Exploring the adoption of cutting-edge management practices by school principals

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Article Info	ABSTRACT
	This study examines the application of contemporary leadership trends by public school principals in the United Arab Emirates (UAE), with an emphasis on the professional standards governing school leadership. Utilizing a quantitative methodology, the study surveyed 113 principals from 641 schools. The validity of a 30-item questionnaire was rigorously evaluated to ensure that it aligned with the research objectives. This study's findings reveal that school principals in UAE public schools implement contemporary leadership trends at a notable rate, as indicated by a substantial mean score of 4.24. Strategic management emerges as the primary focus among these trends. In addition, the research reveals statistically significant (0.05) gender and experience differences in participant responses regarding the actual adoption of modern leadership trends by government school principals. In contrast, there were no statistically significant differences (0.05) between participant responses regarding the incorporation of leadership trends by public school principals based on their academic credentials. This study highlights the importance of continuing training programs designed to keep school administrators abreast of the most recent leadership developments.

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1. INTRODUCTION

Numerous facets of human existence are being swiftly transformed by advances in science, technology, and culture [1]. Individuals must therefore acknowledge the fluidity of their daily lives in order to adjust to and effectively manage changing circumstances [2]. Leaders and legislators study each circumstance thoroughly and prioritize education as the basis for development and growth [3]. Currently, governments prioritize quality and leadership [4]. Numerous presidents have actively involved in the affairs of their country to attain success in numerous sectors. Every nation aspires to greatness, especially the industrialized nations that have accomplished so much. Effective management drives progress and greatness [5]. Management consists of an institution's vision, goal, and objectives in addition to its employees, auditors, and other external stakeholders [6].

Excellence demands collaboration, effort, and unwavering commitment [7]. Societies that have promoted quality education since schools began have played a key role in their local communities [8]. According to previous study [9], management is the art and science of employing an organization's resources to satisfy society and individuals. Effective management determines the success of a company. Individuals plan, organize, direct, and oversee business operations [10], [11]. Educational administration administers

schools, whereas public administration covers government activities [12], [13]. Managing instructors, students, study materials, equipment, and budgets is required. The primary objectives of educational administration are to enhance instruction, organize and monitor activities, and oversee the entire educational process [14]. This comprises gathering information about students, instructors, administrators, school infrastructure, and administrative processes [10]. To achieve excellence, Balfour and Grubbs [12] suggests improving administrative processes across domains, notably in education. This requires constant improvement in educational inputs, procedures, and results [15]–[17]. Educational results must be high-quality due to their connection with people. Individuals and organizations collaborate to achieve quality, leadership, and innovation in development. Marion [18] notes that well-planned initiatives achieve this.

Sustainable development goals include improving education. Thus, universal education is seen as a key to achieving this goal. It aims to restructure education systems and trajectories using a modern educational philosophy. The initiative seeks to establish the United Arab Emirates (UAE) public school, drawing inspiration from successful international systems and operating within a collaborative national framework involving prominent educational, governmental, and private entities in line with the nation's visionary goals. The Ministry of Education anticipates education's trajectory to raise a generation that understands life's needs and stays current. The Ministry of Education's insightful educational viewpoint is based on unshakable values associated with the federal government's goal of outstanding success [19]. The UAE government's emphasis on quality and leadership, as well as His Highness's command, Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President, and Prime Minister, says all federal government employees must strive for excellence to achieve the UAE Vision 2021 goals [19]. The high-ranking official stressed that this administration prioritizes government excellence across many domains and facilitates superior performance, services, and outcomes in the government sector to ensure a high standard of living. The Ministry of Culture and Knowledge Development states that the government's main goal is to provide its citizens with a decent quality of life and empower them to build a bright future for themselves and their country.

Excellence is the condition of surpassing quality in a particular domain as opposed to others [20]. According to previous study [21], greatness might vary depending on personal preference or the situation within the same profession. This applies to individuals, organizations, and institutions. A research [22] defines excellence as efficiently providing the essential services while satisfying the beneficiaries' expectations and wishes, resulting in their complete satisfaction now and in the future. Growth and progress accomplish this. Based on the descriptions, the researcher concludes that greatness is a person or organization's activity or conduct that sets them apart in their field.

Accordingly, this research explores how UAE public school administrators utilize modern leadership practices. It emphasizes their compatibility with the Ministry of Education's professional standards for school leaders, which were created in response to new licensing requirements for teachers and school leaders. The research examines how these leaders attain greatness by following contemporary leadership trends. It also stresses educational environment well-being and moving away from autocratic and authoritarian leadership approaches to improve public education and master it.

