

Abasyn Journal of Social Sciences Vol (13), Issue (1), 2020.

Open Access DOI: 10.34091/AJSS.13.1.30

The status of Total Quality Management of Public and Private sector Universities in District Peshawar, Khyber Pakhtunkhwa

Dr. Rahim Khan

Assistant Professor Teacher Education Department Qurtuba University of Science and information Technology Peshawar, KP-Pakistan

Dr. Farah Khan

Institute of Education & Research (IER) Women University Mardan, KP-Pakistan (drfarah@wumardan.edu.pk)

Haleema Akbar

Ph.D. scholar Qurtuba University of science & information Technology Peshawar, KP-Pakistan (haleema.akbar4@gmail.com)

Sadia Naz

Ph.D. scholar IIUI, Pakistan (sadia108@yaho.com)

Abstract

Purpose of the study was to compare the Total Quality Management (TQM) of public and private universities and to know the perceptions of students about the aspects of TQM. The problem of the study was to determine the status of Total Quality Management of Public and Private sector Universities in District Peshawar, Khyber Pakhtunkhwa. The study was quantitative in nature. The sample of the study remained six Universities in which three were selected from Public while three others were selected from private sector Universities. Sample size of the study was taken as 150 both male and female students from public and private sector Universities on even basis. Data was collected through five-point Likert scale Questionnaire from the sampled students. The regression analysis was applied to check out the influence of product characteristics and animated spokesperson characteristics. The correlation was used for the calculation of checking the relation between variables. The results of the study showed that the private sector follows the TQM pizza in all aspects and work on it and that is the reason of their success. In light of the findings and conclusion, it was recommended to HEC to strengthen Higher Education system to implement TQM in public Universities so that to attain all-round, multifaceted personality; to acquire leadership qualities, to sharpen communication and interpersonal skills, to acquire knowledge of the latest trends in technology& Research, to have exposure to industrial climate and to gain confidence to face changes in the highly competitive and ever changing world.

Keywords: Total Quality Management, TQM Pizza, Public & Private Universities, Students, District Peshawar, Higher Education, HEC

Total Quality Management (TQM) is important to ensure the quality of educational program (Shahmohammadi, 2018). The benefits of TQM valued by number of firms in their

production process. It has been valued as it helps to reach the target. Number of organizations succeeded in reaching their target by putting Total quality management policy in practice (Sudha, 2013). Quality is a versatile phenomenon. Quality in general linked with value attached with that thing (Largosen et al, 2014). Quality is also termed as level of customer satisfaction. Education is considered the tool for country's development. Development through education requires quality education and depends on the varying aspects of education (Youzbashi, 2010). In the global competition and economic liberalization world, quality has much significance to achieve the competitive advantage. Quality considered a key strategic factor in achieving firm success. Quality means the "degree of excellence". Quality in education is the learning system that produces the well-educated individuals who have the capabilities to deal with the matters of concerns with in their area of proficiency (Oakland, 1989).

Quality seeks and achieves customer needs, and acknowledge how we can meet their expectations, demands and needs, and implement activities to improve our products and services. With quality enhancement and improvement, we can gratify our customers and improve their allegiance and loyalty to keep our sales and profits. The future of the country depends on its educated population, therefore all of us are focused in the quality of education and university should deliver and provide the best education. (Omer, 2011). Total Quality Management known as TQM is a set of practices that focus on continuously improvement and meet the needs of customers, and reduce rework. Oakland, (1989) states that TQM is an attempt to improve the whole organization's competitiveness, effectiveness, and structure (Pineda, 2013). The philosophy of Total quality management is to link the material and non-material resources under organization for ensuring the effectiveness of its functioning. For this reason's organization holds different kinds of employees' engagement to bring awareness regarding quality assuring practices including Total quality Management. These activities are seminars, conferences and workshops. Recently the trend also started by educational administrators. They recognized the potentials of quality management in educational purposes. Total quality Management takes every single person activity in quality assuring process.

TQM is a popular management approach developed by Deming in U.S. industry during and before World War II. Although it was started in the United States but has been cleared and refined by Japanese industry. At this time complete quality management was only important for the industrial sector. So many businesses have grasped that total quality management can also be valuable in services but now it can also be a vital element for the education sector. So many universities use total quality management and its shows that holistic quality management is one of the concepts that are related to innovation management. (Purrajab, 2011). First decade of the new millennium has detected the emergence, prominent and notable increase in higher education institutions in private sector of Pakistan. To increase the acceptability of Pakistani institutes of higher education, in Pakistan HEC has started intensive care of the higher educational institutions to implement the standards and norms of quality control such as Total Quality Management (TQM) practices to gauge the quality of higher education and HEC rates the institutions of higher education every year on the basis of these quality standards (Rizwan, 2012).

