

The Role of Strategic Planning as a Mediator in the Relationship Between Organizational Factors and the Sustainability of Institutional Excellence: An Empirical Study in Yemeni Private Universities

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Abstract:

This study aimed to investigate the impact of strategic planning as a mediating variable in the relationship between organizational factors and the achievement of sustainable institutional excellence in Yemeni private universities. A quantitative approach, specifically a descriptive-analytical method, was employed, and a questionnaire was used as the data collection instrument. The study population comprised ten Yemeni private universities, established more than ten years prior, with their main branches located in the capital, Sana'a. These universities represent more than half of the total study population of eighteen universities. These universities were selected using simple random sampling. The study targeted 321 employees from these universities, randomly selected from a total study population of 660 employees. Main Findings: The study demonstrated a high level of effectiveness of organizational factors and strategic planning practices, as well as a distinguished level of achievement in sustainable institutional excellence within Yemeni private universities. Furthermore, the results revealed that organizational factors directly and indirectly influence sustainable institutional excellence, with strategic planning acting as a key mediating variable that strengthens this relationship. Recommendations: To enhance the sustainability of the effectiveness of organizational factors (administrative leadership, organizational culture, and human resources) and to research other factors that lead to the enhancement of strategic planning practices with its components (environmental analysis, strategy formulation, implementation, monitoring and evaluation) in order to achieve sustainable institutional excellence in Yemeni private universities, given its great importance in providing added value in its main functions: education, scientific research, community service and ensuring long-term continuity.

Keywords: Organizational factors, strategic planning, excellence, sustainability, Yemeni private universities.

1. Introduction

Higher university education is a key component with a direct and indirect impact on individual performance and societal advancement. The increasing complexity in all aspects of the university environment is coupled with continuous calls to adapt university education to develop competencies in order to meet the needs of society and the labor market (Al-Mutairi, 2022). This comes amidst growing calls for the necessity of developing university performance, improving the quality of education, and enhancing its standards (Al-Azizi, 2019). This is due to the important roles universities play in achieving and sustaining the efficiency and effectiveness of their main functions, namely: education, scientific research, and community service, in higher education institutions, including Yemeni private universities. However, achieving this faces many problems, and the main problem these universities face is the problem of maintaining successes, continuous improvement, and sustainability, especially in light of rapid globalization and intense competition, which requires them to achieve sustainable institutional excellence.

Bishr (2019) noted that many management references and literature on excellence have agreed on the significant importance of Institutions operating according to the requirements and models of institutional excellence. This agreement stems from the experiences of numerous countries and institutions that have achieved outstanding results in this area, emphasizing the importance of excellence for institutions and their need for it. Conversely, Institutions must possess the organizational factors that support its achievement. These organizational factors - namely, administrative leadership, organizational culture, and human resources - can be described as the factors that will enable Yemeni private universities to achieve this excellence through the application of modern management methods, such as strategic planning. Strategic planning is the process of defining the direction and scope of universities, enabling them to produce distinguished educational, research, and community services that enhance their competitiveness and strengthen their reputation by offering added value that exceeds that of their competitors.

The added value that stakeholders expect from universities is multifaceted, ranging from behavioral characteristics and improved graduate competency to problem-solving research and the expectation that the university will play an active role in driving societal change. This diversity of needs and expectations necessitates that universities develop and implement an appropriate strategic framework (Zuzeviciute et al., 2017).

In light of this, educational institutions have become obligated to transform and move from traditional institutions to contemporary institutions in order to raise their ability to respond to the changes occurring in markets, technology and competition (Abd-Al-Nabi, 2010), and to be able to meet the requirements of survival and institutional excellence that all institutions seek to achieve. Indeed, it is difficult to overcome these problems and challenges and confront them without achieving this excellence and enhancing its sustainability.

The important role that any organization must play to continue providing its services, and to maintain the solidity of its entity, and the strength and robustness of

its business, lies in the existence of supportive organizational factors, and the provision of sufficient sources and information about its internal and external environment related to strategic planning and facilitating access to it, which is what achieves excellence; as organizational factors work to help strategic planning by translating strategic plans into detailed plans and implementable programs (Al-Kafawin; Al-Zu'bi, 2022).

As Qamoun's (2015) study indicated that organizational factors contribute to fostering a favorable work environment characterized by excellence and leadership. Therefore, organizational factors - including administrative leadership - can play a pivotal role in strategic planning by defining and providing direction for decision-making. Furthermore, a study by Bishr (2019) noted that the EFQM (European Foundation for Quality Management) Excellence Model (2012) emphasizes that achieving sustainable excellence requires strong leadership and a clear strategic direction.