The school administration is active and influential in all aspects of education, helping achieve educational goals [16], [17]. To do this, school administrators must expand their skills and link them with scientific advances in all areas of life [18]. This requires an administrative structure with advanced plans and tactics. The researchers examined how a public-school principal in the UAE implements new leadership trends in compliance with school leader criteria. This study was inspired by educational observations and continues prior research on school administration's involvement in excellence. Thus, public school leadership trends must be used to identify greatness. This research shows how these strategies are used in management, helping decision-makers choose an appropriate route to excellence. The significance of this study lies in its recognition of the rapid and escalating global changes, the rapid growth of the knowledge economy, and the advancements in various technological means.

Given these circumstances, it becomes imperative to gain insight into future developments and adequately prepare for them. Neglecting the events unfolding in all domains would result in isolation from the world. Therefore, adopting a discerning perspective and thoughtful ideas will yield positive outcomes in the near future. This study aims to address this significance. The outcomes of this research will provide benefits for the following stakeholders: to facilitate the officials of the Ministry of Education in the UAE and explore its available resources and human capital. To get a comprehensive understanding and reassess the programs and strategies devised for enhancing the quality of UAE public schools, it is necessary to redirect them towards a more optimal trajectory. This research contributes novel insights to the advancement and progress of public education.

     The objective of this research was to assess the extent to which contemporary leadership trends are implemented by school principals in government schools in the UAE, considering the professional standards expected of educational leaders. Thus, the research questions are as:

− Considering professional school leader qualifications, how do UAE public-school principals utilize modern leadership trends?
− Are there significant gender variations ($\alpha \leq 0.05$) in the application of current leadership trends among UAE public-school principals with respect to professional standards?
− Does the application of current leadership trends by UAE public-school principals differ significantly, at a significance level of $\alpha \leq 0.05$, based on professional standards and experience?
− Is there a substantial difference ($\alpha \leq 0.05$) in the adoption of contemporary leadership trends among UAE public-school principals, given their academic qualifications and professional standards?

2. LITERATURE REVIEW

     The present study reviewed numerous related studies. Kadhim and Ahmad [23] investigated overall quality management solutions for Iraqi secondary and preparatory school principals. In the research "Appropriate strategies for secondary and preparatory school principals in the light of total quality management standards," over 90% of participants used complete quality standards. A study by Wu et al. [24] evaluated the amount of ICT deployment in government secondary schools and its influence on principals' administrative performance as judged by teachers. According to instructors, the survey examined government secondary schools' ICT integration and principals' administrative work performance. ICT availability in government secondary schools in Amman Governorate was relatively adequate over time. Özdemir et al. [25] examined teachers' perceptions of basic school principals' strategic management skills. The research examined government school principals' views on using knowledge management to improve performance. The research found that government school principals were optimistic about using knowledge management to improve performance. Li et al. [26] examined governorate school principals' strategic management approaches from teachers' perspectives, found that school principals' administrative practices aligned well with strategic management standards in planning, implementation, performance appraisal, communication, and organization.

     Furthermore, Aldholay et al. [27] examined how well leading Saudi schools in the governorate implement total quality standards. According to instructors polled, these schools applied the whole quality requirement well. Naidoo [28] examined secondary school principals' change management strategies and their influence on leadership management abilities as viewed by teachers and principals. According to teachers and principals, change management methods and school principal leadership management were positively correlated. Another study by Mukhtar et al. [29] examined how government secondary school principals implement organizational change and how teachers view organizational conflict. The research examined principals' organizational change practices and organizational conflict from teachers' perspectives. Teachers observed strong organizational change practice among government secondary school administrators.

     In conclusion, the previous literature review reveals notable distinctions between the current study and prior research. Several studies [24], [25] examined strategic management, while another studies [26], [27] focused on total quality management and explored the relationship between information and communication technology and administrative work. Meanwhile, other research [18], [19] investigated knowledge management and its connection to administrative excellence. Lastly, the study [29], [30] delved into change management and its impact on administrative organization. This report summarizes how UAE public school administrators use current leadership concepts. The study demonstrated good agreement with earlier studies. This research examines how school administrators incorporate current leadership trends and emphasizes the need to update school management systems to match global leadership trends.

3. MATERIALS AND METHOD
3.1. Research design

     The researcher employed a survey (quantitative) methodology to conduct the study. A questionnaire was developed and will be distributed to a representative sample of domain managers, sector managers, and senior managers in the UAE. The data collected will include statistics, data, and information obtained from the Ministry of Education in the UAE, as well as from the study population. This data will be classified and organized in accordance with the objectives of the study.

