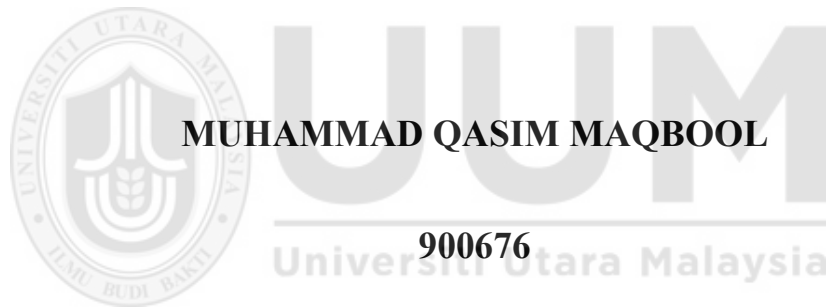


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**MEDIATING ROLE OF CORE TOTAL QUALITY MANAGEMENT
IN THE RELATIONSHIP BETWEEN INFRASTRUCTURE TOTAL
QUALITY MANAGEMENT AND ORGANIZATIONAL
PERFORMANCE OF PUBLIC HOSPITAL IN PAKISTAN**



**A Thesis submitted to Ghazali Shafie Graduate School of Government
in fulfilment of the requirements for the Doctor of Philosophy
Universiti Utara Malaysia**



Kolej Undang-Undang, Kerajaan dan Pengajian Antarabangsa
(College of Law, Government and International Studies)
UNIVERSITI UTARA MALAYSIA

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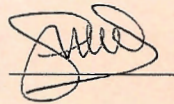
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ABSTRACT

Health care organizations in developing countries face great challenges from both inside and outside the organization. In light of this, the contribution of total quality management (TQM) is extremely valuable for health care organizations to overcome these challenges. Drawing upon resource based view (RBV) of the firm; this study examines the mediating role of core TQM on the relationship between infrastructure TQM and performance of public hospitals in Pakistan, and moderating role of national culture on the link between core TQM and performance of public hospitals in Pakistan. This study applied a hypo deductive research approach. Using cross sectional data, a total 378 valid questionnaires were collected to confirm the proposed hypothesis by using partial least square (PLS) path modeling approach a variance based structural equation modeling technique (SEM). Statistical results show that infrastructure TQM is positively related to core TQM. Core TQM is also found to be positively related to organizational performance. Moreover, results reveal that core TQM mediates the relationship between infrastructure TQM and organizational performance. However, no significant result is found for the moderating effect of national culture on the relationship between core TQM and organizational performance. For theoretical and practical contribution this study contributes to the RBV by providing empirical evidence to support the assertion of the theory. Therefore, this study can also help the physicians, surgeons, pharmacist and health professionals to contribute their services to gain organizational performance. Finally, the limitations and suggestions for future research this study restrains the sample that was taken from the public hospitals of Pakistan and cannot be generalized to the other service organizations.

Key Words: Pakistan, Public hospitals, Infrastructure TQM, Core TQM, National culture