The exponential growth of knowledge, exploding instructional technologies, enhanced access to practices of premier institutions, accessibility to knowledge, globalization of education etc require educators and faculty members to continuously evaluate themselves and improve Education (Sudha, 2013). TQM is certainly common aspect that will refine and shape the approaches of educational institutions in their attempt to gratify various stakeholders including society as a whole, community parents and students. TQM Concepts Identified in Quality Management Literature comprise of the Total Employee Involvement, Continuous Improvement, Continuous Training, Teamwork, Empowerment, Top management Commitment and Support, Democratic

Management Style, Customer/Citizen Satisfaction, and Culture Change (Sallis, 2002). There are very few studies on the execution of TQM in universities. This article identifies the factors that contribute to implementation of TQM in higher education institutions and clarifies the relationship between these factors. Organizations development largely depends on the beneficial knowledge, skills and understanding power of the employees. Education as a tool for development, meets the needs of the community and organizations (Youzbashi, 2010). One of the studies found that educational outcomes largely depends on teacher's effectiveness and efficiency. This effectiveness should be evaluated on regular basis as directly linked with students learning. The education system itself is one of the hurdles in the efficiency and effectiveness of the whole structure of education (Manafi, 2013). Many other studies found similar findings and suggest that quality education is indefensible for national economic development (see Khan and Haseeb (2017), Ahmad and Khan (2018), Karim and Khan (2018), Shah et al. (2018), Khan and Irshad (2018), Khan et al. (2019), Khan et al. (2019), Khan et al. (2019), and Muhammad et al. (2020).

The main objectives of this study are (a) to compare the TQM of public and private universities, and (b) to 0 know the perceptions of students about the aspects of TQM.

The study was delimited to the following public and private universities; University of Peshawar, Agriculture University Peshawar and Shaheed Benazir Bhutto women university Peshawar while from private, City university of science and information technology, Abasyn university Peshawar and Preston university Peshawar.

Literature Review

Quality Management

The concept of quality emerged in twentieth century. Initially it has been taken place in industry and management. Industrialization and scientific approaches raised the question of quality. In organizations quality takes in terms of materials and nonmaterial dimensions. In other way, each single aspect that directly or indirectly affects the objectives of the organizations comes under the scope of the quality and its assuring. According to (Lethy, Boraei, & Hussein, 2017), Total quality Management is not implemented in educational institutions with its full principal implementation. It is necessary to use the quality ensuring technique in educational processes for making objectives possible. Proper utilization may enhance education and its outcomes. When break down structure and work organized in smaller and repetitive tasks. With mass-production and breaking down of work into smaller and repetitive tasks handled by machines. In this situation self-checking for quality on the part of worker was reduced (Sallis, 1996)

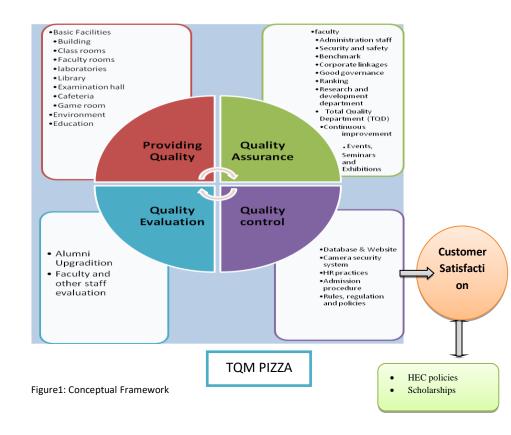
In this 21st century, quality is considered priority in every sector. In recent time quality becomes more diversified as number of variables enters in the process of organizational structure. The students' migration shift in the globalized world remained concern for educationists. It's largely emphasized to know their worth in the society and where they shift. One study conducted on the effectiveness of Total quality Management in Nepal, reported that Total quality Management is important tool for successful running of the organizations. As this approach closely emphasize on the customer and employee relationship. TQM with all its dimensions works in different management organizations (Biswakarma, 2017). Total Quality Management is concerned with all the aspects of the organization, its principles and procedures. Besides this it also responses to the elements that effected by the quality of organizational structure (Stanciu, 2003). The fundamental aim of the TQM is to provide an environment where all the resources are used effectively and efficiently (Vinni, 2011). TQM initiated in manufacturing companies. But after passing rime it has been encouraged in other sectors of society where quality considered important for reaching their objectives. Banking, nonprofit organizations, Health care, insurance and educational institutions are the noted ones. TQM paired the prime factors of the organization like cooperation among the top management, employees and customers, application of advancement tools and training (Murad & Rajesh, 2010). Handling all the components of the organizations, rule and procedures are the working areas of TQM. All concerns that effected by the quality of organization in one way or the other are focused with Total quality Management philosophy (Stanciu, 2003).

