Implementation of Total Quality Management Practices in preschool education during the Pandemic situation of COVID-19 in Pakistan

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ABSTRACT

TQM is one of the tools that enhance the quality of education. The global situation of education today calls for an investigation into the role of TQM in enhancing students' performance generally and particularly in Pakistan. This paper aims to highlight the important contributions of TQM in relation to the administrative development of the preschool business system, facts that lead to an increase in the quality of the entire education system. Approaching this topic and bending with particular interest in the formal education sector in Pakistan, we fall under the context of education management so that we can provide valuable suggestions for creating analytical activities and maximizing full functionality with some preschool network control by including a preschool franchise program. Kindergarten is the cornerstone of a person's personality, and the first pathway to higher education. To ensure the highest quality of education, a complex, well-organized process is required, which must be integrated with the school environment of the organization. Addressing quality management while focusing on quality education should be carefully analysed and researched in management practices aimed at increasing the satisfaction of the needs of the beneficiaries of the education system.

Keywords: *Preschool education including franchises, total quality management, pandemic, technology*

1. Introduction

Various factors are responsible for academic performance such as the students' interest in learning, school engagement, teacher effectiveness, school environment and facilities, student/teacher motivation, and quality of interaction among students, parents and teachers (Mahmood, Ismail, & Fauzee, 2019). Today we have tomorrow's generation in our hands. In general, the community seeks quality more and more whether we are talking about products or services. Early education is no exception to this. In fact, it is one of the departments where people seek perfection the most. This paper aims to highlight essential contributions in terms of quality management development in preschool including franchising system. Approaching this topic and bending with particular interest in the field of formal education in Pakistan, we dive into the essence of educational management so that we can offer important constructive suggestions for optimizing analysis activities and implicitly increasing performance in terms of quality management of the network of preschool including franchising system.

Understanding the growing interest in early education ensures an adequate and proper development of the child based on culture, values, behaviours and attitudes. Quality of education prepares one to meet the challenges in the society and therefore, become economically productive, contribute to peaceful and independent societies and enhance individual well-being (Mahmood, Ismail, & Fauzee, 2020). By intervening and introducing management systems, novel orientations and perspectives will be ensured which will certainly have the same goal: performance (Zigler, Gilliam, & Jones, 2006).

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Nowadays, in the context of the pandemic generated by the WHO COV-19 virus, managers and entrepreneurs have been somewhat put in a position to adapt the way they manage their franchise systems. Without compromising the quality of the services offered, while also maintaining a strong relation with technology and vigorous regulations, the managers have been the ones who pioneered the tentacles of communication and connection.

According to (Mahmood, Ismail, & Fauzee, 2020), the total quality management system (TQM) basically a management approach for continuous improvement/development that satisfies customer needs and seeks to meet customer's expectation. There is no second opinion, that only quality education can prepare students to meet the challenges of global market. In Pakistan, school education is criticized over many forums that it has no quality and producing students without understanding of basic concepts. When these students complete their education and come to market with certificates in hands, found no space for them, because there is a mismatch between the supply skills and jobs demanded in the actual market. There is a serious mismatch between the jobs demanded by the emerging needs of the economy and the supply of skills and trained manpower in the country, this mismatch has created waste and misallocation of resources on one hand and shortages of essential skills to keep the wheels of the economy moving.

Government of Pakistan believes that quality education is the basic right of every child but facing serious problems about quality in school education. There are many challenges to quality school education, right from teacher training to curriculum. Government of Pakistan has taken many steps to resolve these problems and define strategies to meet these challenges (Chishti, Tahirkheli, Raja, & Khan, 2011).

When we talk about quality, Quality means degree of excellence or conformance to the requirement. The quality of product or service is a customer's perception of the degree to which the product or services meets his or her expectation. Similarly when we discuss about quality in education sector, it depend upon the 5 main dimension that's are Top management commitment/Leadership, Continuous improvement, Involvement of staff, Training & education and customer focus (Mahmood et al., 2020). Early education is no exception to this. In fact, it is one of the departments where people seek perfection the most. In order for the educational system to be quality-oriented Zirkel & DuPaul, (2017), it is necessary that all the elements related to quality assurance be combined into a unitary whole Organisation for Economic Co-operation and Development, 2009 (Gabriela Neacşu & Bucuroiu, 2019).

When we say elements, we refer to: criteria, indicators and standards. These parameters must be understood, accepted and used appropriately. This research paper intends to contribute to the process of conceptual and methodological unification in the insufficiently explored field of quality of preschool education in a context that has so far had no precedent: the COVID-19 pandemic.

