

Examining the mediating role of strategic thinking on organizational performance: A quantitative analysis

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ABSTRACT

Currently, private universities are making significant efforts to keep up with changing market demands and societal expectations, particularly in an environment that is rapidly evolving such as Baghdad, Iraq. In order to maintain high standards and achieve excellence, they must continuously seek out the most effective practices and strategies for success. Strategic management has been demonstrated to be an efficient tool for enhancing institutional performance, and the university's organizational culture, which is comprised of traditional institutional elements, is recognized as a significant factor in how organizations operate. Through the utilization of strategic thinking as a mediator, this research aims to evaluate and clarify how organizational culture impacts institutional excellence. A simple random sample was employed to gather information from individuals in managerial positions across multiple sections. Structural Equation Modeling (SEM) was employed to explain the variables under examination. The outcomes and analyses reveal a high level of relative proportions for the variables under investigation and indicate an indirect relationship between the independent and dependent variables. This research recommends several important suggestions and proposes additional research avenues for further investigation

Keywords: Strategic Thinking, Structural Equation Modeling (SEM), Mediator, Organizational culture.

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1. Introduction

Private Universities today strive to perform better and be superior considering market demands and social aspirations, particularly in a setting like Baghdad where change is occurring quickly. It is necessary to continuously look for the best methods to sustain the high standards that result in institutional excellence. The application of strategic management in various fields has improved the effectiveness of institutions, which is crucial to their success. The Private university's organizational culture, which is made up of conventional institutional elements, is acknowledged as a key element of how organizations function [1]. Organizational culture is regarded as either its greatest weakness or strength, and it reflects a variety of factors that might affect any institution's ability to flourish. Because corporate culture influences strategic choices, it must be considered while evaluating internal issues. Culture is an internal component that affects the organizational atmosphere, strategic relationships, and the basis of strategic decisions. If the company can create and implement plans to make use of its advantages, management can operate with ease and can make any necessary changes fast. The

new strategies may cause friction with the established culture of the organization [2]. Considering the stakes, people at all levels of higher education institutions must learn to think strategically. Very little research has been done on how an institution impacts its capacity for strategic thinking and strategic flexibility [3]. Therefore, additional research is required for the field's scientific advancement. The higher education sector is fundamentally important as well as the importance of educational institutions in the growth of nations. To achieve excellence, these educational institutions, particularly those in Baghdad, often take all possible measures. The issue and its signs were highlighted in several earlier research. For instance, a study on "some of Iraqi private universities" found that 68% of those university had good programs [4,5]. As a result, the researcher found that organizational culture and strategic thinking are fundamentally crucial for achieving and enhancing excellence in the higher education sector. These variables are significant ones learned from the field of strategic management. To achieve and enhance institutional excellence at some of Iraqi private universities, a structural equation model was constructed [6] to analyze the interplay between cultural norms and long-term planning. This raises the question of how organizational culture affects strategic thinking within the context of Iraqi private universities, where the goal is to improve educational quality.

The main objective is to ascertain how, through the mediating role of strategic thinking, organizational culture affects "some of Private universities in Iraq" in achieving organizational performance. The sub-objectives of this research are to analyze the characteristics of the Private Iraqi educational sector regarding the research factors, determine the degree to which organizational culture, strategic thinking, and support for achievement are present in "some of Iraqi private universities", and make prompt suggestions regarding the research area to the Iraqi private universities arrangements.

Our first hypothesis is that organizational culture has a direct and statistically significant impact on institutional quality in Iraqi universities at the 0.05 level of significance. We also hypothesize that the power structure of an organization has a direct impact on its performance at the 5% level of statistical significance, that a humane culture has a direct and statistically significant effect on the quality of the institution at the 0.05 level, and that institution quality is directly correlated with a culture of achievement at the 0.05 level of statistical significance. The second and third hypotheses both suggest that there is a significant relationship between organizational culture, strategic thinking, and institutional quality in Iraqi universities. The second hypothesis states that the organizational culture of Iraqi universities has a statistically significant impact on the strategic thinking of employees, while the third hypothesis suggests that strategic thinking has a statistically significant impact on institutional quality in these universities at the significance level (0.05).

The second and third hypotheses both suggest that there is a significant relationship between organizational culture, strategic thinking, and institutional quality in Iraqi universities. The second hypothesis states that the organizational culture of Iraqi universities has a statistically significant impact on the strategic thinking of employees, while the third hypothesis suggests that strategic thinking has a statistically significant impact on institutional quality in these universities at the significance level (0.05).

