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The Role of Ambidextrous Leadership in Building Smart Organizations (An Analytical Study of the Opinions of a Sample of Administrative Staff at Dijlah Private Hospital in Kut)

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Abstract: This study aims to understand the role of ambidextrous leadership in enhancing the establishment of smart organizations as a means to improve their performance, enabling the organization to achieve a competitive position that ensures success and sustainability. To comprehend the nature of the relationship and influence between the variables, ambidextrous leadership was adopted as the independent variable with its dimensions (opening leadership behavior, closing leadership behavior, and flexible leadership behavior), while smart organizations were the dependent variable with dimensions (understanding the environment, achieving goals, and continuous learning). To achieve the research objective, a questionnaire was used as a measurement tool, comprising a sample of 110 employees from the administrative and medical staff at Dijlah Private Hospital in Kut, Wasit Province. The study was based on several hypotheses, the most important of which are: (1) there is a significant correlation between ambidextrous leadership and smart organizations and (2) there is a significant influence of ambidextrous leadership on smart organizations. Subsequently, data were analyzed, and hypotheses were tested using appropriate statistical tools, employing several ready-made statistical software programs, including SPSS version 28 and AMOS version 26. The study reached several conclusions, including the existence of a significant correlation and influence overall between the dimensions of ambidextrous leadership and smart organizations.

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Keywords: Ambidextrous Leadership, Opening Leadership Behavior, Closing Leadership Behaviors, Flexible Leadership Behavior, Smart Organizations, Understanding the Environment, Achieve the Goal, Continuous Learning

1. Introduction

In light of the rapid changes in the business environment and the intense competition among organisations, a new concept in managerial leadership has emerged, referred to as ambidextrous leadership. This type of leadership is considered essential in managing contemporary organisations due to its significant role in achieving set objectives and enhancing the efficiency and effectiveness of organisational management in executing defined tasks. Consequently, this ultimately serves the organisation's overall interests.

The emergence of the concept of a smart organisation is regarded as one of the most important developments in recent times, illustrating how any organisation can transform into a self-smart system that relies on improving its vital and operational processes to achieve its objectives at advanced stages and to carry out various tasks effectively. It depends on achieving integration among three types of behaviours: opening leadership behaviour, which focuses on encouraging subordinates to try different things and granting them the opportunity to think independently; closing leadership behaviour, which emphasises the exploitation of existing activities and ensures that employees perform tasks by taking corrective actions and monitoring the achievement of goals; and flexible leadership behaviour, which involves switching between the previous two behaviours (opening and closing) at the appropriate time. Organisations do not exist in a vacuum; rather, they form an integrated whole with their environment, influencing and being influenced by the surrounding context. To ensure that these organisations are adaptable and flexible in facing changes and transition into what is known as smart organisations, they require astute and conscious leadership in their performance.

Therefore, the current research aims to identify the role that ambidextrous leadership plays in achieving integration among its three behaviours and what is required for building smart organisations, which are the foundation upon which these organisations can rely. To achieve these objectives, descriptive analysis was employed to measure the correlation and impact between the study variables, which represent the core of the research problem. To further affirm this, the research problem centers around answering the following question: What is the extent of the correlation and influence that ambidextrous leadership plays in building smart organisations at Dijlah Private Hospital in Wasit Province/Kut? This is especially relevant as it provides medical services to a large segment of beneficiaries who require these dimensions to adapt to a complex and dynamic environment.

The current study offers several contributions, as the use of ambidextrous leadership behaviours can play a significant role in smart organisations. It also seeks to elucidate the relationship and impact between ambidextrous leadership and smart organisations, supporting the adoption of ambidextrous leadership behaviours to enhance the building of smart organisations, deliver distinguished services, and gain a competitive advantage. It is hoped that this study will be valuable in enriching the discourse on the reality and level of application of ambidextrous leadership in smart organisations.

The study comprises several sections: the next section presents the theoretical framework and hypotheses of the study, followed by the practical framework of the study, and then the results and discussion, concluding with the conclusions and recommendations derived from the study.

Ambidextrous Leadership

Ambidextrous leadership is considered a suitable framework for organisational learning and performance improvement. This type of leadership arises from the increasing complexity associated with the strategies employed in organisations, highlighting the need for leaders today to possess the appropriate behaviours and cognitive complexities that enable them to perform multiple roles simultaneously. This pattern is termed ambidextrous leadership.

The German philosopher Immanuel Kant was the first to address the concept of ambidexterity during the period (1712–1804) when he attempted to interpret it from the perspective of Indian civilisation. Following him, philosopher Ralph Waldo Emerson drew upon concepts of ambidexterity from Eastern and specifically Islamic civilisations (Mukerji, 2017: 431). Ambidextrous leadership serves as a good basis for the art of leadership and influencing multiple levels simultaneously, guiding their organisations to

remain adaptive to competitive conditions or to find a balance between organisational and exploratory strategies (Rashed & Daghim, 2023).

