



Research Paper

The Effect of Quantum Management Skills on Readiness for Change of University staff with the Mediating Role of Organizational Agility

Samira Ali Sofi¹ , Samaneh Salimi²

1- Master of Educational Management, Zahedan Branch, Islamic Azad University, Zahedan, Iran.

2- Assistant Professor, Department of Educational Management, Zahedan Branch, Islamic Azad University, Zahedan, Iran.

Receive:

16 March 2023

Revise:

06 June 2023

Accept:

15 July 2023

Abstract

This study aimed to examine the effect of quantum management skills on readiness for change with the mediating role of organizational agility. The current study was done by descriptive correlative research method. The statistical population of the study consisted of all employees of Zahedan Islamic Azad University (n=294). Using the Cochran formula, the sample size of 200 people was calculated and the applied sampling method was simple random. Azimi sanavi and Razavi Quantum Management Questionnaire (2011) was used for data collection; Sharifi & Young (2000) for Organizational Agility; and Dunham et al, (1989) for Readiness for Change questionnaire. The content validity of the questionnaire was confirmed. The reliability of the questionnaires was estimated based on Cronbach's coefficient as 0.881, 0.887, and 0.753, respectively. The data obtained from the questionnaires were analyzed at two levels of descriptive and inferential statistics, including Pearson's correlation coefficient test and structural equation modeling through Spss23 and Lisrel8.8 software. The findings obtained from the structural equation model showed that the standard coefficient between quantum management on readiness for change (0.19), quantum management on organizational agility (0.58), as well as readiness for change and organizational agility (0.64) and the indirect effect of quantum management on change readiness (0.47) were significant.

Keywords:

Readiness to change,
Organizational Agility,
Quantum,
Management Skills,
Quantum Management

Please cite this article as (APA): Ali Sofi, S., Salimi, S. (2023). The Effect of Quantum Management Skills on Readiness for Change of University staff with the Mediating Role of Organizational Agility. *Management and Educational Perspective*, 5(2), 125-143.

Publisher: Iranian Business Management Association	https://doi.org/10.22034/jmep.2023.390174.1176	
Corresponding Author: Samaneh Salimi	https://dorl.net/dor/20.1001.1.27169820.1402.5.2.6.6	
Email: salimisamane89@yahoo.com	Creative Commons: CC BY 4.0	

Extended abstract

Introduction

Today's organizations, especially educational ones, are trying to surpass their competitors in terms of rapid and increasing developments. Organizations should consider many factors to achieve their goals. Therefore, managers should apply a management method with the highest efficiency for the organization. The thinkers of management science believe that managers in the 21st century should use new management methods to increase the capacity of employees. One of these types of management is quantum management. Quantum management is the empowerment of employees and is also an approach to improve the capabilities, powers, and effectiveness of managers and especially employees. Therefore, quantum management aims to increase the effectiveness and power of managers and employees of the organization. The concept of quantum management is an approach to improve the capabilities, powers, and effectiveness of managers and especially employees in the organization and to increase the effectiveness of managers and employees to prepare for organizational change and agility. The university is one of the most important fundamental elements for any change, transformation, and innovation; therefore, the realization of high goals, independence, and social and economic progress is provided through higher education. As a result, universities must be aware of new management features to have the necessary power to respond to changes.

Theoretical Framework

Quantum management was created based on the quantum paradigm in response to uncertainty in phenomena and the unpredictability of their behavior and environmental complexities, extensive and mutual interactions, and rapid and continuous changes that twenty-first-century organizations face with. Understanding quantum management creates a new perspective for understanding and managing today's organizations with the aforementioned characteristics. Quantum theory completely contradicts traditional management beliefs. This theory states that not only is the world unpredictable, but also there is not enough information to understand the current state.

Readiness for change is the employees' positive views and opinions about the need for change and the positive consequences of change-related efforts for the employees and the organization (Peach et al., 2005). Readiness for change refers to the beliefs, attitudes, and conscious intentions of organizational members regarding the needed changes and the organizational capacity to successfully implement these changes. The dimensions of readiness for change in the organization are 1. Newness tolerance: it refers to the tolerance of the organization's members towards new and unexpected conditions. 2. Complexity tolerance: it refers to little, irrelevant, complex, unorganized, and sometimes conflicting or contradictory information in the organization. 3. Difficult situations tolerance: refers to the tolerance of organization members for situations with unsolvable problems in which answers are not easily obtained.

Agility was introduced to the world by Yakoka Research Institute in 1991 as a strategy for organizations in the 21st century to quickly adapt to changes. Organizational agility is the ability to quickly respond to changes in the environment. Organizational agility is an organizational capability that managers of educational organizations should take it seriously to achieve organizational goals. Organizational agility has also the components of innovation, responsibility, speed in work, low complexity, high quality, flexibility, and readiness to react to changes, and is also very resistant to environmental problems and challenges.



