

# Designing a Relationship Model between Quantum Management and Organizational Citizenship Behavior in the Employees of the Iraqi Ministry of Sports

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Safa Muslim Halil<sup>1</sup>Hassan Seyed Ameri<sup>2\*</sup> 

<sup>1</sup> Phd Student of Sports Management, Urmia University, Urmia, Iran

<sup>2</sup> Professor of Sport Management, Urmia University, Urmia, Iran

\*Correspondence:

Hassan Seyed Ameri, Professor of Sport Management, Urmia University, Urmia, Iran

Email: [ha\\_ameri2003@yahoo.com](mailto:ha_ameri2003@yahoo.com)ORCID: [0000-0001-9447-9013](https://orcid.org/0000-0001-9447-9013)

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## Abstract

**Purpose:** Quantum management increases employee empowerment and the components of quantum management predict improving inter organizational relationships and employee organizational performance. The purpose of this research was to design a relationship model between quantum management and organizational citizenship behavior of employees of the Iraqi Ministry of Sports.

**Methods:** The present research is of the correlational type. The statistical population of this research was 496 employees and managers of the Ministry of Sports and Youth of Iraq out of which a sample of 392 individuals were randomly selected as a main sample. To collect the research data, we used Podsakov's (2000) Organizational Citizenship Behavior Questionnaire and Shelton and Darling's (2000) Quantum Management Skills. The visual and content of the questionnaires was approved by 10 university professors and the basis of the questionnaires was obtained using the Cronbach Alpha coefficient of 0.854 and 0.743 respectively. Kolmogorov Smirnov tests, Pearson correlation, structural equation modeling, PLS and SPSS software were used for data analysis and testing the proposed hypothesis.

**Results:** The results of the correlation coefficient test showed that there is a positive and significant relationship between quantum management and organizational citizenship behavior.

**Conclusion:** So it can be said that the more managers use quantum management practices, the higher the level of organizational citizen behavior of employees. So senior managers should provide training in quantum management skills between other managers and their employees, and use their quantum management skills to develop and improve quantum management skills in order to increase the organizational citizen behavior of employees to welcome new competitive conditions and align with changes in the dynamics of the Iraqi Sports Ministry.

**Keywords:** Quantum management, organizational citizenship behavior, organizational behavior, sports.

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## Introduction

The expansion of the use Today's organizations are striving to surpass their competitors through rapid and increasing developments. For organizations to achieve their goals, they must consider numerous factors. It is particularly crucial to have a strong management team within the organization that employs an appropriate management method. The issue that currently attracts the most attention of organizations is the issue of leadership of human resources, which forms the basis and real capital of an organization, and through this vital factor, the organization exists (Atashzadeh Shorideh, et al., 2015).

To remain competitive, these organizations should place greater emphasis on human resources, which constitute the true wealth of an organization, as focusing on this resource can be the key to organizational success. Every organization is founded on human resources, and without them, no organization can sustain its existence (Adel, et al., 2016). Human power is the most important factor in improving productivity and Adel, et al., (2016) state that if employees feel committed to their organization and have organizational support, they will have the most productivity. Therefore, it can be stated that leadership style, the presence of specialized forces, and organization can be effective factors on productivity. Consequently, understanding the motivations, needs, desires, and factors of satisfaction and dissatisfaction of employees, as well as empowering them, is not only necessary but essential for adopting correct policies, appropriate strategies, and effective programs.

Undoubtedly, the world is nowadays the world of organizations, and the custodians of these organizations are humans. These are the people who breathe soul into the body of the organization, who move it and manage it. Employees of organizations play a significant role in implementing leaders' ideas and values, organizational goals and objectives, and can

strongly influence organizational performance (Morshedi Tonekaboni & Taban., 2019). In the last few decades, the importance of how organizations should treat their employees has dramatically increased (Casati, 2020). According to the dynamic environments in which they operate, organizations need human resources exhibiting desirable organizational citizenship behaviors.

These behaviors include making constructive suggestions, helping others in work groups, avoiding conflicts, preserving the organization's assets, accepting more job activities, respecting rules and regulations, and dealing with job-related challenges appropriately (Gefter. 2022). In fact, human resources are considered as the first element in the design of sustainable strategies of organizations in both global and local competitive standards that are growing rapidly. Because the most important factor that can move organizations forward in today's competitive environment is the human resource factor, which is realized in all administrative processes (Wan Geok Shaari., 2020). Considering the changes and transformations of the present era and with the entry of organizations into the "knowledge-based economy", human power has become of special importance compared to other resources of the organization, and its quality can play a significant role in the growth and excellence of the organization (Hanine, Nita, 2019).

