



**UNIVERSITI PUTRA MALAYSIA**

**THE EFFECT OF ORGANIZATIONAL  
CONTEXT ON QUALITY MANAGEMENT IN SMALL  
AND MEDIUM SCALE ENTERPRISES OF PAKISTAN**

**ABDUL NAVEED TARIQ**

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**By**

**ABDUL NAVEED TARIQ**

**Thesis Submitted in Fulfilment of the Requirement for the Degree of  
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**May 2002**



***DEDICATING THE FRUITS OF THIS STUDY  
TO MY BELOVED PARENTS, BROTHER AND SISTER  
WHOM I MISSED SO MUCH  
DURING THIS STAY  
AWAY FROM THEM***



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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**Chairman: Professor Mohd. Zain Mohamed, Ph.D.**

**Graduate School of Management**

Most of the literature available on quality management (QM) and ISO 9000 in Pakistan is in the form of case studies, conceptual papers, descriptions and prescriptions. The main focus of the study was to identify critical factors for effective implementation of Total Quality Management (TQM) and ISO 9000 certification, so that by managing these critical factors of QM, SMEs of Pakistan could flourish in a competitive world market. This research was an empirical attempt to investigate the relationship between organisational quality context (OQC) and level of quality management (LQM), using data from 94 Small and Medium Scale Enterprises (SMEs). Sample constituted 32 sports, 31 leather, and 30 surgical SMEs while one enterprise was involved in both sports and leather goods manufacturing.

The Chronbach's coefficient alpha and confirmatory factor analysis (CFA) were used to measure the internal consistency, reliability, and validity of the six main



constructs of the measuring instrument. Descriptive statistics and Pearson-coefficient of correlation gave a feel of the data that further helped to examine the current status of the SMEs towards their OQC.

The results indicated that the entrepreneurs were not well aware of the basic concepts of QM and ISO 9000 certifications. Similarly, it was found that the financial position of the SMEs was not good, however, the entrepreneurs were supportive to get ISO 9000 certification for their enterprises despite their poor financial position. Furthermore, descriptive statistics indicated that entrepreneur's perceptions towards the government assistance program (GOVT) to overcome financial constraints (GOVTF) and to increase awareness about QM and ISO 9000 certification (GOVTA) among the SMEs of Pakistan were very poor. Data were further analysed using structural equation modelling (SEM), multiple regression analysis and one-way analysis of variance (ANOVA) techniques. Using SEM, four competing models were developed based on the theoretical framework. Comparison of these competing models illustrated that management commitment (COM) was the most important factor affecting LQM in SMEs which was also supported by the findings from the multiple regression analysis, while COM was significantly affected by the financial position of the SMEs (FINAN) and GOVT. Results of one-way ANOVA indicated that the age of the SMEs and the process of ISO 9000 certification were the two significant factors affecting LQM. In other words the older the firm higher the LQM. Similarly, the SMEs at the advance stages of getting ISO 9000 certification were having better LQM as compared to those with no certification or those at initial stages of the process of certification.

Overall findings revealed that OQC had a significant impact on LQM in SMEs. Research presented the outcomes in the form of an implementation framework, constructed through the use of practical guidelines, the key steps of which have been validated and supported empirically. This empirical study suggested that knowledge of OQC is useful for explaining and predicting quality management practices (QMPs). This study is the first empirical attempt at studying QM in SMEs (leather, sports and surgical) of Pakistan and would be a step further in synthesising the theory of QM and also a good contribution to the existing literature on QM and ISO 9000 certification in SMEs of developing economies.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

