Role of Total Quality Management in Universities: Administrative and Teachers Staff

Muhammad Aqeel Raza, *Department of Education, NCBA & E Lahore, Multan Campus, Punjab, Pakistan*
Sadia Mushtaq, *Department of Education, Govt Graduate college for Women Shah Rukhn-e-Alam, Multan*
Romina Ali*, *Department of Education, Emerson University, Multan, Punjab, Pakistan*

ARTICLE DETAILS

ABSTRACT

Education quality is considered essential, covering economic, social, cognitive, and cultural aspects of learning. Educational establishments show a significant part in the overall development of the country, society in addition students by providing excellent educational services. Achieving total quality requires creating an innovative, flexible, and learning organization capable of quickly adapting to changes in its environment. In order to develop the worth of education, it is important toward reduce extensive amount of information that students are expected to learn. It is recommended that students focus on building a strong foundational knowledge, nurturing creativity, honing problem-solving skills, and fostering a culture of lifelong learning. The study encompassed all public and private universities in Southern Punjab and employed a simple random sampling technique for data collection. The study's sample consisted of forty-five (45) university instructors and thirty-five (35) administrative staff members. To collect data, a questionnaire utilizing a Likert scale was employed as a research instrument. Data analysis which consisted of t-test, mean, standard deviation, and percentage. The findings from the analysis showed a significant difference in opinions between male and female university instructors. Furthermore, it was found that there was minimal variation in opinions between male and female administrative staff members.

OPEN ACCESS

*Corresponding author: rominaali0900@gmail.com

Introduction

The standard of construction is suggestively inclined by the level of education, which also plays a vital role in gathering support. It's important to know that quality education and access to education are equally fundamental and interconnected human rights, as stated by Cullen in 2008. Lack of knowledge is a major contributor to poverty. The academic faculty plays a key role in fostering expertise and is an attractive primary advantage. "Innovative face" refers to achieving improved quality, manageability, mobility to meet standards, and changes in the European education program. Xiao et al., (2017) suggested that the educational systems of the past and present differ due to varying educational approaches and the roles of individuals in the learning process. The distinction in the societal importance of teaching roles is based on efficiency and effectiveness. Stevenson et al., (2014) explained that quality management is a managerial aspect that strives to achieve excellence objectives by ensuring, planning, supervising, and improving perfection. Quality management has become an organizational philosophy that brings together people from diverse backgrounds and departments within the company in today's world.

In other words, according to Kairys (2018), the word "sound quality" takes its origins in the word "qualitas," it encompasses qualities, possessions, value, attribute, feature, and aptitude. Quality has become a crucial factor for the survival, efficiency, and growth of businesses in an increasingly competitive world with rising consumer pressure, not just within the human resources sector and organizations, but for the overall economy of the nation. Few Croatians realize that improving the quality of education is vital for enhancing the quality of businesses and ultimately gaining a competitive edge. In his work from 2022, Cheng provided an analysis of the dynamic and multifaceted nature of the concept of education quality. This encompasses not just the educational model, but also the institutional mission and goals, as well as the specific values of the organization, program, event, or capacity. Determining the quality of education has posed a challenge for both educational theory and practice. In the field of education, the most dependable method for assessing quality is by comparing the outcomes to the stated objective or to previously accepted principles. The quality of any human endeavor can be determined by the caliber of its output, as Algahtani pointed out in 2014.

Moreover, ensuring that the quality meets expectations require intentional quality control. We can conclude that an essential component of management is quality management aimed at achieving direct goals that not only enhance quality but also sustain it over time, based on previous experiences. This is achieved by overseeing the activities outlined in the established quality policy and plans. The quality system accomplishes this through various means, including an appropriate quality monitoring plan. Unconventional models are utilized to achieve effective management within an organization, with the quality management system being one such model. Arrangement, measures, process, and other necessary resources for implementing quality management are highly valued when discussing a quality management system. According to Sohel-Uz-Zaman (2016), quality systems are closely linked with the global and European standards and values of quality.

In the 1950s, Professor W. Edwards Deming introduced the idea of total quality, which can be applied to almost any relationship. The concept represents the process of refocusing the

organization to deliver higher-quality goods and services. The transition in education towards Total Quality Management (TQM) entails not just achieving quality above the average, but also impacting every aspect of the educational process, including the community, administration, interpersonal interactions, content, and staff (Sallis, 2014).