The purpose of this research is to explore the impact of institutional excellence, organizational culture, and strategic thinking on the advancement and performance of institutions. This study is significant as it uses a structural equation model to generate contemporary strategic management variables and adds to the body of knowledge in Arabic and other scholarly libraries about fostering institutional excellence. The findings and recommendations from this research are expected to be beneficial for Iraqi universities in making the required qualitative transition toward institutional excellence.

The 111 responders dataset was gathered from the "private universities in the Iraq's" supervisory posts in the research. Data analytics is a process of collecting, organizing, categorizing, and analyzing unstructured data to gain meaningful insights for organizations. Descriptive statistics are used to represent the data, and only statements about the data set from which they were derived are made by statistical analysis.

The research [7] examined a setting where a more all-encompassing viewpoint prevails, with a particular emphasis on the relationship between small and medium-sized environmental organizations and the natural world, how it and how this relationship influences strategic thinking, help analyze organizations can leverage limited resources. The research [8] aimed to test the direct connection between knowledge management processes and organizational (university) performance by the effects of knowledge-oriented leadership on such procedures at academic institutions. Study [9] used digital search engines with keywords in domains connected to strategic management were used to study and analyze the literature. The majority indicate a gap in the social sciences: a dearth of theoretical notions that could inform the design, development, and improvement of business

strategies. The research [10] examined the impact of corporate social (responsibility) CSR on environmental performance. While we found no evidence that CSR directly affects environmental performance, we did find a positive correlation between CSR and environmental strategy and green innovation, both of which have been shown to have a beneficial impact on environmental performance. The study [11] goal was to apply the dualistic model of passion to the issue of how frontline workers with different kinds of passion use emotions. Furthermore, mediation analysis confirms the partially mediating role of emotional employment strategies in the relationship between dualistic passion and emotional exhaustion. The research [12] explored that entrepreneurship education affects students' attitudes and beliefs about their abilities to succeed in business. The test results show that learning about entrepreneurship can have a positive effect on a person's sense of self-efficacy, perspective on business, and general approach to problem-solving. The research [13] offered a thorough analysis of a sizable computational strategic thinking modeling research effort. They will carefully consider the study approach from the perspective of action research. They will describe the hazy framework and give a summary of the discovery that has significantly improved our knowledge of strategic thinking. Understanding rather than optimizing is the issue with strategic thinking, and in particular, the development of competence. According to the research [14], the performance of small and medium-sized dairy processing enterprises in Kenya was analyzed through strategic thinking. One way to improve strategic thinking is to practice making quick decisions to take advantage of opportunities or minimize risks, while also considering potential solutions to unforeseen problems. Study [15] examines the investments made in intangible assets during the global financial crisis (GFC) by IT/BPO and multinational businesses (MNEs), as well as the importance of promoting management and leadership techniques that support these investments. The findings show that the IT/BPO MNEs' prior continuous investments in intangible assets prepared them for the GFC by enabling them to react quickly. This study is distinctive because it uses a novel approach, called a "structural equation model," to examine how environmental factors impact productivity in Iraqi universities. What sets this research apart is that it goes beyond previous studies by considering the mediating effects of support structures within the university environment. This unique perspective provides valuable insights for professionals in the education sector who want to improve productivity in universities. By understanding the factors that contribute to a supportive and productive environment, professionals can develop targeted interventions that enhance the overall effectiveness of these institutions. This research follows the following structure: Our experiment procedure is described in Section 2. Section 3 contains the experimental analysis. Section 4 provides a thorough discussion and discussion. The final section 5 offered suggestions. Section 6 contains future research.

2. Experiment Procedure

Given social science research requires this kind of methodology, a descriptive and analytical approach was used in this study. To access the target population, a simple random sampling approach was used to collect cross-sectional data. Among the universities represented in the study were "Some Iraqi private universities" [16]. The questionnaire was employed as a data-gathering technique.

A. Demography

The private Iraqi universities in Iraq's supervisory posts are the study's target population, which includes ("Some Iraqi private universities). Administrative positions, including academic positions with administrative responsibilities, account for the full number of employees in managerial roles, or (400) workers [17-19]. A recovery rate of 68.8% was achieved with a sample size of (160) and (111) respondents. The researcher used a 0.06 margin of error with a basic random sampling method using the Stephen-Thompson equation. An 111 respondents' data were acquired from the research's supervision positions at the "Some Iraqi private universities".