**KESAN KNOTEK ORGANISASI KE ATAS PENGURUSAN KUALITI  
DALAM INDUSTRI KECIL DAN SEDERHANA DI PAKISTAN**

Oleh

**ABDUL NAVEED TARIQ**

**May 2002**

**Pengerusi : Profesor Mohd. Zain Mohamed, Ph. D.**

**Sekolah Pengajian Siswazah Pengurusan**

Kebanyakan bahan literatur yang ada mengenai pengurusan kualiti (QM) dan ISO 9000 di Pakistan adalah dalam bentuk kajian kes, kertas berdasarkan konsep, huraian dan preskripsi. Fokus utama kajian ini adalah untuk mengenalpasti faktor-faktor kritikal bagi melaksana Pengurusan Kualiti Total (TQM) dan pensijilan ISO 9000 dengan berkesan dengan mengenalpasti faktor-faktor pengurusan kualiti (QM) agar Perusahaan Kecil dan Sederhana (SMEs) Pakistan boleh berjaya dan berkembang maju dalam pasaran dunia yang kompetitif. Penyelidikan ini adalah satu usaha empirik untuk mengkaji perhubungan antara konteks kualiti organisasi (OQC) dan peringkat pengurusan kualiti (LQM) menggunakan data dari 94 SMEs. Sampel terdiri dari 32 SMEs dari sub-sektor barangan sukan, 32 SMEs dari sub-sektor barangan kulit dan 30 SMEs dari sub-sektor peralatan pembedahan atau surgery, manakala satu perusahaan melibatkan kedua-dua sub-sektor pengeluaran barangan sukan dan kulit.

Alfa koefisien Chronbach serta faktor analisis kepastian (CFA) telah digunakan untuk mengukur konsistensi dalaman, realibiliti dan kesahan enam konstruk yang terdapat dalam alat pengukuran. Statistik deskriptif dan koefisien korelasi-Pearson telah memberi gambaran awal terhadap data yang kemudiannya membantu dalam pemeriksaan status semasa SMEs ke arah konteks kualiti organisasi (OQC).

Hasil kajian menunjukkan bahawa usahawan-usahawan tidak menyedari tentang konsep asas QM dan pensijilan ISO 9000. Didapati bahawa kedudukan kewangan SMEs adalah tidak begitu baik. Walau bagaimanapun, usahawan-usahawan tersebut bersedia membantu perusahaan mereka untuk mendapatkan pensijilan ISO 9000 walaupun kedudukan kewangan perusahaan mereka lemah. Malah, statistik deskriptif menunjukkan bahawa persepsi usahawan-usahawan terhadap program bantuan kerajaan (GOVT) untuk mengatasi masalah kewangan yang terdesak (GOVTF) dan untuk meningkatkan pengetahuan mereka terhadap program-program kesedaran kerajaan (GOVTA) di kalangan SMEs Pakistan adalah sangat lemah. Data seterusnya telah dianalisis menggunakan pemodelan persamaan berstruktur (SEM), analisis regresi pelbagai dan teknik-teknik analisis varians sehala (ANOVA). Dengan menggunakan SEM, empat model bersaing telah dibina berdasarkan rangka kerja teoretikal. Perbandingan model bersaing ini menunjukkan bahawa komitmen pengurusan (COM) adalah faktor yang paling penting mempengaruhi LQM dalam SMEs yang juga disokong oleh hasil yang didapati dari analisis regresi pelbagai. Manakala komitmen pengurusan dipengaruhi secara signifikan oleh kedudukan kewangan SMEs (FINAN) dan program bantuan kerajaan (GOVT). Hasil ANOVA sehala menunjukkan bahawa umur SMEs dan proses



pensijilan ISO 9000 adalah dua faktor nyata yang mempengaruhi LQM. Dengan kata lain, lebih lama sesuatu firma itu beroperasi, lebih tinggi LQMnya. Begitu juga dengan SMEs yang berada di peringkat yang lebih ke hadapan dalam proses mendapatkan pensijilan ISO 9000 mempunyai LQM yang lebih baik berbanding dengan SMEs tanpa pensijilan atau yang hanya berada pada peringkat awal dalam proses pensijilan.