A thorough quality management framework must include all of the following essential elements: full engagement, iterative development, process management, procedure planning, and client requirements orientation. Total quality management is an organized approach to management that requires all employees, regardless of degree of management, to actively participate in order to represent the managerial culture. TQM places a strong emphasis on employees' commitment to quality, leadership and oversight, ongoing improvement, quick reaction times, clear procedures, and employee involvement within the TQM framework (Asif et al., 2013).

To conclude, planning of procedures, management of processes, iterative development, full involvement, and focus on the needs of clients are all integral components of the comprehensive quality management framework. Total quality management calls for an organized management strategy that necessitates active participation from every member of the workforce at all levels of management, thereby reflecting the managerial methods TQM emphasizes dedication to quality by the organization's users, leadership and supervision, continuous enhancement, swift response times, explicit processes, and employee engagement in the TQM framework (Asif et al., 2013) to a critical system.

Objectives of the study

The following goals served as the basis for this study:

1. To study the perceptions of public sector universities' administration and teachers about total quality management.
2. To highlight the role of total quality management for quality education and research at university level.
3. To describe the role of total quality management for documentation and implementation at university level.

Literature Review

Concept of Quality

Zink (2012) stated that the statement quality has many different definitions according to different perspectives. The quality is the level to which quite a few characteristics fulfill the requirements needs of the costumer. The extent to which a position with natural qualities satisfies verified needs, criteria, or prospects usually indirect or mandatory. The mortality rates that product causes to humans from the moment it is transported are what determine its quality. Quality should encompass the needs of the consumer both now and down the road.

Quality Dimensions

Now is a good time to become acquainted with the quality dimensions in order to distinguish between the higher education quality dimension and other dimensions. While quality metrics for goods and services have been created separately, many current involve both a hardware component and an examination portion. For commodities, there are several dimensions of quality:

1. The likelihood that an issue may arise for a certain product and the likelihood that it will occur are both considered reliability factors.
2. Maintainability, the ability to demonstrate how difficult or easy it is to focus, identify, and resolve an issue.
3. In terms of the customer, performance refers to the essential uniqueness of production, such as a useful life.
4. The way a product affects its surrounds is known as its environmental force. A creation's emissions and capacity to be recycled are
5. important in this regard.
6. Strength usually refers to the ability to use, store, and move a thing without it breaking or a person failing.
7. Being able to rely on suppliers is the main integrity problem.

Quality and Success

Wiengarten and Pagellm (2012) explained that as well, enhanced quality increases the stage of achievement and success in an institute. This achievement is able to be touched in a stronger promote position. In addition, there will be a decrease in employee turnover and sick leave costs, and the organization will be able to provide more youth employment opportunities and capital release chances. Finally, higher capacity and more productivity are the results of improved quality, whereas lower interior quality results in various issues with production and services, longer lead times, and ultimately, customer annoyance. Customer dissatisfaction lowers profitability.

Education Quality

Therefore, Akareemn and Hossain (2016) described the statement quality comes from the Latin word qualities (property, value, quality, ability, trait, and feature. Quality is a crucial factor in promoting productivity and growth not just for individual industries but also for the nation's whole financial system, particularly in a highly competitive environment where user stress is on the rise. Not many Croatian businesses recognize that high-quality instruction is a key component in enhancing the caliber of commerce and, consequently, boosting employee morale. Additionally, according to Schoellman (2012), education quality is a dynamic, multifaceted concept that relates not only to the educational approach but also to the institution and its objectives as well as the precise values of the system, capacity, program, or event. What constitutes a high-quality education has been the subject of theoretical and practical investigation in education. When it comes to schooling, it's only probably to determine the quality by comparing the results to likely objectives or to previously accepted principles. Any human endeavor is distinguished by the quality of its output. The same holds true for schooling. Thus, the caliber of education is determined by the caliber of its "product," which is the student.

Quality of Higher Education

According to Welzant et al. (2011), the primary concern in the "invisible" war between nations is education quality since the managerial, administrative, and judgment of managers, engineers, employees, and teachers in the quality job determines the quality of goods and services. Due to economic factors, education and particularly higher education are facing a lucrative fight in today's market, much like other enterprises. According to Freeman (2010), the two main causes of this fight are the growth of the global education movement and the decrease in government funding that forces organizations to seek out alternative sources of income.

