



Enhancing the Performance of Continuing Education Managers in the Kingdom of Saudi Arabia Through Strategic Thinking

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ABSTRACT

This study aimed to evaluate the performance and development of continuing education managers in Saudi Arabia through strategic thinking. It utilized a quantitative cross-sectional survey to assess managers' strategic thinking patterns, practices, obstacles, and mechanisms to overcome obstacles. A validated questionnaire collected data from fifty-three managers. The study demonstrated high reliability with a Cronbach's alpha of 0.973. Validity was also established. The analysis revealed the importance of comprehensive thinking skills, strategy formulation and implementation, and personal, organizational, and external obstacles hindering strategic thinking practice.

Proposed mechanisms included encouraging innovation, providing resources, fostering relationships, offering managerial support and rewards, involving managers in vision development, and providing continuous training. Experience significantly influences the ability to overcome strategic thinking obstacles and improve performance. Academic qualifications showed differences but had little impact on strategic performance development, while training courses did not significantly affect performance outcomes. The study recommends developing targeted training programs, creating a supportive organizational culture, addressing obstacles through interventions, leveraging experienced managers' expertise, and regularly assessing strategic thinking skills. Implications include the importance of comprehensive thinking skills, organizational support, addressing obstacles, and experience for enhancing strategic thinking and performance.

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Introduction

Continuous education and training have become an indispensable necessity in today's rapidly evolving world, where knowledge and skills undergo constant change and development (Moonasar, 2024). Consequently, organizations and companies strive to implement ongoing educational and training programs for their employees to keep pace with these dynamic shifts and emerging needs (Kilag et al., 2023). In the current context, persistent education plans for managers are critically important, ensuring their ability to modify to the ever-changing challenges and variables confronting their institutions (Obeidat et al., 2023). Many researchers underscored the significance of continuing education for managers in enhancing performance and managerial skills, resulting in indicating the overall performance of an organization (Lee et al., 2023). Nonetheless, the programs simultaneously face diverse challenges, including institutional support, work pressures, and difficulties in balancing work and education (Sharma et al., 2023).

The current study examines the experience of a continuing education program for managers at a specific company, delving into managers' perceptions and views regarding this program. (Govranos et al., 2014) conducted a qualitative study exploring ward nurses' perspectives on continuing education. The study's findings underscored the significance of continuing education in enriching nurses' knowledge and skills while also uncovering various obstacles such as time constraints, workload, and lack of managerial support. Additionally, Pool et al. (2013) explored nurses' and managers' perceptions of continuing professional development through focus group discussions. This research revealed disparities in perceptions between older and younger nurses, with older nurses displaying greater motivation to engage in continuing education due to their extensive experience and aspiration for professional advancement.

Therefore, the current research was designed to contribute to the existing body of knowledge by providing insights into the experiences and perspectives of managers regarding the continuing education program within the specific organizational context. By exploring challenges faced, benefits gained, and the overall impact on managerial performance, the current research informs future efforts to design and implement effective continuing education programs tailored to the unique needs of managers. Ultimately, the current research endeavors to promote a culture of lifelong learning and continuous professional development, empowering managers to navigate the complexities of their roles and drive organizational success in an ever-changing business environment. Recently, Saudi Arabia embarked on a transformative journey, redefining the landscape of continuing education with a special emphasis on enhancing the performance of education managers through strategic thinking. This initiative, considered perilous for fostering a culture of continuous improvement and adaptability, is well-documented by (Mitchell et al., 2018). The study also provided a discussion on achieving the aspirations of the National Transformation Program 2020 and Saudi Vision 2030 through education. The Kingdom recognizes the pivotal role of continuing education managers in shaping the future of education and, by extension, contributing to national development.

In Saudi Arabia, the ambit of continuing education is at a critical juncture, boosted by dynamic shifts in the global knowledge economies and underscored by the nation's Vision 2030 ambitions (Al-Mutairi et al., 2019). Furthermore, the strategic vision not only provides a path for economic diversification and educational reform but also underscores the key

role of continuing education managers in navigating and leading the transformation (Alharbi, 2020). Consequently, the task of improving the performance of managers through strategic thinking is not just imperative but strategically intersects with broader goals for national development and global competitiveness (Audi, 2019). Besides, the challenge's complexity is multi-dimensional. First, there's the rapid technological advancement and the attendant need for continuous skill upgrades, positioning continuing education as an imperative factor in the wheel for sustainable development and knowledge dissemination. Secondly, a shift towards strategic thinking necessitates a departure from traditional management styles, demanding a blend of foresight, innovation, and adaptability that aligns with the future-oriented goals of Vision 2030 (Al-Mwzaiji et al., 2023). Third, there are institutional barriers - from limited support frameworks to pressures of balancing work and educational advancement - that can stymie growth and the efficacy of continuing education programs (Mbarki, 2020).

A cultural and organizational approach within which managers operate influences strategic orientation and decision-making processes. The systemic, organizational, and policy-driven factors shape and influence the integration of strategic thinking into management practices. Thus, the current research aims to answer the question: What strategic interventions and systemic changes are important to enhance the performance of continuing education managers in Saudi Arabia, enabling them to effectively lead and navigate a transformative agenda of educational reform in unity with the aspirations of Vision 2030? Current research is designed to unravel multifaceted challenges facing managers and delineate a strategic framework that can amplify impact within the realm of continuing education (Al-Mwzaiji et al., 2023; Mbarki, 2020). The primary question that this research seeks to address is: How can strategic interventions and systemic changes enhance the performance of continuing education managers in the Kingdom of Saudi Arabia, enabling them to effectively lead and navigate through the transformative agenda of educational reform in alignment with the aspirations of Vision 2030?

There are several objectives of current research. The first objective is to reveal the extent to which continuing education department managers in the Kingdom of Saudi Arabia possess strategic thinking patterns (comprehensive, abstract, diagnostic, and planning). The second objective is to uncover the degree to which these managers practice the stages of strategic thinking. The third objective is to identify obstacles to performance development in practicing strategic thinking among these managers. Finally, the fourth objective is to suggest several mechanisms and practical solutions to overcome obstacles that limit the ability of these managers to practice strategic thinking and improve performance.

