MODERATING EFFECT OF EXTERNAL ENVIRONMENT ON PERFORMANCE OF SMES IN PAKISTAN

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ABSTRACT

This study aimed to investigate the moderating effect of external environment (EE) on the relationships between Total Quality Management (TQM), Entrepreneurial Orientation (EO), Market orientation (MO) and performance (P). The study was greatly motivated by the inconsistent findings and the gaps indicated in the contemporary literature regarding those relationships. First there were contradictory findings between TQM and Performance, EO and Performance and MO and Performance relationships. Second, the three strategies; TQM, EO and MO were not investigated together within the context of Small and Medium Enterprises (SMEs), and third, in the relevant literature, many theories have emphasized the necessity to establish the fit between external environment and intended strategies as the key success factor. Therefore, this study integrated EE as an important moderating variable for the purpose of strategy implementation. Data were collected from SMEs operating in the Punjab Province, Pakistan by using questionnaire survey, and a random sampling was used for sample selection. 500 questionnaires were distributed to SME owner/managers but only 384 of them were returned, giving a response rate of 77 percent. However, only 367 useable questionnaires were used for further analysis. The high response rate was achieved due to the survey instrument being personally distributed and emailed by the researcher to the SMEs. The findings revealed that TQM and MO were significant predictors of performance, while EO was found insignificant to the performance. Meanwhile mixed results were found upon investigating the moderating effect of EE on the relationships between TQM, EO, MO and performance. The findings of this study provided significant insights for both managers and researchers to further understand the effects of implemented strategies on performance. Finally, limitations of study and necessary recommendations for future research were discussed.

Keywords: total quality management, entrepreneurial orientation, market orientation, external environment, performance.

ABSTRAK

Kajian ini bertujuan untuk meneliti kesan penyederhana persekitaran luaran (EE) ke atas hubungan-hubungan di antara Pengurusan Kualiti Menyeluruh (TQM), Orientasi Keusahawanan (EO), Orientasi Pasaran (MO) dan prestasi (P). Kajian ini dirangsangkan oleh penemuan-penemuan tidak konsisten serta jurang dalam literatur kontemporari berkaitan hubungan-hubungan tersebut. Pertama terdapat penemuan-penemuan bertentangan di antara hubungan-hubungan TQM dengan prestasi, EO dengan prestasi, dan MO dengan prestasi. Kedua, ketiga-tiga strategi TQM, EO dan MO tidak diteliti secara serentak dalam konteks Perusahaan Kecil dan Sederhana (PKS), dan ketiga, dalam literatur berkaitan banyak teori telah memberi penekanan kepada perlunya padanan diwujudkan di antara persekitaran luaran dengan strategi-strategi tertentu sebagai faktor utama kejayaan. Justeru, kajian ini telah mengintegrasikan EE sebagai variabel penyederhana penting untuk melaksanakan strategi berkenaan. Data dipungut daripada PKS yang beroperasi di Wilayah Punjab, Pakistan melalui tinjauan kaji selidik, dan persampelan rawak digunakan untuk pemilihan sampel. Sebanyak 500 borang soal selidik telah diedarkan kepada pemunya/pengurus PKS tetapi hanya 384 telah dikembalikan, memberikan kadar respons sebanyak 77 peratus. Bagaimanapun hanya 367 soal selidik boleh guna telah digunakan untuk analisis seterusnya. Kadar respons tinggi yang diperoleh adalah disebabkan penyelidik secara peribadi mengedar dan mengemelkan kepada PKS. Dapatan kajian menunjukkan TQM dan MO mempunyai hubungan signifikan dengan prestasi manakala EO tidak menunjukkan hubungan signifikan dengan prestasi. Selain itu dapatan bercampur-campur ditemui apabila meneliti kesan penyederhana persekitaran luaran (EE) ke atas hubungan-hubungan di antara TQM, EO dan MO dengan prestasi. Dapatan kajian ini telah menyediakan pemahaman signifikan kepada pengurus-pengurus dan penyelidik untuk memahami lebih lanjut kesan-kesan pelaksanaan strategi ke atas prestasi. Akhir sekali, limitasi kajian dan cadangan-cadangan untuk kajian akan datang telah dibincangkan.

Kata kunci: pengurusan kualiti menyeluruh, orientasi keusahawanan, orientasi pasaran, persekitaran luaran, prestasi.

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TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

EE	External Environment
EO	Entrepreneurial Orientation
FPCCI	Federation of Pakistan Chamber of Commerce and Industries
KMO	Kaiser-Meyer-Olkin
MBNQA	Malcolm Baldrige National Quality Award
MO	Market Orientation
P	Performance
RBV	Resource Based View
ROI	Return on Investment
SME	Small and Medium Enterprise
SPSS	Statistical Package for Social Science
SMEDA	Small and Medium Enterprise Development Authority
TQM	Total Quality Management
UNIDO	United Nations International Development Organization.
VIF	Variance Inflation Factor

LIST OF APPENDICES

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The globalization of economic activities in the 21st century had led to free flow of tangible and intangible resources among the countries in Asian continents and world at large (Lan & Wu, 2010). The vital role of SMEs (small and medium enterprises) cannot be denied in this competitive and challenging business world. Several researchers such as, Acs and Audretsch (1990) and Brock and Evans (1986) examined that SMEs have the capability to create employment opportunities and are initiator in innovation domain. In keeping with the above discussion, research conducted by Jutla, Bodorik and Dhaliwal (2002) observed the vital importance of SMEs and considered them as the impetus of economic growth in all countries.

History revealed that SMEs existed since time immemorial, even in the Holy Bible; there is an explanation about small scale trade, existed between individuals (Kongolo, 2010). It has been witnessed that most of the existing large organizations have their foundation and origin in small and medium enterprises (SMEs). Dana (1988) pointed out that SMEs lead to larger organizations and later into multinational companies. SMEs worldwide are considered as the engine of economic growth, as they play an important role in poverty alleviation through job creation and a breeding ground for entrepreneurs. Most of the developing countries have realized the extreme benefits from SMEs and significance of the SMEs towards productivity of the country (Jasra, Khan, Hunjra & Rehman, 2011). SMEs contribute to industrialization by developing and strengthening

the economies. The three main characteristics i.e. uncertainty, innovation and evolution make SMEs different from larger organizations (Jasra *et al*., 2011). Besides that, Advani (1997) also underlined that SMEs present a variety of benefits, SMEs due to their flexible structure, lower capital cost with job creation, have an edge over large organizations. In keeping with the above discussion, Aris (2007) explored that Taiwan, Korea, Malaysia and Thailand, significantly developed their economies by SMEs. Table 1.1 presents the significance of SMEs to the economies of different countries.

Table 1.1
Importance of SMEs to the National Economies of Different Countries

Country	**SMEs as percent of all enterprises**	**SME employees as percent of total employees population**
Hong Kong	98.0	60.0
Thailand	99.7	58.0
Philippines	99.6	70.0
Japan	98.9	69.2
Malaysia	96.1	45.0
Singapore	99.7	57.0
Taiwan	97.7	68.8

Source: White paper on small and medium enterprises in Taiwan (2006). Adopted from (Jasra *et al*., 2011)

Moreover, Liedholm and Mead (1987); Schmitz (1995) and Habaradas (2008) highlighted that SMEs play critical role in the countryside to provide income stability, generate employment, serving as suppliers to provide support services for large enterprises and motivating entrepreneurial skills among the people, thus contribute to national economic growth. Consistent with the discussion above, Islam, Khan, Obaidullah and Alam (2011) evaluated that the role of the SME sector is directly related with the growth and development of a nation. On the other hand, Demirbag, Tatoglu,

Tekinus and Zaim (2006) evaluated that SME's contribution has a significant affect on the economic growth in both the developing and developed countries.

Pakistan is a developing country with emerging economy. Rohra, Junejo and Kanasro (2009) stated that 90 percent enterprises are SMEs in Pakistan. According to Federal Bureau of Statistics (2000, 2003, 2004) and SMEDA (2006) geographically there are 65 percent SMEs in the Punjab province, 18 percent present in Sindh province, whereas 14 percent SMEs are in Khyber Pakhtunkhwa and 3 percent are in Balochistan province and Islamabad. There are 53 percent SMEs lie in the category of wholesale, retail, restaurants and hotels,while 22 percent are social and personal services and 20 percent SMEs are manufacturers (Dasanayaka, 2011).

Technical definition of SMEs varies from country to country and amongst different organizations. SMEs have been defined by various institutions in Pakistan in a different manner. According to Small and Medium Enterprise Development Authority (SMEDA) Pakistan, SME is identified as a business that employs a maximum of 250 employees or with a paid up capital of 25 million PK Rupees (247807 USD) or with an annual sale of up to 250 million PK Rupees (2478070 USD) (SMEDA, 2010). Small firms are defined as those having an employee size of less than 35 people while medium size firms are those with 36-250 employees (SMEDA, 2010). Firms with more than 250 employees are considered as large firms in Pakistan (Ndubisi & Iftikhar, 2012).

As stated by Jasra *et al.*,*(*2011) the Government of Pakistan has been trying to develop SME sector in Pakistan so that economy can grow faster, but it needs further improvement by the focused and rigorous research of the scholars and entrepreneurs to

develop and support the business activities. The study of Bhutta, Khan, Omar and Asad (2009) pointed that SMEs play important role to generate employment and economic growth in Pakistan. In a similar vein, Seth (2010) identified that the vital and innovative traits of SMEs dominate the industrial scene, thus contributing positively to Pakistan's economic development and growth. In line with the above discussion, Anwar, Saleem and Zahid (2012) noted that role of SMEs in Pakistan is important in almost all the economic sectors i.e. from manufacturing to services and from trade to agriculture.

Moreover, several other researchers such as Khawaja (2006); Mustafa and Khan (2005) and Berry (1998) also explored the important and prospective role of SME sector in the economy of Pakistan. Husain (2005) highlighted the role of SMEs in generating and enhancing the exports sector and the impediments faced by them in local and global market. In addition to that, Coy, Shipley, Omer and Khan (2007) explored that there are several factors and elements responsible to achieve business success in SMEs in Pakistan.

Due to ever increasing globalization and growing market challenges over the last one decade, many top management of SMEs have been motivated to improve their effectiveness and re-evaluate their business strategies and management practices to satisfy their customers by providing them with better and high quality of products and services. The very existence of any firm or enterprise is to create value for its products and services amongst the customers. Thus, satisfying the customer's needs and wants by providing them with quality goods and services can create competitive advantage for organizations (Eugenia, 2010). It was further mentioned that organizations should implement TQM, in order to survive and become competitive in the ever changing and

demanding business environment. Demirbag *et al*., (2006) identified that TQM is one of the most significant strategy for the success and growth of any organization. Successful organizations, as viewed by Reid and Sanders (2007) understand the dominant influence of quality demand of customers can have on business; therefore, many competitive firms constantly strive to enhance and improve the quality standards of their goods and services. Unprecedented challenges have become more intense in today's globalized economy. The organizations that provide quality products, focus on cost reduction, emphasize on increased customer satisfaction can survive and prosper well and can exceed the other organizations (Ross, 1994).