A study by Aqlan (2018) emphasized the necessity of leaderships training, as well as training and encouraging human resources in universities to prepare and implement strategic plans. Organizational culture is another organizational factor that can effectively influence strategic planning. A positive organizational culture, characterized by the values and beliefs prevalent among members of the institution, contributes to more effective strategic planning, while a negative organizational culture may lead to ineffective strategic planning that fails to achieve sustainable institutional excellence. Human resources, with their knowledge and skills, are a crucial organizational factor and one of the most important success factors that can affect the efficiency and effectiveness of strategic planning, and the achievement of the desired goal of institutional excellence and its sustainability in universities.

Several studies, including Zaid; Al-Shujaa' (2021), have recommended that university leaders prioritize institutional excellence in all its dimensions. Shehata's study (2021) also recommended cultivating a culture of excellence, adopting a future-oriented approach, focusing on global university rankings, monitoring competitors, and learning from their experiences. Saleem's study (2020) further recommended strengthening the culture of institutional excellence within universities, holding seminars and workshops on its importance and development, encouraging employee creativity and continuous improvement, and linking training workshops to institutional excellence. Tajammal et al. (2019) emphasized that achieving a distinguished and sustainable position in all key areas of universities performance is essential for achieving sustainable excellence.

Furthermore, Omar's study (2019) recommended that Yemeni universities strengthen their focus on strategic planning in all its dimensions, given its positive impact on achieving institutional excellence. Al-Wuhibi's study (2020) indicated that institutional excellence requires effective strategic planning that identifies gaps and achieves qualitative leaps. This is particularly important considering the sharp increase in the number of private universities in many parts of the world, including Yemen, in recent decades, and the continuation of this trend. This trend may be influenced by

commercial approaches. Therefore, universities should build their capacities and competencies to become centers of knowledge and expertise for stakeholders. Providing knowledge, insights, skills, and competencies with direct market value should be a priority for universities to achieve a competitive advantage (Carmichael, 2011). Therefore, organizational factors (administrative leadership, organizational culture, human resources) are expected to contribute to the practice and effectiveness of strategic planning, which contributes to an active role in achieving institutional excellence and enhancing its sustainability, as it is the goal of all institutions, and among the most important of these are higher education institutions, which, if achieved in them, will contribute to outstanding outputs that will work to achieve sustainable excellence in the various labor market sectors in which these outputs will work.

Based on the foregoing, it can be said that most of the previous studies mentioned did not address the complementary relationship between organizational factors (administrative leadership, organizational culture, and human resources), strategic planning (environmental analysis, strategy formulation, strategy implementation, and monitoring and evaluation), and achieving sustainable institutional excellence (service delivery excellence, Comprehensive Performance Results, and sustainability) within the context of private universities, particularly in the Yemeni environment, which is characterized by numerous organizational and administrative challenges. Furthermore, most studies addressed institutional excellence solely from a performance perspective, without delving into the dimension of sustainability as a determinant in promoting long-term excellence. This is where the research gap of the current study lies, highlighting the need to investigate the degree of influence of strategic planning as a mediating variable in the relationship between organizational factors and achieving sustainable institutional excellence in Yemeni private universities, a component of higher education institutions in the Republic of Yemen. This aims to contribute to providing a comprehensive vision, results, and recommendations that can be used to develop administrative policies and practices in Yemeni private universities and higher education institutions in general. Accordingly, this study anticipates the direct and indirect effects of strategic planning as a mediating variable in the relationship between organizational factors and the achievement of sustainable institutional excellence in Yemeni private universities. This effect will be measured through a main hypothesis and four sub-hypotheses derived from it, formulated as follows:

Main hypothesis (H): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of strategic planning as a mediating variable on the relationship between organizational factors and the achievement of sustainable institutional excellence in the studied Yemeni private universities.

The following sub-hypotheses are derived from this main hypothesis:

First sub-hypothesis (H1): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of organizational factors on the achievement of sustainable institutional excellence in Yemeni private universities.

Second sub-hypothesis (H2): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of organizational factors on the practice of strategic planning in Yemeni private universities.

Third sub-hypothesis (H3): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of strategic planning on achieving sustainable institutional excellence in Yemeni private universities.

Fourth sub-hypothesis (H4): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of organizational factors on achieving sustainable institutional excellence through strategic planning in Yemeni private universities.

2. Conceptual Framework

2.1. Organizational Factors

Organizational factors are defined as: a set of factors that guide an organization when available and used correctly; however, these factors hinder the achievement of desired goals when absent or insufficiently appropriate (Al-Hassan; Al-Afif, 2010). For the purpose of this study, they are defined as: the set of factors - namely, administrative leadership, organizational culture, and human resources - that influence the implementation of strategic planning methodologies with the aim of achieving sustainable institutional excellence at the universities.

Administrative leadership: This is the ability to influence, motivate, and coordinate the efforts of others through the exercise of formal authority in issuing orders, providing administrative supervision, and fostering the necessary interaction among them to work together toward common goals (Ben Al-Sheikh, 2017).