Review of Literature

Strategic thinking is essential for analyzing and anticipating future trends and challenges, enabling organizations to craft strategies that ensure long-term success. This capability is especially critical in the realm of higher education, where leadership must adapt to the evolving landscape of the 21st century (Gonaim, 2014). Furthermore, continuing education is vital for professionals and adult learners seeking to enhance their skills or knowledge beyond traditional educational pathways. It plays a significant role in personal and professional development, aligning with the needs of a rapidly changing world. A strategic approach to empowering Saudi teachers in secondary education exemplifies the commitment to advancing continuing

education (Muxammadjonovich, 2023). Thirdly, managerial performance in educational settings significantly impacts the achievement of objectives. Developing the performance of educational managers through strategic thinking is crucial for the progress of education systems in Saudi Arabia (Ionescu et al., 2022).

Educational management concerns effectively running educational institutions to achieve their goals. Additionally, a critical shift in the Saudi education system compels adopting innovative educational management practices (Allmnakrah et al., 2020). Thus, strategic management is about continuous planning, monitoring, and assessment for an institution to meet its goals. The concept highlights the importance of incorporating successful international experiences, such as the Japanese model in overseeing higher education, to boost the Saudi educational system (Ajay, 2023). Lastly, professional development focuses on improving educators' and managers' skills and knowledge. Additionally, continuous assessment in the Saudi education system shows the need for ongoing professional development to address challenges and leverage opportunities for educational advancement (Maashi et al., 2022).

Brekelmans et al. (2016) surveyed in the Netherlands to identify factors influencing nurses' participation in continuing professional development activities. The outcomes indicated that organizational support, financial resources, and work-life balance were key factors affecting nurses' ability to engage in the programs. Additionally, Hoque et al. (2017) Hoque et al. (2017) investigated the role of continuing education in sustaining educational leaders in the United Arab Emirates. The scholars showed that continuing education programs play a crucial role in developing leadership skills, fostering professional growth, and enhancing the overall quality of educational institutions. Skees (2010) emphasized the importance of continuing education in critical care nursing, highlighting its role as a bridge to excellence and ensuring that nurses remain up to date with the latest improvements and best practices in their field. In nursing education, Zupanc (2016) established an outcome measurement plan for the accredited continuing nursing education provider unit. This plan aimed to evaluate the effectiveness of the continuing education programs and ensure alignment with professional standards and competencies.

Meanwhile, Allmnakrah et al. (2020) focus on the need for a fundamental shift in the Saudi education system to align with the economic vision of 2030. The transformation points to the multi-faceted approach that integrates international best practices while aligning with the cultural and strategic imperatives of the Kingdom. The evolution of Saudi Arabia's continuing education sector is supported by a robust framework that emphasizes strategic thinking among education managers. Additionally, it brings up a forward-looking, innovative mindset adaptable to the dynamics of the global education landscape. Strategic thinking emboldens managers to anticipate changes, leverage opportunities, and navigate challenges with agility and resilience. This capacity entails a deep understanding of the broader ecosystem, including technological advancements, demographic shifts, and global educational trends. Alharbi et al. (2020) highlighted the integration of the Internet of Things in electrical engineering education and technological advancements contributing to the strategic goals of Vision 2030.

Saudi Arabia intends to cultivate a generation of leaders equipped to steer their institutions towards achieving excellence and relevance in the 21st century. Additionally, the focus on enhancing managerial performance through strategic thinking aligns with

Saudi Arabia's Vision 2030, which envisions creating a vibrant society with robust educational systems that propel the Kingdom into a knowledge-based economy (Pavan, 2017). Al-Mwzaiji et al. (2023) highlighted that alignment with Vision 2030 ensures that educational programs are not only of high quality but also responsive to the changing needs of the labor market and the aspirations of the Saudi population. Thus, Saudi Arabia's emphasis on strategic thinking for continuing education managers represents a transformative shift towards creating a more dynamic, responsive, and quality-driven educational landscape. This strategic orientation is expected to yield significant dividends, not only in enhancing the competencies and performance of education managers but also in elevating the overall quality of continuing education in the Kingdom.

Research Hypotheses

First Objective: Null Hypothesis (H0): Continuing education department managers in the Kingdom of Saudi Arabia do not possess a high degree of strategic thinking patterns (comprehensive, abstract, diagnostic, planning). Alternative Hypothesis (H1): These managers possess a high degree of strategic thinking patterns.

Second Objective: Null Hypothesis (H0): These managers do not practice the stages of strategic thinking to a high degree. Alternative Hypothesis (H1): They practice the stages of strategic thinking to a high degree.

Third Objective: Null Hypothesis (H0): There are no obstacles that negatively affect the ability of these managers to develop performance in practicing strategic thinking. Alternative Hypothesis (H1): Some obstacles negatively affect this ability.

Fourth Objective: Null Hypothesis (H0): It is not possible to suggest mechanisms and practical solutions to overcome the obstacles to practicing strategic thinking and performance development. Alternative Hypothesis (H1): It is possible to suggest such mechanisms and solutions.

Methodology

The research utilizes a quantitative, cross-sectional survey design to explore the strategic thinking among continuing education managers in Saudi Arabia. It assesses their strategic thinking patterns, and practices, identifies obstacles to strategic thinking, and proposes mechanisms for overcoming these obstacles through a structured questionnaire. The study adopts an analytical-descriptive approach to achieve its objectives, which include identifying strategic thinking patterns among managers, assessing their strategic thinking practices, examining obstacles to strategic thinking and performance development, and proposing mechanisms to overcome these obstacles. A self-administered questionnaire was used to collect data, structured around the study's core dimensions: strategic thinking patterns, practices, obstacles, and mechanisms for overcoming obstacles, utilizing a Likert scale for responses. The study targeted a population of 156 continuing education managers across Saudi Arabia, selecting a stratified random sample of 52 managers. This sample size ensures a comprehensive analysis while being practically manageable. The questionnaire, developed through an extensive literature review and validated by experts, underwent rigorous reliability and validity testing. It demonstrated high reliability, with an overall Cronbach's alpha of 0.973, indicating strong internal consistency and stability. The validity of the questionnaire was confirmed

through a significant Pearson correlation between individual items and their respective main axes, ensuring accurate measurement of strategic thinking dimensions. Comprehensive statistical analysis was employed, including descriptive statistics, reliability analysis (Cronbach's alpha), Pearson correlation, multiple regression analysis, and one-way ANOVA, conducted using statistical software for a detailed examination of data.

