Barriers in Implementing TQM in Secondary Schools: A comparison between privately-owned and government-owned schools of Pakistan

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Abstract: Quality in education is essential in the overall development of a nation. In an underdeveloped nation, such as Pakistan, the focus of quality is usually on primary or tertiary education which overlooks secondary schooling. In this regard, the perceived causes of poor implementation of total quality management in secondary schooling were studied. Faculties of both public and private schools were surveyed with respect to six different barriers that are responsible for lack of quality in the education sector. Each analyzed barrier pointed out the extent of the educational quality. It also highlights the similarity in educational quality does not depend upon the ownership of the school. Reasons for poor perception of quality management systems in the education sector are also discussed along with recommendations against each barrier.

Keywords: secondary schooling, TQM, faculty survey, barriers, management commitment

INTRODUCTION

Nelson Mandela (2003) once said, “Education is the most powerful weapon you can use to change the world”. In past, the quality of education at primary and secondary levels of education was given little attention as a single teacher with irrelevant educational background was assigned multidisciplinary subjects with the expectation to teach them efficiently and effectively. But nowadays, the importance of quality of education is gaining recognition as education is becoming an integrated part of economy and transforming due to technological innovation. Students having access to knowledge at the palm of their hands has compelled teachers to enhance their teaching methods and to improve the educational quality. Access to virtual classrooms and interactive groups via social media and teleconferencing, to both students and teachers have revolutionized the education outside the classroom. The sudden shift in educational delivery methods i.e. from on-campus to online, during the COVID-19 pandemic was only sustained by the educational institutes with pre-existing IT-based schooling system.
In Pakistan, the term ‘literacy’ has been defined in the 1998’s census as, “a person is treated as literate if he can read a newspaper or a journal and write a simple letter in any language”. Based on this definition, the literacy rate of Pakistan for 15-year-olds and above was 62.92% (Mundi, 2014). However, with the new 2016 definition (Sheikh, 2017) of literacy, “ability to read and understand simple text in any language from a newspaper or magazine, write a simple letter and perform basic mathematical calculation (i.e., counting and addition/subtraction)”, the rate dropped to 58% (Alvi, 2018).

The system of education in Pakistan comprises of two sectors; 31% of the schools are privately owned and the remaining 69% are government owned (referred here onwards as public schools). The education provided to students in both sectors is different. The private sector is comparatively more advanced and up to date in term of curricula and technological integration. There are portals for both parents and students with easy access to information related to class and school. The students are exposed to real world problems where they learn by experience and to an interactive environment where they learn by observation. The system of private schools, with a stable infrastructure, does not require any foreign funding or reinforced programs to sustain in the society. The fees structure for private schools range from Rs. 5,000 to Rs. 25,000 on average. The higher fees reflect more indulging experience, foreign qualified experienced teacher, access to luxurious facilities on campus, and premium quality stationery. Well-to-do families happily pay exorbitant fees considering it as a smart investment for their children’s future.

The public schools, on the other hand, are underfunded. The annual budget allocation to education in Pakistan exhibits that education is not a priority for policymakers (Ali, 2019). Therefore, the sector is usually supported by funded schemes such as foreign aids, fee waivers, and non-governmental organization (NGO) funded school uniforms and school stationery. The funds are strictly monitored to ensure zero corruption. This results in providing a little room for innovation in the curriculum and the teacher is reluctant to create an activity for students as the material used for it may be subject to an audit. Therefore, the curriculum is outdated and irrelevant to current or future needs of the society. The resources available get consumed by wages of the teachers and basic stationery such that none is left for development of the infrastructure. Existing environment of such schools is demotivating as there is lack of basic necessities such as water, electricity, and class furniture. On top of that, government owned schools are subject to frequent policy changes with the change in government itself. Newly elected officials scrap out the previous policies simply because it was formulated by the rival political party. They use teachers as volunteers in election drives and use school furniture for political rally. In midst of all, the quality of education is neglected.