Reid and Sanders (2007) explored that if organizations are unable to consider the quality demand of customers, the customers will be discontented and losing customers mean creating opportunities for competitors to seize benefit of the market demands. Hence, serious and consolidated attention and priority should be given to quality, to please and satisfy customer's needs and wants. Reid and Sanders (2007) stated that quality means to fulfil customer's current and latent requirements through an integrated effort by involving and participating everyone in the organization. This integrated and coordinated effort is named as Total quality management (Chettiar & Fallah, 2011). TQM is a management philosophy, utilized to improve organization performance.

TQM as a basis to create competitive edge over the competitor has been widely acknowledged strategy worldwide (Dean & Bowen, 1994). Consistent with the above argument, Escrig-Tena (2004) noted that TQM is the most highly developed and universally acknowledged strategy in the quality domain. The most important goal of TQM is to create a corporate culture and management system for an organized

continuous improvement of organizational processes, to produce superior products and services (Waldman, 1994; Cook & Verma, 2002).

In recent years, researchers acknowledge the significance of strategic orientations to improve the performance of organizations. Study conducted by Wiklund (1999) and Zahra and Covin (1995) showed a strong relationship amid entrepreneurial orientation (EO) and organizational performance. Most developing and developed countries have realized that supporting entrepreneurial activities of SMEs is a way out to national economic development and growth**.** According to Nooteboom (1994) and Vossen (1998) SMEs in general face substantial resource constraints but as observed by Ndubisi, Gupta and Ndubisi (2005) they often exhibit successful entrepreneurial characteristics because SMEs are more agile, flexible and proactive and risk keen than larger organizations. SMEs being more nimbler have an additional opportunity to attract niche markets by introducing innovative products and services; and can benefit from the introduction of innovative products, services and processes (Porter, 1980).

Consistent with the above, Zahra and Covin (1995) and Wiklund (1999) found that there is a strong and important link amid entrepreneurial orientation (EO) and firm's performance. Several studies have concluded that enterprises with EO and follow TQM strategy are more willing to update their products and services and experiment with new manufacturing methods to be innovative and competitive (Al-Swidi & Mahmood, 2012). The authors suggested that entrepreneurial orientation and total quality management (TQM) are key factors in determining the growth and success of a firm both at local and global level.

The recent strategic management literatures have highlighted the rising and convergence of TQM and market orientation (MO) as strategic practices based on common goal to satisfy the customers through quality products and services (Gummesson, 1998; Mohr-Jackson, 1998; Day, 1994; Webster, 1988, 1994; Kotler, 1977). In a similar vein, Mohr-Jackson (1998) stated that TQM and MO are complementary strategies for enhancing performance. Gummesson (1998) noted that TQM is internally focused quality management strategy while marketing orientation is mainly externally driven strategy.

Both Total quality management and market orientation are meant to improve the performance of a firm. Study of extant literature showed that TQM and MO as important business orientations are joined and integrated together in order to attain customer satisfaction (Mohr-Jackson, 1998; Gummesson, 1994, 1998; Webster, 1988, 1994; Day, 1994; Kotler, 1977). Market orientation emanates from marketing concept and is embedded in RBV theory to achieve competitive advantage for the firm (Kohli & Jaworski, 1990; Webster, 1994).

In a similar vein, Webster (1994) further underlined that TQM and MO seek to deliver competitive advantage by utilizing quality management principles guided by market factors. Both TQM and MO constructs complement each other by explicitly focusing on customer satisfaction. Moreover, research conducted by Jaworski and Kohli (1993) and Han, Kim and Srivasta (1998) revealed a significant link amid MO and performance of a firm.

Over the past few years, stream of research highlighted the significance of strategic orientations. To grow and sustain profitability in competitive and dynamic market

environment with demanding customers, it is therefore necessary that firms of all sizes and nature are required to acquire different strategic orientations. Osman, Rashid, Ahmad and Hussain (2011) underlined the significance of acquiring EO and MO to rejuvenate firm's performance Market orientation when combined with entrepreneurial orientation (EO) provides the cultural foundation to improve performance of a firm (Slater & Narver, 1995). According to their findings, EO explains the firm involvement in proactive and innovative strategies by taking risk and is associated positively to firm performance, whereas, MO focuses on customers and competitors and it also affects firm performance. Extant literature advocated that EO aligned with MO revive performance of SMEs, as both improve the business competitive ability to innovate and respond proactively to customers and market demands which results in competitive performance (Osman *et al*., 2011).

The success of entrepreneurial orientation emerges when SMEs nurture innovative and novel thinking to shape the basic elements of firm's strategic marketing to improve the business competitive ability (McGrath & MacMillan, 2000; Wiklund & Shepherd, 2003). EO results in improving the firm's ability to be competitive, innovative and proactive to respond to customer's demands thereby increasing business growth and profitability (Osman *et al*., 2011). According to study conducted by Kaplan and Norton (2000) globally 70 to 90 percent firms are unsuccessful in implementing the organization strategies. In addition to that, some researchers have suggested that some organizational variables should be incorporated to resolve the inconclusive results and to better explain the relationship between different organization strategies and performance of a firm (Douglas & Judge, 2001; Ehigie & McAndrew, 2005; Wiklund & Shepherd, 2005).

Moreover, Lumpkin and Dess (1996) argued that some external and internal factors as moderator also affect on the relationship amid different strategies and performance of a firm. In the same line, Zahra and Covin (1995) suggested the internal factors such as organizational structure and culture while external factors, for instance the industry, the life cycle stage of a product or market and governmental regulation, can be possible internal and external moderators and factors impacting the organizational strategies-performance relationship. Besides that, several researchers i.e. Li and Atuahene-Gima (2001); Zahra and Bogner (1999) and Dess and Beard (1984) also recommended that external environment moderate the association between strategy and performance of a firm.

The above discussion provided the motivation to examine the moderating effect of external environment on the relationship amid TQM, EO, MO and performance of small and medium enterprises (SMEs) in the province of Punjab, Pakistan. Punjab is chosen to conduct study, as about 65 percent SMEs are located in this province, representing a diverse culture and a hub of economically competitive business environment (Dasanyaka, 2011).

1.2 Problem Statement

The South Asian region as highlighted by Dasanayaka (2011) is the hub of small and medium businesses for centuries. SMEs are considered as the life and blood to the growth of economy and their vital role cannot be excluded in any developed or developing countries (Marri, Gunasekaran & Sohag, 2007). SMEs are capable to offer more growth and progress opportunities than the large industrial sector to the world

economy (Burli, Kottursheттar & Kalghatgi, 2011). Moreover, SMEs generate employment opportunities more promptly than the larger organizations .The significance of SMEs can be understood from the fact that the novel and proactive SMEs sector in Thailand were the rationale reason behind the country's survival during the Asian economic crunch (Ussahawanitchakit, 2007).

Despite of the significance importance of SMEs, Mahmood and Hanafi (2013) identified that SMEs in many countries exhibit low level of performance due to technological constraint, short of skilled human resource, weak entrepreneurial capabilities and management systems, dearth of proper and timely information, inadequate use of IT and poor quality products.

Pakistan is one of the growing developing countries. To share its potential and value into the mainstream, concrete and consolidated efforts have to be done so that it could come in the list of developed countries (Marri *et al.*, 2007). Economy of Pakistan is mainly comprised of SMEs, approximately 3.2 million enterprises can be classified as small and medium enterprises (SMEDA policy, 2007).

Most of the SMEs in Pakistan work along conventional and traditional lines. Due to intense global competition the state of SMEs in Pakistan is at their troubling stage (Khalique, Isa & Shaari, 2011). Kureshi, Qureshi and Sajid (2010) highlighted that there is a direct link amid the performance of SME sector and overall growth and success of economy but dismal performance of Pakistani SMEs is one of the most important reason of gloomy and depressing performance of country's economy. In addition to that, the authors also argued that being primary suppliers to large

manufacturing and exporting firms, small and medium enterprises can play a considerable role in the overall economic growth and development of any country.

Batool and Zulfiqar (2011) highlighted that there is plethora of research work done by different researchers such as Nishat (2000); Khan and Burki (2000); Bari, Cheema and Haque (2002); Holmes (2005); Khawaja (2006); Saleem (2008) and Halkos and Tzermes (2010) who studied different factors affecting the performance of SMEs. It was explored that improper policies, insignificant support from the government, energy crisis, insufficient managerial and technological skills, non existence of proper linkages between SMEs and large firms are the causes of low productivity and non-competitiveness of SMEs.

Khattak, Arslan and Umair (2011) highlighted that significant role of SMEs sector in the economy is not acknowledged in Pakistan; hence, this adversely affected the SMEs as well as economy of Pakistan. Further, as evaluated by Batool and Zulfiqar (2011) SMEs are discriminated in terms of financial support since larger organizations receive more of the financial assistance. Batool and Zulfiqar (2011) suggested that Pakistani Government and industry need to develop a broad based analysis of the factors to make SME sector more competitive. Besides that, the virtual non-existence of scientific data on SME sector in the country is one of the major problem and frustration for most of the researchers and policy makers. SMEs not only have to struggle and compete among themselves but also with other larger firms, therefore they need to adopt those business strategies which support them to sustain and be competitive (Kassim, Md-Mansur & Idris, 2003).

Few researchers i.e. Moosa (1999); Awan and Bhatti (2003) and Fatima and Ahmed (2005, 2006a, 2006b) have reported that most of the SMEs adhere to minimum quality standards, thus there is no assurance for the quality of their products. Therefore, there is a dire need to develop a better and greater understanding about quality practices in Pakistani SMEs. SME sector is crucial for the economic growth and progress of any country. Taking into account the remarkable contribution of SMEs in industrial development, this sector has been selected so that some reasonable and plausible solutions could be recommended to enhance the performance of SME sector and to develop the economy of Pakistan.

In the current highly competitive scenario of global economy business environment has become more dynamic, it is significant for managers to make every effort to improve and increase organizational success by identifying those organizational strategies which linked to performance (Razghandi, Hashim & Mohammadi, 2012). But the question is, for long-term business growth and profitability, what strategic orientations are important especially in the context of emerging economies like Pakistan where 90 percent of enterprises are SMEs.