Keseluruhan hasil penyiasatan mendedahkan bahawa terdapat suatu kesan OQC yang signifikan pada LQM dalam SMEs. Penyelidikan telah mengemukakan hasil dalam bentuk rangka kerja pelaksanaan, yang dibina melalui garis panduan praktikal dan langkah-langkah utama yang mana telah disahkan dan disokong secara empirik. Kajian ini mencadangkan bahawa pengetahuan OQC adalah berguna bagi menjelaskan dan menjangka amalan-amalan pengurusan kualiti di dalam organisasi. Kajian ini merupakan penyelidikan empirik yang pertama yang cuba mengkaji QM di kalangan SMEs (dari sektor barangan atau peralatan kulit, sukan dan surgeri) di Pakistan. Ianya merupakan satu langkah ke hadapan untuk mensintesis teori QM dan ianya telah dapat memberi sumbangan yang berguna kepada literatur yang berkaitan dengan QM dan pensijilan ISO 9000 di kalangan SMEs daripada negara-negara membangun. Secara ringkas, kajian ini mengandungi kedua-dua perspektif penyelidikan iaitu dari segi teori dan amalan.

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I certify that an Examination Committee met on 20<sup>th</sup> May 2002 to conduct the final examination of Graduate Student on his Doctor of Philosophy thesis entitled “The Effect of Organisational Context on Quality Management in SMEs of Pakistan” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:


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## DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or any other institutions.

Yariq  
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Date: June 18, 2022

## TABLE OF CONTENTS

		Page
DEDICATION		ii
ABSTRACT		iii
ABSTRAK		vi
ACKNOWLEDGEMENTS		ix
APPROVAL SHEETS		xii
DECLARATION FORM		xiv
LIST OF TABLES		xx
LIST OF FIGURES		xxii
LIST OF ABBREVIATIONS		xxiv
<b>CHAPTER</b>		
1	<b>INTRODUCTION</b>	1.1
	1.1 Introduction .....	1.1
	1.2 Background of the Study .....	1.2
	1.2.1 Theoretical Perspective .....	1.2
	1.2.2 Applied Perspective .....	1.5
	1.2.2.1 Quality as a Competitive Strategy .....	1.5
	1.2.2.2 Quality Culture and Quality Context .....	1.6
	1.2.2.3 Industrial Culture in Pakistan .....	1.9
	1.2.2.4 The Cost of Quality .....	1.11
	1.2.2.5 Quality Costs in Pakistan .....	1.12
	1.2.2.6 Lower Quality of Products .....	1.13
	1.2.2.7 Importance of ISO 9000 .....	1.14
	1.3 Importance of National Quality Awards (NQAs).....	1.18
	1.4 Importance of SMEs in Pakistan .....	1.22
	1.4.1 Research Definition of SMEs .....	1.24
	1.4.2 Importance of Leather, Sports and Surgical Goods Industry .....	1.28
	1.5 Current Situation of SMEs by SWOT Analysis .....	1.33
	1.5.1 Potential Strengths .....	1.33
	1.5.2 Potential Weaknesses .....	1.34
	1.5.3 Potential Opportunities .....	1.37
	1.5.4 Potential Threats .....	1.38
	1.6 Statement of the Problem .....	1.39
	1.7 Objectives of the Study .....	1.41
	1.8 Significance of the Study .....	1.42
	1.9 Organisation of the Thesis .....	1.44
	1.10 Chapter Summary .....	1.45
2	<b>LITERATURE REVIEW</b>	2.1
	2.1 Introduction .....	2.1
	2.2 Quality Management Practices (QMPs)	2.2