Organizational culture: This is a set of core concepts, values, beliefs, and ideas that a university possesses and instills in its employees, and works to implement in order to achieve its objectives (Al-Maqrami, 2020).

Human resources: This refers to a group of competent and experienced individuals who perform tasks and activities, including planning, organizing, developing, and motivating to achieve the highest level of productivity efficiently and effectively (Armstrong, 2006).

2.2. Strategic Planning

Strategic planning is defined as: a structured, participatory process undertaken within and by an organization to articulate its organizational goals, the actions necessary to achieve those goals, and any other critical elements developed during the planning process (Bieler; McKenzie, 2017). For the purpose of this study, it is defined as: an administrative approach through which the university, via its sequential, participatory, and time-bound methodology, plans for its long-term future and its transition from its current state to its desired state.

2.2.1. Dimensions of Strategic Planning

This study identifies the stages of strategic planning according to models developed by researchers and specialists in this field. These stages are as follows:

Environmental Analysis: Environmental analysis includes studying the internal and external environments. Al-Dajni (2011) defines the university's internal environment as

its current and future human, material, and financial resources and capabilities, in addition to the level of its technical and financial systems, processes, and other factors. Al-Ariqi (2018) defines the external environment as all elements and variables outside the organization that affect it, including economic, social, political, cultural, technological, and international variables, as well as suppliers, competitors, customers, and distributors.

Strategy Formulation: This is the process of integrating internal and external analysis by aligning the organization's strengths and weaknesses with the opportunities and threats available to it (Musaidah, 2013).

Strategy Implementation: This is a series of interconnected activities that involve fulfilling the requirements of the chosen strategy (Al-Douri, 2005).

Follow-up and evaluation: The final stage, called "performance measurement", means the continuous monitoring and recording of the achievements of the organization's programs, especially monitoring and recording aspects of progress towards achieving the predetermined goals (Al-Ghalibi; Idris, 2007).

2.3. Sustainable Institutional Excellence

Sustainable university excellence is defined as the university's ability to excel in the core areas of knowledge production and dissemination by mobilizing human, social, intellectual, and financial capital to ethically, efficiently, and effectively serve social, economic, and environmental needs, thus ensuring a sustainable future (Tajammal, et al., 2019). For the purposes of this study, sustainable institutional excellence is defined as the university's ability to provide outstanding educational, research, and community services that meet and exceed stakeholder expectations, while ensuring the long-term sustainability of this excellence. In this study, the dimensions of sustainable institutional excellence were identified, tailored to the study's environment and variables, as follows:

Excellence in Service Delivery: This refers to the university's ability to develop and improve its educational, research, and community services to meet the requirements of stakeholders such as students, the labor market, and the community.

Comprehensive Performance Results: These are the final outputs of the university's performance in light of its interaction with its internal and external environment (Al-Rshaideh, 2007).

Sustainability: This refers to the university's ability to maintain its institutional excellence through continuous improvement in efficiency, quality, and innovation (Bousalem, 2015).

3. Study Methodology and Procedures

3.1. Study Methodology

The study adopted a quantitative approach through its analytical method, as it provides a specific description of a particular phenomenon, and through it, the effect between the study variables can be determined.

3.2. Study procedures

3.2.1. Study Population and Sample

The study population consisted of (10) private Yemeni universities that had been established for more than (10) years and whose main campuses were in the capital city of Sana'a. These universities represented more than 50% of the total population of (18) universities and were selected using simple random sampling. The study targeted (321) employees from these universities, who were selected using systematic random sampling from the study population of (660) employees, according to the Steven Thompson formula, where: n : Sample size, N : Study population size, which is 660 employees, p : Probability value (the probability of the occurrence of the phenomenon under study), which is 0.50, d : Permissible error, which is 0.05, Z : The standard score corresponding to the confidence index used to evaluate the results, which is 0.95. Thus, the standard score is 1.96. The questionnaire was distributed by increase according to the size of each university's community in order to obtain the required number after excluding the abnormal and missing ones, and the total responses were as shown in Table (1).

Table (1): Sample Size of the Study

University Name	Distributed Number	Missed	Abnormal	Total Sample
University of Science and Technology	84	6	3	75
Yemeni University	37	3	1	33
Queen Arwa University	27	2	-	25
University of Modern Sciences	29	2	1	26
Al-Nasser University	31	-	1	30
Azal University for Human Development	25	3	1	21
Yemen University	27	1	1	25
International University of Technology Twintech	32	2	2	28
Al-Razi University	37	2	2	33
Civilization University	26	1	-	25
Total	355	22	12	321

3.2.2. Study Instrument

The current study relied on the questionnaire as the main instrument for collecting data by distributing it to (355) individuals. After excluding the missing and abnormal ones, the total sample amounted to (321) individuals. The questionnaire was designed based on previous studies related to the variables, such as the studies by (Afzal; Lim, 2022), (Zaid; Al-Shujaa, 2021), (Hussein et al., 2021), (Saleem; Mutawalli, 2022), (Bishr, 2019), (Omar, 2019), and (Jankalová; Jankal, 2020).