419

The relation among the administration, faculty, students and working industries are the elements of the quality assessment process. Ensuring quality is the process having number of elements responsible for. The combination of these elements and organizational values work together in the process (Gharakhani et al., 2013). Total Quality management run in the organization with the aim to provide more efficient and superior services. Cooperation among the members of the organization is also considered important for completion quality assessment under Total Quality Management (Lakhal et al., 2006). The concept of quality was emerged in Japan in 1930s. It started after World War II. After that many manufacturing firms started to focus on their quality management. The aim of these struggle was to control the quality issues (Demirbag et al., 2006; Talib, 2013). USA and UK were the second to adopt the quality management discipline. From here it emerged and spread widely throughout the world. At classroom level Total quality management aims to continue progressing students' skills, make them self -directed learning and enhance their all-round learning ability at all levels. Basically, Total quality management efforts included to make students, teachers and parents, all stake holders active, effective and rational thinker to meet the society demands and needs (Nejad, 2014)

Quality in higher education linked with the dilution of academic freedom (Largosen, et el, 2004). Secondly the universities are the autonomous bodies and this is why the team work for quality assessment is difficult task (Colling and Harvey, 1995). Thus, it is usually difficult to apply the features of quality to higher education considering the fact that quality requires team work (Boaden and Dale, 1992). Besides this, ensuring quality in higher education considered important for its stake holders. Fund providers, students and employers are important to inform on quality matter (Srikanthan and Dalrymple, 2003). Three aspects; product, service and programming are considered parameters for quality assessment (Owlia and Aspinwall, 1996). It was also supported by (Shah Mohammadi, 2018) that Total quality Management and its different elements linked with the effectiveness of the school education like higher level of studies. According to (Lethy, Boraei, & Hussein, 2017), Total quality Management is not implemented in educational institution with its full principal implementation.

In the Context of Pakistan research studies have been done on Total Quality Management in the fields of services organization and education. In education the higher education and secondary education are the major areas of interest conducting Total quality management. In Pakistan the Total Quality Management (TQM) is observed in various organizations. Methods applied to Total quality Management varied depend on the organizational objectives. In terms of implementation Total quality management practices, Pakistan is one of the countries that utilize quality assurance in education with other organizational structures (Raja et al., 2011). For the purpose special training services should hired to equip educational personnel with Total quality Management skills.



Research Methodology

The study is descriptive in nature while quantitative research design was followed.

Population

The target population of the study remained all the public and private Universities of District Peshawar.

Sample size

After applying non-probability sampling techniques, the researcher randomly selected six Universities in which three were selected from Public while three others were selected from private sector Universities. Sample size of the study was taken as 150 both male and female students from public and private Universities on even basis.

Data collection

After reliability of the Questionnaire by applying alpha Cronbach with 0.7, the data was collected through five-point Likert scale Questionnaire from the sampled students of public and private Universities of Peshawar. Secondary data was collected from journal articles, conference meetings and books which greatly helped the researcher about the study and in designing the conceptual frame work. Out of 150 total 141 Questionnaires were returned. So, the results are based on 141 responses.

Data Analysis

For analysis of the data, SPSS (Version 20.0) was applied. Frequencies, descriptive statistics, reliability test, regression and correlation were applied. The regression analysis was applied to check out the influence of product characteristic and animated spokesperson characteristics. The correlation was used for the calculation of checking the relation between variables.