3.2. Research procedure

The initial step in research is gathering relevant data and establishing a theoretical framework. This step includes obtaining data from several sources and comprehending the topic. This step requires prior theoretical knowledge to understand and analyze the data. This research initially reviewed the theoretical literature on public education and administrative effectiveness. A comprehensive framework for leadership excellence in UAE government schools was the goal. Research variable classification follows. This phase grouped the leadership excellence study variables to conceptualize administrative excellence in UAE government schools. The third step of research entails gathering objective data. This phase included collecting data on the study population and sample, as well as the data collection devices used to evaluate government schools in the UAE's present level of excellence. The main goals were to show the present and the future.

3.3. Study population and sample

The principals and first principals of the 641 schools that took part in the survey and were included for the analysis make up the study's population. These principals and principals were included in the analysis. The results are shown in Table 1. The study community's members were contacted through the Ministry of Education, and a total of 113 responses were obtained for the research, representing the study sample. Sandelowski [31] proposed that qualitative sample sizes should be large enough to facilitate the production of "new and highly textured knowledge" about the phenomena being studied, but small enough to support "depth, case-oriented examination" of qualitative data. Gergen *et al.* [32] contended that fewer participants are necessary when each participant provides more relevant data.

Table 1. Study population

Emirate	Number of schools in each emirate
Abu Dhabi	256
Dubai	73
Sharjah	116
Ajman	36
um Al Quwain	20
Ras Al Khaimah	83
Fujairah	57
Total	641

*All data are based on MOE of United Arab Emirates

3.4. Study procedures

The present research was carried out in accordance with the following procedural steps. One of the first steps in the research process is the preparation and development of a study instrument, with a focus on ensuring its validity and stability. The research sample consists of the residents of the community. The researchers were writing a formal correspondence sent to Zayed University in the UAE with the purpose of expediting the evaluation of the research instrument and streamlining the data gathering procedure for the study population. The study tool was disseminated by the researcher to an exploratory sample to assess the stability of the instrument. The study instrument was delivered to the study population by the researcher. The data was inputted into the computer by the researcher and afterwards subjected to statistical analysis using the software known as Statistical Packages for the Social Sciences (SPSS). After inputting the data and subjecting them to statistical analysis, the findings were extracted, scrutinized, deliberated over, juxtaposed with prior research, and afterwards accompanied with relevant suggestions.

3.5. Study instrumentation

To address the research questions, the researchers devised an instrument for the purpose of investigating the extent to which the contemporary leadership trends of the principal in a public school in the UAE align with the professional standards set for school leaders. This endeavor was informed by an examination of pertinent theoretical literature and prior research, including previous works [18], [19] and other relevant studies. The research instrument was thereafter submitted to a panel of arbitrators with the necessary expertise to verify its veracity, after which it was administered to the study sample.

3.6. Instrument validity

The researcher employed a method of content validation by soliciting feedback from a panel of arbitrators who possess a doctoral degree in educational administration. The purpose was to obtain their expert opinions and observations regarding the accuracy and appropriateness of the paragraphs comprising

the study tool, as well as its suitability for the target population. Based on their feedback, the researcher made necessary modifications to the paragraphs, including the removal of any deemed unsuitable or irrelevant.

3.7. Instrument reliability

To assess the reliability of the study tool and the coherence of the paragraphs, the researcher employed the Cronbach alpha coefficient. Subsequently, the study tool was administered to an initial sample of the study population to evaluate its stability. Paragraphs that exhibited a low stability coefficient were subsequently excluded from the analysis.

3.8. Construction validity

To check how reliable the scale was, correlation coefficients were found for each paragraph, the total score, each paragraph's relationship with its field, and the total score's relationship with different fields. These correlation coefficients were obtained from an exploratory sample of 30 participants who were not part of the main study. The results indicated that the correlation coefficients between the paragraphs and the overall scale ranged from 0.70 to 0.94, while the correlation coefficients between the paragraphs and their respective fields ranged from 0.69 to 0.95. The specific values are presented in Table 2.