Qualitative increase or improvement

This idea, which emphasizes the pursuit of continuous improvement, is based on the ideas that achieving quality is essential to the academic ethos and that academics are the ones who can define quality at any given time. Quality of production and reputation in academic research are likely to be valued at HEIs notwithstanding these divergent conceptions of what constitutes a high-quality education. To shift the focus from management-based to education-based practices, quality systems that have been adopted from business and industrial operations must be reinstalled and reoriented for higher education settings. Phadke et al., (2019) clarified that I]in this situation, trusts that there are certain distinctions between companies and education that we need to be aware of.

Management: An Overview

Goetsch et al., (2014) stated that Management is the practice of using people and other organizational resources to work toward organizational goals. Three qualities characterize management:

Management is the process by which production workers collaborate to use available resources to accomplish desired goals and objectives. Given the possibility of viewing organizations as systems, management may be defined as both human action and design that enables a system to produce beneficial results. Self-management is made possible by this perspective a must before attempting to mentor others (Stadtler, 2015).
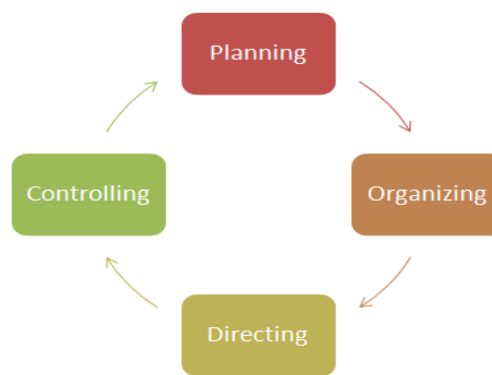
The management function involves planning, staffing, leading or directing, controlling, and organizing an organization or effort in order to achieve a goal. Management is surrounded by a variety of resource types, and resourcing includes the use and handling of the following:

1. Human resources
2. Technological resources
3. Financial resources
4. Natural resources.

Various kinds of management approaches

There are many different types of management styles, and as time has gone on, the management process has evolved. The advent of group projects and servant leadership has altered management expectations as well as what is expected of them.

Conventional Management

There are three levels of management: senior, mid, and low. There is also a hierarchy of staff. In companies with traditional management practices, the manager assigns tasks to staff members who must reach targets, but the manager also reaps the benefits of reaching those targets.

Group Supervision

When a team is managed well, the manager acts as a supervisory figure who supports problem-solving among team members without imposing rules. When goals are met, the team as a whole benefit.

Serving Management

By using this approach, the manager assists in providing the resources needed by the staff to meet business goals. When a company practices servant leadership, its workers are recognized as experts in their fields, and they are assisted in working with expertise. The primary goal of managers, regardless of the management style employed by the firm, is to assist staff in achieving organizational goals and upholding the company's principles and policies.

Total Quality Management in Education

According to Stadtler (2015), total quality management in education, the idea of quality is roughly functional to any business with a degree of assurance. The aforementioned idea aims to improve student outcomes by impacting every aspect of the educational process, including associations, management, interpersonal interactions, and financial resources for both materials and labor. The economic, social, cognitive, and cultural facets of education are all combined to form the word quality. The universal education system is managed by educational institutions and services that contribute to the advancement of the domestic financial system. Additionally, comprehensive quality management may be achieved from beginning to finish to create innovative organizations. For theorizing this model and reviewing the literature, our paper has followed, the literature review writing style outlined in the previous related research (Anser et al., 2020; Gulzar, Ahmad, Hassan, & Rasheed, 2022; Hong, Rasheed, Sigala, &

Ahmad, 2024; Kanwal, Rasheed, Pitafi, Pitafi, & Ren, 2020; Khalid, Weng, Luqman, Rasheed, & Hina, 2021b; Luqman, Masood, Weng, Ali, & Rasheed, 2020; Masood, Feng, Rasheed, Ali, & Gong, 2021; Moin, Omar, Ali, Rasheed, & Abdelmotaleb, 2024; Murtza & Rasheed, 2023; Naeem, Weng, Hameed, & Rasheed, 2020; Rasheed, Saleem, Altaf, Leong, & Okumus, 2024).