Findings

This study explores the dynamics of strategic thinking within Saudi Arabia's educational administration, examining the practices, obstacles, and facilitators among educational leaders. Through a detailed statistical analysis of questionnaire data, we examine the correlation between strategic thinking patterns, the impact of professional experience, academic qualifications, and the efficacy of training programs. The results section presents a comprehensive examination of these elements, utilizing various statistical methodologies to uncover significant insights that inform the development of strategic thinking capabilities in educational leadership. This will be discussed as follows.

Descriptive Statistics of the Data

Table 1 displays statistical measures, including mean, standard deviation, and frequency distribution, for responses related to the variables of the region, years of experience (X1), educational degree (X2), and training courses (X3). Table 1 reveals that the highest response rates came from individuals in the Al-Kharj region (47.2%), bachelor's degree holders (69.8%), participants with fewer than three training courses (52.8%), and those with over ten years of experience.

Table 1

Frequency Distribution of Region, Years of Experience, Educational Degree, and Training Courses

Years of Experience X1			Scientific degree X2			Training courses X3			Area		
%	F		%	F		%	F		%	F	
35.8	19	5years<	69.8	37	Bachelor	52.8	28	3courses<	1.9	1	Al-Baha
26.4	14	10-5years	24.5	13	Master	47.2	25	3-5 courses	5.7	3	Al-Hudud
37.7	20	> 10 years	5.7	3	Ph.D.	100	53	Total	64.2	34	Al-Kharj
100	53	Total	100	53	Total	7.47		Mean	1.9	1	Al-Del
2.02		Mean	4.36		Mean	0.504		S. deviation	11.3	6	Riyadh
0.866		S. deviation	0.591		S. deviation				1.9	1	Al-Jouf
									1.9	1	Al-Qassim
									3.8	2	Al-Wusta
									1.9	1	Tabuk
									1.9	1	Shaqra
									3.8	2	Asir
									100	53	Total

Additionally, Table 2 provides the means, standard deviations, and Pearson correlation coefficients for each item, organized by the main axis. From Table 2, analyzing the importance of the three main axes according to the mean responses and standard deviations for each item, we find that one axis stands out as the most important. The first axis, which focuses on detecting the level of strategic thinking styles possessed by

department managers in the Kingdom of Saudi Arabia, is crucial. The average score is 11.9, with a standard deviation of 0.726. Item 1, which assesses comprehensive thinking skills, has the highest average of 11.97 with a standard deviation of 0.707. Item 4, which evaluates strategic thinking skills, follows with an average of 11.95 and a standard deviation of 0.969. Item 3, which concerns diagnostic thinking skills, comes next with an average of 11.89 and a standard deviation of 0.813, followed by item 2, which measures abstract thinking skills, with an average of 11.79 and a standard deviation of 0.773.

The second axis, which involves detecting the degree of practice of Continuous Education Department Managers in the Kingdom of Saudi Arabia in the stages of Strategic Thinking, is crucial. The average score stands at 11.82, with a standard deviation of 0.819. Item 2, which focuses on strategy formulation, leads with the highest average of 11.91 and a standard deviation of 0.860. Item 3, which focuses on strategy application, follows with an average of 11.84 and a standard deviation of 0.86. Consequently, item 1, which evaluates current situations, has an average of 11.78 and a standard deviation of 0.83. Lastly, item 4, which covers strategy review and evaluation, has an average of 11.74 and a standard deviation of 0.910. The third axis, "Barriers to the Development of Performance of Continuous Education Department Managers in the Kingdom of Saudi Arabia in Practicing Strategic Thinking," is of interest. The average score is 15.27, with a standard deviation of 0.688. Item 3, which focuses on addressing personal barriers, has the highest average of 15.6 and a standard deviation of 0.988. Item 2, which focuses on organizational barriers, follows with an average of 15.16 and a standard deviation of 0.682. Lastly, item 1, which concerns external environmental barriers, records an average of 15.03 and a standard deviation of 0.731.

Fourth Axis (Proposed Mechanisms to Overcome the Obstacles Limiting the Ability of Continuous Education Department Managers to Practice Strategic Thinking and Improve Performance). The average score is 11.86, with a standard deviation of 0.948. Paragraph 61, which focuses on encouraging managers to continue education to explore new ideas, leads with the highest average of 12 and a standard deviation of 1.019. Following this, paragraph 64 addresses the provision of essential resources, such as time and money, for these managers to implement strategic thinking initiatives, showing an average of 11.92 and a standard deviation of 1.158. Paragraph 68 emphasizes the importance of building strong relationships with relevant parties, with an average of 11.91 and a standard deviation of 1.061. Paragraph 63 highlights the creation of a supportive work culture for strategic thinking and innovation, with an average of 11.89 and a standard deviation of 0.974. Paragraph 69, outlining the support and guidance from senior management for managers seeking to practice strategic thinking, also shows an average of 11.89, but with a standard deviation of 1.068.

Additionally, item 66 suggests providing an effective reward system for managers practicing strategic thinking, with an average of 11.87 and a standard deviation of 1.093. Paragraph 67, which involves managers in developing the sector's strategic vision, has an average of 11.83 and a standard deviation of 1.033. Paragraph 62, which provides ongoing professional training and development in strategic thinking, has an average of 11.75 and a standard deviation of 1.159. Lastly, paragraph 65, concerning the evaluation of managers' performance based on their strategic thinking skills, has an average of 11.68 and a standard deviation of 0.966. In summary, the analysis determines the first axis to be the most critical, focusing on managers' possession of strategic thinking styles in continuing education. The fourth axis follows, with the second axis receiving a high response rate. The third axis,

addressing obstacles, received a moderately agreeable response. This ranking shows how important strategic thinking patterns are, how engaged people are in strategic thinking stages, and how well systems work to get continuing education department managers to practice strategic thinking and improve their performance.

