

Climate and Quality Management Practices in the instates of higher learning: Mediating Role of Educational Finance

By

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Abstract

Numerous quality initiatives are being implemented at the same time that universities are experiencing a decline in public funding of education. The main objective of this study is to investigate the role of finance as a mediator. A survey data was acquired composed of three parts adapted from earlier studies to be appropriate for instates of higher learning. Smart PLS 3 analytical software was used to analysed the hypotheses. At the same time, (SPSS) 26 was used to ascertained the profile of respondents using 316 lecturers from 25 colleges as a sample. The results showed that all the predicting variables have a significant positive relationship with quality management practices. Furthermore, educational finance mediates the positive relationship between climate and quality management practices. The finding suggested a need to raise the finances in the Egyptian universities so as to improve the climate of universities and task performance. The study recommends the necessity to increase awareness among educationists and other key players to apply quality management in the universities in the wake of its potential benefit to the education system.

Keywords: Climate, Education, Finance, Quality Management Practices, Higher learning.

Introduction

Over the past decade, instates of higher learning have recognized the significance of quality management practices that aim to improve the quality of services by addressing, identifying, minimising, and eliminating the causes of poor quality in an organisation. Thus, through the use of quality management practices, organizations can ensure that their products and services meet the needs of their end users.

Globally, quality management practice has often been an interest of debate among academic scholars regarding its implementation in instates of higher learning. Undoubtedly, for the general public to have conducive learning environment and quality education remain a cornerstone for sustainable development in education, serving as an uninterrupted link to human capital development (Martin, 2018; Rangou, 2017). Quality in states of higher learning is highly required looking at its contribution to national economic growth and its potential to improve the quality of an organization's output. Hence, this requires that the process of quality is transparent and that the practice of quality enhancement is synchronized within a given system aiming to benefit from quality management (O'Sullivan, 201). Aboudahr (2022) alluded that quality management practices are the core priority of any organization's

administration, which is utilized as a mechanism for competitive business practice and a solid channel to employee satisfaction.

Papanthymou and Darra (2017) stated that the importance of Quality Management QM practices is increased confidence in employees, progress in growth and development, improved quality from the customer's standpoint, link between staff and faculty functions, and improved teamwork. Alzoubi and Ahmed (2019) mentioned that QM practices also include innovation, financial potential, innovation opportunities, adequate control in design system, planning, and distribution field, more considerable flexibility, high-quality services, and market position strength. Substantial studies support the view that the practice of QM, provides a viable benefit in global and domestic markets by offering products and services with high quality to satisfy consumers' needs Madar, 2020). Moreover, implementing QM practices also helped various institutions improve their image, employee satisfaction, and quality awareness (Sciarelli et al., 2020). Also, the organization can enhance its internal operations more effectively by implementing quality management practices. Certainly, Aquilani et al. (2017) posited that most organizations rely heavily on quality. It has grown into a strategic method for achieving superior performance and productivity. It is also recognized as the most essential competitive and business activity. As a result, the climate is critical and most significant element in quality management in terms of having a consistent path to employee satisfaction (Pambreni et al., 2019). Furthermore, Al Shobaki et al., (2018) emphasized that quality management practices success depends on the university's climate. To ensure that quality management practice is effective in colleges, universities, and other educational institutions, climate must be strongly provided in the institution (Kwauk & Casey, 2021).

Building on the influence of climate on quality management, Özoğlu (2016) affirmed that maintaining high-quality education has become the main concern for HEIs and governments. Meanwhile, this needs continuous assessment of government funding to ensure that colleges, universities, and other educational institutions are successful. Financing instates of higher learning is important for its growth and development of education (Barr & McClellan, 2018; Zumeta et al., 2021). According to Simamora (2020), many academic functions require funding in order to be execute either short or long-term goals with adequate and effective future program planning. Thus, making education financing with minimum rules and standards in its use.

Consequently, the responsibility for providing education mainly lies with the government in public colleges and universities. This is related to all types of education ranging from elementary to instates of higher learning. In Egypt, the provision of education mainly lies with the government. The government not only manages and administers education in Egypt but also finances education. However, education in Egypt receives a low amount of funds to finance modern facilities in these schools, especially universities in order to meet the world standard (World Bank, 2018). As a result of insufficient educational support, Mahdy and Sayed (2022) stated that many people in Egypt indirectly suffered from low quality in public universities due to a lack of efficient resources to provide required services to the students that enrolled in these schools. Also, Eltemamy (2019) pointed out that Egypt's instates of higher learning still suffers from poor financial resources and governance challenges due to weakness in the education system that leads to instability of education system. As such, the importance of finance in instates of higher learning, Elabd and Elabd (2021) affirmed that among factor that boosts quality management practices in developing countries, lack of access to finance appears to be significant barrier to pursuing quality management practices in instates of higher learning.