3.2.3. Statistical Methods

A range of descriptive and inferential statistical methods were used, including arithmetic means, standard deviations, and relative weights to analyze the responses of the sample members. Path analysis was also used to test hypotheses and relationships between variables using Amos v25 software, in addition to SPSS v26 software for descriptive statistical analyses.

3.2.4. Model Quality (Validity and Consistency)

The validity and consistency of the instrument's content were first confirmed by presenting the questionnaire to a panel of expert reviewers specializing in business administration and statistics. This ensured the comprehensiveness and clarity of its items and their relevance to the study's objectives and main themes.

The scale's validity was then confirmed using three criteria: internal consistency (loading coefficient), scale reliability (composite reliability (CR)), and extracted mean variance (AVE), as shown in Table (2):

Table (2): Criteria for Model Validity Acceptance

Type of Validity		Criterion
Internal Consistency (Loading)		The loading values for all items must be greater than (0.50), according to Hair et al. (2017).
Composite Reliability (CR)		The composite reliability (CR) value must be greater than (0.70) to reflect internal consistency among the indicators, as suggested by Hair et al. (2017).
Average Variance Extracted (AVE)		The average variance extracted (AVE) values must be greater than (0.50) to demonstrate that all items successfully measure their respective construct, according to Hair et al. (2017).

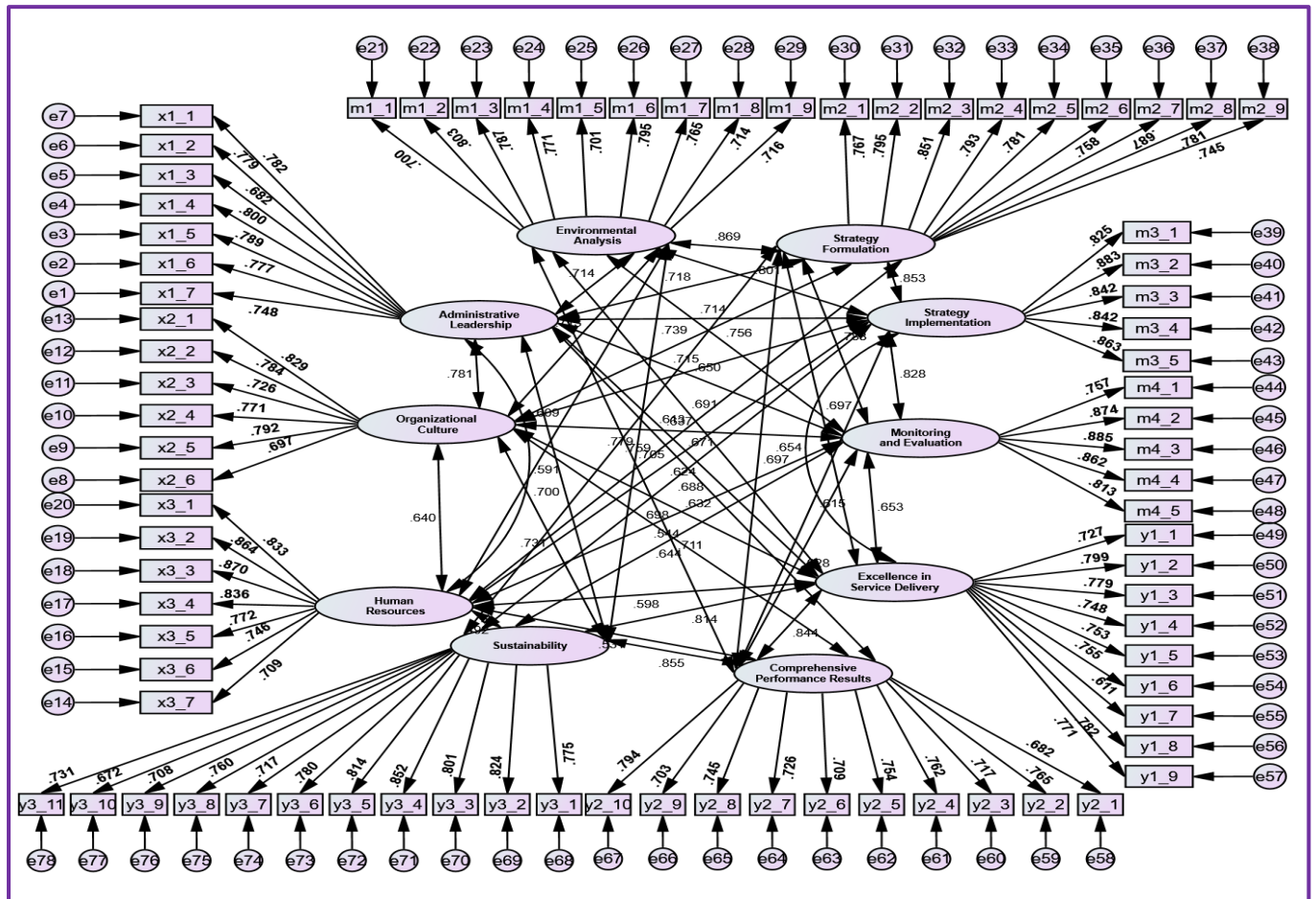


Figure (1): The structural model of the confirmatory factor analysis for the study instrument variables