Preston

Abasvn

University

Agriculture

Benazir

Table 1. Providing Quality
The results are in City University

percentages			university	ity University		/	Peshawar		Peshawar		Women University	
Variables	Α	DA	Α	DA	Α	DA	Α	DA	Α	DA	Α	DA
Building	13.47	1.7 7	13.82	0.35	11.70	3.19	15.07	0	6.02	8.2 9	7.80	4.4 3
Class rooms	14.60	1.4 1	13.47	0.46	10.85	3.78	12.48	3.30	4.25	7.0 9	2.12	9.2 1
Faculty room	12.76	2.3 6	11.10	2.12	8.93	4.01	16.54	0.46	5.43	3.5 4	9.45	3.7 8
Laboratories	10.63	3.3 0	12.97	1.41	7.09	5.43	8.723	4.72	9.92	3.0 7	9.43	2.8 3
Library	7.51	4.9 6	13.47	0	10.14	5.19	16.31	0.46	8.93	4.4 8	5.67	5.4 3
Examination hall	10.63	8.7 2	11.56	2.83	6.141	6.85	6.61	6.61	2.36	12. 0	2.12	10. 6
Cafeteria	6.61	8.0 1	4.25	8.01	4.48	9.92	5.67	12.0 5	3.78	11. 0	5.19	7.3 0
Game room	6.141	8.0 1	0.70	13.9 0	5.43	8.93	2.59	13.6 8	4.25	8.5 1	0.23	9.4 3
Environment	11.81	3.0 7	12.52	2.12	10.16	3.54	13.70	3.07	9.45	5.6 7	10.3 9	1.8 8
Education	10.63	3.5 4	12.76	1.41	10.87	2.59	13.23	2.83	11.1 0	5.4 3	12.0 5	1.4 1

Table 1 includes the variable of providing quality aspect of TQM pizza. The interpretation includes highest satisfaction values of students. 15 percent of respondents are satisfied from the building of University of Peshawar. 15% is the highest value of satisfaction of students from the building. 13.82% of respondents are satisfied from the Abasyn University and 13.47% satisfied from city

university building. City University carries highest value of agree-ness at 14.60%. University of Peshawar carries the highest value of student's agree-ness of 16.54%. 12.97% of Abasyn university's students satisfied from its laboratories. 16.31 % students are satisfied from the University of Peshawar's library. 11.56 % of the students satisfied from the Abasyn university examination hall. 6.51% the students of City University satisfied from its cafeteria. 6.14% of students satisfied from the Game room of City University. 13.70% of students satisfied from the environment of university of Peshawar. 13.23% of students are satisfied from the education of the University of Peshawar.

Table 2. Quality Assurance												
The results are in	City		Abasyn		Preston		University		Agriculture		Benazir	
percentages	Univer	University		university		sity	of Peshawar		Peshawar		Women	
			•		ŕ						University	
Variables	Α	DA	Α	DA	Α	DA	Α	DA	Α	DA	Α	DA
Faculty	10.3	4.6	13.9	0.14	12.9	2.26	8.79	5.81	10.3	6.9	13.0	0.9
	5	8	0	1	0	2.20	0.79	5.61	5	5	4	9
Admin. Staff	9.04	4.4 3	10.9 9	1.59	10.6 3	3.19	7.62	3.90	9.92	3.0 1	7.09	1.9 5
Security & safety	6.66	8.2 2	12.6 2	1.13	7.37	3.68	9.07	6.52	8.51	4.8 2	6.66	3.2 6
Benchmark	10.1 6	3.7 8	9.92	1.41	13.9 4	0.23	12.2 9	2.59	8.03	5.1 9	7.09	1.6 5
Corporate linkage	6.61	6.8 5	10.6 3	2.36	11.3 4	1.41	9.45	4.25	4.25	12. 0	4.72	6.3 8
Good governance	9.45	4.0 1	11.3 4	2.59	6.61	4.96	7.56	6.61	6.14	5.4 3	6.38	2.3 6
Ranking	12.5 2	1.4 1	10.6 3	0	9.92	3.07	13.4 7	3.07	7.80	3.3 0	5.90	2.1 2
R&D	8.15	5.1 4	12.4 1	0.70	7.44	4.25	10.1 0	3.72	12.4 1	3.0 1	8.86	3.0 1
Total quality department	4.48	6.8 5	10.8 7	3.30	6.85 1	4.25	8.51	2.59	7.09	7.3 0	5.90	2.8 3
Continuous improvement	9.21	5.1 9	11.3 4	3.07	10.8 7	0.94	10.3 9	4.48	7.56	5.9 0	7.56	4.4 8

The Table 2 includes the second aspect of TQM pizza such as Quality assurance. The highest value of satisfaction is 13.90% of the Abasyn University for Faculty Factor. 10.99% of students satisfied from the admin. Staff of Abasyn University. 12.62% of the students satisfied from the security and safety of Abasyn University. 13.94 % of students satisfied from the benchmarking of Preston University. 11.34 % of students satisfied from the Preston University's corporate linkages. 11.345 of students satisfied from the good governance of Abasyn University. 13.47% students satisfied from the ranking of university of Peshawar. 12.415 of students satisfied from the R & D of Abasyn University and Peshawar University.10.87% of students satisfied from the Abasyn university.11.34% of students are satisfied from the continuous improvement of Abasyn University. 12.76% of