Research Methodology

A quantitative and descriptive research approach was used to accomplish the investigation's goals. The study's population consisted of all Southern Punjabi government universities. The data collecting involved the faculty, dean, and registrar of each of the six universities. The administrative personnel and teachers were chosen using a straightforward random selection technique. The study tool utilized to evaluate management's contribution to overall quality management in Southern Punjab's public universities was a questionnaire. 34 Likert-type questions with the following response alternatives were included in the questionnaire: strongly agree, agree, disagree, and disagree strongly. The data from the statements was encoded in SPSS so that tables could be created for targeted inferences. Following data collection and processing, SPSS software was used to evaluate the data once it was uploaded to a computer. To confirm the relationship and correlation between the independent and dependent variables, a number of statistical tests were used. The t-test and the mean were computed to statistically examine the data. Overall, we have followed research method chosen in the top quality research papers in our field (Gulzar, Ahmad, Hassan, & Rasheed, 2021; Khalid, Weng, Luqman, Rasheed, & Hina, 2021a; Moin et al., 2024; Peng, Liang, Fatima, Wang, & Rasheed, 2023; Pitafi, Rasheed, Islam, & Dhir, 2023; Pitafi, Rasheed, Kanwal, & Ren, 2020; Rana, Gaur, Singh, Awan, & Rasheed, 2022; Rasheed, Hameed, Kaur, & Dhir, 2023, 2024; Rasheed et al., 2020; C. Wang, Ilyas, Ni, & Rasheed, 2023; Yousaf, Rasheed, Kaur, Islam, & Dhir, 2022).

Data Analysis

Table No. 1

Perceptions of public sector universities' administration and teachers about total quality management

Statements	Means		
	Administrative Staff	Teachers	
1. TQM process is effectively and consistently managed in universities.	3.60	3.65	1
2. It is necessary for administration and teachers to communicate and discuss the policies of TQM.	3.43	3.79	1
3. All staff are fully aware about the standards of quality in teaching given by HEC.	3.86	3.81	1
4. TQM's commitment to can improve performance	3.57	3.92	1

in universities.

5. Teacher's suggestions for TQM are valued and rewarded.	3.40	4.07	1
6. TQM system helps in improving my university's performance.	3.86	3.67	1
7. TQM at university level generate new opportunities for teachers.	3.51	3.87	1
8. TQM provides self-development opportunities for all staff.	3.57	3.69	1
9. TQM provides a good foundation for the provision of effective teaching and learning opportunities.	3.51	3.71	1

The perspective on overall quality management differs between the administration and faculty at public institutions, as indicated in the table. Each statement has a mean score greater than 3, except for statement No. 4, which has the highest mean for administrative staff (3.86), and statement No. 5, which has a mean of 4.07 for administrative staff. The lowest mean for administrative staff is 3.40 for statement No. 5, "Teacher's Suggestions for TQM Are Valued and Rewarded," while for instructors, the lowest mean is 3.65 for statement No. 1, "TQM Process is Effectively and Consistently Managed in Universities." Likewise, statement No. 3 shows the most significant difference in means between instructors and administrative workers. The TQM proposals of five teachers have a value and reward of 0.67.

Table No. 2

Role of total quality management for quality education and research at university level

Statements	Means		
	Administrative Staff	Teachers	
10. TQM addresses the building requirements for instructional process.	3.37	3.53	2
11. TQM provides repair & maintenance schedule.	3.83	3.91	2
12. TQM addresses to follow admission rules strictly.	3.46	3.89	2
13. TQM provides sufficient and well-equipped classroom.	3.34	3.92	2
14. TQM provides sufficient and well instrument laboratories.	3.20	3.59	2
15. Well-furnished and equipped library with books and journals is an important role of TQM.	3.57	3.62	2
16. TQM ensures the faculty criteria of as per HEC recommendations.	3.80	3.53	2

17. TQM ensures the availability of hostel facility to students and staff.	3.57	3.75	2
18. TQM ensures the availability transport facility for students and staff.	3.77	3.80	2
19. TQM ensures the availability and usage of multi-media in the classroom.	3.66	3.91	2
20. TQM provides research facilities to students and staff.	3.34	3.89	2
21. TQM provides friendly environment of campus.	3.54	3.83	2
22. TQM ensures the availability of up-to-date records of students' assessments.	3.54	3.68	2
23. TQM ensures the clear vision of university.	3.40	3.56	2
24. TQM provides the methods to identify the needs of the students/ staff/employees.	3.71	3.97	2
25. TQM provides the learning strategy that clearly identifies teacher-centered & student-centered activities.	3.94	3.88	2
26. TQM provide there are planned arrangements for students' admission and induction.	3.29	4.01	2
27. TQM provide the students' selection criteria for programs are strictly followed	3.29	3.64	2
28. TQM ensures that the intended outcome of programs and courses are matched.	3.29	2.80	2