Ambidextrous leadership is one of the most important factors influencing subordinate behaviour, as it encourages subordinates to proactively identify innovative ideas and solutions within the organisation. It also significantly impacts motivating subordinates and assisting them in achieving organisational objectives by creating a conducive environment characterised by mutual trust and effectively utilising existing competencies (Mohiya & Sulphrey, 2021). It helps individuals within the organisation to harness their skills, motivating them to engage in continuous improvement while enhancing the achievement of future goals, and encouraging them to look beyond immediate objectives and balance options with reality (Hamoud, 2022, p. 464).

Ambidextrous leadership is defined as "the ability to promote exploratory and exploitative behaviours in followers by increasing or decreasing the variance in their behaviour and flexibly switching between these behaviours" (Al-Imadi, 2023, p. 56). According to Hamoud (2022, p. 462), it is the approach that empowers individuals to showcase their talents and interact based on trust and human values, creating a work environment that encourages innovation. It represents a leadership approach developed to address the complexities of innovation, understanding how leadership dexterity impacts innovative methods (Rashed & Daghim, 2023), or the ability to enhance exploratory and exploitative behaviours among followers by switching between reducing and increasing the variability in their behaviour (Al-Eida, 2020, p. 166).

Dimensions of Ambidextrous Leadership

1. Opening Leadership Behavior

Johannes (2019) defines opening leadership behavior as a collection of approaches that involve encouraging administrative subordinates to perform necessary tasks differently, experiment with various methods, and grant them the opportunity to think independently. This behaviour also stimulates their attempts to effectively engage with the current situation by allowing for mistakes and encouraging alternative ways to accomplish required tasks, as well as motivating employees to face and manage risks (Rashed & Daghim, 2023, p. 9). This entails creating a culture that permits mistakes and learns from them, thereby demonstrating a high tolerance for failure (Al-Zahmi, 2020, p. 25). Alghamdi (2018, p. 3) further argues that opening leadership behaviours lead to increased subordinate behaviours, encouraging them to think differently to overcome existing thought patterns, experiment with new ideas, and pursue unconventional paths to reach innovative solutions (Al-Fatlawi, 2023, p. 38).

2. Closing Leadership Behaviors

In this dimension, the term "closing" refers to exploitation, which implies a strategic approach where employees must adhere to established guidelines and maintain alignment. Potential setbacks and mistakes should not jeopardise the continuity of operations during this phase (Bigliardi et al., 2020). Therefore, exploitation requires reliance on competencies and the practical implementation of efficiency (Beh, 2023, p. 3). Additionally, Jansen et al. (2009, p. 9) state that closing leadership behaviours lead to the exploitation of individuals, as leaders adopt these behaviours to reinforce current strategies and focus on achieving goals efficiently, maximising benefits from incremental improvements to existing creative pathways to ensure efficiency and effectiveness. This involves following established routines and adhering to guidelines to achieve a high level of efficiency in meeting objectives (Hassan, 2021, p. 56). The expression of opening behaviours is a natural response imposed by changes in the external environment and future organisational goals, while closing behaviours are deemed exceptional and

temporal. Comfort with the familiar, fear of the unknown, and a sense of risk are some reasons that may enhance closing behaviours (Shirwani & Zarar, 2021, p. 9).

3. Flexible Leadership Behavior

The use of both opening and closing behaviours alone is insufficient to enhance ambidextrous activities (exploration and exploitation). Given the lack of a reliable systematic model in the face of rapid environmental changes that compel organisations to adapt, flexible leadership behaviour is considered the most effective way to address and adjust to these changes. This flexibility is also essential for the requirements of innovation tasks, which are crucial for ambidextrous leadership (Abdul-Zahra, 2024, p. 109). Therefore, ambidextrous leaders must be capable of switching between opening and closing behaviours at any moment and be sensitive to determining the appropriate timing for such transitions (Climent et al., 2019, p. 7). This shift between exploration and exploitation, according to Gibson and Birkinshaw (2017), requires the leader to have a flexible stance by adopting a flexible leadership behaviour that relies on the leader's adaptability.

Smart Organizations

The concept of a smart organization was introduced in 1998 in Matheson's book, *The Smart Organization: Creating Value through Strategic Research and Development*. Matheson highlighted that an organization's ability to make smart decisions and quickly adapt to changes in the environment is the most important competitive advantage in the 21st century.

Given the ongoing changes in the business environment, which are significantly different from those of a few decades ago, organizations face the challenge of designing themselves to be smart. The future is unpredictable, and organizations may have to deal with situations that are unimaginable today. For this reason, they need to create capabilities that allow them to dynamically update knowledge, skills, and competencies and put them into practice (Baets, 2005). They must continuously learn, adapt, and improve in response to environmental events because success belongs to those who can learn, think, and solve problems quickly, as well as to those who can be proactive. Some lessons can be identified for organizations wishing to remain competitive in tumultuous times:

1. It is essential to continuously pursue improvement and remain open to all customer needs.
2. Avoid focusing solely on profitability by balancing efforts to include employee quality of life, community relations, environmental concerns, customer satisfaction, and stakeholder returns.
3. A strong sense of core ideology, where every individual in the organization possesses unique values that align with the overall values of the organization.
4. Smart organizations require their employees to have a strong alignment with their culture and standards, ensuring that employees feel that the organization is a great place to work (Lukić & Lazarević, 2015, pp. 257-259).