There is a potential link amid TQM and performance of SMEs, but there is insufficient literature written in this context (Demirbag *et al*., 2006; Sila, 2007). Besides that, most of the previous studies examining the effect of TQM on performance of the small and medium enterprises were conducted in Europe and USA (Rahman, 2001; Petroni, 2002; Seth & Tripathi, 2005; Demirbag *et al*., 2006; Sila, 2007). As discussed by Khalid, Irshad and Mahmood (2011) there have been arguments presented by different authors regarding the success and failure associated with implementation of TQM in SMEs.

Several researchers i.e. Phillips, Chang and Buzzell (1983); Cole (1992) and Zhang (2000) have underlined the strategic benefits of TQM and better quality contributes to lower manufacturing costs, greater market share and improved performance. McMahon (2001) stated that although SMEs tend to be creative, proactive and innovative, they generally lag behind larger organizations when it comes to implement TQM. As a result of the lack of attention to quality practices most of the small and medium enterprises loose between 5 percent - 15 percent of their sales revenue (McMahon, 2001). Study conducted by Khattak *et al*., (2011) highlighted that it is critical for Pakistani SMEs to implement TQM to better survive both locally and internationally.

According to O'Regan, Ghobadian and Sims (2006) the last two decades have witnessed intense competition in the global market due to increasingly complex and dynamic business environment. Nasution, Mavondo, Matanda and Ndubisi (2011) observed that SMEs especially in developing countries ignored the understanding of key capabilities for example entrepreneurial orientation used to exploit superior performance and improve their competitive advantage. According to Covin and Slevin (1991) and Wiklund and Shepherd (2005) entrepreneurial orientation has been recognized as potentially beneficial, as it involves the willingness to innovate, try to take risks to develop new products, services and markets and act more proactively by exploring the new opportunities and successfully compete with the competitors.

Though there has been extensive work done on the relationship between entrepreneurial orientation and organization performance but the findings showed mixed results. Sharma and Dev (2012); Al-Swidi and Mahmood (2012); Covin and Slevin (1986) and Drucker (1985) reported a positive relationship between entrepreneurial orientation and Firm

performance. Whereas, Anderson (2010) found a negative link amid the EO and performance of a firm. On the other hand, Li, Huang and Tsai (2009) and Wiklund and Shepherd (2005) found inconclusive findings between EO and organizational performance relationship. The inconsistent and mixed findings between EO and performance call for further research work to be conducted to validate the EO performance relationship. To resolve the inconsistencies between EO and performance relationship Martins and Rialp (2013); Miller and Friesen (1978) and Awang, Khalid, Yusof, Kassim, Isma'il, Zain and Madar (2009) suggested that external environmental factors as moderators can be incorporated in the relationship between EO and Performance.

In the view of competitive global economic environment, market orientation (MO) is also known as an important business strategy. Mahmoud (2011) explored that the affect of MO on performance has been widely researched. He argued that SMEs need to focus more to satisfy customer's needs, check competitive trends of competitors and respond effectively and appropriately to market information in order to exist by enduring their business constraints such as financial and technical. Researchers generally are supportive on positive outcome of MO on performance. However, most of the earlier studies emphasized on implementation of MO in large organizations. Only recently researchers have begun to conduct studies on the outcome of MO in SMEs (Blankson, Motwani & Levenburg, 2006; Keskin, 2006).

Previous studies revealed that market orientation refers to a deliberate effort made to consider the requirements of customers as the priority that leads to higher performance. Several studies conducted in relation to market orientation and performance relationship

showed mixed findings. The studies that reported a significant positive relationship amid MO and performance include; Slater and Narver (2000); Grainer and Padanyi (2005); Demirbag *et al*., (2006); Mahmoud (2010); Dauda and Akingbade (2010); Kumar, Venkatesan and Leone (2011) and Oyedijo, Idris and Aliu (2012); Wang, Chen and Chen (2012) and Herath and Mahmood (2013).

On the other hand, some other studies conducted by Au and Tse (1995); Ghani and Mahmood (2011) and Suliyanto and Rahab (2012) did not find any significant relationship between market orientation and performance of a firm. Therefore, the above results by different studies showed inconsistent findings in the relationship between market orientation and firm performance. Wang and Chen (2011) and Suliyanto and Rahab (2012) suggested the addition of moderating variable such as external environment between market orientation to performance relationship to resolve the inconsistencies found in the literature regarding MO and performance relationship.

Though there have been several studies that attempted to establish the relationship between TQM, EO and MO on the performance of small and medium enterprises (SMEs) but the contradictory findings between organizational strategies call for more comprehensive study to better understand the relationship between strategic orientations and SME performance with some moderating variable (Herath & Mahmood, 2013).

A proper relationship between strategy and external environment is the key factor to develop sustainable competitive advantage (Black & Porter, 1996). Previous studies revealed that changes in the external environment bring more uncertainty in SMEs than in larger organizations because their resources are limited to acquire the information

about the changes in the market (Islam *et al.*, 2011). As the external environment becomes more competitive by increasingly more demanding customers, a firm should place emphasis on adopting those strategies that are more customer focused (Perera, Harrison & Poole, 1997). Organizations that do not align their strategic objectives with the changing external environment are less successful than organizations that align their strategic objectives with the changing external environment (Davenport, 2000).

Similarly, a contingency point of view suggested that there must be a good fit between internal and external organizational factors (Lawrence & Lorsch, 1967). The firm strives to achieve a better fit with its external environment are more successful in maintaining and improving performance. In the current competitive era, businesses require ever more demanding efforts to be successful because hurdles such as external environment and some other factors are far more than it was in previous time. Hence, external environment is one of the major variables that affects the correlation amid the business strategies and performance of small and medium enterprises.

Strategic business orientations are considered as resources of an organization (Hoq & Chauhan, 2011; Barney, 1991). According to Amit and Schoemaker (1993) and Barney (1991) these unique and valuable organizational resources are the source of competitive advantage and higher performance in SMEs. SMEs usually do not consider to implement the business strategies, thus unable to develop competitive advantage (Hoq & Chauhan, 2011; Inmyxai & Takahashi, 2009). Additionally, Hult, Hurley and Knight (2004) evaluated in their study that different strategic orientations when combined provides competitive advantage. Review of literature showed that prior researchers have studied different strategic orientations individually or in combination of two or three

orientations as predictors of SME performance (i.e. Santos-Vijande, Sanzo-Pérez, Alvarez-Gonzales & Vazquez-Casielles, 2005; Gao, Zhou & Yim, 2007; Li, Zhao, Tan & Liu, 2008; Kropp, Lindsay & Shoham, 2008; Ledwith & Dwyer, 2009; Herath & Mahmood, 2013).

Total quality management, Entrepreneurial orientation, Market orientation are important strategies and have a vital significance in enhancing the performance of SMEs. Furthermore, several previous studies have supported that organizational strategies have a strong and logical relationship with performance of small and medium enterprises (Jasra *et al.,* 2011). Pinho (2008) emphasized in his study that TQM should not be considered as the only significant component that leads to higher performance and that additional relationships need to be addressed by combining other constructs as key antecedents of performance of SMEs. Furthermore, it was also suggested that external environment should be incorporated as moderator in the association amid TQM and performance.

In this research study, the variables, Total quality management, Entrepreneurial orientation, Market orientation and external environment are considered, to further validate their relationships with the performance of SMEs. As suggested by Renko, Carsrud and Brännback (2009) organizations in order to excel should simultaneously be innovative, proactive and willing to take risks, as well as market oriented and be able to utilize their all assets and capabilities. This study examined the moderating effect of external environment on the relationship between total quality management, entrepreneurial orientation, market orientation and performance of SMEs. Total quality management is a strategy meant to achieve higher customer satisfaction, whereas,

entrepreneurial orientation refers to the willingness of a firm to initiate innovative projects that hamper those of competitors and thus would lead to competitive advantages and increased performance. Market orientation implies to the continuous search for market opportunities and the development of compatible response that facilitate firms to enhance their performance (González-benito, González-benito & Muñoz-gallego, 2009).

The declining performance of SMEs in Pakistan is an issue of serious concern and worth investigating to come up some plausible solution towards achieving sustainable economic development. Though there have been several studies that attempted to examine the relationship between Total quality management, entrepreneurial orientation and Market orientation on performance of SMEs. But for a more comprehensive study there was the need of empirical investigation to consider the moderating effect of External environment on the relationship between TQM, EO, MO and performance of SMEs.

Based on the available literature reviewed, the researcher did not come across any study that integrated TQM, EO and MO with the moderating variable of EE. Through empirical analyses of their relationships, this study showed how TQM, EO, MO and EE can stimulate competitive advantage and drive forward performance of SMEs.

1.3 Research Questions

The present study attempts to contribute to the existing literature by addressing the following research questions:

1. Do Total Quality Management, Entrepreneurial Orientation and Market Orientation affect the performance of SMEs in Pakistan?
2. Does external environment moderate the relationships between TQM, EO, MO and performance of SMEs in Pakistan?

1.4 Research Objectives

Based on the above stated research questions, the study aims at accomplishing the following objectives:

1. To examine the effect of TQM on performance of SMEs in Pakistan.
2. To examine the effect of entrepreneurial orientation (EO) on performance of SMEs in Pakistan.
3. To examine the effect of MO on performance of SMEs in Pakistan.
4. To examine the moderating effect of external environment on the relationship between TQM and performance of SMEs in Pakistan.
5. To examine the moderating effect of external environment on the relationship between EO and performance of SMEs in Pakistan.
6. To examine the moderating effect of external environment on the relationship between MO and performance of SMEs in Pakistan.

1.5 Scope of the Study

The study focused to examine the impact of TQM, EO and MO on performance of SMEs in the context of a developing country, Pakistan. The study covered the Punjab province of Pakistan. Unit of analysis was the firm studied through the viewpoint of

owners/managers of SMEs. Thus, the sample of this study was limited to the owners/managers of SMEs. It is believed that by applying TQM strategy together with entrepreneurial orientation, marketing orientation and external environment as a moderator, SMEs performance can be improved in terms of sales growth, profitability, market share, customer satisfaction and employee's satisfaction. For this purpose, first the effect of three variables TQM, EO, MO on performance was independently examined, later impact of moderating role of external environment on these variables in conjunction with performance was put forward. The focus of this study, the significant role of different important startegies i.e. TQM, EO and MO on performance of SMEs, is in consonance with the premises of the RBV theory and the contingency theory.

1.6 Significance of the Study

This study is important for several reasons:

The topic of this study is being researched for the first time in Pakistan. The focus of the study is on SMEs of Pakistan, where there is limited research regarding TQM, entrepreneurial orientation, market orientation, external environment and performance of SMEs. It analyzed and determined the factors pertaining to the growth and success of SMEs.