The table above illustrates the role of total quality management in ensuring high-quality research and education at the university level. Apart from assertion No. 28, which states that TQM ensures alignment of programs and courses with teachers' expected outcomes, the mean values for all other statements exceed 3. Statement No. 26 TQM outlines planned procedures for student admission and orientation, with the highest mean score among teachers being 4.01. Similarly, statement No. 4 TQM defines the learning approach by clearly specifying teacher-centered and student-centered activities, with the highest mean among administrative staff being 3.94. In addition, TQM statement No. 14 focuses on providing well-equipped and sufficient laboratories, with the lowest mean score among administrative staff being 3.20%. Lastly, TQM statement No. 28 ensures that the intended objectives for programs and courses are met through collaborative efforts. The alignment of program and course outcomes corresponds to an instructor mean of 2.80, which is the lowest. Statement No. 26 TQM, which indicates scheduled arrangements for student entry and orientation, exhibits the largest difference in mean between administrative personnel and instructors, at 0.72.

Table No. 3

Role of total quality management for documentation and implementation at university level

Statements	Means		
	Administrative Staff	Teachers	
29. A manual of the TQM available at the university level.	3.94	3.84	3
30. The TQM manual has clear procedures and instructions.	3.69	3.88	3
31. TQM provides learning activities which developed leadership skills among students.	3.29	3.65	3
32. TQM keeps the record and statistical data of students' progression.	3.77	3.80	3
33. TQM has a policy for university to improve quality and maintain standards.	3.86	3.88	3
34. TQM shares the learning experiences relevant to employment to students.	3.57	3.73	3

The table demonstrates the role of comprehensive quality management in university-level documentation and implementation. All statement means exceed three. Statement No. 29, which is a university-level TQM manual, has the highest mean of 3.94 for administrative staff. Statement No. 30, a TQM manual outlining clear procedures and instructions, and Statement No. 33, a TQM policy aimed at maintaining standards and enhancing quality, have the highest mean for teachers at 3.88. Similarly, while statement No. 31 TQM provides learning activities to promote leadership qualities in students, it has the lowest mean of 3.29 for administrative staff, but also offers activities that foster leadership qualities in students. Teachers have a mean of 3.65 for administrative personnel, which is the lowest mean for instructors. In addition, statement No. 31 TQM has the biggest difference of 0.36 between the means of administrative personnel and instructors, and it offers learning activities that enhance students' leadership skills.

Research Methodology

Table No. 4 (*Comparison of opinions of male and female teachers*)

	Gender	N	Mean	Std. Deviation	Df	C.V(t)
Teachers	Male	40	3.84	8.383	73	.000
	Female	35	6.68	7.538		

In the table above, the viewpoints of male and female instructors are contrasted. Upon analysis It was discovered that, at the 0.05 significance level, the computed value (0.000) is lower than the critical value in the table. This suggests that there is no statistically significant distinction in the perception of male and female university instructors. However, the difference in the averages between male and female university instructors also implies that the former are perceived more favorably than the latter.

Table No. 5
Comparison of opinions of male and female administrative staff

Gender	N	Mean	Std. Deviation	Df	Sig. (2-tailed)
Female	23	3.59	8.489	33	
Male	12	3.58	12.46		

The perspectives of male and female administrative workers are contrasted in the above table. At the 0.05 level of significance, the estimated value (.977) is less than the value in the table. This implies that there is no statistically significant difference in how male and female administrative professionals are perceived. However, the difference in means between the male and female administrative staff members also implies that the female staff members have a more favorable opinion than the male staff members.