Successful organizations build a corporate culture that emphasises making the right strategic decisions at the right time, aligning organisational practices to support these decisions, and maintaining their outcomes. This is exemplified by best practices in companies like General Motors, Pilkington Glass, and Bank One of Ohio, proving that enhanced research and development can lead to the creation of a smart organization (Matheson, 1998, p. 112). Companies that operate in smart ways possess a competitive advantage, enabling them to discover and invest in opportunities before their competitors. They can identify and resolve problems before they escalate into crises, re-engineer

internal processes, products, and services to enhance customer satisfaction and increase loyalty (Eckerson, 2003, p. 22).

The impacts of smart organizations should be viewed from a holistic systemic perspective, encompassing three main areas related to the product life cycle, which determine impacts on their suppliers, manufacturers, and distributors first; the organization's relationships that define its influence on stakeholders and customers second; and the organisation's value to the environment and society third. Examples include General Motors, Pilkington Glass, and Bank One of Ohio (Al-Kasasbeh et al., 2016, p. 107). A smart organization represents a new way of rethinking organizational structure in the knowledge era, where its establishment today is a fundamental requirement for most knowledge-based organisations to access and analyse available data to enhance their capabilities and acquire knowledge (Maccoby, 2015).

Therefore, smart organizations exhibit numerous characteristics, such as a clear strategic vision, a culture of meritocracy, supportive incentive systems, continuous learning, and adaptability to the environment (Schafer, 2009). They possess the ability to address technological breakthroughs and social and cultural issues while competing effectively and evolving sustainably (Anna & Dorota, 2021, p. 2). This concept emerged as a response to the increasing environmental disruptions and the necessity for continuous assessments and adaptations rather than relying solely on annual planning and reviews. It is a continuous process involving strategic managers' efforts to achieve successful alignment between the organization and its environment by developing competitive advantages based on organizational intelligence and focusing on the principles of smart organizations, which emphasises a managerial approach that applies technology and new service models to meet the challenge of enhancing business performance. The concept of a smart organization is closely linked to knowledge management, acquisition, learning, and adaptation, meaning it is an organization that leads knowledge and integrates knowledge management with other effective management tools (Arthur & Poulsen, 2005).

Thus, it is the product of continuous processes that apply technology and new service models to meet the challenge of enhancing business performance, encompassing strategic managers' efforts to create a successful alignment between the organization and its environment through developing competitive advantages based on a strategic vision and a culture of meritocracy, ultimately leading to the overall development of the organisation (Al Shobaki et al., 2018, p. 54). Among the various definitions of the term "smart organization" is one that possesses strong principles, respects public concerns regarding the environment and safety, and has a focused activity through aligning the activities of its components (GIOBAL IGI, 2022). Another definition describes a smart organization as one that can learn, identify challenges, and process significant experiences, transforming them into new knowledge to draw conclusions and make informed decisions in real-time using technology anytime and anywhere (Zukowska et al., 2022, p. 264). Filos (2005) defines it as organizations with the ability to move quickly, agility in generating knowledge, and leveraging that knowledge to achieve desired goals by seizing opportunities and adapting to environmental changes and challenges (Abu Ali & Al-Sharif, 2023, p. 253).

Based on the above, we propose the following main hypothesis:

H1: Ambidextrous leadership positively impacts the building of smart organizations.

Dimensions of Smart Organizations

1. Understanding the Environment

Understanding the environment refers to a deep comprehension of the external landscape by managers, enabling them to monitor, evaluate, disseminate information, and identify influences that could impact the organisation's business. This is crucial for

ensuring the organisation's long-term survival and avoiding strategic surprises (Al-Najjar & Kharisat, 2022, p. 56). Organisations can grasp their environment by implementing a set of essential functions, which include three key elements:

Recognising Uncertainties: This involves the ability of employees within a smart organisation to realistically understand future uncertainties, manage associated risks, and incorporate these considerations into decision-making processes.

Strategic Perspective: A smart organisation evaluates its current position and considers its anticipated status by thoroughly understanding the external environment. Consequently, it works internally to achieve its strategic objectives.

Systemic Thinking: This holistic approach considers the interrelated relationships within the organisation to strategically navigate a competitive environment shaped by technological advancements and evolving products and processes (Al-Sharafi, 2020, p. 69).

Thus, understanding the environment signifies how to effectively navigate the complex and ambiguous landscape through environmental scanning, a process of monitoring, evaluating, and disseminating information from both external and internal environments to key individuals within the organisation. This indicates that the organisation seeks to comprehend complexity and uncertainty to facilitate effective and accurate decision-making (Al-Jubouri, 2020, p. 67). Based on this, we propose the following sub-hypothesis:

H2: Understanding the environment positively impacts the building of smart organizations.

2. Achieving Goals

The primary principle for organisations is the process of achieving pre-defined goals, as work cannot proceed without a specific objective, which serves as a roadmap during various operational phases. Business organisations can achieve their objectives by adhering to these principles, as they form the fundamental goals of organisational operations (Wheelen & Hunger, 2002, p. 8). The process of achieving goals includes:

Culture to Generate Value: In smart organisations, there is a principle of cultivating a culture aimed at maximum value creation. Like other organisations, they need a reason for existence, continually clarifying this purpose, ensuring that all employees understand it, and using this understanding as a benchmark for assessing their strategies, activities, and whether they generate value for customers and the organisation. In essence, the organisation must ensure that its culture prioritises value generation (Al-Taie et al., 2013, p. 15).