2.2.1	Management Commitment .....	2.2
2.2.2	Customer Focus .....	2.3
2.2.3	Benchmarking .....	2.4
2.2.4	Quality of Incoming Material .....	2.4
2.2.5	Design Quality Management .....	2.5
2.2.6	Statistical Process Control (SPC) .....	2.6
2.2.7	Effective Use of Information .....	2.6
2.2.8	Human Resource Management .....	2.7
2.2.8.1	Employee Empowerment .....	2.7
2.2.8.2	Employee Involvement .....	2.8
2.2.8.3	Employee Training .....	2.8
2.3	Level of Quality Management (LQM) .....	2.11
2.3.1	The Saraph, Benson and Schroeder (SBS) Instrument .....	2.11
2.3.2	The Flynn, Schroeder and Sakakibara (FSS) Instrument .....	2.12
2.3.3	The Ahire, Golhar and Waller (AGW) Instrument .....	2.13
2.3.4	Comparison .....	2.14
2.4	Organisational Quality Context (OQC) .....	2.15
2.4.1	Internal Factors .....	2.16
2.4.1.1	Management Commitment .....	2.16
2.4.1.2	Financial Position .....	2.18
2.4.1.3	Management Awareness .....	2.23
2.4.2	External Factors .....	2.27
2.4.2.1	Competition .....	2.28
2.4.2.2	Government Assistance Program .....	2.33
2.5	Quality Management (QM) Studies in SMEs in Developing Economies.....	2.40
2.6	Quality Management (QM) and its Relationship with Organisational Quality Context (OQC) .....	2.42
2.7	Gaps in the Literature .....	2.44
2.7.1	Lack of Empirical Research .....	2.45
2.7.2	Lack of Research in Developing Economies .....	2.46
2.7.3	Pakistan as a Focus of Research .....	2.47
2.8	Chapter Summary .....	2.47
3	<b>THEORETICAL FRAMEWORK</b> .....	3.1
3.1	Introduction .....	3.1
3.2	Quality Management Philosophies .....	3.2
3.2.1	The Deming Philosophy .....	3.2
3.2.2	The Juran Philosophy .....	3.3
3.2.3	The Crosby Philosophy .....	3.4
3.2.4	Other Quality Management Philosophers .....	3.4
3.2.4.1	A.V. Feigenbaum .....	3.4
3.2.4.2	Kaoru Ishikawa .....	3.5
3.2.4.3	Leonard and Sasser .....	3.5
3.3	Some Important QM-Related Studies .....	3.6
3.4	Development of Model .....	3.8
3.4.1	Background .....	3.8



	3.4.2 A System-Structural View of Quality Management ....	3.9
	3.4.3 Model Used by Benson, Saraph and Schroeder (1991) .....	3.11
	3.5 Organisational Quality Context (OQC) .....	3.13
	3.5.1 Proposed Main Quality Contextual Variables .....	3.13
	3.5.2 Classification-Type Quality Contextual Variables ....	3.21
	3.6 Proposed Model for SMEs in Context of Pakistan .....	3.23
	3.7 Relationships and Hypotheses .....	3.26
	3.7.1 Management Commitment .....	3.26
	3.7.2 Financial Position .....	3.27
	3.7.3 Competition .....	3.29
	3.7.4 Management Awareness .....	3.30
	3.7.5 Government Assistance Program .....	3.31
	3.8 Chapter Summary .....	3.33
4	<b>RESEARCH METHODOLOGY</b>	4.1
	4.1 Introduction .....	4.1
	4.2 Research Design .....	4.2
	4.2.1 Population .....	4.3
	4.2.2 Unit of Analysis .....	4.3
	4.2.3 Population Frame .....	4.4
	4.2.4 Sampling Frame .....	4.5
	4.2.5 Sampling Design .....	4.5
	4.3 Questionnaire Design and Administration .....	4.6
	4.3.1 Determine the Information Required .....	4.6
	4.3.2 Determine the Survey Method .....	4.7
	4.3.3 Operational Definitions .....	4.9
	4.3.3.1 For Demographic Information .....	4.12
	4.3.3.2 For Independent Variables .....	4.13
	4.3.3.3 For Dependent Variable .....	4.13
	4.3.4 Reliability and Validity of the Questionnaire .....	4.14
	4.3.4.1 Reliability .....	4.14
	4.3.4.2 Validity .....	4.14
	4.4 Data Analysis Strategy .....	4.16
	4.4.1 Data Editing .....	4.16
	4.4.2 Handling Blank Responses .....	4.17
	4.4.3 Data Coding .....	4.17
	4.4.5 Categorisation .....	4.17
	4.4.5 Data Entry .....	4.18
	4.4.6 Data Analysis Techniques .....	4.18
	4.5 Chapter Summary .....	4.20
5	<b>RESULTS AND DISCUSSION</b>	5.1
	5.1 Introduction .....	5.1
	5.2 Preliminary Examination of the Data .....	5.2
	5.2.1 Data Cleaning and Screening .....	5.2
	5.2.1.1 Accuracy of the Data .....	5.2