ABSTRAK

Organisasi kesihatan di negara-negara membangun menghadapi cabaran besar dari dalam dan luar organisasi. Sehubungan dengan itu, sumbangan pengurusan kualiti (TQM) sangat berharga bagi organisasi kesihatan untuk mengatasi cabaran-cabaran ini. Berdasarkan kepada pandangan berasaskan (RBV) sumber firma, kajian ini mengkaji peranan teras perantara pengurusan kualiti terhadap hubungan antara infrastruktur pengurusan kualiti dan prestasi hospital awam di Pakistan, dan peranan budaya kebangsaan dalam hubungan antara teras pengurusan kualiti dan prestasi hospital awam di Pakistan. Kajian ini menggunakan pendekatan penyelidikan hypo deduktif. Dengan menggunakan data keratan rentas, sejumlah 378 borang kaji selidik yang sah telah dikumpulkan untuk menguji hipotesis yang dicadangkan dengan menggunakan pendekatan *Partial Least Square* (PLS), teknik variasi berasaskan SEM. Dapatan statistik menunjukkan bahawa infrastruktur pengurusan kualiti secara positif berkaitan dengan teras pengurusan kualiti. Teras pengurusan kualiti juga didapati mempunyai hubungan positif dengan prestasi organisasi. Selain itu, dapatan kajian juga mendedahkan bahawa teras pengurusan kualiti menjadi pengantara hubungan antara infrastruktur pengurusan kualiti dan prestasi organisasi. Walau bagaimanapun, tiada sokongan empirikal yang didapati dalam menyederhanakan kesan budaya sesebuah negara di dalam hubungan antara teras pengurusan kualiti dan prestasi organisasi. Bagi sumbangan terhadap aspek teori dan praktikal, kajian ini menyumbang kepada teori RBV dengan memaparkan bukti empirikal untuk mendukung penggunaan teori. Oleh yang demikian, kajian ini membantu ahli perubatan, pakat bedah, juru farmasi, dan kakitangan kesihatan profesional untuk meningkatkan prestasi dan kualiti perkhidmatan organisasi. Akhir sekali, kekangan dan cadangan untuk kajian masa hadapan adalah berkaitan sampel kajian yang diambil daripada hospital awam di Pakistan tidak dapat digeneralisasi untuk sektor perkhidmatan yang lain.

Kata Kunci: Pakistan, Hospital Awam, Infrastruktur Pengurusan Kualiti, Teras Pengurusan Kualiti, Budaya Kebangsaan.

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Muhammad Qasim Maqbool

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LIST OF ABBREVIATIONS

TQM	Total Quality Management
CTQM	Core Total Quality Management
ITQM	Infrastructure Total Quality Management
EFQM	European Foundation for Quality Management
BOD	Burden of Diseases
JIT	Just In Time
LTO	Long term orientation
STO	Short term orientation
HCMs	Establishing hierarchical component models
HRM	Human Resource Management
QMS	Quality Management System
ITI	Information Technology Infrastructure
CSFs	Critical Success Factors
NHS	National Health Services
GDP	Gross Domestic Product
HIS	Health Information System
NCDs	Non-Communicable Diseases
WHO	World Health Organization
CVD	Cardiovascular
TB	Tuberculosis (TB)
HTN	Hypertension
ICT	Information Communication and Technology
NQA	National Quality Awards

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DA	Deming Award
EQA	European Quality Award
OP	Organization Performance
SPSS	Statistical Package for Social Sciences
PLS	Partial Least Squares
CFA	Confirmatory Factor Analysis
HTMT	Heterotrait-Monotrait



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Organizations globally have been determining ways to improve business practices to gain competitive advantage. In today's global competition quality has been pondered as an important factor for attaining competitive advantage (Wheaton & Schrott, 2018). The habit of quality management has become widespread between organizations during the last decades (Irvine & Irvine, 2018). In today business market customer focus is an important element for business success. Land, labor, capital is important but these elements insignificant if the customers are not satisfied. Customer has more options than before so firms are more worried about customer satisfaction that's way they give more importance to customer requirements today (Ross, 2017).

In today business market existence is only possible through customer satisfaction which comes through quality goods and services with the lowest possible price (Dale & Plunkett, 2017). Total Quality Management (TQM) is a tactic for constantly refining the quality of goods and services provided through the contribution of individuals at all levels of an organization. It is a universal corporate philosophy comprising three vital principles of 'Total' as participation of all people and all departments; 'Quality' as fulfill customer needs and expectations; and 'Management' as facilitating conditions for total quality (Dale & Plunkett, 2017; Irvine & Irvine, 2018; Ross, 2017).