Due to its complexities, various issues in behavioral dimensions are emerging, one of which is the issue of organizational citizenship behavior in recent years. In general, citizenship behavior is a type of valuable and useful behavior that people show voluntarily and willingly. In recent years, organizational citizenship behaviors have received considerable attention due to the significant effects they have had on the effectiveness and success of organizations. Generally, citizenship behavior is a type of valuable and useful behavior that individuals display voluntarily

and willingly (Latifi, Khaleghi, 2021). Strengthening organizational citizenship behaviors improves the performance and efficiency of organizations and ensures their long-term survival.

Management within organizations has garnered unprecedented attention from thinkers and specialists in management science regarding employee job performance in the current world (Rahimi Kolor, et al., 2023). Thinkers in management science believe that managers in the 21st century should adopt new management methods to engage employees in their work, reducing the likelihood of their disengagement and potentially increasing their productivity and efficiency (Mazghinejad et al., 2018). Therefore, the ability of managers to plan, organize, lead, and manage human resources in general seems important and necessary (Nazari Jahormi et al., 2022). One of these management methods is quantum management (Mir safian, 2018). One of the ideas and approaches Quantum management theory is new in the field of human resource management and employees (Zohar, 2022). Yin (2019) lists quantum management as a combination of quantum theory and management science, as well as the application of quantum thinking in management science.

Quantum management increases employee empowerment and employees are equipped with up-to-date knowledge related to their jobs to meet the needs of the organization (Auxin, 2012) and the components of quantum management predict the improvement of inter-organizational relationships and organizational performance of employees (Salimi, et al., 2022). Revising leadership development programs encourages employees to think beyond their traditional paradigms and acquire new scientific concepts and align their job tasks with new science and achieve job and organizational abilities (Erçetin & Kamacı, 2008). Therefore, quantum management, as a new management style, has the ability to

introduce employees to the science of the day and increase the job and organizational capabilities of people in the organization. So every organization, including the Iraqi Ministry of sports, should use quantum management managers to improve the capacity of its employees to take steps to guide and determine the fate of its organization, as well as establish dynamic and effective contacts with other organizations, including sports federations, Olympic and Paralympic sports committees (Khajepour, et al., 2022).

Quantum leadership is a service to increase the power and effectiveness of managers and employees, which offers an open, creative and dynamic approach (Jamebozorgi, et al., 2023). This type of leadership, which is based on the best decision in complex situations, requires seven quantum skills that enable organizational leaders to think intuitively and dynamically (Seid Ameri, et al., 2023). In other words, leadership cannot be defined as influencing others to achieve specific goals, but it should be defined as a process in which searching for a goal and moving towards the goal is more important and valuable than realizing the goal itself (Alhosani, et al., 2019; Anggreyani, et al., 2020). The goal of productivity is to make activities more intelligent to achieve a better and superior life (Hanile, et al., 2019; Lewis, et al., 2013), which itself has a direct and meaningful relationship with the components of quantum leadership, including quantum bio and quantum action.

The behavior of the employees of the Ministry of Sports and Youth and their decision-making in different situations and how to deal with the suggestions, initiatives, mistakes and behaviors of the employees have a different effect on the performance of the people, their efficiency and productivity in the organization and finally the productivity and excellence of the organization (Arshad, et al., 2022).

Holding sports meetings at the international level and more and better communication

between different nations and ethnicities are the best human achievement, which is the creation of understanding and peaceful coexistence and empowering people and communication between different institutions of championship sports, especially in the matter of training athletes. It is closely related to the bio-quantum component in quantum leadership (Jamebozorgi, et al., 2023).

If the senior managers of the Ministry of Sports and Youth want to be at the forefront of their economy and work affairs and not lag behind in the competition, they must have expert, creative and highly motivated human resources. Also, to increase productivity, it should delegate authority and improve the communication management of the organization.