Egypt has developed a sustainable development strategy known as 'Egypt Vision 2030'. This is a model devised by the Egyptian authority in order to develop the system of instates of higher learning in Egypt to compliment envisioned result for development particularly with the use of quality management to also help improve universities performance (Singer, 2020). Despite the changes that have accompanied educational institutions in Egypt and their course to adopting the philosophy of practicing quality management, many challenges and obstacles prevent reaching the desired goals of practicing quality management. These challenges cut across insufficient financial assets, enormous demographic pressure, poor administrative and leadership performance, limited management practices in the educational system and feeble atmosphere in the instates of higher learning (Eltemamy, 2019).

Besides, numerous earlier studies have examined the role of finance and climate with its influence on quality management practices with particular focus on the effect of a single and direct association between climate, and finance in instates of higher learning in the case of Egypt (Bergmann et al., 2018; Shaturaev, 2021; Hidayah & Syahrani, 2022). However, there are insufficient empirical studies exploring the potential outlook of access to finance and its mediating role between quality management practice and climate in instates of higher learning. Therefore, this paper aimed to examine the mediating impact of finance on the relationship between climate and quality management practices in order to classify the level of climate in the university towards organization's development by officials in line with the university's vision to achieve an advanced the level of quality management practice that can only be achieved through creating an appropriate climate for employee motivation.

Literature Review

Quality Management Practices

Almost every facet of life today is experiencing a tremendous and rapid change. A change that has pushed and challenge organizations to give serious concern to the adoption of modern system of management in the education sector (Ali, 2020). The need to improve quality management practices remains a very important aspect of this development. Msallam et al., (2020) considers it as a prerequisite for the actualization of instates of higher learning predetermined aims and objectives, and the aspirations to attain excellence and merit. In addition, it is observed that in instates of higher learning, quality management practice is regarded as an essential factor that contributes to the growth and development, better performance and excellence in achieving the targeted objectives of an organization (Saffar & Obeidat, 2020). Since QM deals with the application of quality principles in all levels of a sector, it is also established that instates of higher learning institutions with quality management in focus, it will require constant improvement and development for the success and growth of educational output (Saiz-Alvarez Saiz-Alvarez, 2020). Accordingly, it is important to consider higher learning climate and financial structure to establish an appropriate environment that will enhance all employees and student's performance at the University Continued Improvement and development.

According to Aquilani et al., (2017) quality management practices are the concentration of most organizations because it is known as the main competitive factor for effective business practice. Quality management has become a critical method for ensuring superior performance. Similar to this, QM is more often associated with a significant track record of success for its application in a wide range of organizations, giving these sectors a competitive power at both international and local markets by establishing high standards and quality services or products in order to achieve the highest possible level of satisfaction among customers. (Madar, 2020).

Moreover, implementing the QM practices also assisted the various institution to develop their image, satisfaction of the employee, and quality consciousness (Kipngetich & Bett, 2018). Other empirical study also suggested that QM practises have a substantial and positive impact on the knowledge management system among other management practice (Al Shraah et al., 2021).

Many scholars have attested to the effective and successful use of QMP in different and diverse sectors of the economy which is not limited to education but also includes: the public sector, manufacturing and service industry as it can help to improve and develop quality service. Consequently, satisfying a great number of actors in the industry such as employees, students and parents respectively. On the other hand, reducing costs, improving financial performance in addition to boosting competitiveness with increase capacity and efficiency. Likewise, studies in different countries stressed the significance of quality management practices in instates of higher learning. So, for the education sector to develop and better improve its performance and quality, it is critical to adopt the implementation of quality management practices (QMP) as recent studies have empirically suggested.

Climate

Climate is the overall atmosphere of an organization, from the top management down to the lowest-level worker. It is the perceived level of trust, respect, and understanding among employees, managers, and supervisors. It encompasses the feel of the building, the level of communication between employees, and the way decisions are made. It is the result of many subtle things, from the way an employee is spoken to, the level of trust placed in an employee, to the way an employee is treated when making a mistake.