In fact, this represents the purpose of our research work: implementation of quality management systems adapted to the conditions imposed by the WHO COV-19 pandemic, when managers and entrepreneurs are put in a position to adapt the way they manage their preschool education system including franchises, respecting strict regulations imposed by both WHO and local Public Health Offices (Freeman, 2020).

As options for improvement of management in early education, we propose the following: organizing training courses for teachers so that they are prepared for online teaching, ensuring that all participants in the educational process have the technology required in order to be connected, and last but definitely not least, adapting the curricula to the virtual climate. These suggestions are in line with the theories proposed by (Noveanu & Potolea, n.d.).

2. Problem Statement

The question now is, how can TQM be integrated into the school system to improve students' and school achievements in places where it is not popular and practiced? (Mahmood & Ismail, 2018). If kindergarten staff are included in the organizational constitution they know and ensure quality in all kindergarten education departments (basic curriculum, training / teaching strategies, special school programs organized in thematic institutions, community level verification, etc.), there will be a relatively independent progress (De Pablos & Tennyson, 2013; Garbutt, 1996).

TQM is one of the tools that enhance the quality of education. If the preschool education system including franchising system provides an adequate and opportune microclimate for the child's development from a mental, intellectual, social, moral, emotional and physical point of view, as well as rigorous hygienic-sanitary norms, and if the beneficiary families are prepared to be co-opted to influence and evaluate the quality of services, then the proposed objectives will be met satisfactorily and total quality management is one of the tool through which the efficiency of the preschool franchising system will be maximized, the child will grow harmoniously and will progress to school with a prolific luggage of knowledge, while the manager will be able to establish the correct premises regarding the implementation of a total quality system in the preschool institutions (Mahmood et al., 2020). This hypothesis is supported by the research made by (Barnett, 2008), as well as the common view of (Landers et al., 1996). This goes on to show that continuous improvement of the education system has always been of interest and that the optimizing solutions are not at a far reach, having been analysed for a long period of time.

3. Research Questions/Aims of the research

The research follows applicative values of the diagnostic indices. We identify that the curricular elements that must satisfy the requirements of the child's integration from the educational point of view to the new methodology imposed by the adaptation to the virtual environment and we propose personalized plans for each kindergarten in the context of a pandemic and educational offers involving hybrid style teaching. This should involve complex educational projects, based on strategies for observing, knowing and satisfying the needs of children of targeted age, while following efficient guidelines regarding operational procedures for good managerial practices (Pruteanu, 2020).

1. What are the challenges to preschool education in Pakistan?
2. Which dimensions of TQM association with the preschool education system?
3. What are the main factors that can contribute to stimulate the educational process?
4. Careful examination of the national educational plan, including decisions, measures, strategies and national programs regarding the preschool education sector (National educational policies, 2017).

4. Research Methods

This study was conducted to explore the level of TQM practices in preschool education system including franchises system during the pandemic COVID-19 and to see does TQM dimension has relationship with the performance of preschools education of public and franchises system of education in Pakistan. Study was quantitative and qualitative in nature. To analysis the quantitative data both descriptive and chi square test was applied to analyse data through SPSS, While for qualitative data open and close ended questions asked from the 1 principals and 3 teachers in each preschool . Total 234 faculty members were selected by

census. Instrument of TQM practices obtained 0.80 reliably that is a best score. Reliability of performance measurement tool is 0.915 which is a high computed reliability. As the alpha coefficients were all greater than 0.7, a conclusion was drawn that the instruments had an acceptable reliability coefficient and were appropriated for the study.

5. Results and Conclusion

Chi-square Analysis:

Cross tabulations and correlation study show that how one factor is contingent upon other factors. Chi Squares are used to check the association between different factors. Different factors have been considered in the chi square analysis. The dependent variable here considered was "performance of the preschool".

Table 1.
TQM practices Association with Preschools Education System

Total Quality Management Practices

Variables	Chi-square test statistic	p-value
Performance of schools based on TQM	292.381	0.000*****
Principal of my school is actively involved in quality management in my school.	164.706	0.000***
Principal emphasize to teachers and staff to deliver quality education to students.	234.550	0.000***
Principal encourages the involvement of all teachers and staff in quality management.	188.920	0.000***
Principal discusses issues related to the quality with the higher authorities.	255.421	0.000***
Principal using Total Quality Management (TQM) principles in leading the school.	156.043	0.000***
My school has quality goals that have been implemented by the HEAD of the school.	142.876	0.000***
Principal is actively developing an integrated quality plan to achieve the objectives of the school.	204.807	0.000***
Principal allocate resources to improve the quality of my school.	207.155	0.000***
Principal is actively involved in building the vision, goals, and plans for the quality.	254.420	0.000***
Principal strongly encourages employee involvement in quality management.	196.462	0.000***
Principal demonstrates/explain its commitment towards Total Quality Management (TQM) practices.	259.376	0.000***
My school collects information regarding customer complaints.	276.570	0.000***
Customers focus has long held/implemented in my school.	278.017	0.000***
The school conducts a customer satisfaction survey every year.	92.347	0.000***
The school always fill questionnaire from internal and external customers to get recommendations for school improvement.	159.765	0.000***