The employees of this ministry constitute the true wealth of the organization (Khajepoor Sough, et al., 2020). Therefore, every organization, including the Iraqi Ministry of Sports, should employ managers skilled in quantum management to enhance the competence of its employees. This approach will help guide and determine the organization's direction and establish dynamic and effective communication with other organizations, including sports federations, and Olympic and Paralympic sports committees (Khajapour et al., 2022). This type of role or leadership style offers a creative and dynamic approach and it is based on the best decision in complex situations, which enables organizational leaders to think intuitively and dynamically (Eftikhari & Rahimi., 2019). Also, the behavior of the employees of this ministry and their decision-making in different situations and how to deal with suggestions, initiatives, errors and employee behaviors have a different effect on the performance of people, their efficiency and ability in the organization and ultimately increasing organizational excellence (Khalihipour et al., 2019).

In addition, holding sports meetings at the

international level and fostering improved communication between different nations and ethnic groups facilitate the best human achievement, which is creating understanding and peaceful coexistence. It also empowers individuals and enhances communication between various institutions involved in championship sports, particularly concerning the training of athletes (Anggreyani & Satria, 2020). Finally, if the senior managers of the Iraqi Ministry of Sports want to be leaders in their economy and business affairs and not lag behind in the field of competition, they must have expert, creative and highly motivated human resources. Also, to increase empowerment, they should delegate authority and update the communication management of the organization. Because these managers are looking for more communication and determining new management methods due to the variety of programs in sports fields (Alhosani et al., 2019).

The presence of people with low ability and motivation, especially low internal motivation) in the organization can bring serious risks to the organization so that it reduces the quality of profit reduction, increases the cost of the organization and prevents the achievement of organizational goals. The challenge for most organizations today is to determine the right management style to deal with these environmental factors and changes so that they can develop highly motivated, capable employees with high organizational citizen behavior. Since the Ministry of sports and youth of Iraq is connected and interacted with various factors such as the government, the private sector, sponsors, athletes, coaches, fans and sports spectators, and most importantly, socioeconomic, political and cultural factors, various demands are created; therefore, they must provide conditions that realize the potential forces of employees. Thus, in this area, the Ministry of sports and youth of Iraq requires the high capacity of the employees of this ministry and the behavior of their high

organizational citizenship, so the use of appropriate and effective management style to increase the motivation and ability of the employees of this ministry in order to define the goals and tasks justifies the importance and necessity of this research. There have been many studies on quantum management in Iraq and abroad but background research shows that research that examines the impact of quantum management on employee citizenship behavior has not been done and this shows the necessity and importance of the problem and the innovation of the subject therefore the aim of this research is to examine the relationship between quantum management and employee citizenship behavior of the Ministry of sports and youth of Iraq

### Materials and Methods

In terms of its purpose, the current study is applied research and is classified as descriptive correlational research. Regarding its design, it is categorized as survey research. The statistical population of this research consisted of 496 employees and managers of the Ministry of Sports and Youth of Iraq, from which a sample of 392 individuals was selected using the convenience sampling method. To collect research data, two standard questionnaires were used as follows:

Podsakoff Organizational Citizenship Behavior Questionnaire (2000): The organizational citizenship behavior standard questionnaire was designed by Podsakoff (2000). It has 27 questions and dimensions; Social etiquette (4 to 1), altruism (8 to 5), work conscience (13 to 9), mutual personal coordination (14 to 17), protection of organization resources (18 to 20), chivalry (21 to 23) and politeness (24 to 27). The face and content validity of the questionnaires were verified and the reliability of the questionnaire was obtained using

Cronbach's alpha coefficient and reported to be 0.854.

Quantum Management Skills Questionnaire: To measure managers' quantum skills, the 35-item questionnaire of management quantum skills postulated by Shelton and Darling (2000) was used. The scoring method of this scale is based on a five-point Likert scale, the options of which are rated from very low = 1 to very high = 5, so that a score of 1 indicates the least skill and a score of 5 indicates the highest level of skill. This questionnaire has seven subscales. The face and content validity of the questionnaires were confirmed and the reliability of the questionnaire was obtained using Cronbach's alpha coefficient of 0.743.

It should be noted that the questionnaires were translated into Arabic according to the opinion of the instructor and an Arabic translator and the visual and content of the approved questionnaire of 5 professors of the University of Iraq and 5 professors of the Arabic language from the University of Urmia. In this study, Kolmogorov Smirnov, Pearson, regression and structural equation modeling and smart PLS and SPSS software were used to analyze the data, test the hypotheses, and generalize the results from the sample to the statistical population.