Climate provides the essential framework and atmosphere within which the of learning is nurtured to enable quality management to take place, flourish and feed upon. It is also described as employee's experience based on collective views of policies, practices as well as processes which also includes the habits they assume to be of benefit (Rožman & Štrukelj, 2021) and a key factor that identifies the effectiveness of an organization toward its goals and objective Al-Kurdi et al., 2020) with recent study indicating that it has a massive effect on the performance of an organization (Prasetyo 2021). Al-Kurdi et al. (2020) argued that an enabling climate can facilitate faculty members' performance at the universities. According to Al Shobaki et al. (2018) climate plays a significant role in achieving employee satisfaction and growth in instates of higher learning. This indicates that organizations are interested in learning more about their internal situation and work toward its to development and progress so as to attain advanced level of quality within the climate (Al Damoe et al., 2017). Woznyj et al. (2019) asserted that the significance of climate has developed as a result of its dynamic role in the successful performance or failure of an organization. Hence, the conceptualization of climate can be perceived through the lens of employees by the institutions' management, and communication.

Recent studies conducted by Fonseca (2022), Pecino et al. (2019), Zhang et al., (2020) suggested that climate is one of the supporting factors in all stages of quality management improvement due to its ability to influence and direct individuals' behavior towards achieving goals and objectives. Also, Ghavifekr and Pillai, (2016) revealed that a suitable climate at universities helps faculty members perform their job better. Another significant aspect of the role of climate, Litwin (1968) posited that climate factors directly impact employee engagement and efficiency, which reflect the implementation of quality management. While Aboudahr (2021) implied that climate can either be a motivator for employees to put forward their best effort in order to accomplish the institution's purpose, or it can be a deterrent to

employees' willingness to work. Therefore, organizations are keen to study their climate and efforts to develop and enhance it as part of their endeavour to attain advanced levels of quality, given that the organization's effectiveness depending on the nature of the current situational climate. Previous studies that dealt with the climate in educational institutions such as Al-Kurdi et al. (2020), Kamal (2020), Osman and Kamis (2019), Üstün (2017) revealed a strong relationship between quality practices and the climate. Going by the review of past research, this study formulated hypothesis to examines the relationship between climate, and quality management practices in Egypt's instates of higher learning.

Educational Finance

Educational financing is the amount of capital for operational or investment costs which are designated for the actualization of objectives in the education sector and the provision of infrastructure among other facilities. This fund is channel for development project which requires planning for education personnel, procurement of facility, program socialization, execution, evaluation and supervision, among other education enhancement programs which all requires funding directly or otherwise (Barr & McClellan, 2018; Hidayah & Syahrani, 2022).

Education finance has become a contentious issue with significant debate over whether the government should pay for schools and whether the government should do so through either a block grant system or something else. For this reason, it is obvious that education finance is a very challenging and complex area of policy. It is not a subject in which one can say, "This is an easy problem, and the answer is simple." Especially when there are many layers of problems and even more layers of complexity. To complicate matters further, many of the layers are overlapping. In addition, Al-Samarrai et al. (2021) accentuate that education finance also plays a crucial role for the success of either the private or public sector in their various educational objectives even it is not the only variable that influences the outcome of organization's performance. This is so because for every objective to be accomplished, finance remains a driving force. Several studies such as (Berg & Zia, 2017; Bruhn et al., 2016; Carpena et al., 2019; Kaiser et al., 2021) indicates that financing the education sector plays a key role in every attempt to actualize educational quantitative or qualitative goals. Virtually for all educational purposes, the important role of cost cannot be overemphasized which means without education finance the successful operationalization of schooling system cannot be effective. In this context, educational finance has a very wide view, by that, we mean all forms of expenditure which are linked to the provision of education. Either in the form of money or goods and labour which can as well as be valued in monetary terms.

Based on Deming (1974) finance is considered the most significant factor influencing quality management practice. Al-Samarrai et al (2021) asserts that several countries would need to invest more into their education sector in order to actualize both domestic and global objectives. They will also need to address the inequality gap and huge inefficient spending commonly attributed to majority of educational processes will be pivotal so as to make prudent use of resources thereby strengthening the relationship between education and spending output. The study by Herath et al, (2017) emphasized that the availability of finance can be considered as a vital factor in educational institutions to enhance their quality management practices. Also, Mensah (2020) and Aboudahr et al., (2018) highlighted that quality management practices of instates of higher learning usually need adequate finance to minimize the lack of infrastructure and be able to improve the teaching and learning methods.