11.3

2.36

12.7

3.30

1.1

5.90

3.78

Events

Database & Website

11.5

11.7

2.6

13.0

4.4

8

12.5

2

stude	ents a	re sat	isfied from th	e events, semir	ars and Exhibition	ons of university	of Peshawar.	
Table	e 3. Q	uality	control ,					
results	are	in	City	Abasyn	Preston	University	Agriculture	Benazir
entages			University	university	University	of Peshawar	Peshawar	Women
2	<i>Table</i> results	Table 3. Q	Table 3. Quality	Table 3. Quality control results are in City	Table 3. Quality control results are in City Abasyn	Table 3. Quality control results are in City Abasyn Preston	Table 3. Quality control results are in City Abasyn Preston University	results are in City Abasyn Preston University Agriculture

Variables DA DA DA DA DA Α DA

10.9

1.41 3.68 9.50 9.36 5.39 7 2 2 9 4 3

5.6

7

3.1

7.8

4.2

5

7.80

Camera security	11.3	2.3	7.32	4.72	10.1	5.67	6.61	5.9	6.61	8.5	5.90	3.0
system	4	6	7.52	4.72	6	5.07	0.01	0	0.01	1	5.90	7
HR practices	5.19	6.6	7.32	3.30	14.8	0.94	6.85	3.5	7.09	5.9	7.09	3.3
	3.15	1	7.32	3.30	9	0.54	0.65	4	7.03	0	2	0
Admission procedure	10.1	4.6	12.9	0	11.5	2.65	10.6	4.9	8.15	5.4	8.86	4.6
	0	0	4	U	2	9	3	6	0.15	9	0.80	0
Rules and regulation	14.1	1.8	11.3	2.83	13.4	2.36	11.5	5.4	7.56	6.1	13.7	1.1
	8	8	4	2.83	7	2.30	8	3	7.50	4	0	7

The third aspect of TQM pizza is Quality Control. 13.04% of the students satisfied from the database and Website of Abasyn University. 11.34% of students are satisfied from the camera security system from the city university. 14.89% of students are satisfied from the HR practices of Preston University. 12.945 of students are satisfied from the Admission procedure of Abasyn University. 14.18% of students are satisfied from the rules and regulation of City University.

Table 4. Quality Evaluation

The results percentages	are i	in	City University		Abasyn Preston university University		University of Peshawar		Agriculture Peshawar		Benazir Women University			
Variables			Α	DA	Α	DA	Α	DA	Α	DA	Α	DA	Α	DA
Alumni up gra	dation		9.92	1.8 8	7.56	1.41	11.1 0	3.07	9.45	4.2 5	8.97	5.4 3	2.83 6	3.5 4
Faculty& evaluation	admi	in	9.21	4.6 0	12.0 5	1.24 1	12.4 1	2.30 4	7.44 6	4.2 55	10.1 0	5.1 4	7.44	2.4 8

The Table 4 includes the $4^{\rm th}$ factor of TQM pizza such as Quality evaluation. 11.10 % of students are satisfied from the Alumni up gradation of Preston University. 12.41% of students are satisfied from the faculty and administration of Preston University.

Variables	Private Un	iversities	Public Uni	Public Universities		
	Agree	Disagree	Agree	Disagree		
Building	13	1.77	9.63	4.25		
Class rooms	13	1.88	10.87	3.78		
Faculty room	10.95	2.83	10.47	2.59		
Laboratories	10.24	3.38	9.37	3.54		
Library	10.39	3.38	10.31	3.46		
Examination hall	9.45	6.14	3.70	9.71		
Cafeteria	5.12	8.65	4.87	10.16		
Game room	4.09	10.31	2.36	10.55		
Environment	11.50	2.91	11.18	3.54		
Education	11.42	2.51	12.13	3.22		
Faculty	12.38	2.36	10.73	4.58		
Admin. Staff	10.21	3.07	8.21	2.95		
Security & safety	8.88	4.34	8.08	4.86		
Benchmark	11.34	1.80	9.13	3.14		
Corporate linkage	9.53	3.54	6.14	7.56		
Good governance	9.13	3.85	6.69	4.80		
Ranking	11.02	1.49	9.05	2.83		
R&D	9.33	3.36	10.46	3.24		
TQD (Total quality department)	7.40	4.80	7.17	4.25		
Continuous improvement	10.39	2.36	8.74	4.96		
Events	11.81	3.54	8.79	5.12		
Database & Website	11.81	2.12	8.03	3.07		
Camera security system	9.60	4.25	6.38	5.82		
HR practices	9.13	3.62	7.00	4.25		
Admission procedure	11.52	2.41	9.21	5.02		
Rules and regulation	13	2.36	10.95	4.25		
Alumni up gradation	9.53	2.12	7.09	4.41		
Faculty& admin evaluation	11.22	2.71	8.33	3.95		
HEC policies	13.23	1.25	10.71	1.17		
Scholarships	14.26	1.02	12.52	1.80		
Customer satisfaction	10.95	2.91	7.326	6.26		