Table 2

Means, Standard Deviations, and Pearson Correlation Coefficients for Each Paragraph According to the Main Axis

Paragraph	Variable	Five-point Likert scale scores										Average	Standard deviation	Pearson correlation coefficient
		Very low 9	Low 10	Medium 11	High 12	Very high13	I strongly agree 14	Agree 15	I somewhat agree 16	disagree 17	Strongly disagree 18			
1	X4	0	2	9	24	18	0	0	0	0	0	12.09	0.815	0.721**
2	X5	0	2	13	23	15	0	0	0	0	0	11.96	0.831	0.789**
3	X6	2	3	16	18	14	0	0	0	0	0	11.74	1.041	0.840**
4	X7	1	2	10	20	20	0	0	0	0	0	12.06	0.949	0.842**
5	X8	0	3	7	25	18	0	0	0	0	0	12.09	0.838	0.847**
6	X9	0	1	17	21	14	0	0	0	0	0	11.91	0.815	0.758**
		The first dimension of the first axis										11.97	0.707	
7	X10	0	1	13	28	11	0	0	0	0	0	11.92	0.730	0.879**
8	X11	0	4	17	17	15	0	0	0	0	0	11.81	0.942	0.913**
9	X12	1	7	19	14	12	0	0	0	0	0	11.55	1.048	0.841**
10	X13	0	3	19	20	11	0	0	0	0	0	11.74	0.858	0.850**

11	X14	1	2	12	22	16	0	0	0	0	0	11.94	0.929	0.809**
			The second dimension of the first axis								11.79	0.773		
12	X15	0	2	18	18	15	0	0	0	0	0	11.87	0.878	0.858**
13	X16	1	1	12	22	17	0	0	0	0	0	12.00	0.899	0.905**
14	X17	1	0	14	20	18	0	0	0	0	0	12.02	0.888	0.904**
15	X18	1	3	16	19	14	0	0	0	0	0	11.79	0.968	0.929**
16	X19	1	1	19	20	12	0	0	0	0	0	11.77	0.891	0.894**
			The third dimension of the first axis								11.89	0.813		
17	X20	0	1	14	21	17	0	0	0	0	0	12.02	0.820	0.895**
18	X21	0	3	16	17	17	0	0	0	0	0	11.91	0.925	0.869**
19	X22	0	3	15	20	15	0	0	0	0	0	11.89	0.891	0.893**
20	X23	1	1	15	15	21	0	0	0	0	0	12.02	0.971	0.901**
21	X24	0	0	16	17	20	0	0	0	0	0	12.08	0.829	0.914**
22	X25	0	4	17	12	20	0	0	0	0	0	11.91	1.005	0.936**
23	X26	1	2	17	17	16	0	0	0	0	0	11.85	0.969	0.892**
			The fourth dimension of the first axis								11.95	0.824		
			The first axis								11.90	0.726		
24	X27	0	8	21	11	13	0	0	0	0	0	11.55	1.030	0.838**
25	X28	0	2	20	16	15	0	0	0	0	0	11.83	0.893	0.939**
26	X29	0	4	16	19	14	0	0	0	0	0	11.81	0.921	0.895**
27	X30	0	2	20	16	15	0	0	0	0	0	11.83	0.893	0.929**
28	X31	0	2	18	18	15	0	0	0	0	0	11.87	0.878	0.904**
			The first dimension of the second axis								11.78	0.830		
29	X32	0	1	15	15	22	0	0	0	0	0	12.09	0.883	0.865**
30	X33	0	2	17	15	19	0	0	0	0	0	11.96	0.919	0.920**

31	X34	0	5	13	19	16	0	0	0	0	0	11.87	0.962	0.873**	
32	X35	0	2	17	17	17	0	0	0	0	0	11.92	0.895	0.898**	
33	X36	0	6	16	15	16	0	0	0	0	0	11.77	1.012	0.922**	
34	X37	1	5	14	16	17	0	0	0	0	0	11.81	1.057	0.918**	
The second dimension of the second axis												11.91	0.860		
35	X38	0	2	19	17	15	0	0	0	0	0	11.85	0.886	0.923**	
36	X39	0	4	19	16	14	0	0	0	0	0	11.75	0.939	0.872**	
37	X40	0	3	16	16	18	0	0	0	0	0	11.92	0.937	0.963**	
38	X41	1	3	19	15	15	0	0	0	0	0	11.75	0.998	0.879**	
39	X42	0	4	16	15	18	0	0	0	0	0	11.89	0.974	0.877**	
40	X43	1	4	13	18	17	0	0	0	0	0	11.87	1.020	0.926**	
The third dimension of the second axis												11.84	0.860		
41	X44	1	3	19	14	16	0	0	0	0	0	11.77	1.012	0.838**	
42	X45	2	2	18	17	14	0	0	0	0	0	11.74	1.022	0.898**	
43	X46	1	4	16	16	16	0	0	0	0	0	11.79	1.026	0.931**	
44	X47	2	7	17	12	15	0	0	0	0	0	11.58	1.151	0.840**	
45	X48	1	2	18	16	16	0	0	0	0	0	11.83	0.975	0.886**	
The fourth dimension of the second axis												11.74	0.910		
The second axis												11.82	0.819		
46	X49		0	0	0	0	0	19	18	13	2	1	15.02	0.971	0.671**
47	X50	0	0	0	0	0	27	15	7	3	1		14.79	1.007	0.673**
48	X51	0	0	0	0	0	20	18	12	2	1		14.98	0.971	0.787**
49	X52	0	0	0	0	0	14	16	10	11	2		15.45	1.202	0.743**
50	X53	0	0	0	0	0	18	25	7	2	1		14.92	0.895	0.750**
The first dimension of the third axis												15.03	0.731		

51	X54	0	0	0	0	0	19	20	12	2	0	14.94	0.864	0.616**
52	X55	0	0	0	0	0	18	21	11	3	0	14.98	0.888	0.577**
53	X56	0	0	0	0	0	20	13	19	1	0	15.02	0.909	0.746**
54	X57	0	0	0	0	0	15	13	16	8	1	15.38	1.113	0.720**
55	X58	0	0	0	0	0	13	13	19	5	3	15.47	1.137	0.780**
		The second dimension of the third axis										15.16	0.682	
56	X59	0	0	0	0	0	21	9	11	9	3	15.32	1.312	0.818**
57	X60	0	0	0	0	0	15	8	14	15	1	15.60	1.230	0.777**
58	X61	0	0	0	0	0	14	9	18	10	2	15.57	1.185	0.859**
59	X62	0	0	0	0	0	10	11	20	8	4	15.72	1.166	0.805**
60	X63	0	0	0	0	0	10	10	16	14	3	15.81	1.194	0.800**
		The third dimension of the third axis										15.60	0.988	
		The third axis										15.27	0.688	
61	X64	2	2	9	21	19	0	0	0	0	0	12.00	1.019	0.867**
62	X65	4	3	10	21	15	0	0	0	0	0	11.75	1.159	0.892**
63	X66	0	5	13	18	17	0	0	0	0	0	11.89	0.974	0.897**
64	X67	2	4	13	11	23	0	0	0	0	0	11.92	1.158	0.831**
65	X68	0	6	19	14	14	0	0	0	0	0	11.68	0.996	0.884**
66	X69	2	3	14	15	19	0	0	0	0	0	11.87	1.093	0.912**
67	X70	2	3	12	21	15	0	0	0	0	0	11.83	1.033	0.942**
68	X71	2	2	14	16	19	0	0	0	0	0	11.91	1.061	0.892**
69	X72	2	3	12	18	18	0	0	0	0	0	11.89	1.068	0.923**
		The fourth Axis										11.86	0.948	