According to Hidayah and Syahrani (2022) educational finance is useful and essential to consider the effectiveness and efficiency of financing education due to its important role in

establishing the process and system of educational activities. This is so because financing education addresses the regulatory standards and principles in the system of education which can be very helpful in advancing and developing the education sector in order to meet its expected purposes and objectives. The result by Nenadal (2016) highlights the positive role of educational finance to enhance quality management. Certainly, the possible explanation for this might be the adequate finance of the material resources required to be implemented which is a considerable factor to improving the instates of higher learning sector (Alshubiri, 2020). Sufficient finance leads to the suitability of educational resources that will enable students and lecturers to achieve their teaching and learning standers (Sephania et al., 2017). Shaturaev (2021) also reported that quality management practices could be improved by focusing on proper educational financing.

Among these gaps are the importance of climate, finance and its relationship with quality management practices of instates of higher learning in Egypt. This has urged researchers to explore the considerable relationship and depth of these variables with the ability of finance to enhance the relationship between climate and quality management practice in Egypt instates of higher learning. The following three purposes of the study were established based on literature review.

1. Determine the relationship between educational finance and quality management practices in Egypt instates of higher learning.
2. Examines the relationship between climate and quality management practices in Egypt instates of higher learning.
3. Examines educational finance mediating relationship between climate and quality management practices in Egypt instates of higher learning.

Meanwhile, based on the literature review and in line with purpose of the study, the following hypotheses have been formulated:

H₁: Educational finance is positively related to quality management practices in Egypt's instates of higher learning.

H₂: Climate is positively related to quality management practices in Egypt's instates of higher learning.

H₃: Education finance mediates the relationship between climate and quality management practices in Egypt's instates of higher learning.

Method

Research Design

This study utilized a quantitative technique by using a cross-sectional design to collect data to test the hypothesis. The cross-sectional method is one of the most frequently method employed in which the researcher collects data at a particular point in time from the target population (Shaughnessy et al., 2012). Thus, in order to analyse the study's research hypotheses and give a clear picture of any potential relationships between the variables under consideration, a cross-sectional technique has been used.

Population and sampling

The target population of the study included of 25 colleges in Egypt. The data led from a two-step pilot and field study; calculating the required sample size for the two-step of data. The research sample size took the benefit of G*Power software (Faul et al, 2007). Conventional settings are as follows: $f^2 = 0.15$, $\alpha = 0.05$, power = 0.80 (Perugini et al., 2014). Similarly, 316

participants from 25 colleges in Egypt constituted the sample for this study. Certainly, the PLS analysis was deemed to require the use of sufficient power potentials and descriptive analysis was performed using SPSS.

Instrumentation

The questionnaire consisting of four sections the first section presented demographics (gender and work experiences) the second section presented the climate construct, which involves two dimensions, namely collaboration, 6 items, and, instructional innovation 4 items, adapted from Aboudahr (2021) while 4 items were considered for the third section under finance adapted from Johnson et al., (2007). The PLS analysis was deemed to require the use of sufficient power potentials, and descriptive analysis was performed using SPSS. The study's constructs were all evaluated using a five-point Likert-type scale.

Finding of the Study

Table1. Respondents data (n=316)

	Classification	Frequency	Percentage (%)
Gender	Male	153	48.7
	Female	163	51.3
Work Experience	Below 5	171	56.9
	6-10	94	29.8
	11-15	29	9.2
	16-20	13	4.1

Table 1 is respondents' demographics, showing that the respondent was predominantly female (51.3%). Most of the participants have working experience below 5 years (56.9%).

Results of Measurement Model

Hair et al. (2017) asserts that two procedures are necessary to be considered when the evaluation measurement model is utilized. First is convergent validity (CV) through average variance extracted (AVE), composite reliability (CR) to estimate the internal consistency reliability of the research constructs. The convergent validity assesses whether or not the items of the variables represent the same fundamental construct. Gholami et al. (2013) recommended standards for loadings set above 0.5, in reference to table 2, all loadings which surpassed the benchmark of 0.708 were upheld. The outer loadings of C4, C5, C6, CF1 and CF2 which were marginally under 0.708, were retained as a result of the average variance extracted higher than 0.50 (Hair et al., 2017). The AVE should be more than 0.5, and the CR should be above 0.7 threshold value. Table 2 shows that the study has conceptualized C, EF and QMP as second-order constructs. Consequently, the study utilized the approach proposed in prior study with PLS which is the continual gauge method to model and the second-order factors in the PLS analysis. These findings show that the reflective variables of the research model complied with the requirements for validity and reliability.