Table 2. Correlation coefficients between paragraph, total score, and domain to which it belongs

| Paragraph number | Correlation coefficient | | Paragraph number | Correlation coefficient | | Paragraph number | Correlation coefficient | |
	With the tool	With domain		With the tool	With domain		With the tool	With domain
1	.94**	.93**	21	.71**	.69**	11	.91**	.95**
2	.73**	.83**	22	.75**	.86**	12	.87**	.93**
3	.74**	.82**	23	.89**	.89**	13	.85**	.91**
4	.74**	.84**	24	.89**	.90**	14	.78**	.89**
5	.86**	.91**	25	.75**	.84**	15	.86**	.84**
6	.87**	.95**	26	.91**	.91**	16	.73**	.73**
7	.85**	.93**	27	.75**	.84**	17	.76**	.84**
8	.85**	.92**	28	.70**	.81**	18	.87**	.89**
9	.77**	.83**	29	.93**	.90**	19	.83**	.85**
10	.80**	.87**	30	.90**	.91**	20	.75**	.87**

*Statistically significant at significance level ($\alpha \leq 0.05$)
**Statistically significant at significance level (0.01)

Based on the data presented in Table 2, it is important to recognize that all correlation coefficients demonstrated enough levels of significance, demonstrating that none of the paragraphs were eliminated from the study. The determination of the domain correlation coefficient included consideration of both the total degree and the correlation coefficients between each pair of domains. The correlation coefficients obtained are shown in Table 3. The table presents the correlation coefficients, which were found to be both acceptable and statistically significant. These results suggest that the construct validity of the measures used in the study is suitable.

Table 3. Correlation coefficients between domains and in total degree

	Total grade	Communication technology	Strategic management	Total quality management	Change management	Knowledge leadership management
Knowledge leadership management						1
Change management					1	.902**
Total quality management				1	.871**	.883**
Strategic management			1	.899**	.874**	.882**
Communication technology		1	.890**	.819**	.794**	.835**
Total grade	1	.893**	.923**	.919**	.905**	.912**

*Statistically significant at the significance level ($\alpha \leq 0.05$)
**Statistically significant at the significance level (0.01)

To ascertain the reliability of the research instrument, it underwent verification using the test and retest approach. This included administering the scale to a separate set of individuals (n=30) outside the study population, then afterwards reapplying the scale after a two-week interval. The Pearson correlation coefficient was then computed to determine the extent of agreement between the participants' estimations on both occasions. The stability coefficient was determined using the internal consistency method, specifically through the application of the Cronbach alpha equation. Table 4 presents the internal consistency coefficient

obtained from the Cronbach alpha equation, indicating the stability of the domains and the overall score. These values were deemed suitable for the objectives of this study. Table 5 presents the summary of the frequencies and percentages for each study variable that can be seen in, which can be found study sample distribution.

Table 4. Cronbach alpha internal consistency coefficient and repetition stability of domains and total score

Domain	Internal consistency	Replay stability
Knowledge leadership management	0.82	0.87
Change management	0.73	0.85
Total quality management	0.76	0.88
Strategic management	0.84	0.89
Communication technology	0.81	0.82
Total grade	0.86	0.89

Table 5. Frequencies and percentages by study variables

	Categories	Iteration	Ratio
Gender	Male	39	34.5
	Female	74	65.5
Experience	Less than 15 years old	29	25.7
	15 years and above	84	74.3
Qualification	Bachelor	94	83.2
	Graduate	19	16.8
Job title	Senior Manager	10	8.8
	School Principal	103	91.2
Emirate	Abu Dhabi	35	31.0
	Dubai	17	15.0
	Sharjah	21	18.6
	Ajman	10	8.8
	um Al Quwain	6	5.3
	Ras Al Khaimah	11	9.7
	Fujairah	13	11.5
	Total	113	100.0

4. RESULTS

4.1. Research question 1

Considering professional school leader qualifications, how do UAE public-school principals utilize modern leadership trends? To address this inquiry, statistical measures such as arithmetic averages and standard deviations were used to analyze the practicality of implementing contemporary leadership trends among government school principals in the UAE. This analysis considered the professional standards established for school leaders. The resulting findings are shown in Table 6.

Table 6. Means and standard deviations of the reality of applying modern leadership trends for public school principals in the UAE

Category	Domain number	Domain	Mean	Standard deviations	Level
1	4	Strategic management	4.27	.619	High
2	1	Knowledge leadership management	4.26	.633	High
3	2	Change management	4.26	.627	High
4	5	Communication technology	4.25	.623	High
5	3	Total quality management	4.17	.644	High
		Total grade	4.24	.584	High

Table 6 presents the means and standard deviations ranging from 4.17 to 4.27. Among the various topics, strategic management obtained the highest mean average of 4.27, while total quality management achieved the lowest mean average of 4.17. The overall mean average for the reality of applying modern leadership trends to government school principals in the UAE, in accordance with the professional standards of school leaders, was 4.24. The means and standard deviations of the estimates of the study sample members were calculated on the paragraphs of each domain separately.