### Results

The results of the demographic characteristics of the research population, as detailed in Table 1, revealed that 33.9% of the sample were female and 66.1% were male. Additionally, 38.0% of the sample were married, while 62.0% were single. Furthermore, 28.3% of the sample were aged 36-50 years, whereas 8.7% were over 60 years old. According to Table 1, 46.7% had a bachelor's degree, 21.7% had a master's degree, and 4.8% held a doctoral degree.

**Table 1. Demographic characteristics**

Variable		Frequency	Percentage	Variable		Frequency	Percentage
<b>Gender</b>	woman	133	33.9	<b>Age</b>	30<	51	<b>13</b>
	man	259	66.1		30 to 35 years	92	<b>23.5</b>
<b>Marital Status</b>	Married	149	38		50 to 36 years	111	<b>28.3</b>
	single	243	62		60 to 51 years	104	<b>26.5</b>
<b>Education</b>	Diploma	56	14.3		60>	34	<b>8.7</b>
	Graduate Diploma	66	16.8	<b>Education</b>	Masters	85	<b>21.7</b>
	Bachelor	183	46.7		Phd	2	<b>0.5</b>

**Table 2. Average scores of organizational citizenship behavior and quantum management**

Variable	Average	Standard deviation	Variable	Average	Standard deviation
<b>quantum feeling</b>	2.77	0.43	<b>Social etiquette</b>	2.87	0.71
<b>quantum knowledge</b>	2.81	0.67	<b>altruism</b>	3.67	0.82
<b>quantum trust</b>	3.19	0.79	<b>work conscience</b>	3.41	0.73
<b>quantum thinking</b>	2.48	0.81	<b>Mutual personal coordination</b>	3.19	0.78
<b>quantum observation</b>	2.28	0.43	<b>Protecting the organization's resources</b>	2.85	0.54
<b>quantum action</b>	2.65	0.41	<b>chivalry</b>	2.98	0.68
<b>quantum existence</b>	2.91	0.87	<b>politeness</b>	3.12	0.82
<b>quantum management</b>	2.72	0.47	<b>Organizational citizenship behavior</b>	3.15	0.46

According to Table 2, the highest mean related to altruism was  $3.67 \pm 0.82$  and the lowest mean was  $2.85 \pm 0.54$  to protect the organization's resources. The highest average was related to quantum trust with an average of  $3.19 \pm 0.79$  and the lowest average was related to seeing quantum with an average of  $2.28 \pm 0.43$ .

In order to examine the validity of the measuring instrument, two types of validity are used under the headings convergence and divergence. The convergent narrative goes back to the principle that the indicators of each structure are medially correlated with each

other. The convergent value is obtained by greater than 0.5 of the average output variance or Ave. The divergent narrative is also measured by comparing the Ave Root with the correlation between the current variables, and for each of the reflective structures, the Ave Root must be more than the correlation of that structure with other structures in the model. The study also used three criteria for determining the baseline of the Cronbach Alpha coefficient and the internal combination and coefficient of baseline (factor load). Tables 3 and 4 briefly illustrate the validity and reliability of measuring instruments

(questionnaires on organizational citizenship behavior and quantum management) research after correcting weak dialects