This study attempted to significantly contribute to the existing knowledge by presenting a comprehensive approach in analyzing the issues of SMEs of Pakistan. Moreover, this study would contribute in the extant literature by adding external environment as a moderator which the previous studies have ignored to consider, on the relationship between TQM, entrepreneurial orientation, market orientation and performance of SMEs.

This empirical study is unique in that, it incorporated the three strategic constructs, TQM, EO and MO together as antecedents of performance of SMEs. The study will contribute to the extant literature and provide empirical evidence on the relationship between total quality management, entrepreneurial orientation and market orientation and the performance of SMEs in Pakistan. Hence, the outcome of this study will serve as a guide to SME owner/managers, on the significance of different strategic orientations toward achieving higher performance and competitiveness.

The findings of this research will benefit government functionaries at different levels as well as the decision makers in terms of making policies and relevant recommendations for the development and growth SME in Pakistan**.** Moreover, it would also help academia and researchers in enhancing their knowledge and understanding pertaining to the variables studied within the context of SMEs of Pakistan.

1.7 Concepts and Definition of Key Terms

To clarify the language of this study, several key terms are defined.

1.7.1 Performance

Performance is the firm's ability to achieve and accomplish its objectives by using all the firm's resources in an efficient and effective manner (Daft, 2000).

1.7.2 Total Quality Management

TQM is a holistic management approach aims to bring continuous improvement in all functions, with the participation of all employees under the leadership of top management of an organization to generate and provide products and services according

to the needs and demands of customer's better than their competitors (Demirbag *et al*., 2006).

1.7.3 Entrepreneurial Orientation

EO is a tendency which involves the willingness to innovate, try to take risks to develop new products, services and markets and act more proactively by exploring the new opportunities and successfully compete with the competitors (Covin & Slevin, 1989).

1.7.4 Market Orientation

It refers to organization culture that enables the organization to create the necessary behaviour in order to produce higher worth of its products and services for customers (Narver & Slater, 1990).

1.7.5 External Environment

The situations, factors or events that have the potential to dictate and determine the failure and success of performance of a firm (Mohd, 2005).

1.7.6 Small and Medium Enterprise (SME)

SME is identified as a business that employs a maximum of 250 employees or with a paid up capital of 25 million PK Rupees (247807 USD) or with an annual sale of up to 250 million PK Rupees (2478070 USD) (SMEDA, 2010). Small firms are defined as those having an employee size of less than 35 people while medium size firms are those with 36-250 employees (SMEDA, 2010).

1.8 Organization of the Thesis

The research report is divided into six chapters. The first chapter discusses background of the study, problem statement, research questions, research objectives, significance of the research, scope of the research, definition of key terms and organization of the thesis. Second chapter provides an overview of Pakistan and economic condition specifically focussing on SMEs.

Third chapter discusses relevant literature on total quality management, entrepreneurial orientation and market orientation within the context of SMEs, theoretical framework, hypotheses and underpinning theory. Chapter four reports the research methodology, population of the study, unit of analysis, data collection method, questionnaire design, instrument used in this study, pilot study. Moreover, this chapter also provides the detail on the statistical techniques used for preparing data for the multivariate analysis and to test hypotheses.

Chapter five presents the result of the study, data analysis by using the methods mentioned in chapter four and in depth analysis of hypotheses and the research findings are reported. Finally, Chapter six discusses the key findings of analysis implications, limitation of the study and suggestion for future research as well as formulate the conclusions drawn from the research.

CHAPTER TWO

SMALL AND MEDIUM ENTERPRISES IN PAKISTAN

2.1 Introduction

This chapter provides a brief description of SMEs in Pakistan especially focusing on their potential role in the economic progress of the country. A better understanding of SMEs would be valuable to form a substantial base in conducting research and consequently some suggestions could be recommended for the improvement in performance of Pakistani SMEs.

SME sector has been selected for the research study, as this sector has a tremendous contribution in the economic growth and progress of the developing countries. Moreover, many small and medium enterprises are suppliers to larger organizations and thus, there is an increasing pressure to develop the quality standards of their products and services (Gulbro, Shonesy & Dreyfus, 2000). In addition, this chapter presents an overview of economy of Pakistan, specifically focussing on the significant issues, challenges and problems related to SMEs.

2.2 Overview of Pakistan

Pakistan is located in the western part of the Indian subcontinent, with India on the East, the Arabian Sea on the South and Afghanistan and Iran on the West (story of Pakistan). The name Pakistan is derivative of Urdu words; Pak (pure) and stan (country) (story of Pakistan). It is almost twice the size of the state of California. Prior to the emergence of the state of Pakistan in 1947, local kings and various imperial powers ruled different areas of modern Pakistan (story of Pakistan).

Subsequently, British Parliament passed the Indian Independence Act in July 18, 1947 and India and Pakistan emerged on the world map as two independent states (story of Pakistan). This brought an end to the British rule over the subcontinent and its affairs were administered by the newly formed states in Aug, 1947 (story of Pakistan). The single-minded guidance and persistent struggle of the Quaid-e-Azam Muhammd Ali Jinnah ensured creation of the sovereign country for the Muslims of the sub-continent. The people of Pakistan faced quantum of problems immediately after independence. It was zealous efforts by the people which enabled them to overcome the inherited problems under the leadership of the founder of Pakistan, the Quaid-e-Azam Muhammad Ali Jinnah. Who was subsequently became the first Governor General of Pakistan and Liaquat Ali Khan was appointed its first Prime Minister.

With the grace of Allah Almighty, Pakistan emerged on the world map on 14th August, 1947, the 27th of Ramadan 1366 (story of Pakistan). Pakistan came into existence as the consequence of the "Two-Nation Theory" proposed by Sir Syed Ahmed Khan (story of Pakistan). He opined that India was a sub-continent and not a country. This theory established that based on nationality, social structure and system, traditions, religion, way-of-life, customs, culture and historical conditions, there are two prominent and distinct nations, Hindus and Muslims existed in the Sub-continent (story of Pakistan).

Outcome of three major developments resulted into politicization of the Muslim community. These developments are as under:

- Assorted endeavors for Islamic cultural development and reinforcement during the late 19th and early 20th centuries.
- The effects of Hindu chauvinism on Islamic ideology and way of life.

- The establishment of the government of British India (story of Pakistan).

It was indispensable to reinstate the core Islamic structure (story of Pakistan). The main motive behind the demand for a separate homeland was the safeguarding of a separate distinctiveness and uniqueness of the Muslim idealogy (story of Pakistan). The outcome of tireless political movement based on the cultural, historical, religious and social differentiation between the two nations, Hindus and Muslims brought the division of Sub continent into two independent and sovereign countries, Pakistan and India, on August 14 & 15, 1947, respectively (story of Pakistan).

2.3 General Overview of Economy of Pakistan

The purpose of this section is to present a brief and concise synopsis of the economic and industrial sector of Pakistan with respect to SMEs sector in particular, to get a better understanding of the situations and issues associated with SMEs in Pakistan. Pakistan remained a fast growing economy in comparison to other developing countries but now has far behind the other emerging economies of East Asia i.e. China, India, Bangladesh etc. In the last decade, Pakistan suffered a decline in economic growth rate due to political instability, poor governance, economic sanctions and unfavourable external environment coupled with the global financial crisis.

Pakistan with the population of 190.29 million is the 7th most populated country in the world. Muslims are in majority with the ratio of 95 percent and rest of the population includes Christian and Hindu. Urdu is the national language and English is the official language of Pakistan (Khan, Awang & Zulkifli, 2013). Pakistan is blessed with considerable amount of natural resources, encouraging climatic conditions, abundance

human capital is enriched with diverse skills from unskilled, semi-skilled and high-skilled labor (Khan *et al*., 2013). Unfortunately, these aforestated resources have not been properly used to develop the country so far and many people do not even earn a respectable living. In 90's era, Pakistan's economic growth was progressing and counted among the top three developing nations in the world, the other two countries were China and India. But now it has declined, Pakistan GDP growth percentage was calculated as 3.7 percent in 2012 (Economic survey of Pakistan, 2011-2012).

2.3.1 Agriculture Sector

The agriculture sector is considered the prime sector of economy. Currently, agriculture sector provides the livelihood of almost 44.7 percent of the total employed labor force in Pakistan (Economic survey of Pakistan, 2011-12). Agriculture sector is the core foundation of the rural economy and being a fundamental part of country's financial system, contributes 21.8 percent to country's GDP (Economic survey of Pakistan, 2011-12). About 60 percent of rural population greatly depends upon agriculture sector, generating 45 percent productive employment opportunities for country's labor force. Thus providing food security, serving in reducing poverty and in contributing to enhance overall economic growth (Economic survey of Pakistan, 2011-12). The Government of Pakistan has also taken several measures to make agriculture, a profitable, productive and efficient sector of the economy (Economic survey of Pakistan, 2011-12).

The general performance of agriculture sector has enhanced by 3.2 percent between year 2011-2012 due to government support packages, which included; good prices for cotton,

rice and sugarcane. The financial year 2011-2012 witnessed substantial boom in major crops such as cotton, rice and sugarcane contributed 31.9 percent of agricultural value added products and experienced a growth of 3.2 percent (Economic survey of Pakistan, 2011-12). Table 2.1 illustrates agriculture growth percentages from 2005-2012.

Table 2.1
Agriculture Growth Percentages from 2005-2012

Year	Agriculture	Major crops	Minor crops	Livestock	Fishery	Forestry
2005-06	6.3	-3.9	0.4	15.8	20.8	-1.1
2006-07	4.1	7.7	-1.0	2.8	15.4	-5.1
2007-08	1.0	-6.4	10.9	4.2	9.2	-13.0
2008-09	4.0	7.8	-1.2	3.1	2.3	-3.0
2009-10	0.6	-2.3	-7.7	4.3	1.5	2.2
2010-11	2.4	-0.2	2.7	4.0	1.9	-0.4
2011-12	3.6	3.2	-1.3	4.0	1.8	1.0

Source: Pakistan bureau of statistics (2011-12)

2.3.2 Manufacturing Sector in Pakistan

The manufacturing sector of any country carries vital importance. The manufacturing sector being the second largest sector of the economy is of foremost importance and plays a considerable role in the progress and development of country. Pakistan's economy can be characterized as semi-industrialized. Manufacturing sector of the country contributes 24.3 percent to GDP. 55.9 million (as of 2009) labor force of Pakistan is being utilized in all the largest industries such as, cement, textile, fertilizer, chemicals, sugar, food processing, construction materials, tobacco, pharmaceuticals, steel, edible oil, shrimp and machinery etc of the country (Economic survey of Pakistan, 2011-2012). The performance of manufacturing sector of Pakistan was better in 2011-12

as compared to many other developing economies. This is despite the turbulent economic environment and other challenges such as hindered power supply to the above mentioned industries (Economic survey of Pakistan, 2011-2012). Table 2.2 presents group-wise growth and percent point's contribution rate of large scale manufacturing (LSM) for the Month of July-March 2011-2012 vs.July-March 2010-2011.