Table (3): Results of the confirmation factor analysis for the study instrument variables

Indicators	Items	Loading	CR	AVE	Indicators	Items	Loading	CR	AVE
Administrative Leadership	X1_1	.782	0.909	0.587	Organizational Culture	X2_1	.829	0.896	0.589
	X1_2	.779				X2_2	.784		
	X1_3	.682				X2_3	.726		
	X1_4	.800				X2_4	.771		
	X1_5	.789				X2_5	.792		
	X1_6	.777				X2_6	.697		
	X1_7	.748				////////	////////	////////	////////

Indicators	Item s	Loadi ng	CR	AVE	Indicators	Item s	Loadi ng	CR	AVE		
Human Resources	X3_ 1	.833	0.92 8	0.65 0	Environmen tal Analysis	m1_ 1	.700	0.92 1	0.56 4		
	X3_ 2	.864				m1_ 2	.803				
	X3_ 3	.870				m1_ 3	.787				
	X3_ 4	.836				m1_ 4	.771				
	X3_ 5	.772				m1_ 5	.701				
	X3_ 6	.746				m1_ 6	.795				
	X3_ 7	.709				m1_ 7	.765				
Strategy Formulation	m2_ 1	.767	0.93 1	0.60 0		m1_ 8	.714			0.92 9	0.72 5
	m2_ 2	.795					m1_ 9				
	m2_ 3	.851			Strategy Implementat ion			m3_ 1	.825		
	m2_ 4	.793				m3_ 2		.883			
	m2_ 5	.781				m3_ 3	.842				
	m2_ 6	.758				m3_ 4	.842				
	m2_ 7	.687				m3_ 5	.863				
	m2_ 8	.781			Excellence in Service Delivery	y1_1	.727	0.92 0	0.56 1		
	m2_ 9	.745				y1_2	.799				
Monitoring and Evaluation	m4_ 1	.757	0.92 3	0.70 5	y1_3	.779	y1_4			.748	
	m4_ 2	.874				y1_5				.753	
	m4_ 3	.885									

Indicators	Items	Loading	CR	AVE	Indicators	Items	Loading	CR	AVE		
	m4_4	.862				y1_6	.755				
	m4_5	.813				y1_7	.611				
Comprehensive Performance Results	y2_1	.682	0.922	0.542		y1_8	.782				
	y2_2	.765				y1_9	.771				
	y2_3	.717			Sustainability	y3_1	.775	0.940	0.730		
	y2_4	.762				y3_2	.824				
	y2_5	.754				y3_3	.801				
	y2_6	.709				y3_4	.852				
	y2_7	.726				y3_5	.814				
	y2_8	.745				y3_6	.780				
	y2_9	.703				y3_7	.717				
	y2_10	.794				y3_8	.760				
						y3_9	.708				
						y3_10	.672				
					y3_11	.731					

- *CMIN/DF*: The normed chi-square index, calculated by dividing the chi-square value by the degrees of freedom.
- *CFI*: Comparative Fit Index.
- *TLI*: Tucker-Lewis Index.
- *RMSEA*: Root Mean Square Error of Approximation.

Table (4): Criteria of Goodness of Fit Indices (Ideal Standard)