It is not easy to measure quality for academic processes due to various factors; absence of proper record keeping and hiding incompetency of the school management, to name a few. Hence, certain models needed to be adopted in order to measure quality of education. Implementation of Total Quality Management (TQM) principles is one of the efforts to measure and to enhance the quality of education. It has been found fruitful in improving student’s and staff’s morale, increasing productivity and delivering higher quality services to both internal and external customers (Mishra & Panday, 2013). Competitive advantage with local educational institutions has also been observed as a result of TQM implementation in the industry (Wani & Mehraj, 2014).

One may find different success stories of TQM in the education sector of Pakistan but most of these stories focus mainly on primary education as it ensures strong foundations in youth or on higher education as it produces better professionals for the society. But unfortunately, secondary schools have been given little to no attention and comparatively fewer researches have been conducted with respect to TQM (Suleiman & Gul, 2015). On average, a child in Pakistan, enrolls in a secondary school at the age of 11 years and enrols in a university at the age of 18 years. Keeping this span of 7 years in mind. In 2011, 33.37% of the youth enrolled in a secondary school. In 2018, the number drops drastically as only 9.08% of young adults enrolled in universities (UNESCO Institute for Statistics, 2019). This 73% drop in enrollment of same generation is alarming. The batch who graduated middle school not proceeded with higher studies maybe subjected to various factors such as choosing skill-based career path, starting a business, or affordability of higher education fees. One factor may as well be demotivation due to poor quality of education. Declining learning experience of a student.
results in loosing trust in the educational system. Quality education of the school is measured using internal key performance indicators (KPIs) and stakeholder’s feedback.

In this study, taking TQM approach as a reference, the barriers to implementing a quality education system, with respect to ownership, were explored. Primary purpose of this research is to compare private schools with public schools in terms of their attitude towards quality education. It is important to identify whether we have to focus on both sectors individually or as a collective whole when developing policies, laws, and regulations for the educational excellence of a country.

LITERATURE REVIEW

Quality was initially defined as the allowable number of defects in a product or batch of product but the term has been revised as complying to customers’ requirements and surpassing their expectations (Madu, 1997). Due to increase in globalization and liberalization, quality has become a major factor in achieving competitive advantage in the market by developing viable strategies.

‘Quality in education’ must not be confused with ‘quality of education’. Quality in education refers to efficient functioning of educational institutes with respect to standards set by government or any authoritative body and how the system is effective in bring up the value of the society in a country. This reflected in test performances such as PISA, SAT scores, GRE/GMAT scores of a country. Quality of education refers to conformance of educational matrices set by the institution such as enrolment rate, graduating rate, availability of resources, mode and method of teaching, and infrastructure.

TQM can be applied for both quality in education and quality of education. The application of TQM in educational institutions is derived from the manufacturing sector rather than service sector. Functions such as finance, facilities, and purchasing were found in both manufacturing and educational systems when TQM was being first implemented in educational institutions back in the late 80s (Stuelpnagel, 1989). As mentioned earlier, TQM helps an organization, customer or community to achieve its objectives more effectively and enhancing the potential of employees for continuous improvement (Ray, 2017). Essential elements assist TQM by establishing a powerful sense of school vision, improving the workforce, concentrating on student-driven values, developing achievable goals, and enhancing day-to-day management (Gharakhani, et al., 2013). There are eight (08) key elements of TQM namely: ethics, integrity, trust, training, teamwork, leadership, recognition, and communication (Juneja, 2012). In education, each of these elements play a vital role in managing the four main principles of total quality management i.e. the customer focus (student, parents, and society), total employee involvement (staff and faculty) and systematic approach (educational framework) to achieve organizational strategic goals.