B. Questionnaire

There are two primary parts to the questionnaire: the first deals with demographic information, and the second deals with more in-depth questions on the experience. The study's three primary variables are described in the next section. In the first place, we have the independent variable of "organizational culture," which may be broken down into several subcategories. Paragraph length was used to evaluate the second variable, "strategic thinking," which he mediated. Institutional excellence, which was evaluated using the preceding paragraphs, is the third and most important dependent variable.

Objects on a scale (Threshed hold)

The questionnaire questions employed a five-point Likert scale, with respondents being asked to indicate their level of agreement with statements using the words (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, and (5) Strongly agree. The following table (1) displays the five levels of agreement that will be used to rank each item and variable.

Table 1. Agree on objects based on mean response value

Level of agreement	Mean	Relative Important Index
Very Low	1-1.80	20%-35%
Low	1.81-2.60	36%-51%
Medium	2.61-3.40	52%-69%
High	3.41-4.20	70%-85%
Very High	4.21-5.0	86%-100%

C. Data Analysis

The JASP statistical program was used to examine the study hypotheses using a variety of descriptive and analytical statistical methods. Multivariate statistical maximum level, “Alpha Cronbach's approach”, “Weighted Omega”, “frequency tables”, means, “relative weights”, “standard deviations”, and structural equation modeling were used for the validity and reliability research. “Structured equation modeling (SEM)” was employed in addition to the partial least squares (PLS) method for assessing the causal implications of the investigated variables and providing answers to the research questions. Using hypothetical causative connection models PLS analyses the underlying structures of the relationships between the tested variables and allows us to investigate the combined impact of many factors on one or on multiple groups of variables.

D. Descriptive Statistics

Analysis of a particular sample based on demographic data. Table 2 provides a statistical breakdown of the research population, which consisted of 111 people in supervisory roles at Iraqi private universities.

Table 2. Demographics statistics

%	NO	Variables		%	NO	Variables	Education/Occupations
31.5	35	Administrator	Position	52.2	58	Baghdad college of economic science university	Work-Place
68.5	76	Academic with Administrator		47.8	53	Almamoon University College	
7.3	8	Less than 5	Length of experience	45.0	50	PHD	Qualification
15.3	17	6 - 10		26.1	29	MSc	
23.4	26	11 - 15		23.4	26	BSC	
54.0	60	More than 15		5.5	6	Diploma	

3. Experimental Analysis

Descriptive study

Descriptive measurements of the variables under study are shown in Table 3; overall, the aspects of organizational culture were highly agreed upon, with a mean score of 3.64 (out of 5) and corresponding weights of 72.8%. As for the first factor, "the culture of power," was found to have the highest relative weight (74%) and the lowest mean score (3.70 out of 5). After "the culture of human empathy," another organizational culture sub-variable had the lowest mean value (3.56 out of 5) and the lowest relative weight (71.2%). The second dimension, "strategic thinking," shows a high level of consensus with a mean score of 3.41 (out of 5) and a relative weight of 68.2%. There was broad consensus regarding the importance of the third factor, "institutional excellence," with a mean score of 3.43 (out of 5) and a relative weight of 68.60 percent.

Table 3. Statistical analysis results

Analysis Factors	Statistical Description					
	Mean Value	Relative Weight	Standard Deviation	T-Test	Ranking	Degree of Support
Power-oriented culture	3.70	74.0%	0.46	**15.99	1	High
Culture of human empathy	3.56	71.2%	0.55	**10.55	3	High
Achievement culture	3.59	71.8%	0.50	**12.45	2	High
Organizational Culture	3.64	72.8%	0.41	**16.29	---	High
Strategic Thinking	3.41	68.2%	0.71	***6.07	---	High
Institutional	3.43	68.6%	0.64	**6.98	---	High