In the second step, discriminant validity (DV) is to be verified how a construct varies from other within the model. The Heterotrait-Monotrait (HTMT) ratio of correlations method was used in the study. According to Hair et al. (2014) when a construct is compared to their predictors, the new model's constructs should be less different from those with appropriate discriminant validity. As was explicitly stated, the AVE square needs to retain a high ratio in comparison to the values of its links in comparison to another model element. Additionally, HTMT stands for the ratio of the heterotrait-hetero system associations, which are the associations of the indicators across all unobserved variables and measure a variety of issues in contrast to the ratio of the monotrait-hetero method correlations, there by serving as the

associations of the items of a single latent variable. The research's variables adhere to the criteria outlined by HTMT. Each AVE square root is higher than the correlations among the constructs with reflective items, while the HTMT ratios for a pair are below 0.85 (Gold et al., 2001; Kline, 2015), as established in Table 3. Hence, the collective variables are distinct from one another, and the findings demonstrate and confirm the discriminant validity.

Table 2. *Measurement model*

Lower- Order	Higher-Order	Indicators	Loadings	CR	AVE
Collaboration		CO1	0.892	.872	0.538
		CO2	0.864		
		CO3	0.713		
		CO4	0.652		
		CO5	0.624		
		CO6	0.604		
Instructional Innovation		II1	0.883	.890	0.670
		II2	0.851		
		LI3	0.750		
		LI4	0.783		
Climate		C	0.877	.876	0.779
		II	0.899		
		EF1	0.880		
		EF2	0.901		
		EF3	0.858		
		EF4	0.827		
Finance		T1	0.721	.862	0.611
		T2	0.821		
		T3	0.768		
		T4	0.811		
Training		CU1	0.665	.892	0.584
		CU2	0.605		
		CU3	0.857		
		CU4	0.871		
		CU5	0.850		
		CU6	0.693		
Customer Focus		COI1	0.835	.862	0.675
		COI2	0.828		
		COI3	0.801		
		T	0.798		
Continuous Improvement	Quality Management Practices	CF	0.839	.876	0.703
		CI	0.876		

Table 3. *Discriminant validity*

	1	2	3	4	5	6
1. C						
2. CI	.618					
3. CF	.589	.782				
4. EF	.475	.633	.498			
5. II	.666	.719	.681	.504		
6.T	.483	.637	.624	.724	.5	

Structural Model Evaluation

The evaluation of the research constructs was initially assessed in order to properly define the structural model to be omitted from lateral collinearity bug (Hair et al., 2017). The total inner VIF values in Table 4 appears to be lesser than 5, which indicates that the structural model does not have any issues with predictor construct collinearity. Additionally, the structural model was assessed using the 5000-sample bootstrapping approach to get the beta (β), t-values, and R². (Hair et al., 2017). Lastly, the effect sizes (f^2) and the predictive relevance (Q²) was also explored.

Table 4 indicates that, quality management practices were predicted by climate ($\beta = 0.426$, $t = 6.589$, $p < 0.05$) and Finance ($\beta = 0.470$, $t = 7.744$, $p < 0.05$). Educational finance was predicted by climate ($\beta = 0.490$, $t = 8.082$, $p < 0.05$). Overall, the results supported and maintained the direct hypotheses.

Furthermore, exogenous variables explained 59 % of variations in quality management practices and 24 % in educational finance, when compared to the R² values of endogenous variables. R² values of 0.19, 0.33, and 0.67 are deemed to be weak, moderate, and substantial, respectively, according to Chin (1998) and Cohen (1988). Consequently, the R² values of quality management practices and finance compliments with the standard ranking of predictive accuracy.

The variation in R²-values that depends on the effect sizes (f^2) was examined (Hair et al., 2017) and Cohen (1988) stated that effect sizes with values of 0.02, 0.15, and 0.35 are small, medium, and large, respectively. Table 4 shows the f^2 findings in accordance to the effect sizes: on one hand is two relationships (large) and on the other hand is one (medium).