Research Methodology

This research is applicable in terms of purpose, and descriptive correlative of structural equation modeling in terms of method. The statistical population includes all the employees of Zahedan Azad University, including 294 people (124 women and 170 men). Morgan's Table was used to determine the sample size, and 165 people were selected by simple random sampling. Three questionnaires were used to collect information.

Quantum Management Skill Questionnaire: Azimi Sanavi and Razavi's Quantum Management Skill Questionnaire (Azimi Sanavi & Razavi, 2014) were used in seven dimensions; Quantum thinking, quantum trust, quantum action, quantum vision, quantum feeling, quantum knowledge and quantum existence; and 34 items to measure quantum management skills. This questionnaire was based on a Likert scale (from never to completely agree).

Organizational Agility Questionnaire: Sharifi and Yang's Organizational Agility Questionnaire (Sharifi Yang, 2000) has been used in four dimensions of speed, competence, flexibility, and responsiveness; and 28 items with 5 options of the Likert type (from never to completely agree) to measure organizational agility

Readiness for Change Questionnaire: Dunham et al's Readiness for Change Questionnaire (1989) was used in three dimensions of cognition towards change, emotional reaction to change, and behavioral tendency to change; and in 18 items to measure readiness for change.

The questionnaire's validity of the current research is of the content type that was confirmed by the supervisor and the expert professors of educational management at Zahedan universities. To estimate the reliability coefficient of the questionnaires used in this research, 30 copies were first given to the subjects. According to Cronbach's alpha, its results were obtained 0.881 for the quantum management skill questionnaire, 0.811 for the organizational agility questionnaire, and 0.753 for the readiness for change questionnaire. These reliability coefficient values indicate the relatively good reliability of these questionnaires. In addition, Pearson's correlation coefficient and structural equation model were used to analyze the data. Calculations were carried out by spss23 and Lisrel8.8 software.

Results

According to correlation analysis, the relationship between quantum management and organizational agility (0.329), quantum management and readiness for change (0.826), and organizational agility and readiness for change (0.326) are positive and significant at the level of 0.01. The fit indices of the model were first calculated to examine the research model. The values of the model fit indices have a good fit. In addition, the data analysis showed that the significant numbers (t) between quantum management and readiness for change are 6.37, quantum management and organizational agility are 5.07, and readiness for change and organizational agility are 3.30. Since these values are greater than 1.96, the impact of quantum management and readiness for change, quantum management and organizational agility, and readiness for change and organizational agility are significant. In the corresponding figure, the standard coefficient between quantum management and readiness for change is 0.19, quantum management and organizational agility is 0.58, and readiness for change and organizational agility is 0.64. In addition, the indirect effect of quantum management on readiness for change (0.47) is significant. Since this effect impacts readiness for change through organizational agility, the mediating role of this variable in relation to quantum management on readiness for change is confirmed.

Discussion and conclusion

This research was carried out to investigate the effect of quantum management skills on readiness for change with the mediating role of organizational agility of Zahedan Islamic Azad University employees. Quantum skills in management try to use the laws, concepts, and principles of quantum theory in the form of metaphor and guidance to solve management problems and describe and explain organizational phenomena. The environment of today's organizations, especially higher education, values agility, innovation, change, vitality, and quality to succeed and increase employee productivity, which are all signs of quantum management. Therefore, having senior management with the necessary knowledge and skills, effective planning, leadership, and quantum culture is necessary to transfer from classical management to successful quantum management in the organization. The research findings regarding the first research hypothesis showed that the components of quantum management directly and significantly affect the readiness for change employees (0.19). The research findings regarding the second research hypothesis showed that quantum management components directly and significantly affect organizational agility (0.53). The research findings regarding the third research hypothesis showed that readiness for change directly and significantly affects organizational agility (0.64). Finally, the results obtained from the fourth research hypothesis showed that quantum management indirectly and significantly affects (0.47) readiness for change.

According to the findings, the following suggestions are made to improve organizational agility, strengthen quantum management skills, and provide a context for change in university employees. University managers should not be afraid and have a high tolerance for ambiguity to change purposefully to be innovative and face unknown phenomena. University managers can increase employees' adaptability to changes by creating an atmosphere of optimism and risk-taking among them, which will lead to the acceptance of change and transformation. Managers should also make the most of their knowledge capital and learning ability by using quantum management skills and applying a new and innovative scientific approach in organizations and pave the way to achieve agility by emphasizing efficient and effective policies and programs. According to the changes and developments that have been created in organizational management, faculty members should always be encouraged to learn new and updated skills to achieve an appropriate level of hardware and software technologies in the university. In this regard, they can use new and diverse methods to provide educational and research services with the necessary quality to increase satisfaction and agility. University managers can use innovative and new methods based on the ability of the employees to deal with the turbulent organizational environment and solve problems. The research limitation is limiting the statistical community of the research to the employees of Zahedan Azad University and the inability to generalize the results to other universities.