Achieving Alternatives: This process involves the organisation developing new procedural methods from which it selects those that meet its core needs. It can be seen as a tool to bridge the gap between current and desired organisational performance. Therefore, generating alternatives in a smart organisation means creating a range of high-value options and new working methods to choose from, enabling it to take strategic actions (Abdullah et al., 2020, p. 110). Based on this, we propose the following sub-hypothesis:

H3: Achieving goals positively impacts the building of smart organizations.

3. Continuous Learning

Continuous learning entails organisations consistently learning how to generate greater value in the face of changes—be it in the political or demographic environment, rapid technological advancements, competitive global markets, or any other setting. Organisations recognise that change is one of life's inherent truths. Consequently, individuals, as a result of continuous learning, respond defensively to information

perceived as a genuine threat (Rasn, 2021, p. 266). London and Smither (1999) argue that organisational changes create a need for continuous learning environments that support employees' self-development. This assumes that individuals are capable not only of monitoring their behaviours but also of recognising more suitable and desirable behaviours and outcomes. Employee self-development requires guidance from managers and HR specialists, who facilitate the learning process by providing feedback, training, and necessary resources for development. Organisations that foster continuous learning cultures reward employees for utilising new skills and knowledge in their roles, which in turn enhances employees' awareness of the need to acquire knowledge, skills, and competencies throughout their careers and their value (Qarmash & Al-Najjar, 2020, p. 83). Based on this, we propose the following hypothesis:

H4: Continuous learning positively impacts the building of smart organizations.

2. Practical Aspect of the Research

Reliability Using Cronbach's Alpha

Cronbach's alpha is employed to assess the reliability of the research tool and measure its internal consistency. A value of 0.70 or higher is considered acceptable, indicating good internal consistency, while values below this threshold suggest weak reliability. The values of Cronbach's alpha can be illustrated in Table (1).

Table 1. Results of Consistency among Scale Components via Cronbach's Alpha Test

Cronbach's Alpha	Variable/Dimension
0.766	Opening Leadership Behavior
0.797	Closing leadership Behaviors
0.724	Flexible Leadership Behavior
0.885	Ambidextrous leadership
0.799	Understanding the environment
0.796	Achieve the goal
0.880	Continuous learning
0.817	smart organizations

Source: SPSS V.28

The results in the table indicate that the values of Cronbach's alpha coefficient for the variables and their sub dimensions range between (0.724-0.885), which are above (0.70), indicating a high level of reliability and good internal consistency. This reflects the potential for replicating the scale and obtaining similar results, allowing for additional statistical tests to be conducted with confidence.

Confirmatory Factor Analysis of Research Measures

A. Confirmatory Factor Analysis for the Variable of Proficient Leadership

The proficient leadership variable was measured as an independent variable through three main dimensions: (Open Leadership Behavior, Closed Leadership Behavior, and Flexible Leadership Behavior), using 15 items. Figure (1) illustrates the standardized estimates for each item and the extracted goodness-of-fit indices, all of which fall within

the accepted standards. These results indicate a good fit between the collected data and the hypothesized structural model for measuring proficient leadership.

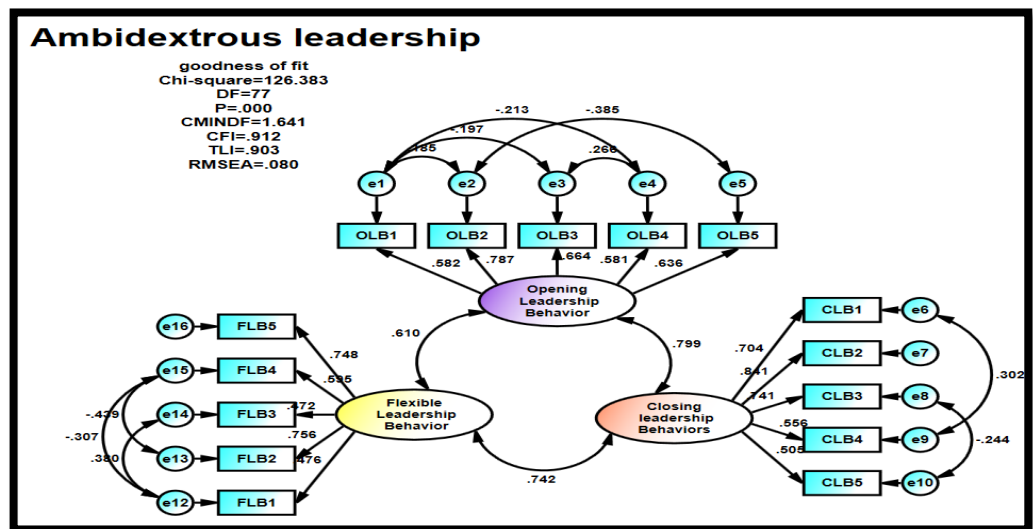


Figure 1. Confirmatory Factor Analysis of Charismatic Leadership

Source: Outputs of Amos v.26

The results in Table (2) indicate that the standardized estimates for the items of the Charismatic Leadership variable ranged from (0.841 to 0.472), which are considered good values. Additionally, the values of the Critical Ratio (CR) for all items were between (7.481 and 3.331), exceeding the critical value (CR = 1.96). Moreover, all items recorded a significance level of (0.000), which is less than (0.05), indicating the significance of all items of the Charismatic Leadership variable. These results serve as a positive indicator for the adoption of the model in future statistical analyses.