Furthermore, in order to examine the predictive relevance, the blindfolding technique, which is commonly used for reflective independent unobserved variable, was used (Hair et al., 2017). Both educational finance (0.229) and quality management practises (0.409) in the study had Q² values above zero, indicating that the model used to predict the variables' outcome was predictively relevant (Geisser, 1974; Hair et al., 2017). In addition, QMPs precisely had the maximum Q² values, while EF was the second.

Table 4. Results of the Structural Model Analysis (Hypotheses Testing)

	Relationship	Std Beta	Std Error	T-Value	P-Value	BCILL	BCIUL	VIF	F ²
H1	C→QMP	0.426	0.065	6.589	P< .05	0.299	0.581	1.319	0.344
H3	EF→QMP	0.470	0.061	7.744	P< .05	0.349	0.581	1.317	0.419
H4	C→Ef→QMP	0.229	0.040	5.769	P< .05	0.161	0.318		

No=316; *p < 0.05

QMP Quality management practices, C Climate, EF Educational Finance.

Mediation assessment

The importance of the indirect effect was investigated to determine the mediating effects. This evaluation utilised the accelerated bootstrapping and bias-corrected approaches (Hair et al., 2017). According to Hair et al. (2017) when t-values are greater than 1.96 and p-values are less than 0.05, indirect effects which considered significant. The results suggested that finance mediated the impacts of organisational climate ($t = 5.76$, $p < 0.05$), as shown in

Table 4. Hence, H4 is supported for the mediation effect. Zero is exempted from the bootstrap confidence intervals of these findings suggesting the inclusion and significance of mediation influences (Preacher & Hayes, 2008).

Discussion

The objectives of this paper was to determine the role of finance in mediating the association between climate and quality management practices in instates of higher learning. The finding indicates a significant relationship between finance and quality management practices. The outcome is consistent with previous research findings of Macharia et al. (2020), Mastor and Ibrahim (2012), Cooper (2020), Takwate (2018), Carpena et al., (2019), Kaiser et al., (2021) which highlighted that sufficient financial resources in any institution are considered as the main factor that could influence the achievement of quality management practices. According to Nzoka and Orodho (2014), the lack of finance affects basic facilities which obstructs quality management in institutions. Therefore, facilities and teaching aid in the university will help lecturers present effective teaching and sufficient funds must be allocated to provide the necessary resources that will help to improve quality management practice and to create an appropriate climate that helps achieve better quality management in Egypt's instates of higher learning.

In light of the finding, the study confirms that finance is one of the most important and influential factors in instates of higher learning. Therefore, the system of finance is considered as the fundamental element of the administrative process which related to various other organizational processes such as planning, organizing, monitoring, and directing. Hence, it can even be considered the most important due to the fact that, it key element to the success of all administrative processes in higher learning. Assuredly, providing sufficient funds is a real indicator towards contributing to, and achieving successful instates of higher learning.

Furthermore, H2 demonstrated a significant relationship between climate and quality management practices in Egypt's instates of higher learning. The result of this research is in harmony with the study of AL jufri and Priyono (2018), Berberoglu (2018), and Escamilla-Fajardo et al. (2021) which alluded that a positive climate contributes to raising the level of quality management practices and performance. Besides, the finding of the research indicates that quality management system is one of the factors that characterized the successful implementation of higher learning in Egypt and could only be achieved in a positive climate that involves participation in decision-making. In addition, the spirit of affiliation among the lecturers with the provision of adequate resources and facilities suitable for work. The study also confirms that the availability of the previous factors in the climate in the colleges and the university helps to enhance the practice of quality management and increase the ability of the university to achieve its goals (Escamilla-Fajardo et al, 2021).

The last hypothesis tested whether there was a mediating influence of finance on the relationship between climate and quality management practices in Egypt's instates of higher learning. The results indicated that there was a significant mediation. Finding revealed that respondents within instates of higher learning generally need sufficient educational finance to improve the climate which in turn enhances quality management practices. Consequently, H3 is supported. The result of the research is in agreement with the views of Asiyai (2015) which argued that in order to improve teaching and learning methodologies and reduce infrastructural gaps, quality management approaches in instates of higher learning typically require enough funding. Also, the result is in the line with the study conducted by Hidayah and Syahrani (2022)

which postulated that financing education is a core an integral part of enabling the system of education process and activities. Certainly, it is critically essential to put in focus its effective and efficient features since education financing also involves regulations with standards and principles. Thus, financing education can be a very important tool that can be used to advance and improve the system of education towards achieving its objectives. Our findings do not erode the importance of finances in instates of higher learning. This should serve as an indicator to educators and policymakers that they should expand the financing of instates of higher learning opportunities.