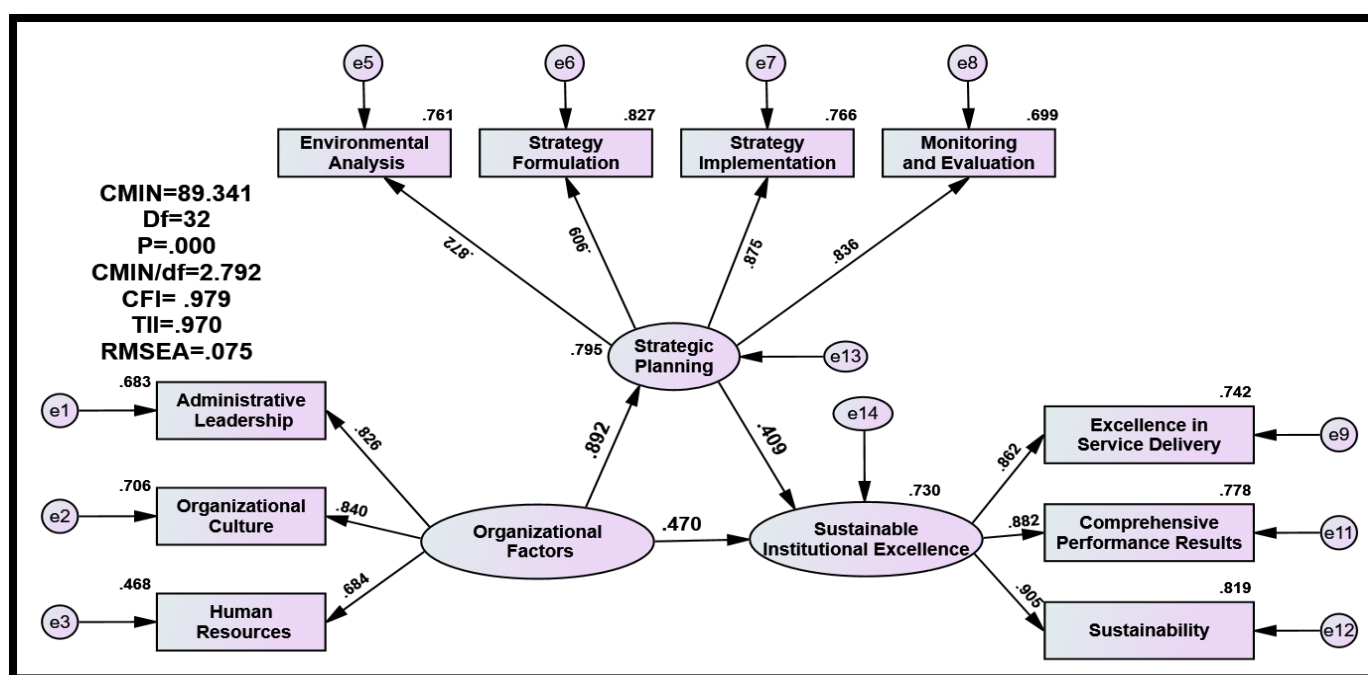
1	CMIN/DF<5
2	Tucker-Lewis Index (TLI>0.90)
3	Comparative Fit Index (CFI>0.90)
4	Root Mean Square Error of Approximation (RMSEA≤0.08)

Source: Afthanorhan, W.A. (2013)

4. Results and Discussion

4.1. Hypothesis Testing

To test the study hypotheses, the AMOS25 statistical software was used to evaluate the proposed model and test both the main hypothesis and its derived sub-



hypotheses. Path analysis was adopted, as described in the study's structural model Figure (2).

Figure (2): The constructivist model according to path analysis of the study hypotheses

Table (5): Results of path analysis of direct, indirect and total effects (independent on the dependent, in the presence of the mediator)

path	β	S.E.	(CR)	P
Direct Effects				

Organizational Factors	>	Sustainable Institutional Excellence	.470	.180	2.611	.001
Organizational Factors	>	Strategic Planning	.892	.025	35.680	***
Strategic Planning	>	Sustainable Institutional Excellence	.409	.176	2.324	0.035
Indirect Effects						
Organizational Factors	>	Sustainable Institutional Excellence	.365	.156	2.340	.033
Total Effects						
Organizational Factors	>	Sustainable Institutional Excellence	.835	.035	23.857	***

(*** Statistical significance level $p < 0.001$)

Figure (2) and Table (5) show the following:

The results of this study emphasize the importance of organizational factors, the importance of achieving sustainable institutional excellence, and the importance of strategic planning as a mediating variable in the relationship between them. This highlights the close correlation between these variables and their clear impact on improving and developing performance, competitiveness, and the survival and sustainability of educational institutions.

The study results also demonstrate a remarkable consistency between the study variables and many previous studies, adding value to scientific knowledge regarding the variables and their dimensions in Yemeni private universities. This is demonstrated in the results of the hypothesis testing, as follows:

Main Hypothesis (H): There is a statistically significant effect ($\alpha \leq 0.05$) of strategic planning as a mediating variable in the relationship between organizational factors and the achievement of sustainable institutional excellence in the studied Yemeni private universities.

The results revealed that, by combining direct and indirect effects, the overall effect of organizational factors on sustainable institutional excellence reached ($\beta = 0.835$, $CR = 23.857$, $P < 0.001$). This strongly supports the main hypothesis and thus its acceptance, confirming that strategic planning acts as a key mediating variable that enhances the effect of organizational factors on achieving sustainable institutional excellence. This will be further explained in the following sub-hypotheses.

To test the sub-hypotheses stemming from the main hypothesis, the researcher relied on the direct impact of the independent variable (organizational factors) on the dependent variable (achieving sustainable institutional excellence), as follows:

first Sub-hypothesis (H1): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of organizational factors on achieving sustainable institutional excellence in Yemeni private universities.