Table 2. Estimates for the Dimensions of the Charismatic Leadership Variable

P	C.R.	Estimate	Dimensions	PATH	Items
		.582		<---	OLB1
***	5.545	.787	Opening Leadership Behavior	<---	OLB2
***	4.203	.664		<---	OLB3
***	3.843	.581		<---	OLB4
***	4.257	.636		<---	OLB5
		.704		<---	CLB1.
***	7.481	.841	Closing leadership Behaviors	<---	CLB2
***	6.664	.741		<---	CLB3
***	6.046	.556		<---	CLB4
***	4.585	.505		<---	CLB5
		.476		<---	FLB1
***	4.164	.756	Flexible Leadership Behavior	<---	FLB2
***	4.312	.472		<---	FLB3
***	3.331	.595		<---	FLB4
***	4.246	.748		<---	FLB5

Source: Outputs of Amos Program v.26

B. Confirmatory Factor Analysis for the Smart Organizations Variable

The smart organizations variable was described as a dependent variable and measured through three main dimensions (Understanding the Environment, Achieving Goals, and Continuous Learning). This was measured using 15 items. Figure (2) illustrates the standardized estimates for each item, along with the extracted goodness-of-fit indices for the variable.

As indicated by the goodness-of-fit indices presented in Table (3), all fall within the accepted standards, suggesting a good fit between the aggregated data and the hypothesized structural model for measuring the smart organizations variable.

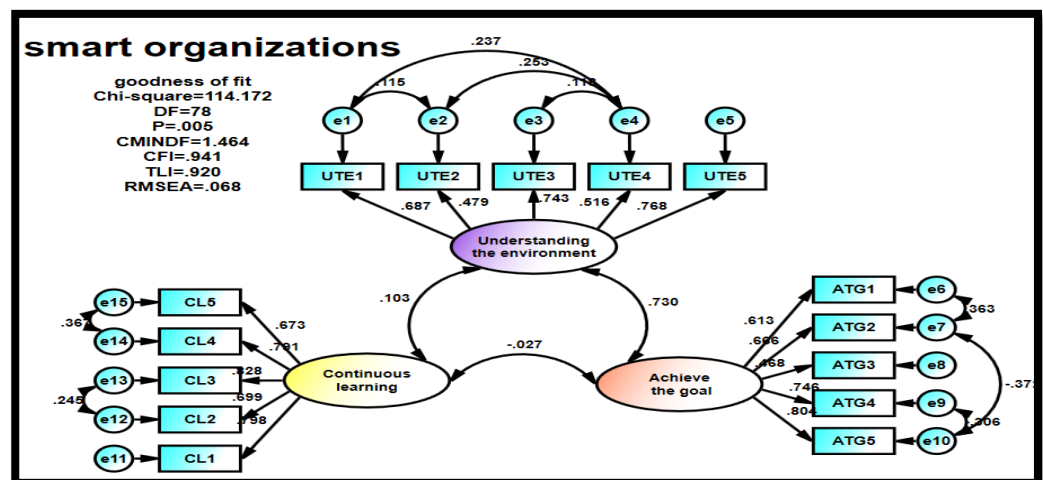


Figure 2. Confirmatory Factor Analysis of Intelligent Organizations

Source: Outputs from Amos v.26

The results in Table (4) show that the standardized estimates for the items of the intelligent organizations variable ranged between (0.828 - 0.468), which are considered good ratios. Additionally, the values of (CR) for all items ranged from (7.996 - 4.045), which are above the critical value (CR = 1.96). Furthermore, all items recorded a significance level of (0.000), which is less than (0.05), indicating the significance of all items of the intelligent organizations variable. These results are considered a positive and sufficient indicator for adopting the model in future statistical analyses.

Table 4. Estimates for the Dimensions of the Intelligent Organizations Variable

P	C.R.	Estimate	Dimensions	PATH	Items
		.687	Understanding the environment	<---	UTE1
***	4.382	.479		<---	UTE2
***	6.037	.743		<---	UTE3
***	4.820	.516		<---	UTE4
***	6.161	.768		<---	UTE5
		.613	Achieve the goal	<---	ATG1
***	6.253	.666		<---	ATG2
***	4.045	.468		<---	ATG3
***	4.957	.746		<---	ATG4
***	5.025	.804		<---	ATG5
		.798	Continuous learning	<---	CL1
***	6.564	.699		<---	CL2
***	7.996	.828		<---	CL3
***	7.853	.791		<---	CL4

*** 6.481 .673 <--- CL5

Source: Outputs from Amos v.26

Descriptive Analysis of the Research Variables

1. Outstanding Leadership

Table (5) shows that the highest overall mean was for the dimension of "Flexible Leadership Behavior," which reached (3.51) at a good level, with a standard deviation of (0.652) and a coefficient of variation of (18.57), ranking first in terms of relative importance. Meanwhile, the lowest overall mean was for the dimension of "Closed Leadership Behavior," which had a value of (3.28) at an average level, with a standard deviation of (0.725) and a coefficient of variation of (22.11), ranking third. On the other hand, "Open Leadership Behavior" recorded an overall mean of (3.30) at an average level, with a standard deviation of (0.724) and a coefficient of variation of (21.91), placing it in the second position.