Table 2.2

Group-wise Growth and Percent Points Contribution Rate of LSM for the Month of July-March 2011-2012 vs.July-March 2010-2011

S#	Groups	Weights	Percent Change (July-March)		Percent Point contribution (July –March)	
			2010-11	2011-12	2010-11	2011-12
1	Textiles	20.91	0.7	0.8	0.15	0.16
2	Food ,beverages & tobacco	12.36	14	6.5	1.73	0.81
3	Coke & petroleum products	5.51	-4.6	-5.7	-0.25	-0.31
4	Pharmaceutical	3.62	1.3	10.9	0.05	0.39
5	Chemicals	1.72	-2.5	-4.7	-0.04	-0.08
6	Automobiles	4.61	11.9	-0.8	0.55	-0.04
7	Iron &steel products	5.39	-10.3	-28.5	-0.56	-1.53
8	Fertilizers	4.44	-9.2	-0.4	-0.41	-0.02
9	Electronics	1.96	-14.4	-7.9	-0.28	-0.15
10	Leather products	0.86	17.4	1.8	0.15	0.02
11	Paper and boards	2.31	-2.3	8.4	-0.05	0.19
12	Engineering products	0.40	-9.5	-10.2	-0.04	-0.04
13	Rubber products	0.26	9.2	-24.6	0.02	-0.06
14	Non metallic mineral products	5.36	-9.6	2.9	-0.51	0.15
15	Wood products	0.59	6.9	7.4	0.04	0.04

Source: Pakistan bureau of statistics (2011-12)

Several studies have investigated and assessed the performance of the manufacturing sector of Pakistan, according to which, there are different factors such as, lack of research and development, inadequate investment, lack of good quality products and competition, slow growth and development of human capital, more than required concentration in industrial products and less exposure to foreign markets (Ara, 2004).

Figure 2.1 shows large scale manufacturing growth (percent) 1999-00 till 2008-09 (July-March).

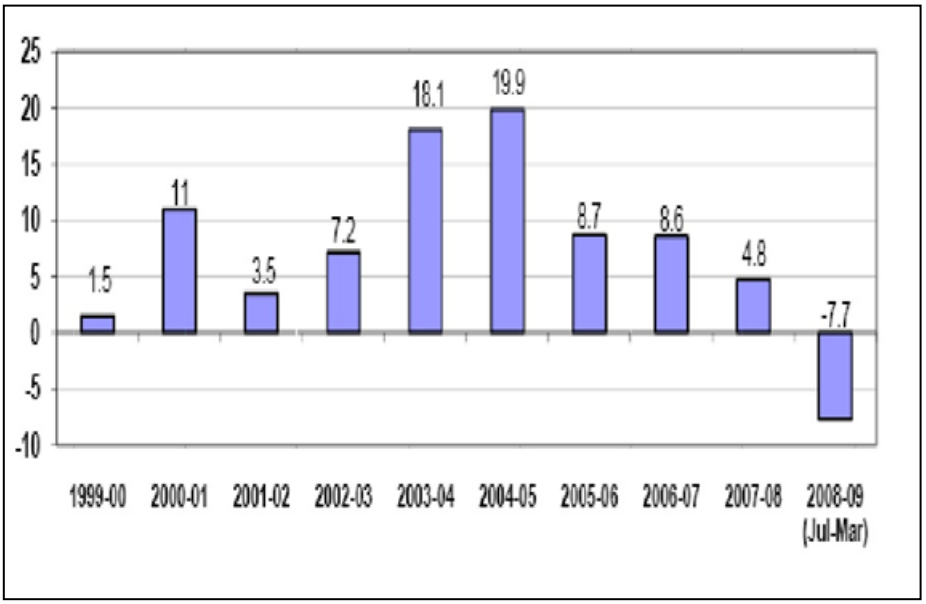

Figure 2.1
Large scale Manufacturing Growth (percent) 1999-00 till 2008-09 (July-March)
Source: Pakistan bureau of statistics (2008-09)

2.3.3 Service Industry in Pakistan

In the current era of economic development, services sector is considered as the major and fastest emerging sector in the global economy, contributing biggest share in GDP and employment generation in most of the developed countries. Many researchers such

as Clark (1941); Kuznets (1957) and Fuchs (1980) observed that economic trends in the world are shifting from agriculture sector to manufacturing and from manufacturing sector towards services. In case of Pakistan too, the share of services sector is increasing as compare to other sectors of economy over the time. According to Ahmed and Ahsan (2011) services sector is growing faster as compare to the agriculture and manufacturing sector. Services sector contribute 54 percent to the GDP and account for little over one-third of total employment (Ahmed & Ahsan, 2011). Service sector provides vital and necessary input to agriculture sector and manufacturing sector as it has a strong linkages with these sectors of economy (Ahmed & Ahsan, 2011). Service sector contributes a significant role in the economic growth, trade and employment generation.

Service sector in Pakistan can be categorized into four major sectors, producer, social services, distributive and personal. This sector account 24 percent of storage, transport communications, finance and insurance while, 30 percent consist of retail trade and whole sale (Annual Reports of State Bank of Pakistan). The country is endeavoring to develop the information industry and other modern service industries by offering flexible incentives. The service sector plays a vital role and act as a backbone by providing consistent support and significant contribution to Pakistan's economic growth (Annual Reports of State Bank of Pakistan). Table 2.3 illustrates classification of services sector in Pakistan.

Table 2.3
Classification of Services Sector in Pakistan

1. Distributive services • Transport, storage and communication	• Railways • Water Transport • Air Transport • Pipeline Transport • Mechanised

Table 2.3 (Continued)

		• Non Mechanized • Communications
	• Wholesale, Retail Trade and Hotels and Restaurants	• Wholesale and Rental Trade including imports • Purchase and sale Agents and Brokers • Auctioning
2.	Producer Services • Financial Institution	• State Bank of Pakistan • Commercial Bank • Other Financial Intermediaries • Insurance corporation and Pension funds
3	Personal Services • Entertainment and Recreation Services • Ownership and Dwelling	
4.	Social Services • Public Administration and Defence • Social Community and Private Services	• Education • Medical and Health Services • Other Household and Community Services

Source: Annual Report of State Bank of Pakistan. Adopted from (Ahmed & Ahsan, 2011).

2.4 Background of SMEs and its Importance

The pivotal role of SMEs in the economic and social structure of a nation is a worldwide acknowledged phenomenon. Carrier (1999) observed that economists, multilateral agencies, planners and governments all over the world are paying serious consideration to the development of SMEs. Fida (2008) evaluated that SMEs generate employment for rural and urban growing labor force and provide attractive sustainability thus contribute to economic growth and development of a country. In addition to that, a large number of people directly or indirectly depend on SMEs. It has been observed that China established its economy with its well developed SMEs sector. Similarly, Aris (2007)

explored that Taiwan, Korea and Thailand, significantly developed their economy by establishing SMEs sector. Moreover, the role of SMEs in employment creation, poverty reduction and increase in the welfare of the society is also well established in other countries i.e. Bangladesh, Japan and all other industrialized economies (Fida, 2008).

By generating employment opportunities, products diversification, scale of assets, SMEs contribute 40 percent to the GDP of Pakistan (SMEDA Policy, 2007). Later extensive research done by Shah, Mehmood, Hashmi, Shah and Shaikh (2011) highlighted that some economists believe, large firms, mainly responsible to contribute in the economy and also to generate foreign exchange earnings. But contrary to their observation, many countries like, Korea, Japan and Taiwan developed their economy by establishing and strengthening SMEs. It is very precisely acknowledged that basically large firms achieve their targets due to the important contribution of small and medium sized firms. Therefore, it is appropriate to state that both SMEs and larger organizations contribute equally to the economic maximization and prosperity. The evidence shows that the growth, development and prosperity, emerge from lower level, help and benefit all the strata of society.

2.4.1 Anatomy of SMEs in Pakistan

Syed and Shaikh (2013) underlined that Pakistan is currently confronting lot of problems like unemployment, dismal performance in industrial sector and slow growth in agriculture. The authors stressed the need of looking at those potential economic sectors which not only provide employment but also steer the economy towards progress. It is recorded that the higher growth prospective lies in the modern high

equipped industries but potential growth equally exists in SMEs and in the services that support it (Syed & Shaikh, 2013). In line with the above arguments, several other scholars i.e. Khawaja (2006); Mustafa and Khan (2005) and Berry (1998) also highlighted the significant importance and role of SME sector in Pakistan's economy. Similarly, Husain (2005) discussed the key role of SMEs in exports generation and the challenges they are facing in local market. Coy *et al*., (2007) explained different factors responsible to achieve success in small and medium business in Pakistan.

Small and medium enterprises are considered as the backbone of economy of Pakistan. Recent statistics showed that approximately 3.2 million small and medium enterprises exist in Pakistan. SMEs include 600,000 Service sector units, 400,000 manufacturing units and 1 million trade units (retailers). They employ up to 90 percent of all private enterprises in the industrial sector and almost 78 percent of the non-agriculture labor force. Besides giving out 35 percent in manufacturing value added products, their contribution is around 40 percent to the GDP and contributes 25 percent share in the exports of manufactured products. Table 2.4 shows province wise distribution of SMEs in Pakistan.

Table 2.4
Province Wise Distribution of SMEs in Pakistan

Name of Area	**SMEs Unit**
Punjab	65.26 percent
Sindh	17.82 percent
Khyber Pakhtunkhwa	14.21 percent
Balochistan	2.71 percent

(The Economic Survey of Pakistan Report, 2009)

Jasra *et al*., (2011) highlighted that SMEs are contributing quite effectively in industrial employment and export of different manufacturing goods. In manufacturing and other sectors, 87 percent of SMEs employ less than five people while 98 percent employ either 10 persons or less than it. 25 percent of small and medium enterprises are manufacturing SMEs, sharing 28 percent to the economy.

Following the growth in SMEs sector, Pakistan's economy is developing. Government should develop concrete and practical solution to the problems faced by SME sector and it is indispensible and requisite to implement a sound, comprehensive and consistent policy for this neglected sector. Small and medium enterprises are considered as the backbone and life line for the economy of a country. Despite of many constraints in the development of SMEs, it is also a fact that for the last 65 years, small and medium enterprises are playing a key role in the economy of Pakistan. Table 2.5 illustrates SME Share in Sub-Sector.