In summary, the study proved the strength of the hypotheses that revolved around contributing to the mediating role of finance and climate in quality management practices in instates of higher learning in Egypt. In addition, the study shows that finance enhances and improved the climate in the university which is an urgent necessity to achieve quality management practice in instates of higher learning. For the reason, climate constitutes a working environment that helps the improvement and development of the student, lecturer and university administration with the provision of appropriate educational finance.

Conclusion

This paper empirically investigated the relationship between climate and quality management practices by drawing up on finance as a mediator that improves the connection between climate (C) and quality management practices (QMP) among lecturers in the colleges. Furthermore, the study contributes to the existing body of knowledge in management science. Given the findings of the study, it supports the influence of finance in affecting quality management practices. Despite the body of literature from previous studies attested to this idea of government financing and spending is a great influencer of the growth and development of instates of higher learning. The result also shows that quality management practice and climate significantly correlate with an increase in fiscal spending. Meanwhile, climate and finance has broadly impacted on quality management practices, and these constructs assumes a positive status in the development of instates of higher learning. It is evident that the government can help in the growth and development of instates of higher learning through the increase in finance and budget spending. Therefore, for other universities and places of higher learning to benefit from finance to achieve quality management practices, it is vital to raise awareness among those in charge of the educational process about the importance of implementing quality management in instates of higher learning.

This paper is expected to be part of the body of existing literature for better understand climate (C), Educational Finance (EF), and its relationship with quality management practices (QMP) among scholars and practitioners which will offer a significant contribution to the university's environment. Moreover, adopting the result of this paper would serve as yardstick for an increase of university's funding provided by the Ministry of Higher Education, so as to provide better training and services to the university academic community. It will also help provide the appropriate infrastructure required for the practice of quality management, which leads to raising level of students' academic experience when better service is offered to them. It will likewise increase the loyalty and retention of employees to university and other higher institutions. The paper further argues that there is a significant relationship between climate, finance, and quality management practice in the context of Egypt. Consequently, this study attempts to fill the gap in mediating the role of finance to improve climate which reflects the need for such in Egypt's instates of higher learning for quality management practice. Finally, the study reveals the need to increase financial endowment from the government to instate of

higher learning to satisfy and address their financial needs at a sufficient level. Thus, measures should be taken to reduce the lack of finance in instates of higher learning and effort should be aimed at improving the fund and providing basic infrastructure to the higher learning and universities in Egypt.

Implication of the Study

Considering educational finance as a potential basic need for climate and quality management practices, this study has contributed to exiting literature on quality management practices, climate and educational finance. Meanwhile, this study further filled the gap that presently exists in educational research by determining the factors that increase or impede the connection between climate and quality management practices with the mediating influence of educational finance among academics in higher education sector. Moreover, this study has contributed to the understanding of educational finance and its relationship with climate, which will benefit the institution of higher learning on enhancing the university's continuous effectiveness on quality Management practices. Furthermore, knowledge acquired from this study would help to provide the appropriate infrastructure required for the practice of quality management, which leads to raising level of students' academic experience when better service is offered to them. It will likewise increase the loyalty and retention of employees to university and other higher institutions. The study further affirmed that there is a significant relationship between climate, educational finance, and quality management practice in the context of Egypt.

Limitation of the study

The findings of this paper should be interpreted through the lens of its limitations. The purpose of this research was to investigate association between climate and quality management practices with mediating effect of finance. The focus of the study was on quality management practices in terms of training, customer focus, and continuous improvement. Future research may use other dimensions of quality management practices, such as top management, strategic planning, and information analysis. Furthermore, the paper focus was only on a university survey with lecturers from 25 colleges as its respondent. The study took into serious concern the views of all (students, instructors as well as other active parties). Hence, there could be a possibility for slight biases even though enormous care and concern were put into consideration, so as to ascertain that the analysis was strictly based on data obtained from all lecturers at the selected College. As a result, it would be most useful if the future study could investigate similar issue from student instructor and lecturer's perspectives in order to make a comparison of any difference in climate. So, the result of this particular study is not sufficient to be generic of all universities and higher learning centers in Egypt.

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