It was observed that a major barrier for implementing TQM in an academic institution is the misconception of TQM philosophy. Only a few primary elements of total quality management were handpicked by the management of schools and colleges, usually based on personal preferences. Little attention is given to strategic management and to fact-based decision making. Lack of understanding the structure of TQM is often traced back to improper leadership. Resistance to change, let alone initiating it and failure to provide the resources needed for team effort directed towards achieving the vision results in failure of TQM (Venkatraman, 2007). In secondary education of Pakistan, the selection of leadership, the accountability of employees, and the cooperation of lower staff with upper staff are often cherry-picked while the commitment to a clear vision, long-range leadership, and teamwork for the development of staff is often suppressed (Hassan & Fan, 2016).

National educational policies formulated educational standards of Pakistan. It dictates that education system in a state should meet the needs of its people. Unfortunately, private schools are merely focused on generating revenue over providing quality education and opportunities for intellectual growth. The Government of Pakistan spent 2.76% of the GDP on education in 2018, which is bragged as highest since 1999 which was 2.61% (UNESCO, 2018). This low allocation of GDP expenditure indirectly resulted in poor quality of curriculum, nepotism in hiring underqualified faculty, and low pay scale for the teacher, and strong political influence in academics (Chishti, et al., 2011).
Barriers

Barrier is defined as hindrance that causes poor or no implementation of any of the eight elements of total quality management. Each barrier identified here has been addressed one way or another in the field of service industry including education.

The sincerity of upper management in an educational organization reflects the ethical values and the code of conduct followed by it. To implement quality successfully, in the educational industry, top management commitment, their involvement, and their positive attitude are essential (Sohal & Terziovski, 2000) and results in high failure if absent (Huq, 2005). Deming argues that by driving out fear, the management can ensure empowerment of employees in making good rational decisions in improving the organization (Amar & Muhd Zain, 2002). Academic programs require regular updating; management, in view of the requirements of stakeholders and technological advancement, should encourage the faculty to amend the curricula (Bayraktar, et al., 2008). At the same time, Top management oversees the requirements of the TQM in their organization and is responsible of providing clear vision to the employees of the organization. Effective application of TQM requires massive reforms in organizational culture and environment which is impossible without effective leadership which promotes a sharp mission and smart strategies (Talib, et al., 2011). Like every highest ranking manager, school leaders also have the responsibility of planning leadership succession so that it does not pose a threat to sustainability of the school (Stoll, et al., 2002). The international competition with respect to student, faculty, and research, is growing significantly which can be addressed by a process-oriented approach to increasing productivity, decreasing costs and improving quality services (Stoll, et al., 2002). Style of school principals have been studied in secondary schools to determine that the leadership styles have a direct influence on teachers’ morale (Eboka, 2016). Therefore, ‘Lack of Top Management Commitment’ has been set as first perceived barrier to implement TQM in secondary schools of Pakistan.

The another barrier to successful application of quality management in education is attitude of employee towards quality. It is quite difficult to change the mindset of an employee all of a sudden. Studies have shown that employee’s behavior in steering quality is linked with top-management commitment (To, et al., 2015). Attitude may be changed by recognizing efforts of an employee or by the introduction of a reward system for advocating quality in the organization (Gibbs, et al., 2017). Resistance to quality improvement and quality changes results from lack of employee motivation. When it comes to educational sector, the motivation of teachers is positively related to motivation of students. It is long established that students and teachers share motivational values such as self-evaluation, mastering a task, and moral responsibility (Ames & Ames, 1984; Ulrich Schiefele, 2017). And motivation of faculty members in teaching supports quality management in the organization. Hence, the negative attitude towards quality by teachers directly affects students. Therefore, ‘Resistance and Attitude of Employees Towards Quality’ is considered as second barrier to application of TQM.

When a task is assigned to employees with insufficient resources and the incentives provided are not justified, it becomes difficult for employees to exhibit their maximum potential. It acts as a hidden cost of poor quality (Wood & Wood, 2005). Resources such as books, classrooms, and infrastructure are critical in deterioration of quality education (Goetsch & Davis, 2009). Unavailability of school supplies not only deteriorates the quality of education but also increases the dropout rate (Bohannan, 2017). As mentioned earlier, Pakistan allocates very little budget to education as compared to other developing countries. This impact directly on public schools of Pakistan. Headteachers of secondary schools being fully aware of the declining condition of teaching are helpless due to scarcity of funds where faculty willing to work at lower wages is non-qualified and is unable to strike enthusiasm among the students (Mughal & Aldridge, 2017). It is for this reason, ‘Lack of Funding and Resources’ is considered as another barrier in this study.