Table 2.5
SME Share in Sub-Sector

S #	Sub Sector	Percentage Share of SMEs
1	Cotton weaving	18 percent
2	Wood and furniture	8 percent
3	Metal products	20 percent
4	Carpets	24 percent
5	Art silk	5 percent
6	Grain milling	8 percent
7	Jewelry	6 percent
8	Other Textiles	4 percent
9	Others	7 percent

The Economic Survey of Pakistan Report, (2009)

2.4.2 Small and Medium Sized Enterprises-Definitions

The term SME generally stands for small and medium-sized enterprises but there is no agreement on a single definition of SME and due to this complication, it is very difficult to define SMEs. Depending on their contribution in the economic development as well as their existing social conditions, differences exist regarding definition of SMEs between countries and even within the same country between different sectors and governmental agencies (Yusof & Aspinwall, 2000). As observed by Rujirawanich, Addison and Smallman (2011) in some countries, such as Taiwan, any firm getting government support even though it does not actually fulfill the general criteria may still be considered as SME. While in mainland China, township SMEs distinguishes from village enterprises, on the other hand in Singapore, local SMEs are different from exporting SMEs (Lee, Li & Hwang, 1994).

In Pakistan different organizations have given different definitions for SMEs. But SMEs are normally defined globally based upon three characteristics, namely:

a. Number of employees

b. Annual Revenues

c. Paid-up Capital

In the beginning the term Small Scale Industries (SSI) was used as a subset of the SME sector. The Government of Pakistan devised and adopted a single SME definition that is acknowledged by all public and private organizations. However, as noted by Saleem (2008) different organizations were permitted a two-year time frame to line up their existing SME definition with the proposed definition in SMEDA Policy (2007). SME is identified as a business that employs a maximum of 250 employees or with a paid up capital of 25 million PK Rupees (247807 USD) or with an annual sale of up to 250 million PK Rupees (2478070 USD) (SMEDA, 2010). Small firms are defined as those having an employee size of less than 35 people while medium size firms are those with 36-250 employees (SMEDA, 2010). Table 2.6 illustrates SME definition by SMEDA.

Table 2.6
SME Definition by SMEDA

Employment	Upto 250 people
Paid-up Capital	Upto Rs. 25 million (247807 USD)
Annual Sales	Upto Rs. 250 million (2478070 USD)

SME policy (2007)

2.4.3 Critical Issues and Challenges of SME Sector

Kureshi, Mann, Khan and Qureshi (2009) evaluated the performance of SME sector and revealed that overwhelming percentage of Pakistani businesses are SMEs, but dismal performance of SME sector also affecting the performance of large firms. In the same line, it was also pointed out that the dismal and discouraging performance of Pakistani SMEs has been one of the major causes for the dismal performance of the economy of the country. SMEs being the main suppliers to most of the large firms, therefore performance of the SMEs is a vital factor contributing to the overall performance of any economy. It can be very rightly said that there is a direct and significant association amid the health of SME and the overall progress and growth of economy of a country.

There is a dire need that policymakers, larger businesses and academia of Pakistan should particularly focus on SME sector for sustainable and realistic growth in country's economy (Kureshi *et al*., 2009). Small and medium enterprises in developing countries like Pakistan not only can create employment for them but also provide jobs for others with low capital costs (Nishat, 2000). Marri and Sohag (2004) revealed in their study that in order to stay in business, SMEs should strive to achieve higher performance and competitiveness.

Various researches indicated that there is potential market for SMEs and if this potential is explored and undertaken in a systematic and organized way; economy of Pakistan can prosper in no time. The factors that hinder progress of the SMEs in Pakistan are well-known, literature showed that in today's globalized competitive economy; most of the SMEs around the world are under pressure to survive due to the lack of technology,

access to financial assistance and wider markets, lack of infrastructure and competition from foreign products. Besides that, policy makers and key government stakeholder find difficult to give attention to SME sector due to unavailability of concrete and quantifiable data. During 2011-12, SMEDA took an initiative to publish SMEDA Research working papers series to bridge the information gap (Economic Survey of Pakistan, 2011-12).

2.4.4 Contribution of SME in Pakistan Economy

SMEs are globally documented as very crucial to boost up the economy and for poverty alleviation. It is a documented fact that the economic prosperity and wellbeing in the world was systematically achieved through SME-led measures which ultimately became the trademark of world's economy. It is noteworthy that SMEs contribute 40 percent to GDP and 30 percent to exports of the manufacturing sector. Batool and Zulfiqar (2011) highlighted that the Government of Pakistan has stated SME sector as one of the four major drivers of economic development and growth.

Batool and Zulfiqar (2011) evaluated that innovative, proactive and flexible SMEs can generate employment, help to produce foreign exchange, improve the efficiency of the work force, develop the business management skills and distribute technological know-how all over Pakistan. Thus contributing overall economic development of the country.

2.5 Summary

Small and medium enterprises are active in almost all the sectors of economy such as in rural areas, agricultural inputs/outputs business, food and beverages and other small

businesses while in cities, up to more advanced from light engineering products such as computer, chemical, machinery, apparel to construction business in local and foreign markets. Pakistan is very prospective market for small and medium enterprises, but this sector is being neglected. It is suggested that economy can progress and prosper if proper measures to support and develop the SMEs sector are undertaken in an organized and efficient way.

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

This chapter critically and thoughtfully reviewed the current literature corresponding to the Total quality Management, Entrepreneurial Orientation, Marketing Orientation, External Environment and Performance in the perspective of SME's of Pakistan. The study aimed to provide evidence from the selected literature review to support a theoretical framework and for the development of hypotheses. By reviewing the literature, it was analyzed and discovered how other researchers have explained similar problem, ensuring that this research do not duplicate the previous work.

This section also provided a thorough and systematic insight of the affect of TQM, entrepreneurial orientation (EO), marketing orientation (MO) with external environment as a moderating variable on the performance of SMEs of Pakistan. Moreover, this chapter discussed the underpinning theories covering the variables of the study.

3.2 Performance

Organizations are commonly defined as instruments of purpose creating value for its products and services amongst the customers. Organizations compete with one another, to seek competitive advantage by doing better in performance (March & Sutton, 1997). Performance has been the most vital concern for every organization, be it profit or non-profit one. It has been very important for owners or managers to identify the factors which affect performance in order to make them competitive and profitable (Abu-Jarad, Yusof & Nikbin, 2010). Different scholars have conceptualized and measured

performance in different way. Researchers have put forth different opinions, approaches and definitions of performance (Barney, 1986). According to Venkatraman and Ramanuiam (1986) the main concern is the use of appropriate approach utilized to measure and understand the concept of performance.

Performance is a main concern for the firm that refers to the firm's success and the achievement of its objectives. Some researchers tried to investigate the ways of improving the firm performance and some studied the predictors of firm performance (Mahmood & Hanafi, 2013). According to Rogers and Wright (1998) and March and Sutton (1997) in most of the organization research, firm performance has widely been studied as a dependent variable. Moreover, Carton and Hofer (2010) and Brush and Vanderwerf (1992) observed that most of the research on SMEs also have attempted to use performance as a dependent variable.

In this research study, performance was used as a dependent variable. Performance was measured at a firm level through six different indicators, i.e. growth rate, profitability, market share, customer satisfaction, employee's satisfaction and overall performance of firm relative to competitors which were then combined into one construct. These measures are common among researchers and have extensively adopted to measure performance of SMEs (Jaworski & Kohli 1993; Wiklund, 1999; Wiklund & Shepherd, 2005; Yusuf, Gunasekaran & Dan, 2007; Keh, Nguyen & Ng, 2007). Additionally, the performance measures applied in this study are commonly used for service as well as manufacturing industry.Moreover, Jaworski and Kohli (1996) and Wiklund (1999) suggested that using different kinds of measures create a comprehensive picture of the firm performance.The philosophy of performance entails that it must always be

enhanced for better survival because the competition in the competitive market never rests.

3.2.1 Performance Definition

Scholars not only differed in defining performance but also contradicted in its conceptual explanation. Based on the study of Hefferman and Flood (2000) there is not any conceptual clarity to describe various areas of performance as a concept in modern management. Such non-universality of definition also extends to the area of measurement. Researchers sometimes confused the term performance with productivity but there is a difference between productivity and performance (Ricardo & Wade, 2001). Productivity refers to the volume of work done in a specified amount of time while, performance is a broader term that could include productivity, quality, consistency etc (Abu-Jarad *et al*., 2010). According to Daft (2000) performance is the firm's ability and capacity to achieve and accomplish its objectives by using all the firm's resources in an efficient and effective manner. While, Ricardo and Wade (2001) viewed performance as the ability of the firm to succeed in achieving its defined goals and objectives. .

3.2.2 Measurement of Performance

Firms widely recognized the importance of performance; many financial and non financial factors have been used by several previous researchers to measure performance. These factors included gross profit, profitability, return on sale (ROS), return on asset (ROA), return on equity (ROE), return on investment (ROI) and revenue growth. Others factors are market share, sales growth, stock price and export growth

(Gimenez, 2000; Thomas & Ramaswamy, 1996; Snow & Hrebiniak, 1980; Segev, 1987; Parnell & Wright, 1993). In addition to that, there is also inconsistent measurement of performance found by many researchers (Denison & Maishra, 1995; Marcoulides & Heck, 1993; Kotter & Heskett, 1992).

In a similar context, Doyle (1994) argued that there was no single indicator or best indicator to measure performance of firms. Firms adopt different objectives and subjective measurements for performance. Some studies have even included effectiveness and efficiency to measure performance. Effectiveness-related measures deal with matters like business growth and employee satisfaction and efficiency-related measures relate to the input/output relationship. It has also been argued that to record the performance, profitability is the most common measurement (Hamel & Prahalad, 1989; Doyle, 1994).

Data to determine the firm's performance can be obtained either from published sources (secondary data) or directly from the firm (primary data). The information of financial data in case of SMEs is extremely difficult to obtain from secondary sources, but may be available in the case of large, publicly held company (Abu-Jarad *et al*., 2010).

Furthermore, according to the study conducted by Dess and Robinson (1984) objective or financial data on the performance of SMEs is usually not available due to their private ownership structure, whose owners are neither required by law to publish financial results coupled with the fact that they are usually reluctant and unwilling to share such information voluntarily to outsiders. In addition to that, financial statements of small firms are usually unedited and as such considered as not accurate one.

Sapiena, Smith and Gannon (1988) reviewed that owner/managers of SMEs are more inclined and interested to provide subjective assessment of the performance of their firm than the financial measures. As reviewed in this section, various dimensions of firm performance have been used by previous studies; however, most of the studies employed perceptual assessment measures, since they are more practical.

3.3 Concept of Total Quality Management

The concept of TQM started with the visually check of individual finished products by the workers. It was a simple inspection based system and any item found in poor quality was either scrapped or sold cheaply and in extreme case, reworked completely. Years immediately after World War II, witnessed a boom of mass production. Thus, by 1950s and 1960s after the craftsmanship period, it was realized that quality system needs to be addressed on a wider scale to prevent problems happening at first place (Hafeez, Malak & Abdelmeguid, 2006). The concept of total quality control was first introduced by Feigenbaum (1951) where he proposed a total system's approach to quality primarily emphasizing prevention-based rather than a corrective-based system.