The results revealed a statistically significant direct effect of organizational factors on achieving sustainable institutional excellence, with results ($\beta = 0.470$, $CR = 2.611$,

$P=0.001$). These results confirm that organizational factors play a crucial role in achieving sustainable institutional excellence in universities.

The results of the hypothesis also indicate the importance of administrative leadership as one of the dimensions of organizational factors in achieving sustainable institutional excellence, which confirms that one of the requirements for achieving it is the existence of administrative leadership that is chosen on solid foundations and enjoys responsibility due to its importance in the ability to continuously develop. This is consistent with Al-Hajj's study (2020), which confirmed the existence of an impact of leadership in achieving institutional excellence in Yemeni private universities, as well as with Al-Wuhibi's study (2020), which indicated that leaders bear the greatest responsibility in achieving the enablers of institutional excellence.

The results of the hypothesis revealed that organizational culture, as one of the dimensions of organizational factors, plays an important role in achieving sustainable institutional excellence. This indicates the importance of organizational culture in helping everyone working in the educational institution to deal with and adapt to all the changes in order to achieve it and ensure the survival, growth and sustainability of the educational institution. This supports what the study (Afzal; Lim, 2022) concluded, that organizational culture is one of the main factors affecting sustainability performance.

The results of the hypothesis also revealed that human resources, as one dimension of organizational factors, influences the achievement of sustainable institutional excellence. This indicates the importance of competent and qualified human resources for the strategic survival and prosperity of universities, enabling them to compete in their current markets, assess and adapt to evolving markets and technological changes, and achieve long-term sustainable success. This supports the study by Bishr (2019), which confirmed that human resource development strategies have an impact on achieving sustainable institutional excellence. The results also align with the study by Hussein; Al-Junaibi (2022) on the role of human competencies in achieving institutional excellence, as well as with the study by Al-Zu'bi; Al-Zu'bi (2022), which found an impact of human resource soft skills on institutional excellence. Based on the above, the first sub-hypothesis is accepted.

Second sub-hypothesis (H2): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of organizational factors on the practice of strategic planning in Yemeni private universities.

The results revealed that organizational factors have a strong and statistically significant impact on strategic planning practices in universities ($\beta=0.892$, $CR=35.680$, $P<0.001$). These results provide strong evidence that organizational factors significantly influence the adoption and implementation of strategic planning. This indicates that administrative leadership, as one of the dimensions of organizational factors, is very important in the direction towards the practice of strategic planning, as any change in administrative leadership may lead to the strategic plan - even if it is within the framework of strategic analysis, strategy formulation, or even ready for implementation - facing a new administrative leadership for the educational institution that stands as an obstacle to completing its construction or implementation. Moreover, the

organizational culture, with its prevailing beliefs and values, greatly affects the work of practicing strategic planning to become a sustainable methodology for the development and long-term survival of the educational institution. This also confirms the importance of human resources in the success of the educational institution's strategy and adding sustainable value to it. The more the institution strives to reach and identify individuals with outstanding skills and competencies in human resources and give them a fundamental role in the strategic planning process - from analysis and formulation to implementation, follow-up, evaluation, and assessment of the strategy - the more the institution will be able to achieve its strategy. This aligns with the findings of several previous studies, such as Aqlan's (2018) study, which emphasized the need for university leadership and human resources to engage in the practical application of strategic planning; Al-Mutairi's (2022) study, which demonstrated a positive relationship between organizational culture, human resources, and strategic planning; and Balkarm; Abdulbasit's (2022) study, which stressed the importance of considering human resources as a strategic partner with a vital role within the organization's strategy. Based on the above, the second sub-hypothesis is accepted.

Third sub-hypothesis (H3): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of strategic planning on achieving sustainable institutional excellence in Yemeni private universities.

Strategic planning practices demonstrated a direct and statistically significant impact on sustainable organizational excellence, with results ($\beta=0.409$, $CR=2.324$, $P=0.035$). This confirms that effective strategic planning contributes significantly to achieving sustainable organizational excellence.

The results also indicate that strategic planning has a positive impact on improving competitiveness and performance in Yemeni universities, thus developing and distinguishing them and enhancing their sustainability. They also indicate that universities show great interest in practicing it as an effective methodology in increasing development processes, achieving desired goals, enhancing their competitive position and achieving sustainability in excellence. This is consistent with the results of the study (Alhafiti et al., 2019), which confirmed that the effectiveness of strategic planning tools in management increases the organization's performance, and the study (Hussein et al., 2021), which confirmed that the university under study employs strategic planning with all its indicators to improve its competitiveness, and the study (Hamza, 2020), whose results showed a strong positive correlation between strategic planning indicators and university performance. This confirms the importance of strategic planning with all its factors and indicators in improving competitiveness and improving performance in universities, and the study (Al-Mutairi, 2022), whose results showed the availability of the requirements for developing Kuwaiti higher education institutions in light of the strategic planning approach.