**Table 3. Convergent validity and reliability of measurement tools**

variables research	Questions	coefficient of mean variance extracted Ave	factor loads	statistical t	Alpha Cronbach	combined base coefficient
Social etiquette	OCB <sub>1</sub>	0.82	0.556	6.03	0.80	0.90
	OCB <sub>2</sub>		0.699	18.34		
	OCB <sub>3</sub>		0.868	37.60		
	OCB <sub>4</sub>		0.936	43.88		
Friendship type	OCB <sub>5</sub>	0.58	0.741	23.803	0.72	0.83
	OCB <sub>6</sub>		0.858	36.60		
	OCB <sub>7</sub>		0.856	36.37		
	OCB <sub>8</sub>		0.554	4.73		
Work conscience	OCB <sub>9</sub>	0.51	0.717	20.40	0.61	0.71
	OCB <sub>10</sub>		0.840	34.14		
	OCB <sub>11</sub>		0.758	25.35		
	OCB <sub>12</sub>		0.683	16.99		
	OCB <sub>13</sub>		0.570	6.36		
Personal mutual harmony	OCB <sub>14</sub>	0.52	0.922	43.14	0.63	0.71
	OCB <sub>15</sub>		0.892	39.17		
	OCB <sub>16</sub>		0.727	21.84		
	OCB <sub>17</sub>		0.835	33.75		
Protecting the organization's resources	OCB <sub>18</sub>	0.69	0.796	28.99	0.97	0.97
	OCB <sub>19</sub>		0.853	35.82		
	OCB <sub>20</sub>		0.802	29.73		
You're a young man	OCB <sub>21</sub>	0.80	0.852	5.55	0.83	0.89
	OCB <sub>22</sub>		0.565	5.98		
	OCB <sub>23</sub>		0.831	32.93		
Courtesy	OCB <sub>24</sub>	0.83	0.868	37.56	0.98	0.98
	OCB <sub>5</sub>		0.912	41.67		
	OCB <sub>26</sub>		0.847	35.19		
	OCB <sub>27</sub>		0.613	11.20		
Quantum vision	QMS <sub>1</sub>	0.58	0.895	39.96	0.73	0.65
	QMS <sub>2</sub>		0.724	21.65		
	QMS <sub>3</sub>		0.741	23.89		
	QMS <sub>4</sub>		0.739	23.63		
Quantum thinking	QMS <sub>5</sub>	0.58	0.732	22.51	0.76	0.66
	QMS <sub>6</sub>		0.754	25.16		
	QMS <sub>7</sub>		0.652	14.77		
Quantum feeling	QMS <sub>8</sub>	0.57	0.634	11.94	0.86	0.80
	QMS <sub>9</sub>		0.632	12.77		
	QMS <sub>10</sub>		0.609	10.57		
	QMS <sub>11</sub>		0.708	19.67		
	QMS <sub>12</sub>		0.734	22.83		
Quantum cognition	QMS <sub>13</sub>	0.68	0.669	16.22	0.79	0.86
	QMS <sub>14</sub>		0.745	24.47		
	QMS <sub>15</sub>		0.779	26.80		
	QMS <sub>16</sub>		0.942	44.39		
	QMS <sub>17</sub>		0.901	40.57		

Quantum action	QMS <sub>18</sub>	0.53	0.607	10.45	0.80	0.85
	QMS <sub>19</sub>		0.828	32.34		
	QMS <sub>20</sub>		0.902	40.99		
	QMS <sub>21</sub>		0.799	29.28		
Quantum trust	QMS <sub>22</sub>	0.60	0.674	16.77	0.85	0.83
	QMS <sub>23</sub>		0.614	11.24		
	QMS <sub>24</sub>		0.820	31.52		
	QMS <sub>25</sub>		0.909	41.53		
	QMS <sub>26</sub>		0.738	23.55		
	QMS <sub>27</sub>		0.718	20.55		
	QMS <sub>28</sub>		0.711	19.93		
	QMS <sub>29</sub>		0.913	41.91		
Quantum existence	QMS <sub>30</sub>	0.56	0.830	33.50	0.80	0.82
	QMS <sub>31</sub>		0.878	38.51		
	QMS <sub>32</sub>		0.863	36.85		
	QMS <sub>33</sub>		0.872	30.77		
	QMS <sub>34</sub>		0.892	36.59		

Three criteria of the Cronbach Alpha coefficient and the internal combination and coefficient (factor load) were used to determine the basis according to Formal and Larker (1981). The acceptable rate for Cronbach Alpha is greater than 0.6 and the combined base is greater than 0.7. The factor load of the dialects

used to examine internal homogeneity and its acceptable value is more than 4/0. Its t statistics at the error level 0.05 should also be higher than 96/1; in other words, questions whose factor load is less than 0.4 or whose T statistics are between 1.96 and 1.96 - should be removed.

**Table 4. Correlation matrix and divergent discriminant validity (discriminant validity)**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	divergent Validity
Social etiquette	1														0.91
Friendship type	0.13	1													0.91
Work conscience	0.38	0.75	1												0.83
Personal mutual harmony	0.27	0.30	0.43	1											0.76
Protecting the organization's resources	0.12	0.09	0.15	0.37	1										0.72
You're a young man	0.14	0.11	0.04	0.77	0.23	1									0.87
Courtesy	0.29	0.05	0.03	0.59	0.20	0.34	1								0.74
Quantum vision	0.34	0.39	0.43	0.23	0.54	0.10	0.18	1							0.77
Quantum thinking	0.34	0.54	0.41	0.48	0.39	0.38	0.41	0.28	1						0.79

