2: There is a significant relationship between self-leadership strategies (behavior-focused, Natural reward and Constructive thought) and components of quantum organization at university.
H3: There is a significant difference between self-leadership leadership strategies and components of quantum organization at university in terms of demographic variables (scientific degree, field of study, and employment status).

Methodology
This study was conducted using the correlation method. Correlation research method is the ability to prove a positive or negative correlation between two subjects (Dellavar, 2007). The statistical population consists of 1324 individuals from the faculty members of selected public Universities of Isfahan and Tehran. The sample was selected by stratified randomized sampling proportional to the volume of 228 respondents.
The tools for gathering data was a self-leadership strategies questionnaire with 28 items and quantum organization questionnaire with 27 items based on five-point scale (1= disagree completely and 5= agree completely). In total, 210 questionnaires were circulated to targeted population. Out of 228 questionnaires we received 210 completed questionnaires. This response rate is quite suitable for this type of study. By using Alpha Cronbach coefficient, reliability coefficients were obtained equal to 0.87 for self-leadership strategies questionnaire and 0.9 for quantum organization questionnaire. Also, both questionnaires were confirmed by 30 faculty members in the university in terms of content validity. The analysis of the data was performed in inferential level (correlation coefficient, regression, ANOVAs and t-test), using SPSS16 statistical software.

**Finding**

H1: self-leadership strategies (behavior-focused, natural reward and constructive thought) and quantum organization are bigger than average.

<table>
<thead>
<tr>
<th>Variables</th>
<th>df</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-leadership strategies</td>
<td>209</td>
<td>3.92</td>
<td>0.32</td>
<td>41.87</td>
<td>.000</td>
</tr>
<tr>
<td>behavior-focused</td>
<td>209</td>
<td>4</td>
<td>0.31</td>
<td>47</td>
<td>.000</td>
</tr>
<tr>
<td>natural reward</td>
<td>209</td>
<td>3.88</td>
<td>0.37</td>
<td>34.9</td>
<td>.000</td>
</tr>
<tr>
<td>constructive thought</td>
<td>209</td>
<td>3.9</td>
<td>0.45</td>
<td>28.2</td>
<td>.000</td>
</tr>
<tr>
<td>quantum organization</td>
<td>209</td>
<td>3.9</td>
<td>0.26</td>
<td>49.41</td>
<td>.000</td>
</tr>
</tbody>
</table>

Analysis of the results related to H1 indicated that mean self-leadership strategies (behavior-focused, natural reward and constructive thought) and quantum organization were bigger than average.

H2: There is a significant relationship between self-leadership strategies (behavior-focused, natural reward and constructive thought) and components of quantum organization at universities.
Table 2: correlation coefficient self-leadership strategies and quantum organization

<table>
<thead>
<tr>
<th>variable</th>
<th>n</th>
<th>r</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-leadership and quantum organization</td>
<td>210</td>
<td>0.65</td>
<td>0.000</td>
</tr>
<tr>
<td>behavior-focused and quantum organization</td>
<td>210</td>
<td>0.46</td>
<td>0.000</td>
</tr>
<tr>
<td>natural reward and quantum organization</td>
<td>210</td>
<td>0.6</td>
<td>0.000</td>
</tr>
<tr>
<td>constructive thought and quantum organization</td>
<td>210</td>
<td>0.57</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Analysis of the results related to H2 indicated that correlation coefficient between self-leadership strategies and quantum organization was significant & positive at the level of \( P \leq 0.05 \). The rate of relationship between behavior-focused strategy and quantum organization was \( r = 0.46 \), indicating a direct correlation between these two variables. Rate of relationship between natural reward strategy and quantum organization was \( r = 0.6 \), indicating a direct correlation between these two variables. Rate of relationship between constructive thought strategy and quantum organization was \( r = 0.57 \), indicating a direct correlation between these two variables.