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Questionnaire



Dear

It is my pleasure to inform you that I am conducting a pilot and field study for the purpose of making a scientific research in order to be awarded the PhD degree in Public Management from the University of Utara in Malaysia. The title of the study is “Mediating role of Core TQM in the relationship between Infrastructure TQM and Organizational Performance Public Hospital in Pakistan: Moderating role of National culture”. Will you kindly answer the questions on the attached questionnaire as your cooperation in this respect will be of great effect in concluding valuable results from this study. The researcher wants to give every assurance that all information given in this questionnaire will remain, and dealt with confidentially, and will be used solely for the purpose of scientific research.

Thanking your co-operation,

Researcher

Muhammad Qasim Maqbool

Section One

Demographic Variable

This part contains statements concerning general information about the participants
Please read the following statements and checks the category that best describes your
situation.

1. Type Of Hospital:

General () Specialist ()

2. Gender:

Male () Female ()

3. Age:

Below 30 () 31-40 () 41-50 () 51-60 ()

4. Qualifaction:

Bachelor () Master () PhD () Diploma or Other ()

5. Designation:

Principal () Medical Superintendent (MS) () Head of department ()

Director quality () Quality assurance manager ()

6. Working Experience:

1-5 year () 6-10 years ()

11-15 years () More than 15 year ()

7. TQM Programs:

Only one program () More than one program ()

8. Time of TQM programs adoption

Less than 1 () 1-3 year () More than three year ()



Section Two

Instructions

Please indicate your level of strongly disagree or strongly agree with the following statements: Key:

1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat agree; 6 = Agree; 7 = Strongly agree

No	Leadership	1	2	3	4	5	6	7
1	Our hospital's top management supports a long-term quality improvement process and provides the necessary and continuous resources for quality improvement.							
2	Our hospital's top management participates in quality improvement activities.							
3	Quality is considered as a strategic priority by top management.							
4	Our hospital's top management makes strategic quality planning based on customers' requirements.							
Human Resource Management								
1	In our hospital teams and committees are formed to improve health service quality.							
2	In our hospital quality training courses are held periodically.							
3	In our hospital recommendations and suggestions provided by employees are utilized to improve health service quality.							
4	In our hospital employees are rewarded for their contributions to quality practices.							

Financial Management								
1	Our hospital increase fees from time to time	1	2	3	4	5	6	7
2	Some operations in our hospital are run on debt	1	2	3	4	5	6	7
3	Sometimes, there is misdirection and misallocation of funds	1	2	3	4	5	6	7
4	Development projects are adequately financed	1	2	3	4	5	6	7
Information technology infrastructure								
1	Hospital management are able to enforce standards that ensure compatibility of new IT platforms with existing ones	1	2	3	4	5	6	7
2	Hospital management follows processes through which legacy IT systems do not limit the development of new IT systems.	1	2	3	4	5	6	7
3	Hospital management is able to integrate different and distributed IT systems by keeping the data architecture flexible.	1	2	3	4	5	6	7
4	Hospital management is able to make evolutionary changes to IT platforms.	1	2	3	4	5	6	7
5	By linking different and distributed IT platforms, hospital IT infrastructure has helped us to integrate internal and inter hospital processes.	1	2	3	4	5	6	7
6	Hospital management are effective in supporting new strategic initiatives by keeping IT systems scalable	1	2	3	4	5	6	7
Continuous improvement								
1	In our hospital, there is always an emphasis on the continuous improvement in all the activities at various levels.	1	2	3	4	5	6	7
2	In our hospital, continuous improvement is emphasized in the training programs provided to	1	2	3	4	5	6	7