Quantum feeling	0.45	0.56	0.40	0.19	0.32	0.39	0.49	0.50	0.39	1					0.72
Quantum cognition	0.50	0.48	0.39	0.55	0.60	0.28	0.39	0.56	0.47	0.50	1				0.73
Quantum action	0.47	0.30	0.29	0.59	0.34	0.48	0.29	0.39	0.60	0.54	0.56	1			0.70
Quantum trust	0.38	0.44	0.56	0.32	0.50	0.48	0.36	0.56	0.66	0.57	0.50	0.43	1		0.72
Quantum existence	0.40	0.50	0.53	0.37	0.47	0.40	0.27	0.27	0.39	0.46	0.51	0.46	0.49	1	0.70

The divergent (differential) narrative is also measured by comparing the AVE Root with the correlation between the current variables, and for each of the reflective structures, the AVE Root must be more than the correlation of that structure with other structures in the model. The tables above show that the above narrative

(divergent) indicates the divergent narrative of the questionnaire.

**Goodness of fit**

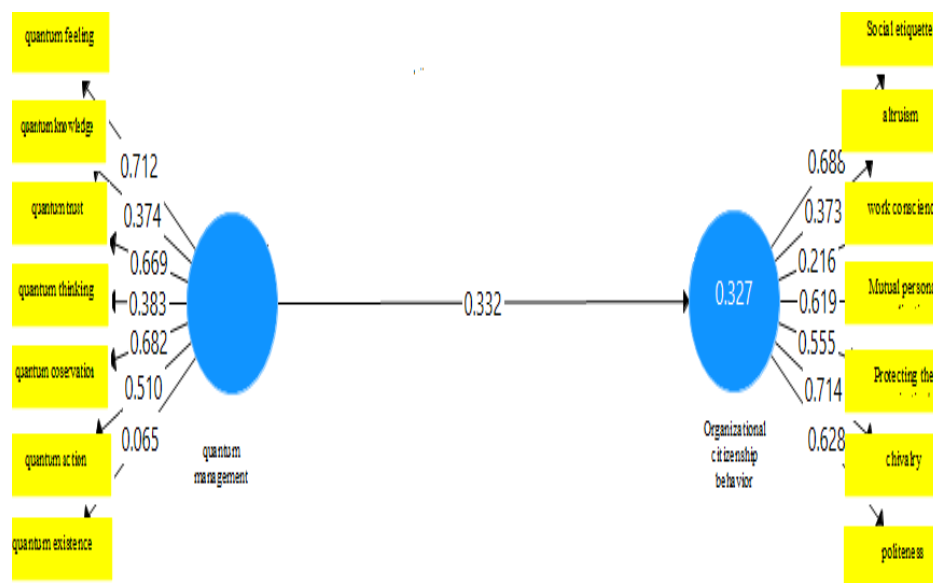
The overall research model is examined using the RMST criterion.

**Table 5. The goodness of fit index of the research model**

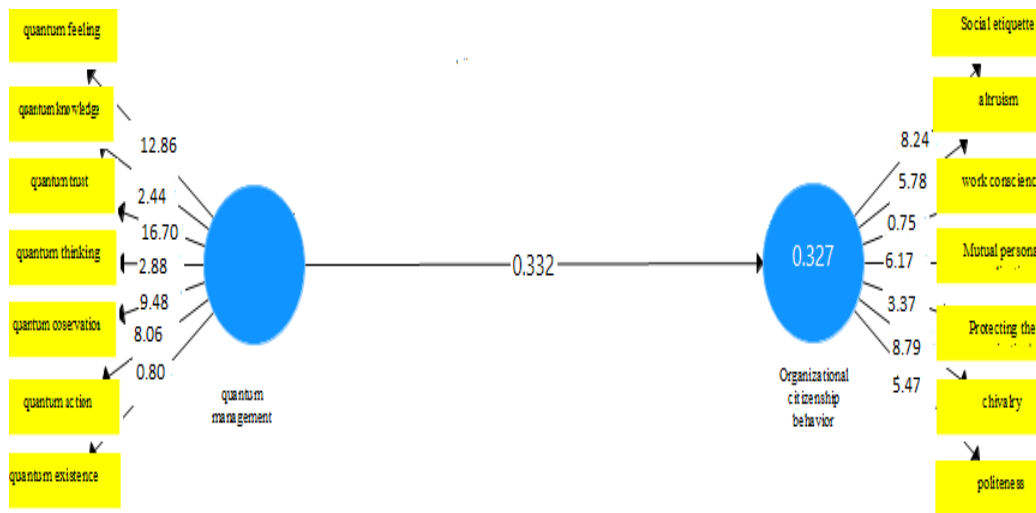
	Index	Estimated fashion	Structural model
Root Mean Square Residual	SRMR	0.021	0.021
The root of the mean is subjected to	RMS Theta	0.065	

A value less than 1/0 or 08/0 shows the root of the average remaining squares (in a more conservative version) of a good fit for the

model. Rms\_theta values below 0.12 indicate a suitable model, while higher values indicate a mismatch.