(*) Significant correlation at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$.

Validity Analysis

We conducted a thorough evaluation of the questionnaire's validity to ensure it met the stringent criteria for data collection in this study. The review process involved a detailed examination by experts in educational and statistical sciences, focusing on the questionnaire's alignment with the research objectives and its ability to accurately measure the intended constructs. This step was pivotal in establishing the questionnaire's suitability for analysis and ensuring the credibility of its outcomes. After incorporating expert feedback and making the necessary adjustments, we approved the final version of the questionnaire. This rigorous validation process, affirming the questionnaire's capability to provide analyzable and credible data, underscores the importance of validity in ensuring the integrity of the study's findings.

Reliability Analysis

We conducted a comprehensive evaluation of the questionnaire's reliability, essential for ensuring the validity and consistency of the collected data for this study. We evaluated the alignment of the questionnaire's items with their respective domains using Cronbach's alpha coefficient, a widely recognized measure of internal consistency. A Cronbach's alpha value nearing 1 indicates a high level of stability and internal consistency within the questionnaire. As the primary data collection tool for this research, establishing the questionnaire's suitability for analysis and the credibility of its outcomes was crucial. Experts in educational and statistical sciences scrutinized the questionnaire to determine its validity. This review process involved a detailed examination of the questionnaire's content to ensure its alignment with the research objectives and its ability to accurately measure the intended constructs. After incorporating feedback and necessary adjustments, we finalized the questionnaire and administered it to a select group of 53 participants (see Table 3).

Table 3

Cronbach's Alpha Reliability Coefficients for Study Axes and Overall Survey

Axis	Number of Items	Cronbach's Alpha
First	23	0.975
Second	22	0.981
Third	15	0.896
Fourth	9	0.968
Overall	69	0.973

Additionally, we computed the Pearson correlation coefficient for each item against the total score of its corresponding axis and sub-factor to validate the internal consistency of the questionnaire. This step was crucial in confirming the questionnaire's reliability in assessing the study's targeted variables. Table 3 displays a Cronbach's alpha coefficient of 0.973 for the survey, indicating a high level of reliability and internal consistency for the study instrument. Evaluating the survey's validity is crucial to ensuring it accurately captures the study's objectives and produces analyzable, reliable, and objective data. Analyzing the Pearson correlation coefficient between each item and its main axis revealed significant, strong correlations, further confirming the survey's construct validity.

Additionally, we calculated the square root of the reliability coefficient (Cronbach's alpha) as an indicator of validity. A higher square root of Cronbach's alpha, with a value of 0.986 for this survey, close to one, reinforces the instrument's validity as a data collection tool. These metrics underscore the survey's effectiveness in meeting the study's objectives.

Analysis of Bivariate Correlations

By applying the Pearson correlation coefficient, [Table 4](#) illustrates the nature and magnitude of the associations between the study variables and their dimensions. Table 4 shows a weak yet significant positive correlation between leadership experience and the obtained training courses. Conversely, there is a very strong and significant positive correlation between experience and the second dimension, reflecting the extent of strategic thinking stage implementation. Additionally, there is a weak but significant negative correlation between academic degrees and the fourth dimension, indicating mechanisms for overcoming barriers to practicing strategic thinking and enhancing performance. Likewise, a weakly significant negative correlation is observed between training courses and the first dimension, which assesses leaders' proficiency in strategic thinking stages, along with a weakly significant positive correlation with the fourth dimension. Furthermore, a weakly significant negative correlation exists between the first and second dimensions. Relationships not mentioned are considered non-significant.

Table 4

Pearson Correlation Coefficients Between Study Variables and Dimensions

Fourth Dimension	Third Dimension	Second Dimension	First Dimension	Training Courses	Academic Degree	Experience	
						1	Experience
						0.024	Academic Degree
					1	0.864	Academic Degree
					0.200	0.325*	Training Courses
				1	0.152	0.018	Training Courses
				-0.286*	-0.026	-0.124	First Dimension
			1	0.038	0.853	0.375	First Dimension
			-0.302*	-0.125	-0.135	0.918**	Second Dimension
		1	0.028	0.374	0.334	0.000	Second Dimension
		-0.129	0.212	0.124	0.055	0.123	Third Dimension
	1	0.357	0.127	0.377	0.696	0.379	Third Dimension
	-0.129	-0.187	-0.096	0.347*	0.363**	0.040	Fourth Dimension
1	0.356	0.181	0.496	0.011	0.008	0.775	Fourth Dimension

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

T-Distribution Tests

Using the T-distribution test, we tested the hypothesis that the average responses across various dimensions for each item within each axis of the study significantly deviate from zero. Table 5 shows statistically significant findings across all dimensions of the first axis, indicating that the mean responses for each dimension significantly differ from zero. This indicates that managers within continuous education departments across the Kingdom of Saudi Arabia demonstrate a significant level of strategic thinking abilities, covering comprehensive, abstract, diagnostic, and planning thinking.

Table 5

T-Test Results for Items in the First Axis

	T	D.F	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
First Dimension	123.236	52	0.000***	11.975	11.78	12.17
Second Dimension	111.123	52	0.000***	11.792	11.58	12.01
Third Dimension	106.483	52	0.000***	11.891	11.67	12.11
Fourth Dimension	105.536	52	0.000***	11.951	11.72	12.18

(* Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

Table 6 presents statistically significant results across all dimensions of the second axis, showing that the mean responses for each dimension are significantly different from zero. This suggests that managers within continuous education departments in the Kingdom of Saudi Arabia are highly engaged in strategic thinking stages.