4.1.1. Knowledge leadership management

Table 7 presents the range of means, which varied from 3.98 to 4.44. Among the paragraphs analyzed, paragraph 6, which emphasizes the role of the school principal in promoting knowledge leadership among the administrative and educational staff, obtained the highest average score of 4.44. Conversely, paragraph 1, which highlights the principal's recognition of the importance of professional leadership in driving knowledge, received the lowest average score of 3.98. The calculated means for the domain of expertise pertaining to leadership management were determined to be 4.26.

Table 7. Means and standard deviations related to knowledge leadership

Category	Number of questions	Paragraph	Mean	Standard deviations	Level
1	6	The school principal contributes to spreading the concepts and culture of knowledge leadership among the administrative and educational faculty members	4.44	.566	High
2	5	The principal's knowledge leadership contributes to understanding how to invest knowledge to achieve national, strategic, and operational goals	4.42	.594	High
3	3	The principal believes that the success of knowledge management requires a culture within the school that instills the importance of information exchange	4.29	.787	High
4	4	The school principal understands that knowledge leadership helps him to do his work through the information it provides in his field of work.	4.29	.677	High
5	2	The school principal understands that knowledge leadership is the product of experience and information	4.12	.884	High
6	1	The principal understands that professional leadership drives knowledge	3.98	.963	High
		Knowledge leadership management	4.26	.633	High

4.1.2. Management change

Table 8 illustrates the range of arithmetic averages, which varied from 4.04 to 4.42. Notably, paragraph 12, which emphasizes the school principal's investment in professional communities to foster a culture of knowledge transfer and change management, achieved the highest arithmetic average of 4.42. Conversely, paragraph 7, which discusses the establishment of systems to assess the impact of development and change, obtained the lowest arithmetic average of 4.04. The calculated arithmetic mean for the discipline of change management was determined to be 4.26.

Table 8. Means and standard deviations related to change management in descending order by means

Category	Number of questions	Paragraph	Mean	Standard deviations	Level
1	12	The school principal invests in professional communities to instill a culture of knowledge transfer and change management	4.42	.595	High
2	10	The school principal imparts and applies up-to-date knowledge for change management	4.35	.654	High
3	11	The school principal proposes solutions to problems facing change processes	4.32	.658	High
4	9	The school principal develops a sense in individuals of the need for change	4.24	.816	High
5	8	Manages change and innovation for the continuous development of the school	4.18	.899	High
6	7	Establishes systems to measure the impact of development and change	4.04	.925	High
		Change management	4.26	.627	High

4.1.3. Total quality management

Table 9 illustrates the range of mean averages, which varied from 3.94 to 4.42. Notably, paragraph 18, which emphasizes the school administration's commitment to fostering collaboration and coordination among teams and workshops to implement quality improvement programs, received the highest average score of 4.42. Conversely, paragraph 15, which mentions the school administration's provision of quality lectures for its employees, obtained the lowest average score of 3.94. The calculated mean for the total quality management domain was 4.17.

Table 9. The means and standard deviations related to total quality management

Category	Number of questions	Paragraph	Mean	Standard deviations	Level
1	18	The school administration is interested in forming teams and workshops that cooperate and coordinate with each other to implement quality improvement programs	4.42	.564	High
2	17	The school administration uses information and data as an information base collected by faculty, staff and students and adopted as a base in decision-making and change processes in the school	4.32	.723	High
3	16	The school administration provides an organizational climate that considers climate, production, service, efficiency, and quality as essential parts of its culture	4.24	.747	High
4	13	Total Quality Management for School Management is a continuous and permanent process of development	4.14	.990	High
5	14	The school administration relies on quality in the design of processes and the extent of its ability to achieve speed in performance	3.96	.910	High
6	15	The school administration conducts lectures on quality for its employees	3.94	.919	High
		Total quality management	4.17	.644	High

4.1.4. Strategic management

Table 10 presents the mean averages within the range of 4.10 to 4.36. Notably, paragraph 23, which pertains to the development of systems for evaluating the professional competence of school-level employees and assessing their consistency, coherence, and efficiency, achieved the highest average of 4.36. Conversely, paragraph 20, which focuses on the formulation of strategies that facilitate the attainment of national targets and global competitiveness indicators, obtained the lowest average of 4.10. The calculated mean for the strategic management area was determined to be 4.27.