**Figure 1. Relationship model between quantum management and organizational citizenship behavior of Iraqi Ministry of Sports employees in standard mode**



**Figure 2. Correlation model of the relationship between quantum management and organizational citizenship behavior of employees of the Iraqi Ministry of Sports in a significant state**

**Table 6. The Statistical Description of Research Samples**

Variables	Direction	Variables	factor loading	t	Sig
quantum management	---->	Organizational citizenship behavior	0.332	4.936	0.001

**Discussion**

Today, rapid and continuous changes have complicated the world out of its stable and predictable state. In such a world, managers' ability to plan, organize, direct and control is increasingly compromised. Current thoughts about environmental dynamics and vital organizations have brought the emergence of a new generation of organizations, one of which is the quantum organization (Konan & Mermer., 2021). Quantum organization has components of trust, values, collective thinking, learning, dialogue and spirituality. Recently, in the management literature, they talk about a new model in the field of organization and management. The paradigm known as quantum theory is essentially complexism, uncertainty, randomness, idealism, complementarity and multi-world interpretation (Dyck & Greidanus., 2017).

The purpose of this research was to design a model of the relationship between quantum management and organizational citizenship

behavior in the employees of the Iraqi Ministry of Sports. The results showed that quantum management and dimensions have a positive and significant relationship on the organizational citizenship behavior of employees of the Iraqi Ministry of Sports. These results are in line with the research results (Sweis, et al., 2019; Nazari, Basravi., 2021; Kotobi, et al., 2023; Seid Ameri, et al., 2023; Khajepoor Sough., 2020; Auxin, 2012). In all of the studies, quantum management has been reported as a factor in increasing job knowledge, job empowerment, and increasing productivity, which is consistent with the results of the present study.

Nazari and Basravi (24) in a study titled The relationship of quantum management with career empowerment, physical education secretaries of Isfahan province stated that the component of quantum thinking, quantum existence, quantum trust, quantum vision, quantum feeling, quantum cognition, quantum action and quantum trust predictability empowerment

They have a job as physical education teachers, and there's a linear relationship between them. So if managers apply quantum management skills to education, it can lead to the ability and maturity of physical education teachers. Seyed Ameri and colleagues (53) in a study titled the communication model of quantum leadership, productivity and empowerment of employees of the Ministry of sports and youth, showed that increasing the level of quantum leadership in the Ministry of sports and youth increases the level of productivity and empowerment of personnel. In addition, increasing the level of personnel capacity in the Ministry of sports and youth increases the level of personnel productivity. The results of the structural equation test showed that there are positive and significant relationships between the various variables of quantum management and organizational citizenship behavior. A positive and significant correlation between quantum emotion and organizational citizenship behavior shows that employees who have higher quantum emotion (flexibility, empathy and acceptance of changes) are more inclined to show organizational citizenship behaviors. These behaviors include cooperation, volunteering and compliance with organizational rules. This result indicated the importance of positive emotions and attitudes in the workplace. Strengthening positive emotions and flexibility can lead to the improvement of organizational citizenship behavior. This result is in congruent with the studies such as Dachon and Plowman's study (2007) who showed that positive emotions in the workplace can lead to organizational citizenship behaviors (Duchon D, Plowman, 2007).

From the relationship between the component of quantum knowledge and organizational citizenship behavior, it can be concluded that employees' understanding and recognition of quantum concepts (complexity, uncertainty and synergy) leads to an increase in organizational citizenship behaviors. Training and informing

employees about quantum management concepts can help strengthen organizational citizenship behaviors. This finding is in line with studies such as Zhang and Bartol (2010), which showed that deep knowledge and understanding of the work environment can help increase voluntary behaviors beyond official duties (Zhang and Bartol., 2010). On the other hand, the relationship between quantum trust and organizational citizenship behavior shows that mutual trust between managers and employees leads to an increase in organizational citizenship behaviors.