Overall, the variable "Outstanding Leadership" achieved an overall mean of (3.37) at an average level, with a standard deviation of (0.604) and a coefficient of variation of (17.96), ranking second in relative importance among the research variables. These results reflect a variation in the evaluation of the dimensions of leadership, with "Flexible Leadership Behavior" considered the most important, while "Closed Leadership Behavior" is viewed as the least important.

These findings highlight the importance of focusing on enhancing flexible leadership behavior to strengthen effective leadership, while acknowledging the variation in the evaluation of other dimensions. The results indicate a need for improvement and enhancement of various leadership dimensions to ensure optimal performance. Hospital management should leverage evaluations of leadership behavior to identify areas needing improvement and to strengthen the positive aspects to enhance hospital effectiveness and improve the overall work environment.

Table 5. Descriptive Statistics for the Variable of Outstanding Leadership

Direction	Rank	CV	S	M	Items
Somewhat Agree	Second	21.91	0.724	3.30	Open Leadership Behavior
Somewhat Agree	Third	22.11	0.725	3.28	Closed Leadership Behavior
Agree	First	18.57	0.652	3.51	Flexible Leadership Behavior
Somewhat Agree	Second	17.96	0.604	3.37	Skilled Leadership

2. Smart Organizations

The results from the table reveal variability in the evaluation of the dimensions of "smart organizations," with differences in the relative importance of each dimension. The findings in Table (6) show that the highest overall mean was for the dimension of "continuous learning," reaching (3.71) with a good level, a standard deviation of (0.920), and a coefficient of variation (24.79), placing it third in terms of relative importance.

The lowest overall mean was for the dimension of "goal attainment," with a value of (3.21) and an average level, a standard deviation of (0.783), and a coefficient of variation (24.42), ranking second. Meanwhile, the dimension of "environmental understanding"

achieved an overall mean of (3.27) at an average level, with a standard deviation of (0.799) and a coefficient of variation (24.43), placing it first in terms of relative importance.

Overall, the variable "smart organizations" recorded a mean of (3.40) at an average level, a standard deviation of (0.574), and a coefficient of variation (16.90), ranking first among the research variables in terms of relative importance. These results confirm a decline in the importance of enhancing the dimension of "continuous learning" and improving strategies for "environmental understanding" and "goal attainment" to achieve optimal performance. The hospital should focus on improving adaptability and understanding the surrounding environment, alongside fostering a culture of continuous learning, as enhancing these aspects will contribute to increasing the organization's effectiveness and responsiveness to future challenges and opportunities.

Table 7. Descriptive Statistics for the Smart Organizations Variable

Direction	Rank	CV	S	M	Items
Agree	First	24.43	0.799	3.27	Environmental Understanding
Somewhat Agree	Second	24.42	0.783	3.21	Goal Attainment
Agree	Third	24.79	0.920	3.71	Continuous Learning
Somewhat Agree	First	16.90	0.574	3.40	Smart Organizations

Source: SPSS V.28

Testing Research Hypotheses

1. Testing the First Main Hypothesis between the Dimensions of the Variable (Skilled Leadership) and the Variable (Smart Organizations)

A. First Main Hypothesis (There is a significant correlation between skilled leadership and smart organizations)

Table (8) and Figure (3) show that the correlation coefficient between skilled leadership and smart organizations is (0.686**) at a significance level of (0.000), which is less than (0.05). This indicates a significant correlation between the two variables. Additionally, the extracted value of (Z) is (8.277), which is greater than the critical value of (1.96), further confirming the significance of this relationship.

Based on these results, we reject the null hypothesis and accept the alternative hypothesis, which indicates a significant correlation between skilled leadership and smart organizations. This means that improving skilled leadership is directly linked to enhancing the efficiency of smart organizations. It suggests that boosting skilled leadership abilities could contribute to building smart organizations, potentially making skilled leadership a key factor in achieving success and innovation within organizations. Therefore, skilled leadership is essential for optimal performance and adapting to future challenges.