	employees.							
3	In our hospital policies, improving the quality is more important than the quantity and short term goals	1	2	3	4	5	6	7
4	In our hospital, all departments and stations believe that by implementing continuous improvement strategies, they can survive and serve better in the highly competitive environment	1	2	3	4	5	6	7
Process Management								
1	Processes in our hospital are designed/improved based on customers' requirements.	1	2	3	4	5	6	7
2	Use of preventive controls to ensure quality services in our hospital.	1	2	3	4	5	6	7
3	Our hospital makes extensive use of statistical techniques to reduce variation in processes.	1	2	3	4	5	6	7
4	Our hospital has good plans for an emergency to ensure operations not to be interrupted.	1	2	3	4	5	6	7
5	Our hospital conducts preventive equipment maintenance	1	2	3	4	5	6	7
6	Clear work or process instructions are given to employees.	1	2	3	4	5	6	7
7	Our hospital wards are well organized and clean.	1	2	3	4	5	6	7
Customer Focus and Satisfaction								
1	Our hospital is in close contact with patients and other customers.	1	2	3	4	5	6	7
2	Our customers give us feedback on quality and delivery performance.	1	2	3	4	5	6	7
3	Our hospital regularly carries out external customers' satisfaction survey	1	2	3	4	5	6	7
4	We use customer requirements and expectations	1	2	3	4	5	6	7

	as the basis for quality.							
5	Our employees know who our customers are.	1	2	3	4	5	6	7
Customer perspective								
1	The hospital conducts an annual survey to determine the patient's satisfaction with the hospital performance.	1	2	3	4	5	6	7
2	Patients get courtesy and respect from the medical staff and administrative.	1	2	3	4	5	6	7
3	The hospital offers services for patients in shortest possible time.	1	2	3	4	5	6	7
4	The hospital is keen to provide high quality services	1	2	3	4	5	6	7
5	Patients have a good image of the management reputation	1	2	3	4	5	6	7
Internal process perspective								
1	The hospital offers a number of new services (i.e. endoscopy, MRI, CT Scan or Angiography).	1	2	3	4	5	6	7
2	The hospital provides an acceptable ratio of medical staff to patients.	1	2	3	4	5	6	7
3	The hospital offers all the facilities (i.e. medical equipment and medicine) in proportion to the number of patients.	1	2	3	4	5	6	7
4	The hospital provides to meet scientific requirements of the all activities.							
Learning and growth								
1	Hospital top management encourages the Medical staff to receive awards such as patents, excellence awards	1	2	3	4	5	6	7

2	Hospital top management dealing seriously with the Medical staff suggestions	1	2	3	4	5	6	7
3	Hospital top management is keen to adaption to new technology and new ideas	1	2	3	4	5	6	7
4	Hospital top management contributes to the involvement of all the staff to develop competencies.	1	2	3	4	5	6	7
5	Hospital top management encourages Medical staff to increase research productivity.	1	2	3	4	5	6	7
6	Medical excellence is top management objective (through an increasing publish articles in journals, scientific conferences, and scientific awards)	1	2	3	4	5	6	7
Financial perspective								
1	Hospital top management gets an increase in the funding rate from time to time.	1	2	3	4	5	6	7
2	Investment in human resources is a priority of hospital top management.	1	2	3	4	5	6	7
3	Hospital top management encourages medical staff to get annual grants.	1	2	3	4	5	6	7
4	Hospital top management encourages to more efficient and effective use of financial resources.	1	2	3	4	5	6	7
Power distance								
1	In our hospital, subordinates are afraid to express disagreement with their superior.	1	2	3	4	5	6	7
2	In our hospital supervisor usually makes decisions on his/her own and then expects the decisions to be carried out loyally and without raising difficulties	1	2	3	4	5	6	7
3	In our hospital supervisor usually makes decisions on his/her own but before going ahead explains	1	2	3	4	5	6	7

	the reasons for the decisions and answers any questions.							
4	I prefer to work for any type of supervisor expect for one who asks me for advice and then announces his/her decision and expects me to loyally implement the decision whether or not it was in accordance with the advice I gave.	1	2	3	4	5	6	7
Uncertainty avoidance								
1	In our hospital, it is very important to follow organizational rules even if I think it is in the organization's best interests if I break the rules.	1	2	3	4	5	6	7
2	It is important for me to work in a well-designed job situation where the responsibilities and requirements are clear.	1	2	3	4	5	6	7
3	It is very important for me to have long term security of employment.	1	2	3	4	5	6	7
4	It is very important for me to have little tension and stress on the job.	1	2	3	4	5	6	7