Therefore, it can be said that creating an environment where there is mutual trust can lead to the improvement of organizational interactions and cooperation. Based on the significant relationship between the quantum thinking variable and organizational citizenship behavior, it can be stated that employees who possess quantum thinking skills (such as systems thinking, creativity, and innovation) are more inclined to exhibit organizational citizenship behaviors. Encouraging creative and innovative thinking among employees can contribute to improving organizational citizenship behaviors.

The positive and significant correlation between the component of quantum viewing and organizational citizenship behavior indicates that employees' comprehensive and holistic view of organizational issues leads to an increase in organizational citizenship behaviors. Strengthening a holistic and holistic view among employees can help improve organizational interactions and collaborations.

On the other hand, the practical and innovative actions of managers lead to an increase in organizational citizenship behaviors. Encouraging practical and innovative actions among employees can help improve organizational citizenship behaviors. Additionally, based on the research results, it can be acknowledged that the existential and spiritual state of the managers of the Iraqi

Ministry of Sports contributes to an increase in organizational citizenship behaviors. Paying attention to the spiritual and psychological aspects of employees can further enhance organizational citizenship behaviors.

In general, based on the results obtained, the senior managers of the Ministry of Sports and Youth should create conditions that help build trust, protect the interests of the organization, determine the expectations and roles of personnel and their participation in group decision-making and give importance to them. For future teamwork within the organization, the activities in the Ministry of Sports and Youth should be planned so that personnel feel effective and important in understanding their role in the organization. They should recognize that they are the primary capital of the organization and that without their efforts, the work cannot be accomplished. In addition to their presence, senior managers should pay attention to personnel who dedicate their time to help their managers out of interest and friendship and use the guidance of consultant personnel to achieve their organization's goals.

Senior managers should provide special financial and job support for their personnel. The quantum leadership style gives the senior managers of the Ministry of Sports and Youth the right to choose personnel, their sincere participation in decision-making, acquiring new ideas and creativity from them in how to perform tasks, and creates motivation and a sense of responsibility. And most importantly, increasing productivity in the organization. Such managers can inform employees of their performance in the organization by applying daily evaluation and monitoring criteria, which is the basis for comparing the performance of personnel with each other and with organizational goals (Jie, Yunfeng, & Wenhao, 2021). Managers can be informed about the result of their performance through monthly joint meetings in formal and informal ways. Such managers can use and encourage

employees' commitment to the organization to achieve organizational goals and increase productivity (Hanaysha, 2016).

## Conclusion

According to the results of the structural equation model, the effect of quantum management components on improvement in the organizational citizen behavior of employees of the Ministry of sports of Iraq, senior managers of the Ministry of sports and youth of Iraq should create conditions that help and care about building trust, preserving the interests of the organization, setting expectations and the role of personnel and their participation in group decision-making. For teamwork in the organization in the future, activities in the Ministry of sports and youth should be planned in such a way that personnel feel effective and important in understanding their role in the organization and know that they are considered the main capital in their organization and that things cannot be done without doing work. Their presence in addition, senior managers should pay attention to personnel who, out of interest and friendship, devote time to helping their managers and use the guidance of advisory personnel to achieve the goals of their organization. Senior managers should provide special financial and job support for their personnel. Quantum leadership style gives senior managers of the Ministry of sports and youth the right to choose personnel, their sincere participation in decision-making, acquire new ideas and creativity from them in how to perform tasks, and creates motivation and a sense of responsibility. And most importantly, increasing productivity in the organization. Such managers can inform employees of their performance in the organization by applying daily evaluation and monitoring criteria, which are the basis for comparing the performance of personnel with each other and with organizational goals. Managers can be informed of the outcome of their performance through monthly joint

meetings in formal and informal ways. Such managers can use and encourage employee commitment to the organization to achieve organizational goals and increase productivity. Quantum management seeks to better adapt people to job tasks by increasing job knowledge. Based on what has been said, it can be concluded that quantum management as a new science in the management system of organizations has the ability to improve the behavior of people's organizational citizenship and create conditions for people to increase their job capacity by gaining new job knowledge and be able to perform job tasks in the best possible way and show high job compatibility with their job. Therefore, it is recommended to train managers by holding workshops or preparing brochures related to how to implement quantum management to further implement their management style based on the implementation of quantum management to improve and increase the level of organizational citizen behavior of employees.

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