Table 6

T-Test for Items in the Second Axis

	t	D.F	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
First Dimension	103.316	52	0.000***	11.777	11.55	12.01
Second Dimension	100.839	52	0.000***	11.906	11.67	12.14
Third Dimension	100.247	52	0.000***	11.840	11.60	12.08
Fourth Dimension	93.939	52	0.000***	11.743	11.49	11.99

(* Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

Table 7 shows statistically significant findings across all dimensions of the third axis,

indicating that the mean responses for each dimension significantly differ from zero. This indicates the presence of obstacles that negatively affect the ability of managers in continuous education departments in the Kingdom of Saudi Arabia to effectively practice strategic thinking, thus impeding their performance development.

Table 7

T-Test for Items of the Third Axis

	t	D.F.	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
First Dimension	149.638	52	0.000***	15.034	14.83	15.24
Second Dimension	161.804	52	0.000***	15.158	14.97	15.35
Third Dimension	114.977	52	0.000***	15.604	15.33	15.88

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

Table 8 illustrates statistically significant results for all items within the fourth axis, indicating that the mean responses for each item significantly differ from zero. This suggests that several practical mechanisms and solutions effectively address the barriers preventing managers of continuous education departments in the Kingdom of Saudi Arabia from engaging in strategic thinking and improving performance.

Table 8

T-Test for Items of the Fourth Axis

	t	D.F.	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
X64	85.728	52	0.000***	12.000	11.72	12.28
X65	73.857	52	0.000***	11.755	11.44	12.07
X66	88.857	52	0.000***	11.887	11.62	12.16
X67	74.984	52	0.000***	11.925	11.61	12.24
X68	85.399	52	0.000***	11.679	11.40	11.95
X69	79.078	52	0.000***	11.868	11.57	12.17
X70	83.386	52	0.000***	11.830	11.55	12.11
X71	81.698	52	0.000***	11.906	11.61	12.20
X72	81.022	52	0.000***	11.887	11.59	12.18

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

Table 9 shows that the four main axes significantly impact the ability of Continuous Education Department managers to engage in strategic thinking and enhance performance within educational administrations across the Kingdom of Saudi Arabia.

Table 9*T-Test for All Study Axes*

	t	D.F.	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
First Dimension	119.395	52	0.000***	11.902	11.70	12.10
Second Dimension	105.085	52	0.000***	11.817	11.59	12.04
Third Dimension	161.548	52	0.000***	15.265	15.08	15.46
Fourth Dimension	91.063	52	0.000***	11.860	11.60	12.12

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$ *Analysis of Multiple Regression*

We utilize multiple regression analysis to assess the influence of independent variables, encompassing all items, paragraphs, and variables about the main axes, on the dependent variable, namely, the practice of strategic thinking and performance enhancement. Table 10 indicates that the multiple regression model concerning the primary axis holds statistical significance. In particular, the initial dimension, evaluating the possession of skills associated with comprehensive thinking, notably impacts the practice of strategic thinking and performance enhancement. However, the other items do not demonstrate a noteworthy impact at the 5% significance level.

Table 10*Impact of First Axis on Strategic Thinking*

Model	R	R Square	Adjusted R Square	Std. Error		
	.8380	.70200	.6770	.3160		
Model	Sum of Squares		D.F	Mean Square	F	Sig.
Regression	11.288		4	2.822	28.298	.000***0
Residual	4.787		48	0.100		
Total	16.074		52			
Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
(Constant)	5.055	0.753			6.718	0.000***
First Dimension	0.277	0.126	0.352		2.199	0.033*
Second Dimension	0.000981	0.111	0.000		0.001	0.999
Third Dimension	0.149	0.123	0.218		1.210	0.232
Fourth Dimension	0.215	0.113	0.318		1.905	0.063

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

Table 11 demonstrates that the multiple regression model regarding the second axis

holds statistical significance. More precisely, the third dimension, which concerns strategy implementation, notably influences the practice of strategic thinking and performance enhancement. Conversely, the remaining items do not demonstrate a noteworthy effect at the 5% significance level.

Table 11

Second Axis Effects on Strategic Thinking

Model	R	R Square	Adjusted R Square	Std. Error		
	0.876	0.767	0.748	0.279		
Model	Sum of Squares		D.F.	Mean Square	F	Sig.
Regression	12.331		4	3.083	39.532	0.000***
Residual	3.743		48	.078		
Total	16.074		52			
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	5.767	0.567			10.175	0.000***
First Dimension	0.171	0.108	0.256		1.588	0.119
Second Dimension	-0.100	0.131	-0.155		-0.763	0.449
Third Dimension	0.375	0.112	0.580		3.351	0.002**
Fourth Dimension	0.143	0.092	0.234		1.558	0.126

Table 12 indicates that the multiple regression model for the third axis holds significance. More precisely, the second dimension, organizational constraints, notably influence the practice of strategic thinking and performance enhancement. However, the remaining items do not show a significant impact at the 5% significance level.

Table 12

3rd Axis Items Impact on Strategic Thinking and Performance

Model	R	R Square	Adjusted R Square	Std. Error		
	0.434	0.188	0.138	0.516		
Model	Sum of Squares		D.F.	Mean Square	F	Sig.
Regression	3.022		3	1.007	3.781	0.016*
Residual	13.053		49	0.266		
Total	16.074		52			
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	7.505	1.701			4.411	0.000***
First Dimension	-0.037	0.133	-0.048		-0.278	0.782
Second Dimension	0.308	0.148	0.377		2.085	0.042*
Third Dimension	0.070	0.096	0.125		0.732	0.468

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

Table 13 illustrates that the multiple regression model concerning the fourth axis holds significance. More precisely, variable X66, associated with paragraph 63 ("Creating a supportive work culture for strategic thinking and innovation"), notably influences strategic thinking and performance enhancement practices. Conversely, the remaining items do not demonstrate a significant effect at the 5% significance level.