Table 5. Quality result

Tubic 3. Quality	Tuble 5. Quality result											
The results are in	City		Abasy	Abasyn Preston		n	University		Agriculture		Benazir	
percentages	Unive	rsity	univer	sity	Unive	University		of		Peshawar		en
								Peshawar				rsity.
Variables	Α	DA	Α	DA	Α	DA	Α	DA	Α	DA	Α	DA
HEC policies	12.5	1.8	11.5	1.88	15.6	0	13.2	0.4	10.3	2.3	0.51	0.7
	2	8	8		0	0	3	7	9	6	8.51	0
Scholarships	14.4	1.4	14.4	0.46	13.9	1.17	12.2	0.2	12.7	3.5	12.5	1.6
	1	1	1	0.46	4	7	9	3	6	4	2	5
Customer satisfaction	12.0	3.0	11.9	1.88	8.86	3.78	13.2	1.2	11.0	2.8	9.29	2.8
	5	7	3	1.00	0.00	3.76	3	9	6	3	3.23	3

The table 5shows that 15.06% of students are satisfied from the HEC policies followed by the Preston University. 14.41% of students satisfied from the scholarships provided to the students by the City University and Abasyn University. 13.23% of students satisfied from the overall performance of university of Peshawar.

Table 6. comparative analysis of Public and Private Universities

Table 6 includes the comparative analysis of Public and Private Universities in Peshawar. 13% of students satisfied from the building and class rooms of private universities. 10.95% of

students satisfied from the faculty rooms of private universities. 10.24% of students satisfied from the Laboratories of private universities, 10.39% of students are satisfied from the libraries of private universities. 9.45% of students are satisfied from the examination hall of private universities. 5.12% of students are satisfied from the cafeteria of private universities. 4.09% of students are satisfied from the game room of private universities. 11.50% of students are satisfied from the environment. 12.13% of students are satisfied from the overall education provided in the public universities. 12.38% of students are satisfied from the faculty of private universities. 10.21% of students are satisfied from the administration staff. 8.88% of students are satisfied from the security and safety of private universities. 11.34% of students are satisfied from the benchmarking of private universities. 9.53% of students are satisfied from the corporate linkages of private universities. 9.13% of students are satisfied from the good governance of the private universities. 11.02 % of students are satisfied from the ranking of private universities. 10.46% of students are satisfied from the research and development of the public universities. 7.40% of students are satisfied from the TQD of private universities. 10.39% of students are satisfied from the continuous improvement of private universities. 11.81% of students are satisfied from the events, seminars and exhibition and database and website of private universities. 9.60% of students are satisfied from the camera security system of private universities. 9.13% of students are satisfied from the HR practice of private universities. 11.52% of students are satisfied from the admission procedure of private universities.13% of students are satisfied from the rules and regulation of private universities. 9.53% of students are satisfied from the alumni up gradation of private universities. 11.22% of students are satisfied from the faculty and administration staff evaluation. 13.23% of students are satisfied from the are satisfied from the HEC policies followed by the private universities. 14.26% of students are satisfied from the satisfied from the scholarships provided to students from the private universities. 10.95% of students are satisfied from the overall performance of private universities.

Discussion

Public universities should work on the total quality management aspects to achieve customer consummation and satisfaction. The foremost source and means of total quality management is individual in higher education and individuals are an integral part of many service activities. In judging value and quality, the vies of participants, including employers, parents and students play a vigorous role in evaluating the education system as a whole of each of these parameters. It is essential that all individuals and groups connected with the higher education system, must have a good understanding of their obligations and responsibilities. Training students is the main goal of the education system to make it easier for them to be the best personnel of tomorrow. Parents need to be constantly informed about the progress of their imports to clarify their ideas for system development. The role of employees vital in providing internal and external stimulus factors. They need to take into account changes and observe the external environment for the improvement of institutions.

Thus, we see that the participation of all the constituencies of higher educational system will result in continuous improvement in the process. This will facilitate more customer friendly practices, which will result in Excellency's of performance in terms of quality outputs. This cycle if repeated continuously will improve quality at each stage. The need for higher education is primarily based from what the customers wants in terms of output and satisfaction.