Quality and process improvement activities in an organization have been identified to act as a catalyst necessary to start an economic growth (Deming, 1986). According to Deming (1986) TQM is a strategy to meet customer's expectation and requirements. In a similar vein, Summers (2006) argued that improving quality refers to decrease in costs, fewer number of manufacturing mistakes, reduced delays in production and better use of resources. These will in turn, lead to improved productivity thereby enabling a firm to acquire more market share which guarantees its continuous stay in business and

provision of more jobs. Several researchers have attempted to define the concept of quality in different ways within the range of fitness and use of the products on one hand and perception of value for customer on the other (Juran, 1979; Summers, 2006). Following section entails the definitions of TQM proposed by different researchers.

3.3.1 Definition of TQM

In the extant literature, quality gurus, different practitioners, academician and writers have defined TQM in their own way, to go with their own viewpoint, business and academic experiences. TQM strategy integrates basic management techniques with existing quality improvement efforts to continuously improve performance of a firm. According to Besterfield (1995) TQM is a way of life, a set of guiding principles and approaches that refers to continuously improve the firm performance. In a similar vein, Kanji (1990) stated TQM, as a way of life of an organization dedicated to satisfy both internal and external customer's needs and wants through continuous improvement by involving everyone and everything. Whyte and Witcher (1992) described TQM by using a three-word definition,

Total: participation of all the stake holders in the organization, i.e employees, customers and suppliers.

Quality: fulfilling customer's requirements.

Management: commitment of top management.

All these definitions emphasized that TQM is more than a programme; rather it is a way of business management philosophy for the whole organization to achieve organization excellence (Yusuf *et al*., 2007).

A review of extant literature indicated that different authors and researchers defined TQM differently. According to Dale (1994) TQM refers to the mutual participation and cooperation of everyone in an organization to produce products and services, which satisfy and fulfil the requirements of customers. In the same line, Kanji (1990) defined that TQM is a way of life to continuously improve the firm's processes, products and services to achieve customer satisfaction. TQM has certain rules and principles with which an organization can secure higher market share, increase its profits and minimize its costs.

Similarly, Juran and Gryna (1993) defined TQM as a philosophy intended to achieve superior performance by utilizing its tools and techniques such as employee motivation at work. Furthermore, Berry (1991) suggested that TQM is a management philosophy aimed at fulfilling and exceeding customer's expectations by considerably reducing costs by adopting a new management structure and quality culture. Since there is no universally acceptable definition of TQM, Mann and Kehoe (1994) summed up that there are basically two types of definition of TQM namely: description of TQM in terms of its ultimate and vital objective and; description of TQM in terms of activities or functions that require to be addressed to attain business objectives (Deros, Rahman, Ghani, Wahab, Hashim & Kamis, 2009)

3.3.2 Historical Development of Total Quality Management

The history of TQM is undoubtedly as old as production and industry. Industrial revolution brought about the concept of specialization of labour. As observed by different researchers, most of the concepts of TQM were mainly developed during

twentieth century. Garvin (1988) argued that the historical evolution of TQM can be classified and understood based on four stages which include:

1. Quality inspection (1910s)
2. Quality control (1924s)
3. Quality assurance (1950s)
4. Total quality management (1980s)

It has been argued that TQM is holistically transformed by the influence of different development factors, ranging from the business process movement (BPM) to human resource development (HRD) and concepts of empowerment (Davenport, Jarvenpaa & Beers, 1996; Wilkinson & Willmott, 1994). Thus, TQM philosophy which hitherto was limited to a narrow and mechanistic approach was changed to more subjective and broader organizational form.

The Table 3.1 below described the stages and characteristics of TQM development. McAdam (2000) argued through this table that throughout the period of its ongoing development (i.e. 1910 to 1980) TQM had progressed and developed through the influence of many different factors.

Table 3.1
Characteristics of Different Stages in TQM

Stage	**Characteristics**
QI (1910s) Quality inspection	Salvage; sorting; corrective action; identify source of non conformance
QC(1924s) Quality control	Quality manual; performance data; self inspection; product testing; Quality planning; use of statistics; paper work control

Table 3.1 (Continued)

QA(1950s) Quality assurance	Third party approval; system audits; quality planning; quality manuals Quality cost; process control; failure mode and effective analysis(FMEA); Non-production operation
TQM (1980s) Total quality management	Focused vision; continuous improvements; internal customer; performance measure; prevention; company wide application; Inter departmental barriers; management leadership

(as quoted by Deros *et al*., 2009)

3.3.3 Quality Concepts and TQM Theories

Although there is enormous literature on TQM but there is no agreement on the definition of concept of quality. Different researchers, such as Crosby, Juran, Deming, Feigenbaum and Ishikawa have consdirable contribution in TQM literature. Garvin (1987) quality approach was based on product, customers, manufacturing and value. He also identified eight indicators to measure the quality of product. On the other hand, Juran termed quality as "fitness for use" refering to a troika, i.e. quality planning, quality control and quality improvement (Mitra, 1987). Similarly, Crosby is reckoned for the concepts of "quality is free and zero defects" achieving the quality by fixing the errors and defects right at first place. His quality improvement philosophy is based on the principle that quality is compliance to requirements and system of quality.

Quality has been seen as an expected degree of standardization and reliability of products produced at a low cost appropriate to the market needs (Deming, 2006). He affirmed that quality is about people, not products. Ishikawa (1985) explored the significance of total quality control to enhance organization's performance and stated that quality does not refer to the quality of the product only but it is a set of activities such as after sales service, quality of management, the firm itself and human life.

Similarly, Feigenbaum (1951) introduced the idea of organization-wide total quality control. He defined quality as a system that is effective for integrating quality improvement efforts, quality maintenance and quality development within an organization to facilitate production and service process at the most economical levels to achieve customer satisfaction.

The TQM concepts put forward by the above mentioned leading quality management gurus provided a deeper understanding of total quality management. All of these researchers contributed a significant knowledge on the development and evolution of quality management discipline. Literature revealed that organizations tend to customize the approach of their quality adoption primarily to fit their activities as well as their desired goals rather than being dependent on one specific model which is not universal (Llorens Motes & Verdu Jover, 2004; Yasin, Kunt & Zimmerer, 2004).

On the basis of discussions so far, though the quality approaches differ from one scholar to another, it is concluded that the dynamic nature of TQM is rooted in continuous improvement and change. The main aim is to get complete customer satisfaction by adopting best practice in processes, products and services (Bryde & Robinson, 2007). It is appropriate to say that total quality management is the most important concern for all organizations.

3.3.4 Literature Review on Total Quality Management

TQM involves interaction between and within all the components of organizations to achieve quality in all terms and functions of organization (Hafeez *et al*., 2006). As observed by Kumar, Garg and Garg (2011) Total quality management (TQM) is a

strategy meant to satisfy customers needs, it is a combination of various systems, processes, effective communication, devoted and committed people and a proper supporting culture. Khan (2000) observed that there is also a perception that TQM philosophy is an alien to cultural and religious norms of developing country like Pakistan; as it was believed that TQM is probably originated in Japan or USA. He further stated that it can safely be concluded that the Islamic norms of business transactions which forms the culture in Pakistan, emphasis to ensure customer satisfaction (fulfilling customer's prospects and expectations that have been decided and agreed upon).

Okay and Semiz (2010) mentioned that in order to improve quality, organizations must formulate some standard procedures in which all the stakeholders from employees to customers and suppliers would be able to contribute and participate. TQM literature on both manufacturing and service sector revealed that significant number of researchers Samson and Terziovski (1999); Flynn, Schroeder and Sakakibara (1995); Wilson and Collier (2000); Fynes and Voss (2001); Montes, Jover and Fernandez (2003) and Benson, Saraph and Schroeder (1991) explored that proper implementation of TQM produces variety of benefits, such as higher customer satisfaction, better problem solving, fewer error, better understanding of customers, improved quality of products and services. TQM focuses primarily on the concept of continuous improvement in a consistent, integrated and systematic way by involving everyone and everything in the organization to achieve satisfaction for both internal and external customers (Dahlgaard, Kristensen & Kanji, 1998). According to Sashkin and Kiser (1993) and Talha (2004)

TQM emphasis on the entire organization and all its employees, it involves continuous improvement in all processes to provide high quality products and services.

As evaluated by different researchers that although most of the research on TQM is done in industrialized and developed countries such as USA, Japan, UK etc, but now the demand for quality is no longer the privilege of the developed world only (Temtime, 2003; Hoang, Igel & Laosirihongthong 2006; Das, Paul & Swierczek 2008; Khanna, Laroiya, & Sharma 2010; Satish & Srinivasan, 2010; Al-Swidi & Mahmood, 2012). It was noted that due to globalization of world trade and escalating demand by the customers for quality products and services, developing countries have also started to focus on the improvements in quality; therefore, researchers have also started studying TQM in developing countries (Thiagaragan, Zairi & Dale, 2001).

During the last three decades, TQM has been studied in diverse sectors of the economy such as manufacturing (Fotopoulos & Psomas, 2009), service (Feng, Prajogo & Sohal, 2006), health care (Kaplan, Brady, Dritz, Hooper, Linam & Froehle, 2010), banking (Irfan, Mohsin & Yousaf, 2009; Al-Swidi & Mahmood, 2012), government (Chen, Yu & Chang, 2005) and education (Faganel, 2010; Manivannan & Premila, 2011). Within the context of Pakistan, most of the studies conducted on TQM by several researchers such as Awan and Bhatti (2003); Awan, Bhatti, Qureshi and Bukhari (2009); Malik, Iqbal, Shaukat and Yong (2010); Raja, Bodla and Malik (2011) and Saleem, Siddique, Akmal, Khan, Khan and Sultan (2011) found positive relationship amid TQM and firm performance in manufacturing sector, while in service sector Vakani, Fatmi and Naqvi (2011); Khan (2010); Quraishi, Hussain, Syed and Rahman (2010); Khurram and Jafri

(2011) and Sajjad and Amjad (2011) revealed positive association between TQM and firm performance.

Sadikoglu and Olcay (2014) conducted a study on 242 Turkish firms and revealed that dearth of resources, inappropriate firm structure, lack of employee involvement, awareness and commitment are the primary obstacles to implement TQM. It was also recommended that firms should provide resources to overcome the barriers and improve employee's involvement and awareness to TQM and continue to implement TQM to improve performance.