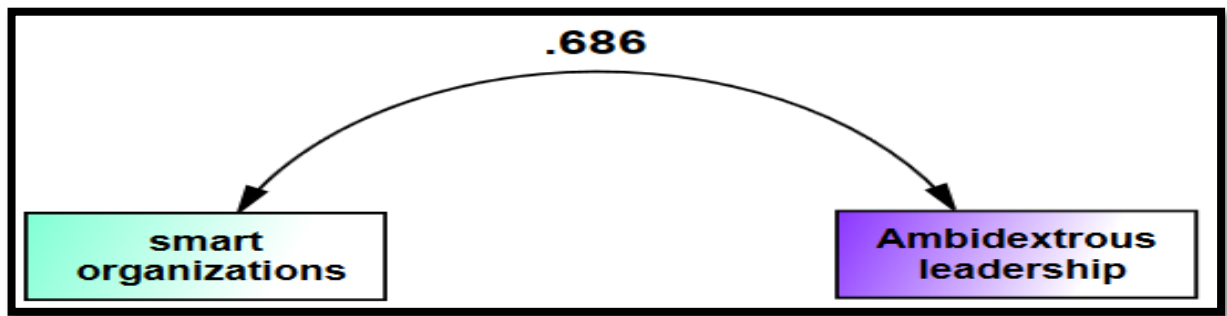


Figure 3. Correlation Values between Skilled Leadership and Smart Organizations

Source: Outputs from Amos v.26

B. Testing the Sub-Hypotheses for Dimensions of Skilled Leadership and Smart Organizations

From Table (8), the following is observed:

The obtained correlation coefficients (R) between the dimensions of skilled leadership and smart organizations were as follows: (0.639**, 0.521**, 0.619**) at a significance level of (0.000), which is less than (0.05). This indicates a significant correlation among the various dimensions of skilled leadership and smart organizations. The relationships ranged from moderate to strong, with the extracted Z-test values being (7.450, 5.690, 7.124), all of which exceeded the critical value of (1.96), indicating a robust connection between the different dimensions of skilled leadership and smart organizations.

The results suggest that skilled leadership directly influences smart organizations, with variations in the levels of impact among the different dimensions. Furthermore, the findings reveal a strong statistically significant relationship between the dimensions of skilled leadership and smart organizations, signifying that skilled leadership plays a crucial role in the development of smart organizations. Among these findings, it was established that open leadership behavior has the highest correlation, recording a value of (0.639**). Conversely, closed leadership behavior exhibited the lowest correlation value, measuring (0.521**).

In light of the above, appropriate decisions may be made based on the analysis, indicating a significant correlation between the dimensions of skilled leadership and smart organizations.

Table 8. Correlation between the Dimensions of Skilled Leadership and Smart Organizations

Hypothesis and Decision	sig	Strength and Direction of the Relationship Based on Results	Z	R	Dimensions of Skilled Leadership	Smart Organizations
There is a statistically significant correlation between the dimension of open leadership behavior and smart organizations.	0.000	Positive Medium	7.450	0.639**	Open Leadership Behavior	
There is a statistically significant correlation between the dimension of	0.000	Positive Medium	5.690	0.521**	Closed Leadership Behavior	

closed leadership behavior and smart organizations.					
There is a statistically significant correlation between the dimension of flexible leadership behavior and smart organizations.	0.000	Positive Medium	7.124	0.619**	Flexible Leadership Behavior
There is a statistically significant correlation between skilled leadership and smart organizations.	0.000	Positive Strong	8.277	0.686**	Skilled Leadership

Source: SPSS V.28

2. Testing the Second Main Hypothesis between the Dimensions of Skilled Leadership and Smart Organizations

A. Testing the Second Main Hypothesis (There is a statistically significant effect of skilled leadership on smart organizations)

Table (9) and Figure (4) show that the extracted value of (F) between skilled leadership and smart organizations was (87.228), which is greater than the critical value of (3.94) at a significance level of (0.05). This result supports the acceptance of the alternative hypothesis, indicating a significant effect of skilled leadership on smart organizations. Skilled leadership explains about (46%) of the variables affecting smart organizations. Additionally, the extracted value of (t) for skilled leadership was (9.340), which is greater than the critical value of (1.984) at a significance level of (0.05), indicating the significance of (β) for the skilled leadership variable. The value of (β) shows that an increase in skilled leadership by one unit leads to an increase in smart organizations by (65%).

Based on these results, it can be concluded that improving skilled leadership has a significant and direct impact on enhancing the performance of smart organizations and significantly boosts their efficiency. It is recommended to implement strategies to strengthen skilled leadership within organizations to achieve better outcomes in performance and efficiency toward applying and achieving smart systems.

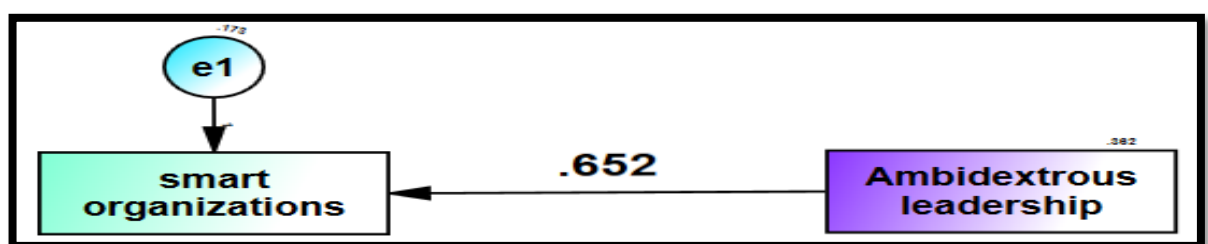


Figure 4. Impact Analysis of Skilled Leadership on Smart Organizations

Source: Outputs from Amos v.26

B. Testing the Sub-Hypotheses for the Dimensions of Skilled Leadership in Smart Organizations

From the table, we can see the following:

- The extracted F values between the dimensions of skilled leadership and smart organizations are (67.731, 36.453, 60.879), all of which are greater than the critical value of (3.94) at a significance level of (0.05). This indicates a significant effect of the different dimensions of skilled leadership on smart organizations. Therefore, we accept the alternative hypothesis that there is a significant effect between the

dimensions of skilled leadership and smart organizations, while rejecting the null hypothesis.