Development of faculty is an ongoing process that updates them with new educational thinking and teaching practice. Professional training of faculty enables them to conduct interactive session, assess student grades more efficiently, and boosts the cognitive ability of the students (Harris & Sass, 2011). Lack of professional learning within the daily routines of teachers results in poorer lesson planning, assessment, and evaluation (Ulla, 2018). On job training, in Pakistan, like anywhere
in the world, has improved teachers’ performance by improving their professional knowledge and skills (Haider & Ali, 2012; Amin, et al., 2013). Culture of not conducting workshops and seminars for faculty member have a direct impact on the overall quality of any educational institution and these reasons ‘Lack of Proper Training and Education’ is selected as another barrier to TQM.

Weak internal communication reduces the chances of success in implementing TQM. Vision of an educational institute is rarely shared down the hierarchy because of a fear of loss in status and of disempowerment by supervisors, reflecting poor internal correspondences (Wang, et al., 2013). Lack of coordination among management, staff and faculty in an educational setting creates resistance to smooth flow of operations. The perception of quality for management and for faculty can differ from each other’s. Managements approach to ensure standards and procedures are usually confronted by creative and innovative nature of academics. In Pakistan, the healthy relationship of principal with the teacher is directly related to professional development of the teacher, which in turn improves student output and positively impacts the effectiveness of the school (Niqub, et al., 2014). Therefore, ‘Lack of Communication Between Management and Staff’ is set as fifth barrier to provide quality education in the schools.

Presence of political interference in the organization leads to total failure of the quality management system. Political influence refers to two things: nepotism and cronyism in connection with political figures and changes in government policies and strategies after every other general election. Hiring of an employee with disregard to their qualification adds a non-productive member in the team and reduces the enthusiasm of fellow members. This gives rise to lobbying within the staff of the school and focuses shift from quality education to organizational politics. Appointment of a faculty in a public school is assumed to be possible only by a reference of a government official or member of a political party (Ashraf, 2017). Nepotism, in Pakistan, is not limited to public schools. Management of private schools sometimes have to hire family members and associates of political leaders to maintain corporate relationships with the government (Islam, 2004). The other form of political influence is constantly changing government policies and strategies of the schools. Elections are held every five years in Pakistan. If the government changes, either at the provincial level or at the federal level, the newly elected officials scrap the previous educational policies and strategic plans merely on the grounds that they were put forward by their rival political party. The ongoing projects for enhancing quality of the schools are abandoned or reverted which costs faculty members their time, effort and resources (Dildar, et al., 2016; The Express Tribune, 2019). Both aspects of political influence mentioned affects the quality management system of both private and public schools and for such reasons, ‘Political Influence’ is set as sixth and final barrier in the implementation of TQM in secondary schools of Pakistan.

To evaluate the worsening of the educational institutions over the years, these six potential barriers to proper implementation of TQM have been identified and are abbreviated as:

- Lack of Top Management Commitment (LTMC)
- Resistance and attitude of employees towards quality (RAETQ)
- Lack of funds and resources (LOFR)
- Lack of coordination between management and staff (LCBMS)
- Lack of proper training and education (LPTE)
- Political Interference (PI)

Each of these barriers can be mapped on the eight elements of TQM. Ethics, integrity, recognition, and trust are covered in RAETQ and PI. Training relates to LPTE. Communication and teamwork fall in line with LCBMS. LOFR can be linked with communication in terms of explicitly informing the management or government the needs of the school. And leadership clearly relates to LTMC. These relationships between barriers to TQM and elements of TQM are not exclusive and may overlap with each other but all point out that presence of these barriers highlights the absence of key elements of TQM

**RESEARCH METHODOLOGY**

A qualitative deductive research is conducted to describe a situation. The convenience sampling
method used for collecting data is helpful when population members are conveniently available to participate in the study.