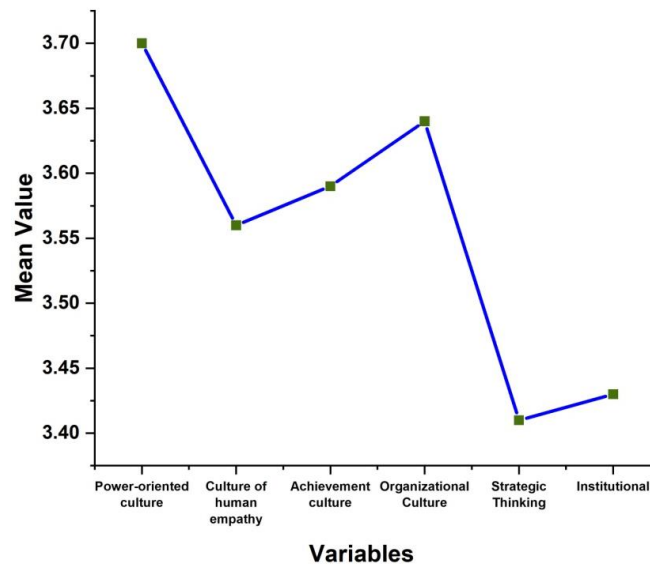


Figure 1. Statistical analysis of the mean value

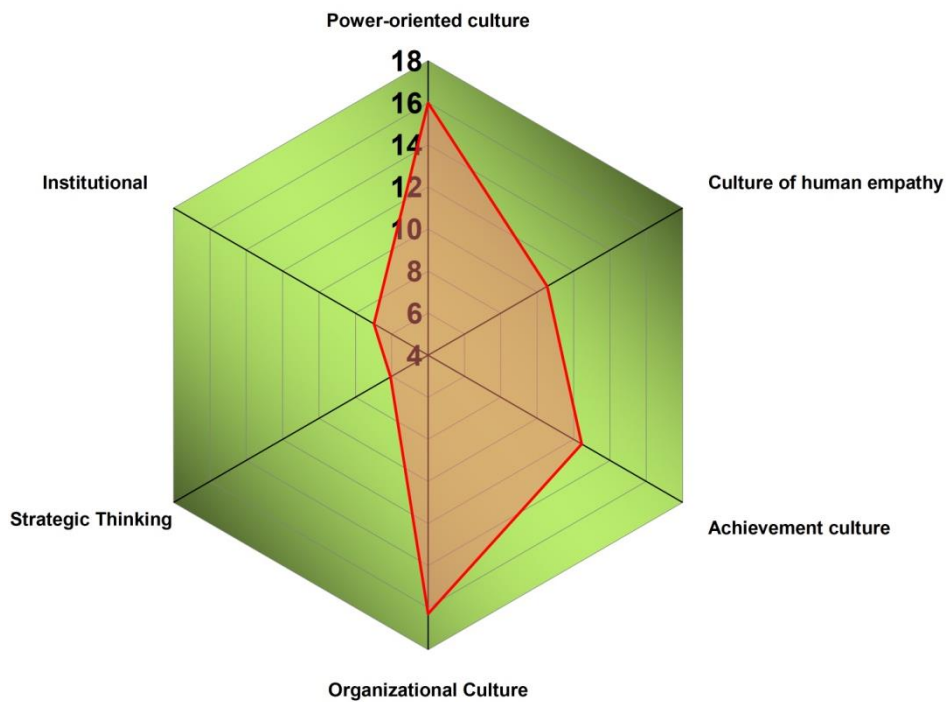


Figure 2. Statistical analysis of the T-test

Figure 1 and Figure 2 depict the statistical analysis of the mean value and T-test, respectively. Data from a mean value and one-sample t-test showed statistically significant increases in positive, negative, and neutral attitudes across the board ($p < 0.05$), with positive high agreement present across the board. At the 0.01 level, this is statistically significant. (If the significance level is less than 0.05, it means that the dimension is important.)

Structural Model Analysis

Direct and indirect impacts between the study's primary variables were analyzed using a structural model, with the results shown in (Table 4).

Table 4. Represents the variable's structural model's major effects

Various factors	Direct Impact		Indirect Effect	
	Impact	Sig	Impact	Sig
Strategic Thinking → Institutional Excellence	0.736	-	-	-
Organizational Culture → Strategic Thinking	0.972	-	-	-
Organizational Culture → Institutional Excellence	0.923	-	0.300	0.001
Power-oriented Culture → Institutional Excellence	0.366	0.008	0.202	0.033
Human Empathy Culture → Institutional Excellence	0.144	0.241	0.088	0.302,
Achievement Culture → Institutional Excellence	0.444	0.001	0.358	0.001

Hypothesis test

Hypothesis 1:

"Iraqi colleges" might improve their already high quality by paying more attention to their organizational culture. At the 0% level of significance, organizational current cultural impact on academic performance is quantified in Table 4. Knowledge management, organizational performance, and sound decision-making are just a few of the positive results that have been connected to corporate culture. The specific hypotheses are as follows:

Sub-hypothesis 1: The strength of culture has a substantial impact on the quality of the institution. Table (4) demonstrates that, at significance level of 0.008 (less than 0.05), the effect value of (0.366) indicates that the culture of power has a direct effect on the advantage of Institutions in "Iraqi colleges".