5.2.1.2 Outliers .....	5.2
5.2.1.3 Normality .....	5.4
5.2.2 Respondent Profile .....	5.5
5.2.3 Current Status of Organisational Quality Context (OQC) and LQM in SMEs .....	5.9
5.2.4 Correlation .....	5.11
5.3 Testing of Hypotheses .....	5.14
5.4 Multiple Regression Analysis .....	5.14
5.4.1 Model Summary of Step-wise Multiple Regression Analysis .....	5.15
5.4.2 Most Important Factors affecting LQM in SMEs .....	5.16
5.5 Analysis of Variance (ANOVA) .....	5.17
5.5.1 Relationship between Age of the Company and LQM .....	5.18
5.5.2 Relationship between Company Size and LQM .....	5.20
5.5.3 Relationship between Type of Industry and LQM .....	5.23
5.5.4 Relationship between Manager Type and LQM .....	5.26
5.5.5 Relationship between ISO 9000 Certification in SMEs and LQM .....	5.27
5.6 Structural Equation Modelling (SEM) .....	5.30
5.6.1 Stage One: Model Conceptualisation .....	5.31
5.6.1.1 Structural Model .....	5.32
5.6.1.2 Model Specification .....	5.32
5.6.2 Stage Two: Model Estimation .....	5.33
5.6.2.1 Nature of the Data .....	5.33
5.6.2.2 Size of the Sample .....	5.33
5.6.2.3 Input Data .....	5.34
5.6.2.4 One or Two Stage Estimation Approach .....	5.34
5.6.2.5 Model Identification .....	5.35
5.6.2.6 Measurement Model Estimation .....	5.36
5.6.2.7 Details of Measurement Model Evaluation .....	5.37
5.6.3 Stage Three: Testing the Measurement Model Fit .....	5.44
5.6.3.1 Measurement Model for Government Assistance Program (GOVT) .....	5.45
5.6.3.2 Measurement Model for Competition (COMP) .....	5.46
5.6.3.3 Measurement Model for Management Awareness (AWARE) .....	5.47
5.6.3.4 Measurement Model for Financial Position (FINAN) .....	5.48
5.6.3.5 Measurement Model for Management Commitment (COM) .....	5.49
5.6.3.6 Measurement Model for Level of Quality Management (LQM) .....	5.51
5.6.4 Stage Four: Structural Model Evaluation .....	5.52
5.6.4.1 Proposed Model (5 Factor Model) .....	5.53
5.6.4.2 First Competing Model (4a-Model) .....	5.55
5.6.4.3 Second Competing Model (4b-Model) .....	5.56
5.6.4.4 Third Competing Model (3 Factor Model) .....	5.58

	5.6.4.5 Summary of the Competing Models .....	5.59
	5.6.5 Stage Five: Modifications .....	5.60
	5.6.6 Summary of Hypotheses Testing .....	5.61
	5.7 Chapter Summary .....	5.63
6	CONCLUSION AND RECOMMENDATION	6.1
	6.1 Introduction .....	6.1
	6.2 Summary of Research Findings .....	6.2
	6.3 Problems and Issues in SMEs Development .....	6.7
	6.4 Final Proposed Model .....	6.9
	6.5 Policy Implications .....	6.10
	6.5.1 Managerial Implications .....	6.11
	6.5.2 Government Policy .....	6.12
	6.6 Quality Management Strategies in SMEs .....	6.15
	6.7 Limitations of the Study .....	6.22
	6.8 Future Research Suggestion .....	6.23
	6.9 Chapter Summary .....	6.25
	REFERENCES .....	R.1
	APPENDIX A .....	A.1
	APPENDIX B .....	B.1
	APPENDIX C .....	C.1
	APPENDIX D .....	D.1
	APPENDIX E .....	E.1
	APPENDIX F .....	F.1
	BIODATA OF THE AUTHOR .....	H.1