**Educational Profile of Lahore**

Teachers and principals of both Public and private secondary schools of district Lahore are the populations of the study. In Pakistan, there are 49,090 middle schools, out of which 34% are public sector while the remaining 66% are in private sector, and covered around 3.93 million enrolments in 2017-18 (Academy of Educational Planning and Management, 2018). Punjab comprises of 57% of the total population of Pakistan with 2.4% annual percentage change, and has around 6663 secondary schools i.e. less than 14% of the total middle schools of the country. Total enrolments last year in secondary schools in Lahore were 105681, and total number of teachers was 3073, giving a student-teacher ratio of 35:1(School Education Department, 2020).

The schools surveyed fall under the Punjab Education Sector Reform Programme (PESRP) of Govt. of Punjab whose one of the primary goals is to ensure quality education. School councils have been introduced to promote local communities, increase the engagement of parents, and look after developmental needs of each school. Department of School Education have designated Monitoring and Evaluation Assistants (MEAs) who observe and evaluate the performance of these schools. Each MEA is assigned four schools per day and rotated every month so they do not form any personal relationship with any school staff. They are responsible to oversee the basic facilities, teachers’ attendances, and changes in enrolments. The data collected is used to reward schools that have a stable quality framework and penalize if they fail to do so.

Individually, each school surveyed has its own unique way to handle quality management. Some of them have an accredited Quality Management System (QMS) and some follow guidelines but not officially certified. Majority do not follow any international guidelines and lack basic elements of quality assurance such as feedback of teachers, students, and parents. These factors are used as secondary data to draw a conclusion for the study.

**Sample Size**

Lahore District has 332 registered secondary schools which includes both public and private sector schools. Setting 3073 teachers as our population size and confidence level at 95%, we calculate a sample size of 144. Margin of error is set to the upper acceptable limit of 8% because the faculty may find it risky to comment on the management and may be reluctant to answer transparently and with complete honesty. With an expected response rate of 75%, 180 respondents were approached initially, out of which only 140 respondents responded, 71 of them were from the public sector and 69 of them were from the private sector.

**Questionnaire**

The questionnaire used in this study was based on earlier studies (Bayraktar, et al., 2008; Morgan & Murgatroyd, 1994; Talib, et al., 2011) which used structured questions to examine the issues in implementing TQM in education institutes. The advantage of structured questions is that response rate is increased by overcoming the time cost for the respondents and decreasing waiting cost. Questions used are comprehensive, brief and were avoided to decrease understanding and interest of the respondents.

The questionnaire consisted of 33 questions and each question was provided with a Likert scale. Each barrier was assignment a minimum of 4 questions. 6 questions were for LTMC, 7 questions covered RAETQ, 4 questions for LOFR, 5 questions regarding LPTE, 5 questions for LCBMS, and 4 questions for PI.

**RESULTS**

The scoring of Likert scale was recorded and the results were compiled. The mean score and the standard deviation calculated are shown in Figure 1 and Figure 2 respectively.
Mean values of LTMC, RAETQ, and LPTE are close to each other for both private and public school students. LOFR, LCBMS, and PI are more inclined towards private schools.

**Normality test:**
Normality test was used to check the normal distribution of data. The p-value of the Shapiro-Wilk test conducted against LTMC for both Public and Private secondary schools, is 0.005 & 0.002 respectively (<0.05) which shows that the data is not normally distributed. For RAETQ, a p-value of Shapiro-Wilk test for Public schools is 0.073 (>0.05) which shows that data is normally distributed but for private schools it is 0.048 (<0.05) showing the abnormal distribution of data. LOFR, the p-
value of Shapiro-Wilk test for both Public and Private schools is 0.003 and 0.010 respectively (<0.05) showing abnormality in data distribution. LPTE, p-values of Shapiro-Wilk test for Public schools is 0.013 (<0.05) but 0.085 (>0.05). In the case of PI, Shapiro-Wilk test shows non-normal data as the p-value is 0.033 for public and 0.01 for private schools. LCBMS has p-value 0.042 (<0.05) for public schools and p-value is 0.191 (>0.05) for private schools.