Sub hypothesis 2: The culture of human sympathy has a direct, statistically significant effect on the institutional quality of "Iraqi private universities". The data in Table 4 contradicts this hypothesis by showing that a culture of human empathy has a positive effect on institutional excellence.

Sub hypothesis 3: The third null hypothesis proposes that there is a positive correlation between the individual's effort as well as the institutional quality of "some of" Iraqi private universities" at the 0.05 level of significance. Table 4 demonstrates that, with an effective value of 0.444, there is a relationship between a successful work environment and employees in "some of" Iraqi private universities" at the 0.001 significance level.

Hypothesis 2:

Iraqi private universities in the Iraq found a statistically significant correlation between organizational culture and employees' ability to think strategically. According to Table 4, "Iraqi private universities" had a 0.972 influence on strategic thinking due to the institutional environment. This finding is consistent with and supports the findings of several other researchers, including those that found a beneficial impact on strategic thinking and other outcomes related to work practices like knowledge management.

Hypothesis 3:

When examining "some of "Iraqi private universities ", we find a link connecting strategic thinking and the quality of institutions at the 0.05 level of statistical importance. Based on the data in Table. 4, we can see that the effective value of the 0.0001 level of strategic thinking about cultural intelligence in " Iraqi private universities ", was 0.736. (less than 0.05). This finding is consistent with prior research that has indicated a beneficial benefit of strategic thinking.

Hypothesis 4:

In Iraqi colleges in Iraq, strategic thinking serves as a mediator between organizational culture and organizational excellence. The significance of this impact is proven at the 0.05 level of analysis. In Table. 4, when looking at " Iraqi private universities ", we find that the effective value of work environment on strategy implementation is 0.300 with a probability level of 0.001, which is less than 0.05. Both above function as alternative and basic hypotheses:

First null hypothesis: Strategic thinking as a moderator shows no direct relationship between a university's culture of power and its workers' pursuit of excellence at the 0.05 level or higher in " Iraqi private universities ". Table 5 indicates that the value of the impact of the strong culture on academic performance enhancement in colleges in the Iraq was 0.202. This result was attained by investigating the notion that strategic thinking would serve as a bridge between the two ideas.

Second null hypothesis: There is a statistically significant link between a humane culture and academic success at Iraqi universities for example, in " Iraqi private universities " Table 5 indicates that the value is more than 0.300 at the 0.05 level of significance, indicating that the attitude of fundamental humanity has no indirect effect on strategic leadership through strategic thinking as a mediator component. This conclusion is rejected.

Third Null Hypothesis: There is a statistically strong impact of strategic thinking as a mediator between a culture of achievement and institutional excellence at Iraqi private universities, at the 0.05 level of significance. According to Table 5, at the 0.033 level of significance, the effect value of the culture of achievement on performance improvement in " Iraqi private universities " universities was 0.358.

4. Discussion and Conclusion

This study employs a unique approach by proposing a structural equation model to test its hypothesis and achieve its objectives. The research examines the impact of organizational culture on some private universities in Iraq, with strategic thinking as a moderator variable. The findings reveal direct effects between the variables, emphasizing how strategic thinking can enhance organizational quality and how organizational culture can influence strategic thinking. The study focuses on the university environment in Baghdad and identifies the culture of human sympathy as an essential moderator of organizational culture and excellence. This highlights the importance of creating a culture of excellence in the higher education industry. Unlike prior studies that used regression analysis, this research adopted a qualitative approach and found that strategic thinking moderates the positive effects of culture on an organization's performance. The study also indicates a positive relationship between organizational susceptibility and support for achievement, but the role of strategic intelligence in this relationship was somewhat mixed. The study's use of a structural equation model to account for these factors provides a noteworthy contribution to the field.

5. Suggestions

Based on the study's findings, the authors suggest that university administration works to continuously improve organizational culture to adapt to new circumstances. In addition, it is proposed that Iraqi and international institutions make advantage of modern organizational culture to increase scientific cooperation through increased interaction as well as research.

6. Future Research

Future research is pointed out in several different ways based on the findings of this study. One of these concerns the role that Iraqi universities' business environments play as a moderator in the link between organizational culture and the success of its members. The purpose of this comparative analysis is to assess the significance of institutional culture in facilitating the attainment of strategic objectives at Iraqi and international educational institutions.

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Declaration of competing interest

The authors declare that they have no known financial or non-financial competing interests in any material discussed in this paper.

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