Training increases the quality of work. Research & training is given to teachers during their school career.	99.789	0.000***
Quality awareness education provided to all teachers and staff.	261.765	0.000***
Financial allocation is provided for the training and education that lead to the achievement of quality in teaching.	56.906	0.000***
Most of the staff at my school is very interested in attending a seminar or training program related to quality.	147.133	0.000***
Teachers work together in improving the quality of school.	141.782	0.000***
All teachers and school staff are actively involved in programs to improve the quality of teaching and learning	217.002	0.000***
All teachers and school staff are committed to the success of the school.	191.017	0.000***
Our school has a database that can provide information to be used in the process of continuous improvement	292.447	0.000***
My school uses the PDCA cycle (Plan-Do-Check-Act) widely for continuous improvement process.	280.784	0.000***
Training in identifying problems solving skills has provided to improve the quality of teachers and staff.	265.990	0.000***

Chi-square analysis was used to explore the correlation and relationship between performance of the preschool education and TQM. Performance of the preschool has been observed with significant relationship with top management commitment (p-value=0.000***), Customer focus (p-value=0.000***), Continuous improvement (p-value=0.000***), the involvement of staff (p-value=0.000***) and training and education (p-value=0.000***).

Findings of the study showed that there is strong positive association between implementation of TQM practices and the performance of preschool education system including franchises system of education. The final results revealed that by the implementation of TQM practices in preschool education network enhance the performance of preschool education system either it is government sector or private franchising education sector. Government has to achieve their millennium goal by implementing the good practices of TQM in their preschool education system even during the COVID -19 pandemic situations in Pakistan.

The final results of the surveys unveiled diverse findings as follows:
a. There are projects, programs and partnerships at a local level that ensure a developed conceptual climate related to a quality education;
b. Teachers are not sufficiently prepared for the transition to the virtual teaching system;
c. The technology that is at hand at the moment clearly requires to be improved;
d. It was observed that there are some concerns regarding the inter-learning processes and the dissemination of successful practices with visible effects on the sphere of quality of counselling activities;
e. Parents are not fully satisfied with the quality of the educational process carried out in the online environment, either due to an uncertain connection to overloaded internet networks, or due to the time spent by the child in front of the computer, thus impeding the parent's

professional cycle, or related to the dissatisfaction regarding the visual impact of the time spent in front of the computer or tablet on the child.

6. Conclusions

The preschool including franchises institutes should assimilate significant and systematic transformations by applying the strategies, values and accountability of those involved in the quality management of the mentioned institutions (Quality assurance personnel) Ministry of Education, 2017).

According to the Pakistan National Education Policy (2017), the policy provides for number of important provisions/actions for universal access/enrolment especially in the context of enrolment of out of school children as well as universal retention/completion through minimizing the dropout rate. The main focus of policy provisions aimed at,

1. Enrolment of out of school children.
2. Minimize the dropout rates.
3. Improve quality in terms of learning tool and learning contents (Literacy, problem solving, Numeracy, oral expression and learning contents knowledge, skills, norms, values and attitude).
4. Providing access to ICT in schools; use of ICT to strengthen quality of teaching and enhance student learning.

    The next highest priority is assigned to universal high student achievement through enhancing the quality of education by implementing TQM practices are,
1. Leadership focused on achieving the set objectives;
2. Training and education should be the compulsory part of preschools;
3. Total involvement w.r.t parents, teachers, children, administration, society and capitalization of the entire potential;
4. Systemic and holistic approach toward the organization;
5. Decision-making based on relevant data and information, which can be verified;
6. Mutually beneficial relationships with all parties involved;
7. Procedural approach to resources and their use;
8. Adaptation to any situation imposed by the continuous improvement of processes, products and requirements (Mahmood et al., 2020).

By following the guideline above and becoming an open system, in a permanent connection with innovation, the preschool franchises system and government of Pakistan has high chances of reaching its maximum potential when it comes to the preparation of children for success, even in challenging environments, such as the current context of a global pandemic.

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