## LIST OF TABLES

<b>TABLE</b>		<b>PAGE</b>
1.1	Estimated Quality Costs in Pakistan .....	1.13
1.2	Direction of Trade (1997-99) .....	1.17
1.3	Table 1.3: Definition of SMEs in India .....	1.25
1.4	Definition of SMEs in the USA .....	1.25
1.5	Definition of SMEs in Japan .....	1.26
1.6	Definition of SMEs in Malaysia .....	1.26
1.7	Definition of SMEs in Pakistan .....	1.27
1.8	Pakistan's Major Exports (% Share in Total Exports) .....	1.30
2.1	Summary of Literature Review on Best Quality Management Practices .....	2.9
4.1	Operationalisation of the Variables .....	4.10
5.1	Respondent Profile .....	5.7
5.2	List of the Labels to Constructs/Variables .....	5.8
5.3	Current Status of OQC and LQM in SMEs of Pakistan .....	5.10
5.4	Correlation Matrix .....	5.13
5.5	Model Summary .....	5.15
5.6	ANOVA <sup>c</sup> .....	5.16
5.7	Regression Coefficients .....	5.17
5.8	ANOVA-Difference in LQM in Different Age Classes of the SMEs .....	5.18
5.9	ANOVA-Difference in LQM in Size Distribution of SMEs .....	5.21
5.10	ANOVA-Difference in LQM among Leather, Sports and Surgical Sectors .....	5.24
5.11	ANOVA-Difference in LQM with Manager's Type .....	5.27
5.12	ANOVA-Difference in LQM in Different Phases of ISO 9000 Certification .....	5.28
5.13	Stages in SEM Applied in this Research .....	5.31
5.14	Fit Indices, Reliability and Regression Weights .....	5.39
5.15	Goodness-of-fit statistics for the CFA model of GOVT .....	5.45
5.16	Goodness-of-Fit Statistics for the CFA Model of COMP .....	5.47
5.17	Goodness-of-fit statistics for the CFA model of AWARE .....	5.48
5.18	Goodness-of-fit statistics for the CFA model of FINAN .....	5.49
5.19	Goodness-of-fit statistics for the CFA model of COM .....	5.50
5.20	Goodness-of-fit statistics for the CFA model of LQM .....	5.52
5.21	Structural Model Equations for the Path Diagram .....	5.54
5.22	Structural Model Equations for the Path Diagram .....	5.55
5.23	Structural Model Equations for the Path Diagram .....	5.57
5.24	Structural Model Equations for the Path Diagram .....	5.58
5.25	Summary of the Competing Models .....	5.60
5.26	Summary of Hypotheses Testing .....	5.63
C.1	Results of Tukey's Test for Age of the Company and LQM.....	C.1
C.2	Results of LSD Test for Age of the Company and LQM.....	C.2
C.3	Results of Tukey's Test for ISO 900 Certification in SMEs and LQM .....	C.3