Summary and Conclusion

The conclusion is based on the findings and results of the research. The private sector follows the TQM pizza in all aspects and work on it. That is the reason of their success. The public sector got the highest value of agree-ness from the students for two factors such as education and R&D. The complete TQM pizza is very much important. The moderating variables also have the impact on the relationship of dependent and independent variables. The moderating variables are HEC policies and scholarships.

So, in light of the identified gap, the University of Peshawar is recommended to follow TQM pizza in aspects to gain competitive edge.

426

On the other hand, Private sector universities must focus on R&D and educational aspects of TQM pizza. Suitable models are needed to be adapted to measure quality in higher education.

The higher Education system needs to be strengthened which will be capable of holding the system to attain all-round, multifaceted personality; to acquire leadership qualities, to sharpen communication and interpersonal skills, to acquire knowledge of the latest trends in technology, to have exposure to industrial climate and to gain confidence to face changes in the highly competitive and ever changing world.

References

- Ahmad, A., & Khan, F. (2018). Investigating the determinants of youth unemployment in Pakistan. *Pakistan Journal of Humanities & Social Science Research*, 1(1), 1-12.
- Ahmed, A., & Ali, S. A. (2012). Implementing TQM practices in Pakistani Higher Education Institutions. *Pak. j. eng. technol. sci, 2(1), 1-26.*
- Azam, M., Khan, F., Hafeez, M. H., & Abdullah, H. (2019d). Impacts of education and life expectancy on economic growth: some panel data evidence from developing economies. Pakistan Journal of Social Sciences, 39(4), 1629-1639.
- Biswakarma, G. (2017). Effectiveness of total quality management in nepal: a case study of hospatility sector . *International Journal of Research in Business Studies and Management*, 5(4) 32-40.
- Branding and Integrated Marketing Communications.(n.d.). Retrieved from www.thedesignchannel.com: www.thedesignchannel.com
- Colling, C., & Harvey, L. (1995). Quality control assurance and assessment in the link to continuous improvement. *Quality Assurance in Education*, 3 (4), pp. 30-34.
- Choi, S., & Ng, A. (2011). Environmental and economic dimensions of sustainability and price effects on consumer responses. *Journal of Business Ethics*, 104(2), 269-282.
- Demirbag, M., et al. (2006). An Analysis of the Relationship between TQM Implementation and Organizational Performance. *Journal of Manufacturing Technology and Management,* 17 (6) 829-847.
- Gharakhani, D., Rahmati ,H., Farrokhi, M., & Farahmandian, A. (2013). Total quality management and organizational performance. *American Journal of Industrial Engineering*, 1(3), 46-50.
- Goodwin, M. (2005). The importance of brand continuity in Epilepsy drug. *NT Clinic: Nursing Times*, 101(25), 26—27.
- Khan, F., Yasmeen, G., Sofian MUF, & Javid, M. U. (2019a). Exploring the effect of terrorism on education sector: a case study of Khyber Pakhtunkhwa-Pakistan. *City University Research Journal*, 9(2), 340-349.
- Khan, S., Khan, F, & Naz, S. (2019b). A survey of teachers motivational Level in Government Secondary Schools of District Mardan. *Global Regional Review (GRR)*, 4(2) 263 271.
- Khan, F., Gul, S., & Zahid, M. (2019c). Women's right to education: an analysis in perspective of Islamic teachings. *Tahdhīb al Afkār*, 6(2), 49-60.
- Khan, F., Uddin, M. N., Fauzee, M.S.O., & Daud, Y. (2018). Role of educated leadership in poverty alleviation in Pakistan: A quantitative approach. *Journal of Managerial Sciences*, 12(3), 134-14
- Khan, F., & Irshad, (2018). The effect of education and good trained teachers on students' performance. *PUTAJ Humanities and Social Sciences*, 25(2), 93-99.
- Karim, N., & Khan, F., (2018). The effect of investment in education on socio-economic development of Pakistan. Pakistan Journal of Humanities & Social Science Research, 1(2), 66-73.
- Khan F., & Haseeb, M. (2017). Analysis of teacher training education program: a comparative study of Indonesia, Malaysia and Pakistan. *Paradigms*, 11(1), 13-17.
- Kocyigit, O., & Ringle, C. M. (2011). The impact of brand confusion on sustainable brand satisfaction and private label proneness: A subtle decay of brand equity. *Journal of Brand Management*, 1(19), 1-18.
- Largosen, S. R., & Leitner. M. (2014). Examination of dimensions of quality in higher education, Quality Assurance in Education, 12(2), 61-69.