Discussion

The purpose of this study was to find out how administrative staff members felt about a Total Quality Management (TQM) system being implemented in a university department. The findings suggest a generally positive outlook, with a majority of respondents expressing appreciation for various aspects of TQM. The Areas of Strength which shows a significant portion of the administrative staff (60% of instructors and 57.2% of administrative personnel) agreed that TQM addresses students' educational needs effectively. There was high approval for aspects like consistent management of TQM processes (57.2%), well-defined maintenance and repair schedules (80%), and structured procedures for student admissions (54.3%).The majority of administrative staff appreciated TQM's role in providing well-equipped classrooms (54.3%), libraries with relevant resources (57.1%), and access to research facilities (54.3%).Positive University Environment: The TQM system was viewed favorably for fostering a friendly campus environment (62.9%) and identifying the needs of staff and students (65.8%).A strong majority (74.4%) of administrative staff endorsed TQM's role in ensuring adherence to HEC standards for faculty and instruction. There are many areas for Improvement in which Faculty Training is important while a majority (57.2%) supported educator training in TQM concepts, a significant minority (20%) disagreed. This suggests a need for improved communication or targeted training programs. There is room for improvement in keeping everyone informed, with some disagreement regarding transparency in areas like using TQM for admissions (22.9%) and hostel options (17.1%). While a majority found TQM valuable, some respondents expressed disagreement regarding aspects like opening new opportunities for educators (20%) and providing a clear university purpose statement (21.5%). Further explanation or targeted communication might be necessary. Several studies support the positive impact of TQM in educational settings. Iqbal et al. (2023) found that TQM implementation in universities led to improved student satisfaction and faculty engagement. Similarly, Akinlolu (2018) highlighted TQM's role in enhancing quality and efficiency in educational institutions. Our results are discussion is in line with the previous research in the social sciences research (Rasheed, Weng, Umrani, & Moin, 2021; Q. Wang, Azam, Murtza, Shaikh, & Rasheed, 2023; Yousaf, Rasheed, Hameed, & Luqman, 2020; Zhang, Rasheed, & Luqman, 2020; Zhang, Wu, & Rasheed, 2020).

Conclusions

The research provides valuable insights into the perceptions of TQM among university administrative staff. The findings indicate a generally positive perception of TQM and its potential to enhance various aspects of university functioning. It also highlights areas that need improvement, particularly in terms of resource allocation and consideration of student needs. Based on these findings, future research could explore more nuanced aspects of TQM implementation and its impact on university quality. Upon careful examination of the findings of the study, it is evident that university faculty and staff members hold varying yet predominantly favorable perspectives on the implementation and utilization of Total Quality Management (TQM) practices within the university. As per the findings, the majority of university staff and administrative employees All staff members are believed by teachers to be open in their conversations and effectively communicate departmental policies. In addition, university professors support the idea that TQM initiatives should offer carefully considered strategies for student admission and orientation. The findings also show that TQM principles align with recognizing effective learning methods, instructional needs, and the needs of employees, staff, and students as indicated by university faculty and administrative staff. Additionally, the significance of TQM in delineating university objectives is recognized. The survey also indicates positive views regarding TQM manuals, sufficient financial support for educational initiatives, well-equipped classrooms, scheduled maintenance and repair programs, and the significance of considering instructors' suggestions within the institution. The differing perspectives of male and female university instructors reveal notable perception gaps, showing statistically significant differences in their opinions on specific TQM implementation elements. Conversely, it was observed that these discrepancies were not statistically significant among administrative staff. These findings underscore the importance of TQM in fostering transparent communication, enhancing teaching quality, and improving overall institutional performance. Educational institutions can further harness the advantages of Total Quality Management (TQM) to adapt to the evolving needs of staff, professors, and students by addressing the identified areas of strength and potential areas for enhancement.

References

Akareem, H. S., & Hossain, S. S. (2016). Determinants of education quality: what makes students' perception different? *Open review of educational research*, *3*(1), 52-67.

Akinlolu, M. T. (2018). *Framework for the effective implementation of total quality management in the maintenance of tertiary instituition buildings in South Africa* (Doctoral dissertation, Cape Peninsula University of Technology).

Algahtani, A. (2014). Are leadership and management different? A review. *Journal of management policies and practices*, *2*(3), 71-82.

Anser, M. K., Zaigham, G. H. K., Imran Rasheed, M., Pitafi, A. H., Iqbal, J., & Luqman, A. (2020). Social media usage and individuals' intentions toward adopting Bitcoin: The role of the theory of planned behavior and perceived risk. International journal of communication systems, 33(17), e4590.

Asif, M., Awan, M. U., Khan, M. K., & Ahmad, N. (2013). A model for total quality management in higher education. *Quality & Quantity*, *47*, 1883-1904.

Cheng, Y. C. (2022). *School effectiveness and school-based management: A mechanism for development*. Routledge.

Cullen, J. (2008). Self, soul and management learning: constructing the genre of the spiritualized manager. *Journal of Management, Spirituality & Religion*, *5*(3), 264-292.