C.4	Results of LSD Test for ISO 900 Certification in SMEs and LQM...	C.4
D.1	Summary of Descriptive Statistics .....	D.1
D.2	Univariate Outliers with Z scores above $\pm 3.29$ .....	D.2
D.3	Mahalanobis Distance of Outliers for Proposed Model .....	D.3
D.4	Mahalanobis Distance of Outliers for 4a-Model .....	D.4
D.5	Mahalanobis Distance of Outliers for 4b-Model .....	D.5
D.6	Mahalanobis Distance of Outliers for Final Model .....	D.6
D.7	Summary of the Observed Variables of the Latent Construct: FINAN .....	D.7
D.8	Summary of the Observed Variables of the Latent Construct: COMP .....	D.8
D.9	Summary of the Observed Variables of the Latent Construct: AWARE .....	D.9
D.10	Summary of the Observed Variables of the Latent Construct: COM .....	D.10
D.11	Summary of the Observed Variables of the Latent Construct: GOVT .....	D.11
D.12	Summary of the Observed Variables of the Latent Construct: LQM .....	D.12



## LIST OF FIGURES

<b>FIGURE</b>		<b>PAGE</b>
1.1	Outline of Chapter One .....	1.1
1.2	An Organisation System.....	1.8
1.3	Pervasive Role of Quality .....	1.12
1.4	Outline of the Thesis .....	1.38
2.1	Outline of Chapter Two .....	2.1
3.1	Outline of Chapter Three .....	3.1
3.2	System-Structural View of Quality Management .....	3.10
3.3	The System-Structural View of Quality Management Modified to Reflect Aspects of Managerial Problem-Solving Process .....	3.12
3.4	Effect of Financial Position of SMEs on the Level of TQM Implementation Based on Alderfer's Model .....	3.15
3.5	Forces Driving Industry Competition .....	3.17
3.6	Modified System-structural View of Quality Management .....	3.23
3.7	Proposed Organisational Quality Context and its Relationship with level of Quality Management .....	3.26
3.8	Sub-model I Showing the Relationships between Variables, Management Awareness, Financial Constraints and Management Commitment .....	3.29
3.9	Sub-model II Showing the Relationships between Variables, Management Awareness, Financial Constraints and Government Assistance programmes .....	3.33
4.1	Outline of Chapter Four .....	4.1
4.2	Map of Pakistan .....	4.4
5.1	Outline of Chapter 5 .....	5.1
5.2	Age of the Company .....	5.18
5.3	Relationship between Age of the Company and LQM .....	5.19
5.4	Size Distribution of SMEs .....	5.20
5.5	Relationship between Company Size and LQM .....	5.22
5.6	Type of the Industry .....	5.23
5.7	Relationship between Type of Industry and LQM .....	5.25
5.8	Position of the Interviewee .....	5.26
5.9	Relationship between Manger Type and LQM .....	5.27
5.10	Number of certification in SMEs .....	5.28
5.11	Relationship between ISO 9000 Certification in SMEs and LQM .....	5.29
5.12	Proposed Model .....	5.53
5.13	4a Model .....	5.56
5.14	4b Factor .....	5.57
5.15	Competing Model Three (3 Factor) .....	5.59
6.1	Outline of Chapter Six .....	6.1
6.2	Final Proposed Model .....	6.9
E.1	Measurement Model for GOVT .....	E.4
E.2	Measurement Model for Competition (COMP) .....	E.8



E.3	Measurement Model for Management Awareness (AWARE)	E.12
E.4	Measurement Model for Financial Position (FINAN) .....	E.17
E.5	Measurement Model for Management Commitment (COM) ...	E.22
E.6	Measurement Model for Level of Quality Management (LQM) .....	E.26
F.1	Proposed Model .....	F.8
F.2	4a Model .....	F.15
F.3	4b Model .....	F.22
F.4	Final Model .....	F.28





## LIST OF ABBREVIATIONS

QMS	Quality Management System
QM	Quality Management
IQM	Integrated Quality Management
TQM	Total Quality Management
OQC	Organisational Quality Context
QMPs	Quality Management Practices
SPC	Statistical Process Control
TQ	Total Quality
SQC	Statistical Quality Control
PIQC	Pakistan Institute of Quality Control
SMEDA	Small and Medium Enterprises Development Authority
CFA	Confirmatory Factor Analysis
LQM	Level of Quality Management