Table 3: Regression coefficient of self-leadership strategies and quantum organization

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.85</td>
<td>-</td>
<td>9.72</td>
<td>0.000</td>
</tr>
<tr>
<td>behavior-focused</td>
<td>-0.053</td>
<td>-0.062</td>
<td>-0.735</td>
<td>0.46</td>
</tr>
<tr>
<td>natural reward</td>
<td>0.63</td>
<td>0.765</td>
<td>5</td>
<td>0.000</td>
</tr>
<tr>
<td>Constructive thought</td>
<td>-0.058</td>
<td>-0.08</td>
<td>-0.65</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Analysis of the results related to H2 indicated that in prediction quantum organization in universities, natural reward strategy have effective role and can be in regression model. \( Y = 1/85+0/63 \)(natural reward)

H3: There is a significant difference between self-leadership strategies and quantum organization at universities in terms of demographic variables (scientific degree, field of study, University of service location and employment status).
Table 5: ANOVA of self-leadership strategies and quantum organization in terms of demographic variables.

<table>
<thead>
<tr>
<th>Source</th>
<th>Variable</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression model</td>
<td>self-leadership</td>
<td>56</td>
<td>0.105</td>
<td>1.050</td>
<td>0.400</td>
</tr>
<tr>
<td></td>
<td>quantum organization</td>
<td>56</td>
<td>0.083</td>
<td>1.293</td>
<td>0.112</td>
</tr>
<tr>
<td>constant</td>
<td>self-leadership</td>
<td>1</td>
<td>628.173</td>
<td>6.2703</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>quantum organization</td>
<td>1</td>
<td>602.608</td>
<td>9.3563</td>
<td>0.000</td>
</tr>
<tr>
<td>Scientific degree</td>
<td>self-leadership</td>
<td>3</td>
<td>0.147</td>
<td>1.468</td>
<td>0.226</td>
</tr>
<tr>
<td></td>
<td>quantum organization</td>
<td>3</td>
<td>0.127</td>
<td>1.979</td>
<td>0.120</td>
</tr>
<tr>
<td>field of study</td>
<td>self-leadership</td>
<td>3</td>
<td>0.058</td>
<td>0.578</td>
<td>0.630</td>
</tr>
<tr>
<td></td>
<td>quantum organization</td>
<td>3</td>
<td>0.133</td>
<td>2.057</td>
<td>0.108</td>
</tr>
<tr>
<td>Employment status</td>
<td>self-leadership</td>
<td>2</td>
<td>0.327</td>
<td>3.264</td>
<td>0.041</td>
</tr>
<tr>
<td></td>
<td>quantum organization</td>
<td>2</td>
<td>0.255</td>
<td>3.957</td>
<td>0.021</td>
</tr>
<tr>
<td>University of service location</td>
<td>self-leadership</td>
<td>1</td>
<td>9.653-5</td>
<td>0.001</td>
<td>0.975</td>
</tr>
<tr>
<td></td>
<td>quantum organization</td>
<td>1</td>
<td>0.328</td>
<td>5.094</td>
<td>0.025</td>
</tr>
</tbody>
</table>

According to the obtained results from H3, the observed F did not show significant difference among the means of self-leadership strategies in terms of gender, field of study, University of service location and scientific degree (P≤ 0.05). But observed F showed a significant different among self-leadership strategies in terms of employment status (P≤ 0.05).

The observed F did not show significant difference among the means of quantum organization in terms of field of study and scientific degree (P≤ 0.05) at universities. According to the results, the observed F showed a significant difference among the means of quantum organization in terms of employment status and university of service location (P≤ 0.05).

Discussion
The aim of this research was to an analysis of relationship between self-leadership strategies and components of quantum organization at universities.
Analysis of the results related to H1 indicated that mean self-leadership strategies (behavior-focused, natural reward and constructive thought) and quantum organization were bigger than average. Finding showed spirit, thinking together, dialog, learning and trust in universities are relatively high.

Also it shows faculty members of the specific objectives set for the their activities and actions, for their work attempts have goals in mind consciously. If not doing the tasks properly, feelings of guilt. Evaluate their beliefs and assumptions. Evaluate progress on projects continually. Thus, if self-leadership strategies level faculty members was high, universities can better solve their problems.