Freeman, R. B. (2010). What does global expansion of higher education mean for the United States? In *American Universities in a global market* (pp. 373-404). University of Chicago Press.

Gulzar, M. A., Ahmad, M., Hassan, M., & Rasheed, M. I. (2021). How social media use is related to student engagement and creativity: investigating through the lens of intrinsic motivation. Behaviour & Information Technology, 1-11.

Gulzar, M. A., Ahmad, M., Hassan, M., & Rasheed, M. I. (2022). How social media use is related to student engagement and creativity: investigating through the lens of intrinsic motivation. Behaviour & Information Technology, 41(11), 2283-2293.

Goetsch, D. L., & Davis, S. B. (2014). Quality management for organizational excellence: pearson Upper Saddle River.

Hong, S., Rasheed, M. I., Sigala, M., & Ahmad, M. (2024). Is there a bright side of COVID-19? The influence of conscientiousness and extended TPB on the tourists' eco-friendly behaviour. Current issues in Tourism, 27(5), 696-700

Iqbal, S., Ashfaq, T., Azlan Bin Taib, C., & Rizal Razalli, M. (2023). The effect of quality culture on service quality of public and private Universities: A comparative analysis. *Plos one*, *18*(4), e0283679.

Kairys, M. R. (2018). The influence of gender on leadership in education management. *International Journal of Educational Management*, *32*(5), 931-941.

Khurniawan, A. W., Sailah, I., Muljono, P., Indriyanto, B., & Maarif, M. S. (2020). An Analysis of Implementing Total Quality Management in Education: Succes and Challenging Factors. *International Journal of Learning and Development*, *10*(2), 44-59.

Kumar, V. (2010). JIT based quality management: concepts and implications in Indian context. *International Journal of Engineering Science and Technology*, *2*(1), 40-50.

Kanwal, S., Rasheed, M. I., Pitafi, A. H., Pitafi, A., & Ren, M. (2020). Road and transport infrastructure development and community support for tourism: The role of perceived benefits, and community satisfaction. Tourism Management, 77, 104014.

Khalid, J., Weng, Q. D., Luqman, A., Rasheed, M. I., & Hina, M. (2021a). After-hours work-related technology use and individuals' deviance: the role of interruption overload, psychological transition and task closure. Kybernetes.

Khalid, J., Weng, Q. D., Luqman, A., Rasheed, M. I., & Hina, M. (2021b). After-hours work-related technology use and individuals' deviance: the role of other-initiated versus self-initiated interruptions. Information Technology & People.

Luqman, A., Masood, A., Weng, Q., Ali, A., & Rasheed, M. I. (2020). Linking excessive SNS use, technological friction, strain, and discontinuance: the moderating role of guilt. Information Systems Management, 37(2), 94-112.

Masood, A., Feng, Y., Rasheed, M. I., Ali, A., & Gong, M. (2021). Smartphone-based social networking sites and intention to quit: self-regulatory perspective. Behaviour & Information Technology, 40(11), 1055-1071.

Moin, M. F., Omar, M. K., Ali, A., Rasheed, M. I., & Abdelmotaleb, M. (2024). A moderated mediation model of knowledge hiding. The Service Industries Journal, 44(5-6), 378-390.

Murtza, M. H., & Rasheed, M. I. (2023). The dark side of competitive psychological climate: exploring the role of workplace envy. Journal of Hospitality and Tourism Insights, 6(3), 1400-1418.

Naeem, R. M., Weng, Q., Hameed, Z., & Rasheed, M. I. (2020). Ethical leadership and work engagement: A moderated mediation model. Ethics & Behavior, 30(1), 63-82.

Peng, M. Y. P., Liang, Z., Fatima, I., Wang, Q., & Rasheed, M. I. (2023). The nexus between empowering leadership, job engagement and employee creativity: role of creative self-efficacy in the hospitality industry. Kybernetes.

Pitafi, A. H., Rasheed, M. I., Islam, N., & Dhir, A. (2023). Investigating visibility affordance, knowledge transfer and employee agility performance. A study of enterprise social media. Technovation, 128, 102874.

Pitafi, A. H., Rasheed, M. I., Kanwal, S., & Ren, M. (2020). Employee agility and enterprise social media: The Role of IT proficiency and work expertise. Technology in Society, 63, 101333.

Phadke, A., Bakti, N., Bawale, R., & Singh, B. (2019). Current concepts in management of ACJ injuries. *Journal of Clinical Orthopaedics and Trauma*, *10*(3), 480-485.