- The R^2 values were (0.403, 0.264, 0.377) respectively, showing variation in how the dimensions of skilled leadership explain the smart organizations variable. The results indicate that the highest explanatory percentage was for the dimension of "Open Leadership Behavior," which explained about 40% of the changes in smart organizations. In contrast, the lowest explanatory percentage was for "Closed Leadership Behavior," which explained about 26% of the changes in the variable.
- The extracted t values for the marginal slope between the dimensions of skilled leadership in smart organizations were (8.230, 6.038, 7.803) respectively, all of which are higher than the critical value of (1.984) at a significance level of (0.05). This suggests the significance of the marginal slope for the three dimensions of skilled leadership: "Open Leadership Behavior," "Closed Leadership Behavior," and "Flexible Leadership Behavior."
- The regression coefficients (β) for the different dimensions were (0.507, 0.412, 0.545), indicating variation in the strength of the impact that the dimensions of skilled leadership have on the smart organizations variable. The results showed that the strongest impact was from "Flexible Leadership Behavior," with a β value of 0.545, meaning an increase in this dimension by one unit leads to a 54% increase in smart organizations. Conversely, the weakest impact was from "Closed Leadership Behavior," with a β value of 0.412, meaning an increase in this dimension by one unit results in a 41% increase in smart organizations.

Table 9. Correlation between the Dimensions of Skilled Leadership and Open Leadership Behavior

Hypothesis and Decision	sig	t	F	Adj (R^2)	R^2	B	A	Dimensions of Skilled Leadership	Open Leadership Behavior
There is a statistically significant effect of open leadership behavior in smart organizations.	0.000	8.230	67.731	0.403	0.409	0.507	1.721	Open Leadership Behavior	
There is a statistically significant effect of closed leadership behavior in smart organizations.	0.000	6.038	36.453	0.264	0.271	0.412	2.045	Closed Leadership Behavior	
There is a statistically significant effect of flexible leadership behavior in smart organizations.	0.000	7.803	60.879	0.377	0.383	0.545	1.483	Flexible Leadership Behavior	
There is a statistically significant effect of skilled leadership in smart organizations.	0.000	9.340	87.228	0.466	0.471	0.652	1.203	Skilled Leadership	

Source: SPSS V.28

3. Results and Discussion

The findings of our research confirm that skilled leadership has a positive correlation and impact on the development of smart organisations. This study relied on data from the administrative staff (both technical and medical) at Dijla Al-Ahli Hospital in Kut/Wasit. Consistent with the results of the statistical analysis, the standardised estimates for the skilled leadership variable ranged from 0.841 to 0.472, indicating a significant correlation between skilled leadership and smart organisations. This suggests that enhancing skilled leadership is directly linked to improving the efficiency of smart organisations, with an increase in skilled leadership by one unit leading to a 65% increase in smart organisations.

Based on these results, it can be concluded that employing skilled leadership behaviours has a substantial and direct positive impact on improving the performance of smart organisations, significantly enhancing their efficiency. It is advisable to implement strategies to promote skilled leadership within these organisations to achieve better outcomes in performance and efficiency towards the implementation of smart organisations.

4. Conclusion

The results of the statistical analysis revealed the suitability of the proposed model, as well as the reliability and credibility of the questionnaire used in the study across all variables and their dimensions, as indicated by the calculated Cronbach's alpha values. The research found that the responses of the studied sample tended to fully agree with the items related to both skilled leadership and smart organisations. The elements share varying degrees in building these dimensions based on confirmatory factor analysis. The responses from the study sample reflected a positive attitude regarding the importance of the research in developing smart organisations through skilled, conscious, and effective leadership, which is considered one of the most common leadership styles in technologically advanced organisations.

The results also showed a statistically significant correlation between all dimensions of skilled leadership, with open leadership behaviour demonstrating the strongest correlation. Conversely, closed leadership behaviour recorded the lowest correlation. This indicates a significant relationship between the dimensions of skilled leadership and smart organisations, providing sufficient support for the first main hypothesis of the research. Additionally, the results indicated an impact of all dimensions of skilled leadership on smart organisations, with the highest explanatory power attributed to the dimension of "open leadership behaviour" and the lowest to "closed leadership behaviour." This finding positively supports the second main hypothesis of the research, suggesting that when skilled leadership behaviours are open to a dynamic environment, it reflects on the performance of smart organisations operating within that environment. This requires continuous scanning of the environment and intensified strategic efforts through optimal utilisation of available resources, focusing on a strategic vision to create successful alignment between the organisation and its environment, and developing competitive advantages that enhance its capabilities and standing.

Moreover, this leadership should provide support, motivation, and training for all hospital staff to prepare them for adapting to various circumstances they may encounter and to assist in addressing potential issues. There should be increased efforts towards adopting and supporting skilled leadership behaviours, as they would bolster the organisation's status as a smart organisation.

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