Analysis of the results related to H2 indicated that correlation coefficient between self-leadership strategies and quantum organization was significant & positive that indicating a direct correlation between these variables. Analysis of the results related to H2 indicated that in prediction quantum organization in universities, natural reward strategy have effective role and can be in regression model. Y=1/85+0/63(natural reward). The findings of this study lend support to the role of self-leadership skills in shaping quantum organizations. The literature suggests that people can be trained to adapt and enhance their self-leadership skills and thereby improve their performance. Hence, organizations need to invest efforts in developing self-leaders to improve the overall functioning of the organization. Self-leadership is conceived as being a key ingredient of shared leadership. In organizations that emphasize innovation, shared leadership is needed because of the complex nature of this process, especially at group and organizational levels.

This finding is aligned with previous studies as Shipper and Manz (1992), Prussia et al. (1998), Phelan and Young (2003), Pearce (2004), Powell (2007), Justice (2007) and Elloy (2009).

Shipper and Manz (1992) presented that self-management and self leadership techniques were a central part of the empowerment efforts within that organization. Prussia (1998) demonstrated a direct significant relationship between self-leadership behaviors and self-efficacy perceptions, with self-efficacy fully mediating the relationship between self-leadership and performance. Phelan and Young (2003) found a significant relationship between self-leadership and creativity. Pearce (2004) argued that self-leadership is necessary in those organizations that need continuous innovation. Powell (2007) explored the relationship between organizational leadership and strategic direction of organization as adoption of a positive orientation to install trust and commitment, creating a learning environment that foster both individual and organizational growth, and never stop providing meaningful communication. Justice (2007) found that having good communication with people was important to motivate collective work, and provide trust and meaningful environment. Elloy (2009) found that what we can do to improve the efficacy of self performing teams is creating a climate of trust, boosting team interactions, giving feedbacks, rewarding, creating noble behaviors and making decisions.

According to the obtained results from H3, the observed F did not show significant difference among the means of self-leadership strategies in terms of gender, field of study, University of service location and scientific degree (P≤ 0.05). But observed F showed a significant different among self-leadership strategies in terms of employment status (P≤ 0.05).

The observed F did not show significant difference among the means of quantum organization in terms of field of study and scientific degree (P≤ 0.05) at universities. According to the results,
the observed F showed a significant difference among the means of quantum organization in terms of employment status and university of service location (P≤ 0.05).

Changes in the workforce may require some organizations to redefine the work environment (Pascarella, 1984). Some organizations are moving away from top-down, command-and-control leadership to shared leadership (Arnold et al., 2000; Pearce, 2007). Conger and Kanungo (1988) suggested that organizational effectiveness improves when superiors share power and control with subordinates. Yet, sharing power and control requires a change in mindset, relationships and structure in many organizations (Gupta, 2007). These changing environments require employees willing to accept more responsibility and make efforts to improve their individual performance, such as making use of self-leadership strategies. Organizational environments moving away from traditional management to shared leadership need employees willing to lead themselves. Employees with high general self-efficacy may be more likely to positively impact outcome expectations (Boss & Sims, 2008) and use natural reward and constructive thought self-leadership strategies.

The results of this study suggest that the components of quantum organization can be appeared through efforts directed toward augmenting behavior-focus, natural reward, and constructive thought strategies in organizational members. The findings of this study lend support to the role of self-leadership skills in fostering appearances the components of quantum organization. The literature suggests that people can be trained to adapt and enhance their self-leadership skills and thereby improve their work outcomes (Neck and Manz, 1996). Hence, organizations need to invest efforts in developing self-leaders to improve the overall functioning of the organization. This study contributes to the literature by showing that self-leaders play an important role in organization of quantum age. This finding is crucial because these components in organizations are the basis for competitiveness in modern society. As we have noted, self-leadership is conceived as being a key ingredient of shared leadership. In organizations that emphasize thinking together, dialog and learning, shared leadership is needed because of the complex nature of this process, especially at group and organizational levels.

Finally, the findings of this study make a valuable contribution to the quantum organization literature by helping to clarify the nature of the relationship between self-leadership and quantum organization. The results of this study suggest that self-leadership and quantum organization are indeed related, thus supporting the Powell (2007) and Justice (2007) propositions that factors such as trust and collective work are associated with modern behavior of leadership.

This study also contributes to the self-leadership literature through the refinement this suggestion that self-leadership has impressive potential for application in today’s dynamic organizations (Houghton, 2008; Pearc, 2004).

References


-Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. Academy of Management Executive, 18, 47-57.