Rana, J., Gaur, L., Singh, G., Awan, U., & Rasheed, M. I. (2022). Reinforcing customer journey through artificial intelligence: a review and research agenda. International Journal of Emerging Markets, 17(7), 1738-1758.

Rasheed, M. I., Hameed, Z., Kaur, P., & Dhir, A. (2023). Too sleepy to be innovative? Ethical leadership and employee service innovation behavior: A dual-path model moderated by sleep quality. Human Relations, 00187267231163040.

Rasheed, M. I., Hameed, Z., Kaur, P., & Dhir, A. (2024). Too sleepy to be innovative? Ethical leadership and employee service innovation behavior: A dual-path model moderated by sleep quality. Human Relations, 77(6), 739-767. doi:10.1177/00187267231163040

Rasheed, M. I., Malik, M. J., Pitafi, A. H., Iqbal, J., Anser, M. K., & Abbas, M. (2020). Usage of social media, student engagement, and creativity: The role of knowledge sharing behavior and cyberbullying. Computers & Education, 159, 104002.

Rasheed, M. I., Saleem, S., Altaf, M., Leong, A. M. W., & Okumus, F. (2024). Workplace hazing and employee turnover intention in the hospitality industry: a person-environment fit perspective. The Service Industries Journal, 1-30.

Rasheed, M. I., Weng, Q., Umrani, W. A., & Moin, M. F. (2021). Abusive supervision and career adaptability: The role of self-efficacy and coworker support. Human Performance, 34(4), 239-256.

Sallis, E. (2014). *Total quality management in education*. Routledge.

Schoellman, T. (2012). Education quality and development accounting. *The Review of Economic Studies*, *79*(1), 388-417.

Sohel-Uz-Zaman, A. S. M. (2016). Implementing total quality management in education: Compatibility and challenges. *Open Journal of Social Sciences*, *4*(11), 207.

Stadtler, H., Stadtler, H., Kilger, C., Kilger, C., Meyr, H., & Meyr, H. (2015). *Supply chain management and advanced planning: concepts, models, software, and case studies*. springer.

Stevenson, W. J., Hojati, M., & Cao, J. (2014). *Operations management* (p. 182). New York: McGraw-Hill Education.

Wang, C., Ilyas, B., Ni, G., & Rasheed, M. I. (2023). Leveraging employee engagement and creativity through ethical leadership: the role of employee ambidexterity in the hospitality industry. Kybernetes.

Wang, Q., Azam, S., Murtza, M. H., Shaikh, J. M., & Rasheed, M. I. (2023). Social media addiction and employee sleep: implications for performance and wellbeing in the hospitality industry. Kybernetes.

Welzant, H., Schindler, L., Puls-Elvidge, S., & Crawford, L. (2011). Definitions of quality in higher education: A synthesis of the literature. *Higher learning research communications*, *5*(3), 2.

Wiengarten, F., & Pagell, M. (2012). The importance of quality management for the success of environmental management initiatives. *International Journal of Production Economics*, *140*(1), 407-415.

Xiao, Y., Zhang, X., & Ordonez de Pablos, P. (2017). How does individuals' exchange orientation moderate the relationship between transformational leadership and knowledge sharing? *Journal of Knowledge Management*, *21*(6), 1622-1639.

Yousaf, S., Rasheed, M. I., Hameed, Z., & Luqman, A. (2020). Occupational stress and its outcomes: the role of work-social support in the hospitality industry. Personnel Review, 49(3), 755-773.

Yousaf, S., Rasheed, M. I., Kaur, P., Islam, N., & Dhir, A. (2022). The dark side of phubbing in the workplace: Investigating the role of intrinsic motivation and the use of enterprise social media (ESM) in a cross-cultural setting. Journal of Business Research, 143, 81-93.

Zhang, Y., Rasheed, M. I., & Luqman, A. (2020). Work–family conflict and turnover intentions among Chinese nurses: The combined role of job and life satisfaction and perceived supervisor support. Personnel Review, 49(5), 1140-1156.

Zhang, Y., Wu, S., & Rasheed, M. I. (2020). Conscientiousness and smartphone recycling intention: The moderating effect of risk perception. Waste Management, 101, 116-125.

Zink, K. J. (2012). *Total Quality Management as a holistic management concept: the European model for business excellence*. Springer Science & Business Media.