Table 13

Regression Analysis for the Effect of Paragraphs of the Fourth Axis on the Practice of Strategic Thinking and Performance Development

Model	R	R Square	Adjusted R Square	Std. Error		
	0.733	0.537	0.440	0.416		
Model	Sum of Squares	D.F.	Mean Square	F	Sig.	
Regression	8.634	9	0.959	5.544	0.000***	
Residual	7.440	43	0.173			
Total	16.074	52				
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
(Constant)	7.695	0.773		9.953	0.000***	
X64	-0.080	0.146	-0.147	-0.552	0.584	
X65	-0.139	0.121	-0.290	-1.147	0.258	
X66	0.340	0.148	0.595	2.300	0.026*	
X67	-0.067	0.114	-0.140	-0.592	0.557	
X68	0.004	0.125	0.008	0.035	0.972	
X69	0.202	0.141	0.396	1.427	0.161	
X70	0.069	0.153	0.129	0.452	0.653	
X71	0.017	0.131	0.033	0.133	0.895	
X72	0.076	0.138	0.147	0.552	0.584	

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

One-Way ANOVA Analysis

One-way ANOVA analysis is a parametric method that examines mean variances to determine significant differences in the effectiveness of various treatments on groups of people. This method aims to identify the factors causing differences between means. This analysis aims to determine if significant differences exist in the perceptions of the study cohort across all main study axes. Furthermore, we examine whether these differences can be attributed to specific variables such as experience, academic qualifications, and the number of training programs for continuous education administrators within educational institutions in the United Kingdom. Table 14 presents the one-way ANOVA analysis of the impact of the experience variable. It describes how this factor affects the mean responses across all main axes, thereby influencing strategic thinking and performance enhancement processes. Table 14 demonstrates statistically significant differences in the average responses to the fourth axis, which pertains to overcoming obstacles to strategic thinking and performance improvement. These differences, influenced by the experience variable,

significantly impact performance development within the context of strategic thinking.

Table 14

One-Way ANOVA Analysis for the Effect of Experience Variable on the Practice of Strategic Thinking and Performance Development

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
First Dimension	Between Groups	2.278	2	1.139	2.268	0.114
	Within Groups	25.111	50	0.502		
	Total	27.388	52			
Second Dimension	Between Groups	3.185	2	1.592	2.515	0.091
	Within Groups	31.663	50	0.633		
	Total	34.848	52			
Third Dimension	Between Groups	0.533	2	0.266	0.553	0.579
	Within Groups	24.076	50	0.482		
	Total	24.609	52			
Fourth Dimension	Between Groups	8.196	2	4.098	5.315	0.008**
	Within Groups	38.549	50	0.771		
	Total	46.744	52			
Performance development	Between Groups	1.858	2	0.929	3.267	0.046*
	Within Groups	14.216	50	0.284		
	Total	16.074	52			

(*) Significant at $p < 0.05$, (**) at $p < 0.01$, and (***) at $p < 0.001$

Table 15 presents the results of the one-way ANOVA, illustrating how the educational level variable affects the average responses across all main axes, thereby influencing the application of strategic thinking and performance enhancement. Table 15 indicates that the mean responses to the fourth dimension (Mechanisms to Overcome Obstacles Hindering Strategic Thinking and Performance Development) vary significantly based on the educational level variable. However, this variable does not have a significant impact on performance development within the domain of strategic thinking.

Table 16 provides a detailed one-way ANOVA analysis investigating the impact of educational degrees on strategic thinking and performance development across multiple dimensions. The results indicate that the educational degree variable has no significant impact on any of the analyzed dimensions or performance development. Specifically, the first dimension exhibits a significance level of 0.375, the second dimension at 0.334, the third dimension at 0.377, and the fourth dimension at 0.496, all suggesting no significant impact. Likewise, performance development, with a significance level of 0.508, is also unaffected by the educational degree variable. The consistent absence of statistical significance across all areas suggests that the educational degree does not significantly contribute to enhancing strategic thinking and

performance development practices in the studied context. From the table, it is evident that there are no significant differences in the mean responses across all main axes attributed to the variable of the number of training courses. Moreover, it does not impact performance development concerning strategic thinking.

Table 15

One-Way ANOVA Analysis for the Effect of Educational Level Variable on Practicing Strategic Thinking and Performance Development

		ANOVA				
		Sum of Squares	D.F.	Mean Square	F	Sig.
First Dimension	Between Groups	0.611	2	0.305	0.570	0.569
	Within Groups	26.778	50	0.536		
	Total	27.388	52			
Second Dimension	Between Groups	1.730	2	0.865	1.306	0.280
	Within Groups	33.118	50	0.662		
	Total	34.848	52			
Third Dimension	Between Groups	1.290	2	0.645	1.383	0.260
	Within Groups	23.319	50	0.466		
	Total	24.609	52			
Fourth Dimension	Between Groups	5.640	2	2.820	3.430	0.040*
	Within Groups	41.105	50	0.822		
	Total	46.744	52			
Performance development	Between Groups	1.225	2	0.612	2.061	0.138
	Within Groups	14.850	50	0.297		
	Total	16.074	52			

Table 16

One-way ANOVA for the Effect of Educational Degree Variable on Strategic Thinking Practice and Performance Development

		ANOVA				
		Sum of Squares	D.F.	Mean Square	F	Sig.
First Dimension	Between Groups	0.423	1	0.423	0.801	0.375
	Within Groups	26.965	51	0.529		
	Total	27.388	52			
Second Dimension	Between Groups	0.639	1	0.639	0.952	0.334
	Within Groups	34.209	51	0.671		
	Total	34.848	52			
Third Dimension	Between Groups	0.377	1	0.377	0.793	0.377
	Within Groups	24.232	51	0.475		
	Total	24.609	52			
Fourth Dimension	Between Groups	0.428	1	0.428	0.471	0.496
	Within Groups	46.317	51	0.908		
	Total	46.744	52			
Performance development	Between Groups	0.139	1	0.139	0.444	0.508
	Within Groups	15.936	51	0.312		
	Total	16.074	52			

Discussion

The results of this study significantly enhance the existing literature on strategic thinking and managerial effectiveness within educational contexts. Highlighting the paramount importance of comprehensive thinking skills and strategic planning competencies, this research underscores their vital role among continuing education managers in Saudi Arabia. It integrates the current study's findings with prior research, providing a comparative analysis that elucidates the evolution and deepens understanding in the realms of educational administration and strategic thought. This investigation has uncovered the critical nature of comprehensive thinking and strategic planning skills among continuing education managers in Saudi Arabia, identifying significant obstacles to strategic thinking. These include personal, organizational, and external challenges, echoing broader issues noted in prior studies. This research further delves into these barriers, offering an in-depth examination that affords a more detailed perspective than typically found in the literature. However, the current study breaks down these barriers further, presenting insights into personal, organizational, and external factors within the specific context of Saudi Arabia, thus broadening and deepening the insights derived from earlier research.