### Table 1 - Shapiro-Wilk Test

<table>
<thead>
<tr>
<th></th>
<th>Stat</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Top Management Commitment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>0.946</td>
<td>70</td>
<td>0.005</td>
</tr>
<tr>
<td>Private</td>
<td>0.936</td>
<td>68</td>
<td>0.002</td>
</tr>
<tr>
<td>Resistance and Attitude of Employees Towards Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>0.968</td>
<td>70</td>
<td>0.073</td>
</tr>
<tr>
<td>Private</td>
<td>0.964</td>
<td>68</td>
<td>0.048</td>
</tr>
<tr>
<td>Lack of Funding and Resources</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>0.942</td>
<td>70</td>
<td>0.003</td>
</tr>
<tr>
<td>Private</td>
<td>0.951</td>
<td>68</td>
<td>0.010</td>
</tr>
<tr>
<td>Lack of Proper Training and Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>0.955</td>
<td>70</td>
<td>0.013</td>
</tr>
<tr>
<td>Private</td>
<td>0.969</td>
<td>68</td>
<td>0.085</td>
</tr>
<tr>
<td>Lack of Coordination Between Management and Staff</td>
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<td></td>
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<tr>
<td>Public</td>
<td>0.964</td>
<td>70</td>
<td>0.042</td>
</tr>
<tr>
<td>Private</td>
<td>0.975</td>
<td>68</td>
<td>0.191</td>
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<tr>
<td>Political Interference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>0.962</td>
<td>70</td>
<td>0.033</td>
</tr>
<tr>
<td>Private</td>
<td>0.930</td>
<td>68</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**Reliability Test**

Reliability Test calculates the reliability of scale and provides information about individual items in the scale. Reliability test is used to check the reliability of the data. The Cronbach’s alpha value is 0.814 > 0.700, which indicates a level of internal consistency for the scale i.e. Likert scale. Thus, it can be said that all items in the questionnaire are related to each other and do not possess any problem.

**Inter-Item Correlation Matrix**

The inter-item correlation was found by pairing barrier and calculating correlation of each pair. The mean correlation was presented to find a relationship between each barrier and how one influences the other.

### Table 2 - Inter-item Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>LTMC</th>
<th>RAETQ</th>
<th>LOFR</th>
<th>LPTE</th>
<th>LCBMS</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTMC</td>
<td>0.506</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAETQ</td>
<td>0.158</td>
<td>0.488</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOFR</td>
<td>0.496</td>
<td>0.569</td>
<td>0.271</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPTE</td>
<td>0.573</td>
<td>0.496</td>
<td>0.234</td>
<td>0.612</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCBMS</td>
<td>0.381</td>
<td>0.356</td>
<td>0.256</td>
<td>0.498</td>
<td>0.424</td>
<td></td>
</tr>
</tbody>
</table>

It was calculated that LOFR is least correlated with LTMC (0.158) and LPTE is significantly correlated to LCBMS (0.612).

**Independent Samples Test**

The following was observed when comparing means between two unrelated groups on the same dependent variable. The equality of variances was also calculated for both assuming equal variances and without using equal variances, read as EV and Non-EV respectively in Table 4.