Table 10. The means and standard deviations related to strategic management

Category	Number of questions	Paragraph	Mean	Standard deviations	Level
1	23	Develops systems for assessing the level of professional competence of all employees at the school level and assesses their consistency, coherence, and efficiency	4.36	.642	High
2	24	Institutional review of plans is conducted according to specific criteria and based on relevant national and international standards	4.35	.623	High
3	22	Examines technological changes and events and their impact on the school	4.33	.661	High
4	21	Sets goals that are flexible and adaptable to unexpected variables	4.28	.818	High
5	19	Understands relevant policies and applies them in operational plans to support decision-making.	4.19	.934	High
6	20	Develops strategies that support the achievement of national targets and global competitiveness indicators	4.10	.896	High
		Strategic management	4.27	.619	High

4.1.5. Communication technology

According to Table 11, the mean averages varied between 4.05 and 4.51. Paragraph 30, which emphasizes the utilization of communication technology in the educational process, obtained the highest arithmetic average of 4.51. Conversely, paragraph 25, which aims to offer the most up-to-date communication methods within the school, obtained the lowest arithmetic average of 4.05. The mean value for the field of communication technology was calculated to be 4.25.

Table 11. The means and standard deviations related to communication technology

Category	Number of questions	Paragraph	Mean	Standard deviations	Level
1	30	Promotes the employment of communication technology in the teaching and learning process	4.51	.599	High
2	29	Opens communication channels to communicate school requirements to administrators	4.38	.659	High
3	28	Seeks to provide all means of audio and visual communication	4.36	.655	High
4	27	Follows vertical communication methods with school officials and staff	4.12	.814	High
5	26	Follows horizontal communication methods with school officials and staff	4.06	.899	High
6	25	Seeks to provide the latest means of communication in the school	4.05	.943	High
		Communication technology	4.25	.623	High

4.2. Research question 2

Are there significant gender variations (α≤0.05) in the application of current leadership trends among UAE public school principals with respect to professional standards? To address this inquiry, the mean and standard deviation values were obtained regarding the implementation of contemporary leadership trends among government school principals in the UAE, considering the professional standards for school leaders and the gender variable. To determine the statistical disparities between the mean values, the "T" test was employed. Table 12 provides a visual representation of these findings. Table 12 presents the results, indicating statistically significant differences (α≤0.05) between sexes across all domains and the total score. Notably, these discrepancies consistently favored females.

Table 12. Means, standard deviations, and a "T" test for the effect of gender

Domain	Gender	Number	Means	Standard deviations	"T" Value	Degree of freedom	Statistical significance
Knowledge leadership Management	Male	39	3.95	.699	-3.936	111	.000
	Female	74	4.42	.534			
Change management	Male	39	3.91	.666	-4.731	111	.000
	Female	74	4.44	.520			
Total quality Management	Male	39	3.86	.690	-3.894	111	.000
	Female	74	4.33	.559			
Strategic management	Male	39	3.97	.630	-4.017	111	.000
	Female	74	4.43	.555			
Communication technology	Male	39	4.01	.663	-3.035	111	.003
	Female	74	4.37	.567			
Total grade	Male	39	3.94	.627	-4.260	111	.000
	Female	74	4.40	.495			

4.3. Research question 3

Does the application of current leadership trends by UAE public-school principals differ significantly, at a significance level of α≤0.05, based on professional standards and experience? To address this inquiry, the means and standard deviations were derived to assess the extent of implementation of contemporary leadership trends among public school principals in the UAE, considering the professional standards of school leaders based on the variable of experience. To demonstrate the statistical disparities between the arithmetic means, the "T" test was employed, and Table 13 provides a visual representation of these differences. The results shown in Table 13 indicate that there are statistically significant differences (α≤0.05) attributed to the influence of experience across all disciplines of study as well as in the overall degree. These differences consistently favored those with 15 years or more of experience.

Table 13. Means, standard deviations, and a "T" test for the effect of gender

Domain	Experience	Number	Means	Standard deviations	"T" Value	Degree of freedom	Statistical significance
Knowledge leadership management	Less than 15 years old	29	3.89	.704	-3.893	111	.000
	15 years and above	84	4.38	.555			
Change management	Less than 15 years old	29	3.87	.741	-4.093	111	.000
	15 years and above	84	4.39	.525			
Total quality management	Less than 15 years old	29	3.94	.739	-2.300	111	.023
	15 years and above	84	4.25	.592			
Strategic management	Less than 15 years old	29	4.07	.673	-2.040	111	.044
	15 years and above	84	4.34	.588			
Communication technology	Less than 15 years old	29	3.99	.718	-2.623	111	.010
	15 years and above	84	4.34	.565			
Total grade	Less than 15 years old	29	3.95	.677	-3.213	111	.002
	15 years and above	84	4.34	.516			

4.4. Research question 4

Is there a substantial difference (α≤0.05) in the adoption of contemporary leadership trends among UAE public school principals, given their academic qualifications and professional standards? To address this inquiry, the arithmetic means, and standard deviations were obtained regarding the extent of implementation of contemporary leadership trends among government school principals in the UAE, considering the professional standards of school leaders based on the variable of academic qualification. To determine the statistical disparities between the arithmetic means, the "T" test was employed. Table 14 provides a visual representation of these findings.