Furthermore, the emphasis on training and development's specific contributions to improving strategic thinking practices among continuing education managers provides a sophisticated understanding of how targeted interventions can address identified barriers. This facet of the study is in line with [Obeidat et al. \(2023\)](#) findings, which stressed the critical importance of didactic training. Furthermore, situating strategic thinking within Saudi Arabia's Vision 2030 introduces a novel perspective, moving away from the European-centric focus of studies such as [Varetto et al. \(2013\)](#) investigation of continuing medical education. The robust statistical rigor, high reliability, and significant impact of experience in overcoming obstacles lend credibility to this research, aligning it with the methodological strengths of previous studies while offering unique insights specific to the Saudi Arabian context. This comprehensive investigation significantly contributes to the academic discourse on strategic thinking in educational leadership, offering a more nuanced understanding of the complex factors influencing this field. By melding statistical thoroughness with contextual relevance and practical recommendations grounded in Saudi Arabia's Vision 2030, the study provides tailored guidance that not only aligns with but also enriches the insights from prior research.

Conclusion

The study aimed to evaluate the performance development of continuing education department managers in Saudi Arabia through strategic thinking. It focused on assessing managers' strategic thinking patterns, and their practice stages, and identifying obstacles to strategic thinking practice. Data analysis from questionnaires highlighted key findings. The study found high response rates from the Khar region, bachelor's degree holders, those with less than three years of course experience, and individuals with over ten years of experience. The study found comprehensive thinking skills are vital, followed by planning, diagnostic, and abstract thinking skills; strategy formulation and implementation are crucial, as are evaluating and reviewing strategies; personal, organizational, and external obstacles significantly hinder strategic thinking practice. The fourth axis proposed

enhancing strategic thinking through encouraging innovation, providing resources, fostering relationships, creating a supportive culture, offering managerial support and rewards, including engaging managers in vision development and continuous training, and evaluating their strategic thinking skills. Overall, the analysis of averages reveals that the first axis, evaluating strategic thinking patterns among managers, holds the highest importance within the study. It is followed by the fourth axis, which addresses mechanisms to overcome strategic thinking obstacles, and then the second axis, related to the practice levels of strategic thinking stages, which received a high level of response. The third axis, focusing on obstacles to strategic thinking, received moderate agreement among respondents.

Furthermore, Pearson correlation analysis revealed relationships between variables, including a very strong negative correlation between experience and engagement in strategic thinking stages and a weak negative correlation between academic degree and addressing barriers to strategic thinking. Among other notable correlations, we found a weak positive correlation between the number of training courses and the depth of strategic thinking. Accordingly, the T-distribution test demonstrated significant deviations from zero across all dimensions and axes, indicating the prevalent use of strategic thinking patterns among the target group. Each axis presented important findings, ranging from the critical role of comprehensive thinking skills in the first axis to the identification of significant obstacles in the third axis that negatively impact strategic thinking practices. Besides, multiple regression analysis at a 5% significance level, highlighted the significant impact of comprehensive thinking skills, strategy implementation, and the presence of organizational obstacles on strategic thinking and performance development. The fourth axis underscored the importance of fostering a supportive work culture for strategic thinking and innovation. Finally, in the variance analysis results, experience emerged as a significant factor influencing performance enhancement within strategic contexts, particularly in overcoming barriers to strategic thinking and development. On the other hand, academic qualifications showed significant differences but had little impact on strategic performance development. Additionally, the analysis indicated that the completion of training courses did not significantly influence strategic thinking performance development, underscoring that this variable does not critically affect performance outcomes in strategic contexts.

Recommendations

The study recommends developing and implementing targeted training programs to enhance comprehensive, abstract, diagnostic, and planning thinking skills among continuing education managers. Furthermore, it also recommends creating a supportive organizational culture that encourages innovation, provides resources for strategic initiatives, and involves managers in strategy development. Besides, it recommends addressing personal, organizational, and external obstacles to strategic thinking by providing mentorship, fostering collaboration, and engaging with relevant stakeholders. Accordingly, it recommends leveraging seasoned managers' experience through knowledge-sharing initiatives such as mentoring programs and communities of practice. Finally, it recommends regularly assessing managers' strategic thinking skills and providing personalized feedback and support to facilitate continuous improvement.

Implications

The study highlights the importance of fostering strategic thinking skills, particularly comprehensive thinking, among continuing education managers in Saudi Arabia to enhance performance. Training programs should focus on developing these skills. The study also reported that organizational support is crucial for enabling managers to practice strategic thinking effectively. Creating a supportive work culture, providing necessary resources, and involving managers in strategy development can help overcome barriers. The study asserted that personal, organizational, and external obstacles significantly hinder the practice of strategic thinking among continuing education managers. Addressing these barriers through targeted interventions is essential for improving performance. The study concluded that experience plays a key role in managers' ability to practice strategic thinking and overcome related obstacles. Organizations should leverage the expertise of experienced managers and encourage knowledge sharing.

Limitations and Future Directions

There are some limitations of current research. The study relies on self-reported data from a questionnaire, which may be subject to response bias. Objective measures of strategic thinking and performance could strengthen future research. Secondly, while the sample size of 53 managers provides valuable insights, it may limit the findings' generalizability to the broader population of continuing education managers in Saudi Arabia. Lastly, the cross-sectional design of the study captures perceptions at a single point in time. A longitudinal study could provide a more comprehensive understanding of the development of strategic thinking skills over time. Therefore, future research could explore the specific mechanisms through which experience enhances strategic thinking skills and identify ways to accelerate this development in less experienced managers. Furthermore, investigating the effectiveness of different training programs and organizational interventions in fostering strategic thinking skills could provide practical guidance for continuing education institutions. Besides, examining the relationship between strategic thinking skills and objective measures of organizational performance, such as program outcomes and stakeholder satisfaction, could provide further evidence of the value of these skills.

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