### Table 3 - Levene's Test and t-test for equality of means

<table>
<thead>
<tr>
<th>EV = Assuming Equal Variances</th>
<th>Levene’s Test</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTMC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td>1.987</td>
<td>0.161</td>
</tr>
<tr>
<td>Non-EV</td>
<td>0.070</td>
<td>136.94</td>
</tr>
<tr>
<td>RAETQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td>0.10</td>
<td>0.920</td>
</tr>
<tr>
<td>Non-EV</td>
<td>0.387</td>
<td>137.957</td>
</tr>
<tr>
<td>LOFR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td>0.965</td>
<td>0.328</td>
</tr>
<tr>
<td>Non-EV</td>
<td>-1.883</td>
<td>137.114</td>
</tr>
<tr>
<td>LPTE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td>1.002</td>
<td>0.318</td>
</tr>
<tr>
<td>Non-EV</td>
<td>0.188</td>
<td>137.459</td>
</tr>
<tr>
<td>LCBMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td>0.234</td>
<td>0.629</td>
</tr>
<tr>
<td>Non-EV</td>
<td>-0.860</td>
<td>136.40</td>
</tr>
<tr>
<td>PI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td>0.048</td>
<td>0.827</td>
</tr>
<tr>
<td>Non-EV</td>
<td>-0.542</td>
<td>137.610</td>
</tr>
</tbody>
</table>

A t-test was performed in order to find out the difference on all six barriers. The results failed to reveal a statistical difference between public and private schools. Indicating that the barriers to TQM are perceived similarly in both public and private schools of with the same potency.

**DISCUSSION**

Mean values for LOFT, LCBMS, and PI favoured private schools over public schools. Higher value indicates that the faculty of private schools agrees strongly that these contribute in poor application of TQM in schools when compared to faculty of public schools. Government schools do not focus on maximizing profits as do public schools; the cost cutting attitude of private school management resists implementing any quality management system in their school. It is also plausible that the response of government employees is out of fear of consequences from the upper management. Although PI scores are low for both, public teachers believe nepotism and cronyism as part of government institution and if there is hinderance in implementing TQM it may be for other reasons beside PI.

It is self-evident that all barriers are interlinked at some level. Reducing one will definitely reduce others also. It was calculated that LOFR is least correlated with LTMC as the funding and resources are driven by fluctuations in Pakistan’s economy and devaluation of currency over time. It is not in total control of the top management, of both public and private schools, to regulate the funding against the changes in economic policies and budgeting. At the same time, it was found that
LPTE is significantly correlated to LCBMS. Due to the fact that training of employees brings the staff together and they are made aware of the ways to approach the quality management and streamline communication.

Both private and public schools are supervised by centralized education department of the government. The quality consciousness and quality awareness are driven in both sectors equally. The recent concern of controlling fees of private schools, where supreme court ordered reduction in fees by 20% and only increase by 5% annually, shifted the primary goal of top management from quality education to cost cutting through fund management (Bhatti, 2019).

Absence of a proper quality system offers resistance to change out of fear of turning things worse. Positive change would require extra effort and working hours for faculty in addition to their existing teaching load. This resistance is directed toward LOFR which is also reflected in low remuneration and poor incentives given to the teaching staff. As stated before, private institutions are profitable entities that are not unwilling to maximize profit at the expense of quality. On the other hand, government schools are funded poorly for the past years i.e 2012 to 2017, with allocation budget ranging from PKR 20.92 billion to PKR 79.69 billion only. However, the trend dramatically changed with the budget allocation for Punjab education department skyrocketed to PKR 297.76 billion and PKR 332.51 billion in year 2018 and 2019 respectively, promising a better future for the educational quality (School Education Department, 2019). The proper allocation of funds along with management commitment exhibited through internal communication, training and education leads directly to better quality management.

Proper training programs are not planned in either sector. Failure to provide adequate knowledge and training to the team about TQM dramatically reduces the efficiency and effectiveness of its implementation (Subedi, 2015). The quality of training provided to a teacher has strong relationship with the performance of the teacher (Hervie & Winful, 2018). Both sectors invest little on faculty development at the level of middle schools in Pakistan.