The arithmetic means, and standard deviations were obtained regarding the extent of implementation of contemporary leadership trends among government school principals in the UAE, considering the professional standards of school leaders based on the variable of academic qualification. To determine the statistical disparities between the arithmetic means, the "T" test was employed. The accompanying table provides a visual representation of these findings.

Table 14. Means, standard deviations and the "T" test for the impact of academic qualification

Domain	Qualifications	Number	Means	Standard deviations	"T" Value	Degree of freedom	Statistical significance
Knowledge leadership management	Bachelor	94	4.24	.638	-.445	111	.657
	Graduate	19	4.32	.618			
Change management	Bachelor	94	4.26	.636	-.038	111	.970
	Graduate	19	4.26	.594			
Total quality management	Bachelor	94	4.16	.647	-.497	111	.620
	Graduate	19	4.24	.641			
Strategic management	Bachelor	94	4.26	.609	-.431	111	.667
	Graduate	19	4.32	.681			
Communication technology	Bachelor	94	4.25	.629	-.039	111	.969
	Graduate	19	4.25	.610			
Total grade	Bachelor	94	4.23	.583	-.314	111	.754
	Graduate	19	4.28	.605			

5. DISCUSSION

In consideration of the professional standards for school leaders, this discussion will focus on the outcomes pertaining to the research questions. Considering professional school leader qualifications, how do UAE public school principals utilize modern leadership trends? (RQ1). To address this inquiry, the means and standard deviations were computed for each paragraph. The analysis revealed that the implementation of contemporary leadership trends by the principals of public schools in the UAE was characterized by a high level of effectiveness, as indicated by an arithmetic mean of 4.24 and a standard deviation of 485. The arithmetic means of the paragraphs varied from 4.17 to 4.27, as seen in Table 6. The standard deviation ranged from 619 to 644. A comprehensive examination was conducted on the subject matter of the first inquiry. The first domain of study, known as knowledge leadership management, encompasses several aspects related to the effective management and use of knowledge within an organizational context. The arithmetic mean for this field was 4.26, with a standard deviation of 633. In paragraph 6, it is stated that the school principal plays a significant role in disseminating knowledge, leadership concepts, and culture among administrative and educational faculty members, ranking first in this regard. This is attributed to the principal's understanding of their work responsibilities and their ability to collaborate effectively within their team. This study aligns with previous research [22], [25].

The second area, namely change management, exhibited an arithmetic mean of 4.26 with a standard deviation of 627. At a broader level, paragraph 12 of the report holds significance as it highlights the school principal's strategic investment in professional communities to foster a culture of knowledge transfer and change management. This paragraph received the highest ranking of 1, owing to the principal's adept utilization of existing knowledge to drive organizational change and provide a rationale for effective change management. Notably, this finding aligns with previous studies [25], [26].

The third area, known as total quality management, had an arithmetic mean of 4.17 and a standard deviation of 644. In paragraph 18, it is stated that the school administration aims to establish collaborative teams and workshops to implement quality improvement programs. This initiative is driven by the school principal's pursuit of excellence and the active participation of staff members in order to achieve positive outcomes for the school. This study aligns with the previous findings [24].

The arithmetic mean for the fourth area (strategic management) was (4.27) and the standard deviation (619.) and at a high level, and paragraph No. (23) "Develops systems for assessing the level of professional competence of all employees at the school level and assesses their consistency and interdependence" at rank 1, due to the fact that the school principal is constantly aware of the progress of the educational process within school and develops the performance of his employees and their accountability, and this fifth area (communication technology) agrees: The arithmetic mean for this field was (4.25) and the standard deviation was (623.) at a high level, and paragraph No. 30 reads "enhances the employment of communication technology in the teaching and learning process" in the soil (1), and this is due to the fact that the school principal keeps pace with developments in educational technology and competes with his team members and workers, similar institutions located in the same educational region [25].