- Lakhal, L, Pasin, F. & Liman M. (2006). Quality management practices and their impact on performance. International *Journal of Quality & Reliability Management*, 23(6): 625-646.
- Lane, V.(2000). The impact of add content on consumer perceptions of incongruent extensions. Journal of Marketing, 64(2), 80-91.
- Lethy, N., Boraei, D., & Hussein, A. (2017). Effectiveness of Total Quality Management (TQM) in the English Language Teaching (ELT) Community. SSRN.
- Manafi, N, 2013 "Increasing the effectiveness of programs and educational opportunities and learning at different levels", Ronas Press, 3(7), 24-31.
- Manzoor, B. H. (2013). Measuring Student Satisfaction in Public and Private. *Global Journal of Management and Business Research*, 13(3).
- Muhammad, A., K., Khan, H. N., & Khan, F. (2020). Testing Malthusian's and Kremer's population theories in developing economy. *International Journal of Social Economics*, 47(4), 523-538.
- Muhammad, A., & Ahmed, M. A. (2015). Role of human capital and foreign direct investment in promoting economic growth: Evidence from Commonwealth of Independent States. *International Journal of Social Economics*, 42(2), 89-111.
- Murad, A., & Rajesh, K. S. (2010). Implementation of Total Quality Management in Higher Education. *Asian Journal of Business Management*, 2(1), 9-16.
- Manafi, N. 2013 "Increasing the effectiveness of programs and educational opportunities and learning at different levels", Ronas Press, 3(7), 24-31.
- Nejad, D. (2014). The application of total quality management in teaching-learning process. Engineering, Technology & Applied Science Research, 1(8), 2433-2437.
- Owlia, M. S., & Aspinwall, E. M. (1996). A framework for the dimensions of quality in higher education. *Quality Assurance in Education*. 2(4), 12-20.
- Oakland, J. S. (1989). Total Quality Management. Heinemann Professional.
- Oliver, R. L. (1993). Cognitive, Affective, and Attribute Bases of the Satisfaction Response. *Journal Of Consumer Research*, 3(20), 418 430.
- Farooq. M.S., Akhtar. M.S., & Zia Ullah, S. (2001). Application of total quality management in education. *Journal of Qafqaz University*, *2*(3), 87-97.
- P.E.S. (2015). *Brand Continuity Guide*. Anderson University, Marketing. Anderson University. Papavassiliou, V. (1995). UMIST dissertation.
- Pineda, A. P. (2013). Total quality management in educational institutions: influences on customer satisfaction. *Asian Journal Of Management Sciences And Education*, 2(3),46-57
- Pourrajab, M., Basri, R., & Da, S. M. (2011). Applying total quality management in the classroom and solving students failure. *KASBIT Business Journal* 1(4), 69-76.
- Raja, M.W., Bodla, M.A., & Malik, S. A. (2011). Evaluating the effect of total quality management practices on business performance: a study of manufacturing firms of Pakistan, *International Journal of Business and Social Science*, 2 (9).
- Rizwan, M. (2013). Empirical study of employee job satisfaction. *IOSR Journal of Business and management*, 9(23), 29-35.
- Sallis, E., (2002). Total Quality Management in Education (3rd edition). British Library Cataloguing in Publication Data.
- Shah, A. A., Irshadullah, H.M., & Khan, F. (2018). The factors affecting students' academic performance at Abdul Wali Khan University Mardan, Pakistan. *Research Journal of Education*, 2(1), 59-67.
- Stanciu, L. (2003), Abordari teoretice ale stilurilor de conducere, Buletinul Academiei Foretelor Terestre, I(15), 94-102
- Sudha, T. (2013). Total quality management in higher education institution. *International Journal of Social Science & Interdisciplinary Research*, 2277-3630.
- Shahmohammadi, N. (2018). The Impact of total quality management on the effectiveness of educational programme of karaj first grade high school. *Engineering, Technology & Applied Science Research*, 1(8), 2433-2437.
- Talib, F. (2013). An overview of total quality management: understanding the fundamentals in service organization, International Journal of Advanced Quality Management, 1(1), 1-20.

- Vinni, R. (2011). Total Quality Management and paradigms of public administration, *International Public Review*, 8(1), 15-23.
- Youzbashi, A. (2010). Factors affecting the effectiveness of training courses in Naftiran Intertrade Company, MSc Thesis, Department of Psychology and Education, Tehran University.