LCBMS prevails in both the public and private sectors of school education with the same potency, and considered as hindrance in implementation of TQM in secondary schools. Primary reason for poor lack of coordination between administration and faculty for Lahore district requires more research. What is known is that motivating employees by delegating authority, and rewarding system for better decision making can enable faculty to contribute their intellect and creativity in improving education quality (Gibbs, et al., 2014). Without overlooking the teacher’s autonomy to work independently for any respective curriculum, administrative control and coordination should be balanced to sustain quality education (Prichard & Moore, 2016).

PI is a major concern for both the faculty and the administration together. The policies formulated by the ministry of education, and budget allocation each year causes drifts in smooth flow of operations by introduction of new management strategies frequently. Quality of education suffers when quality parameters defined in previous policy differs from the quality parameters set in the newer policy. The energy spent on data gathering, training of dedicated quality focal person, and the time spend all goes in vain. Nepotism which is punishable by imprisonment up to 14 years (National Accountability Bureau, 1999) is considered as the bud of corruption (Ary News, 2018). A competent faculty is more open to change and acceptable to the concept of quality management than the one who is hired using personal connections. When nepotism provides better career progression of a poor performer over a good performer in an organization, poor attitudes and norms among the faculty and staff is observable (Abramo, et al., 2014).

Each barrier to TQM is perceived similarly by both public-school faculty and private-school faculty members. Principals and teacher find all six barriers to be present in resisting operation of a TQM system but not as strongly as it they are expected to be.

CONCLUSION
Punjab is the most populous province of Pakistan where the decreasing literacy rates through middle schools reflect the poor-quality education of these schools. Students loses motivation to study further, and parents lose confidence in the education system (Academy of Educational Planning and
Management, 2018). The poor perception of educational quality has been often linked with lack of quality management system in the schools (Matorera, 2017).

Pakistan is facing the great challenges in adapting education according to the changing needs of the society. For the modern era, implementing quality management in education in both the public and private sectors is paramount. Education at secondary school level is frequently neglected as compared to primary education and tertiary level. Youth has been found to lose the tempo of gaining knowledge which they attained back in primary school thus producing poorer candidates at university and college level. The educational policy focuses on overarching challenges and deficiencies of the system by identifying their causes (Ministry of Federal Education and Professional Training, 2017). Remorsefully, when statistically comparing public and private sectors at secondary level education, both are facing TQM barriers at a similar level.

The teachers of private school face the dilemma of saving resources without compromising the quality of education while teachers of public school willing to enhance quality are deprived even of basic resources such as water and sanitation (Mustafa, et al., 2018). The government employees and private employees both find issues such as lack of training, lack of communication with staff and management, and political issues. It can be concluded that that the issue of quality management or implementing a new quality management system is beyond the nature of management and the proprietorship of the school.

In a third world country, where overhauling of a system altogether is near impossible, it is better to begin with a small step of quality improvement and move towards other step; first step being engagement of management and administration with the faculty and staff.

RECOMMENDATIONS

The chain of sequences begins from the top management which is responsible for all other barriers. They can communicate the ground realities of the education sector to the policy makers, and request funds for faculty development. They can coordinate among the organogram of the school and provide autonomy to teacher allowing them to maximize their potential. Administration can be stringent in political hiring in their organization and control nepotism to the fullest.

To overcome these barriers top management in academic institutions should be committed to quality and encourage initiatives among the employees. The management themselves should have proper training and skills of TQM prior to enforcing it on their subordinates (Dhar, 2015). The communication among school staff and faculty members should be strengthened as it has direct linkage with the overall productivity of the school (Clampitt & Downs, 1993) and increase job satisfaction (Falcione, et al., 1977). The country should prevent cutting off resources for quality implementation and stop considering it as an extravagant expense.

Further Research

The research is focused only on one developed city of the country. It is also limited to secondary schools of that city. The research can be expanded horizontally and vertically i.e. include more cities and rural areas of each province of Pakistan. The research can also be expanded vertically i.e. include primary and tertiary education. The collective feedback from both private and public preschools, colleges, and universities in cities and rural area will help in determining the education outlook of the whole country in terms of TQM implementation. The research can be replicated to provide the detailed map of educational quality in Pakistan.

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