Secondly, this section will address the findings pertaining to the second research question, are there significant gender variations (α≤0.05) in the application of current leadership trends among UAE public school principals with respect to professional standards? (RQ2). To address this inquiry, the study examined the mean and standard deviation of the extent to which government school principals in the UAE apply modern leadership trends. This analysis was conducted in relation to the professional standards of school leaders, considering the gender variable. A statistical test was employed to determine if there were significant differences in the mean scores across various domains. The results, as presented in Table 12, indicated the presence of statistically significant differences (α≤0.05) attributed to the gender variable in all domains as well as the overall extent of application. These differences favored females, as evidenced by a t-value of -4.260 and a statistical significance level of 0.00. This finding may be attributed to the increasing number of females assuming the role of school principal in male schools, as well as their representation in female schools, this finding aligns with previous studies [27], [28].

Thirdly, this section will address the findings pertaining to the third research question (RQ3), which is as: does the application of current leadership trends by UAE public-school principals differ significantly, at a significance level of α≤0.05, based on professional standards and experience? To address this inquiry, the study examined the mean and standard deviation of the extent to which government school principals in the UAE apply modern leadership trends. This was done in relation to the professional standards of school leaders, considering the variables of experience. Additionally, a statistical test was conducted to determine if there were significant differences in the mean scores across various categories. The results, as presented in Table 13, indicated that there were statistically significant differences (α≤0.05) in relation to the gender variable across all domains and the overall degree of application. These differences favored individuals with 15 years or more of experience, as evidenced by a t-value of 3.213 and a statistically significant p-value of 0.002. This finding suggests that the longer tenure of managers in these positions may contribute to their ability to select and implement appropriate leadership practices. It is worth noting that these positions are typically held by individuals who have accumulated a substantial amount of experience in this field, this finding aligns with previous studies [28], [29].

Fourthly, this section will focus on the analysis and interpretation of the findings pertaining to the fourth research question (RQ4), is there a substantial difference (α≤0.05) in the adoption of contemporary leadership trends among UAE public school principals, given their academic qualifications and professional standards? To address this inquiry, the study examined the mean values and standard deviations of the extent to which government school principals in the UAE apply modern leadership trends. This analysis was conducted in relation to the professional standards for school leaders, considering the variable of scientific qualification. The T-test was employed to assess the statistical differences between the mean values of the different aspects. The findings, as presented in Table 14, indicate that there were no statistically significant differences (α≤0.05) in relation to the variable of academic qualification across all domains and the overall degree. This is evidenced by the t-value of -0.314, which is statistically significant at 0.754. This lack of significant differences may be attributed to the fact that school principals adhere to the policies set forth by the Ministry of Education and employ a uniform strategy when interacting with their subordinates in the educational realm, this finding aligns with previous studies [29], [30].

6. CONCLUSION

The following recommendations have been developed on the basis of the empirical evidence that has been presented in this research. The administration of the school can be kept up to date on the most recent advancements in leadership trends by taking advantage of the frequent training opportunities that are made available to them. The goal is to improve the administrative system of school administration so that it is in line with the current trends in educational leadership that are prevalent around the world. Providing professionals working in the educational sector with the tools necessary to accept emerging leadership trends in the field of education today. According to the findings of the current study, school principals play a far more important role than any other type of school administrator in terms of their level of administrative expertise and prowess.

Like other research studies, this one has limitations, such as sample size. This study's tiny sample size of 113 UAE Ministry of Education replies limits it. A bigger sample may have yielded more reliable and generalizable findings. Furthermore, the instrument validity. The experts validated the study tool; however, their subjectivity may restrict its validity. Accepting that validity is subjective is crucial. Additionally, the Cronbach alpha coefficient was used to measure instrument reliability, although it may not capture all reliability factors. The analysis may have been incomplete due to poor stability coefficients excluding several paragraphs. The research examines UAE public school administrators. Thus, the findings may not apply to different educational systems or circumstances, limiting their generalizability.

This research may influence UAE educational policy by revealing how present leadership practices match professional norms. Policy changes or school leadership training program enhancements may result. The research may affect school principal training. Identifying leadership practices that deviate from norms may help build successful leadership training programs. The study advances UAE educational leadership research. It may guide future researchers and instructors in this sector. Understanding how well leadership practices match professional standards helps enhance UAE public school education, benefitting students and the community. School leaders may use the information to gauge their leadership practices and find areas for development to meet professional standards. Although the research is confined to the UAE, it might be compared to comparable studies in other nations to get cross-cultural and international insights into educational leadership methods.

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