The study's findings revealed a strong positive correlation between strategic planning practices and their importance in achieving sustainable institutional excellence in Yemeni universities. Any improvement in strategic planning practices leads to increased achievement and sustainability of institutional excellence. This aligns with the study by

Tajammal et al., (2019), which emphasized that achieving sustainable university excellence requires universities to continuously focus on strategies, policies, and action plans, and with the study by Lopez; Martin (2018), which stressed that sustainability should be an integral part of universities' long-term strategic planning and clearly reflected in mission statements, quality policies, and quality management plans. Based on the above, the third sub-hypothesis is accepted.

Fourth sub-hypothesis (H4): There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of organizational factors on achieving sustainable institutional excellence through strategic planning in Yemeni private universities.

The results revealed a statistically significant indirect effect of organizational factors on sustainable institutional excellence through strategic planning ($\beta=0.365$, $CR=2.340$, $P=0.033$). This confirms the mediating role of strategic planning in this relationship.

The results of testing this hypothesis indicate the importance of organizational factors in achieving sustainable institutional excellence through strategic planning as an intervening variable. This demonstrates the universities' awareness and understanding of the importance of practicing strategic planning and its important role in achieving institutional excellence and enhancing its sustainability. It also indicates its importance as an intervening variable through which organizational factors (administrative leadership, organizational culture, and human resources) achieve sustainable institutional excellence in universities. It helps them guide decisions, enhance their performance, analyze their internal and external environment, and clearly define their vision, mission, and strategic goals, as well as implement strategic plans by developing the necessary operational plans to achieve institutional excellence and ensure its long-term sustainability in higher education institutions. The results of this study are consistent with several previous studies that addressed three dimensions (independent, mediating, and dependent), such as the study by Chowdhury et al., (2022), which concluded that organizational factors enhance sustainable performance through a "focus and talk" strategy. The study also partially agrees with the study by Abdulaziz; Al-Zu'bi (2021), which confirmed the impact of strategic planning as an independent variable and the mediating role of organizational factors in the relationship between strategic planning and strategic success. Furthermore, the study partially agrees with the study by Al-Kafawin; Al-Zu'bi (2021), which indicated the impact of organizational factors on strategic planning with creative behavior as a mediating variable. Based on the above, the fourth sub-hypothesis is accepted.

4. Conclusion

This study confirms that Yemeni private universities achieve a high level of sustainable institutional excellence, as evidenced by the quality of services provided and comprehensive performance results. However, the sustainability dimension requires further attention to enhance it in order to align the levels of excellence in educational, research, and community services with the comprehensive performance results of these

services, thereby ensuring the continuity of excellence in the long term within a balanced strategic framework.

Statistical analyses also showed that organizational factors directly and indirectly influence sustainable institutional excellence, with strategic planning being a key mediating variable that strengthens this relationship. Strategic planning also enables the efficient transformation of organizational resources and capabilities into high-quality services, outstanding comprehensive performance results, and sustainable practices. Therefore, integrating organizational factors with strategic planning provides a solid foundation for ensuring the continuity of sustainable institutional excellence in Yemeni private universities.

6. Recommendations

Based on the above, the study recommends the following:

Enhancing the sustainability and effectiveness of the three components of organizational factors: administrative leadership, organizational culture, and human resources - through the implementation of effective strategic plans that ensure the continuous improvement of these factors and their integration with future variables.

Integrating institutional excellence and sustainability as an integral part of future university strategies, and prioritizing the achievement of sustainable institutional excellence as a key strategic objective for universities, given its pivotal role in enhancing the added value of these institutions, ensuring their continuity in a competitive environment, expanding the base of beneficiaries of their services, and raising the level of their academic and research outputs to meet the requirements of quality and academic accreditation.

The effectiveness of human resources should also be enhanced by focusing on development and qualification programs for academic and administrative staff, and training them on the latest administrative practices and strategies.

The study also suggests conducting further research that addresses other organizational factors not studied in this study, in order to examine the relationship between them and the practice of strategic planning and the achievement of sustainable institutional excellence. It also suggests studying the relationship between strategic planning in its various dimensions, to explore its impact on achieving sustainable institutional excellence in various aspects of the higher education sector in other contexts. This contributes to deepening scientific knowledge and providing more comprehensive insights for researchers and decision-makers.

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Conflicts of Interest

The authors affirm that the present study is free of any conflicts of personal or institutional interests.

Disclosure of the use of AI

The authors declare that no generative artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript.

Ethics Approval

This study adhered to the ethical guidelines of the Center for Business Administration at Sana'a University. The Center sent official letters to the targeted private universities and all university presidents approved the data collection process. Before distributing the questionnaire, all participants were informed of the study's purpose, and their participation was voluntary.

Data Availability

The data were obtained, collected, and analyzed from a sample of employees in the studied private Yemeni universities.

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