Though there is not any particular rule, how to implement TQM, but some principles are uniform and can be implemented in any organization. Grandzol and Gershon (1997) stated that TQM is a holistic approach to run the organization to create competitive advantage. Several researchers i.e. Anderson, Rungtusanatham and Schroeder (1994) and Grandzol and Gershon (1997) found TQM dimensions, i.e. leadership, continuous improvement, customer focus, learning, employee fulfilment and process management, which repeatedly occurred in TQM literature. Eight critical TQM practices proposed by Saraph, Benson and Schroder(1989) are top management, process management, product and service design, training, quality data and reporting, supplier quality management, role of the quality department and employee relations. On the other hand, Lu and Sohal (1993) employed nine TQM practices i.e. top management commitment, process quality management, strategic management, education and training, design quality management, information and analysis, resources and statistical process control and benchmarking. Moreover, Flynn, Schroeder and Sakakibara (1994) proposed seven quality factors of

TQM such as, top management support, process management, product design, quality information, workforce management, customer involvement and supplier involvement.

Sila and Ebrahimpour (2002) reviewed studies conducted on TQM from 1989 to 2000 and identified 25 TQM factors. Wali, Deshmukh and Gupta (2003) conducted an empirical study in the Indian context and identified twelve elements of TQM. On the other hand, Sharma (2006) and Powell (1995) studied twelve quality management dimensions. Moreover, Rao, Solis and Raghunathan (1999) proposed thirteen TQM factors, which were later Mellat-Parast, Adam and Jones (2007) also incorporated in their study to evaluate the quality management practices.

The above literature review revealed that most important critical factors of TQM are leadership, teamwork, customer satisfaction, employee involvement, education and training, process management, supplier quality management, continuous improvement and employee fulfillment. Table 3.2 illustrates the summary of studies related to the relationship between TQM and firms' performance.

Table 3.2
Summary of Studies Related to the Relationship between TQM and Firms' Performance

Researcher(s)	**Sector**	**Country**	**Method**	**Findings**
Lee (2003)	SME	China	Survey	TQM positively affects organizational performance.
Kaynak (2003)	Mnf and service	USA	Survey	Positive relationship between TQM and firm performance.
Demirbag *et al*., (2006)	SME	Turkey	Survey	TQM has a strong positive relationship with non-financial performance, while weak influence of TQM on financial performance.

Table 3.2 (Continued)

Demirbag *et al*., (2006)	SME	Turkey	Survey	MO has a positive and significant impact on organizational performance through only a mediating role of TQM implementation.
Joiner (2007)	Mnf firm	Australia	Survey	A strong positive relationship between TQM practices and organization performance.
Awan *et al*., (2007)	Mnf	Pakistan	Survey	Management commitment to quality affects the success or failure of TQM implementation.
Pinho (2008)	SME	Portugal	Survey	TQM has a positive and direct impact on performance.
Salaheldin (2009)	SME	Qatar	Survey	Significant positive effect of TQM on both the operational and the organizational performance.
Khan (2010)	Service	Pakistan	Survey	TQM strategy has a positive and significant effect on performance.
Malik *et al*., (2010)	SME	Pakistan	Survey	A positive correlation between TQM practices and non-financial performance of SMEs.
Kureshi *et al*., (2010)	SME	Pakistan	Case study analysis	Significant correlation is found between TQM and other quality management techniques, six sigma and 5S.
Valmohammadi, (2011)	SME	Iran	Survey	TQM has a significant relationship with organizational performance.
Khalid *et al*.,(2011)	Mnf	Pakistan	Case study	Time, manpower, technical and managerial expertise are the constraints in TQM implementation.
Kumar *et al*., (2011)	Mnfg and service	India	Survey	TQM factors are very important for performance.
Raja *et al.,* (2011)	Mnf	Pakistan	Survey	The effect of TQM on financial performance can not be directly measured due to their indirect relationship.

Table 3.2 (Continued)

Saeed & Hasnu, (2011)	SME	Pakistan	Case study	Firms have a medium level of TQM implementation
Wanjau, Gakure & Kahiri (2012)	SME	Kenya	Survey & interview	TQM has direct relationship with organizational growth.
Jasra *et al*., (2011)	SME	Pakistan	Survey	A significant relationship between business success and its determinants.
Wang *et al*., (2012) .	Service	China	Survey	TQM positively affects organizational performance.
Al-Swidi & Mahmood (2012)	Banking	Yemen	Survey	TQM has a critical role in enhancing overall organizational performance.
Yunis, Jung & Chen (2013)	Mnf and service	USA Mexico, Korea, and China	Survey	Soft TQM has a higher impact than hard TQM on performance.
Sadikoglu & Olcay (2014)	Firms	Turkey	Survey	TQM practices improve various performance measures in the firms.

Hafeez *et al*., (2006) examined that the aim of TQM is to achieve overall higher performance than the individual results originated from all the departments. Organizations which implemented TQM effectively, outperformed non-TQM organizations using performance measures such as, revenues, costs, profitability, capital expenditure and total assets (Hendricks & Singhal, 2001). Despite numerous studies demonstrated the positive direct relationship amid TQM and the organizational performance, but the results of the studies done by Prajogo and Sohal (2006) and Easton and Jarrel (1998) identified inconclusive and contrary findings to the above arguments. Similarly, research conducted in Philippine on 49 companies by Capistrano (2008) reported some differing results that TQM is not positively impacting on organization's financial performance in Philippines.

Samson and Terziovski (1999) supported to employ total quality management as a multidimensional construct. While, Douglas and Judge (2001) suggested that TQM should be adopted in its entirety as a uni construct to analyze the correlation between TQM and firm's performance. Likewise, several researchers i.e. Choi and Eboch (1998); Easton and Jarrell (1998); Hendricks and Singhal (1996, 1997) and Chenhall (1997) examined and supported the notion that uni construct of TQM should be operationalized to examine the link amid TQM and performance. Kaynak (2003) in his study indentified a positive correlation amid TQM and firm performance. He supported the argument and perception in the studies of Hendricks and Singhal (1996, 1997); Easton and Jarrell (1998) and Douglas and Judge (2001) in which TQM was used as a single construct. In this study TQM was used as a uni dimensional construct to determine its affect on performance of SMEs.

3.3.5 TQM and Performance of SMEs

Most of the literature encompasses the link amid TQM and performance was conducted on large organizations (Watson, 2003). While, it was observed that there is limited literature that focused on the affect of TQM on SMEs (Walley, 2000). Khalid *et al*., (2011) noted that early studies on TQM implementation in SMEs have mainly focused to enhance quality of products and use of different statistical tools and techniques. Small and medium enterprises have been found to lag behind large firms in TQM application (Moreno-Luzon, 1993).

A study conducted by Khalid *et al*., (2011) found that successful SMEs place more focus on product quality and process innovation. This is done by a highly motivated

management team with better managerial aptitude and by investing more in updated technology to meet customer's expectations. Though SMEs have less qualified personnel than larger firms but through TQM, they can invest in skill development of their staff which will lead to improved performance (Khalid *et al*., 2011).

Approximately 95 percent of enterprises across the world are SMEs, accounting for about 60 percent employment in private sector (Ayyagari, Grover & Purvis, 2011). Consistent with the above discussion, Ghobadian and Gallear (1996) also emphasized that SMEs contribute in global competitive economy. Since SMEs dominate the industrial sector in most of the developed and developing countries, it is more imperative to adopt TQM to achieve more equitable and efficient economic results and pursue industrialization.

Researchers i.e. Chapman and Al-Khawaldeh (2002) and Zhang, Waszink and Wijngaard (2000) underlined that TQM is a key strategy for firms to enhance the quality standards of its products and services and overall performance to achieve world class status. Besides that, Agus (2000) underlined the vital role of TQM strategy for all firms despite of their size and location in an increasingly competitive world. East, Anderson and Sohal (1999) studied the impact of TQM on performance of Australian SMEs and showed a positive link amid TQM strategy and performance of the SMEs. In a similar context, Huarng and Chen (2002) evaluated that TQM has a positive association with performance of SMEs in Taiwan. It was noted that TQM positively affected both, to reduce the cost and improve performance.

Demirbag *et al*., (2006) in a study on 500 Turkish textile small and medium enterprises identified that there is a strong positive and significant link between TQM and non-financial performance of SMEs, while there is only weak affect of TQM practices on SMEs financial performance. Yusof and Aspinwall (2000) also empirically examined the TQM important success factors in the context of SMEs.

In addition to that, Rahman (2001) conducted an empirical study on 53 Australian SMEs and found that the important components of the successful implementation of TQM are leadership, information and analysis, customer management, employee empowerment and employee involvement, employee training and development, and strategy and planning. Several researchers such as Fening, Pesakovic and Amaria (2008); Bayati and Taghavi (2007); Lewis, Pun and Lalla (2006a, 2005); Temtime and Solomon (2002); Rahman (2001) and Ahire and Golhar (1996) noted that if total quality management is implemented properly can help SMEs to improve and achieve better performance in the turbulent and competitive marketplace.

Consistent with the above discussion, Ghobadian and Gallear (1996) also emphasized that SMEs contribute effectively in global competitive economy. Temtime and Solomon (2002) based on their study conducted on 52 SMEs in Ethiopia identified eight key TQM factors namely; managerial leadership and commitment, continuous improvement, customer satisfaction, supplier partnership, employees empowerment and involvement, quality culture and measurement and feedback. It was noted that due to lack of resources, business planning practices and unclear vision create main obstacles in TQM adoption by SMEs.

In addition to that, empirical findings of Salaheldin (2009) study of 139 Qatari SMEs revealed that there is a significant affect of TQM on operational performance of SMEs. He considered strategic, tactical and operational factors as important TQM factors. Whereas, strategic factors include factors related to the top management practices and support, operational factors related to products, resources, and customers while tactical factors related to the employees and suppliers. The study highlighted the important role of the strategic factors in the successful implementation of TQM strategy in SMEs.

On the other hand, Demirbag *et al*., (2006) based on his empirical study on 163 SMEs in Turkey identified seven critical factors namely, role of top management, employee's relations, quality data and reporting, training, quality policy, supplier quality management and process management. The findings supported the strong positive relationship between TQM critical factors and non-financial performance of SMEs, while there is weak link found between TQM and financial performance.

In line with the previous argument, the results generated by Anderson and Sohal (1999) based on the study on 62 Australian SMEs showed that leadership practices effect were greater on quality of products and services than the flexibility of delivery. In a similar vein, Pinho (2008) confirmed that TQM practices are the major contributors to SMEs performance. He carried out an empirical study on 135 Portuguese SMEs and concluded that there is direct relationship between TQM practices and firm performance. Moreover, results of his study showed that quality assurance system and top-management training and leadership initiatives factor contribute more on SME's performance.

Lee (2004) carried out an empirical research on 112 SMEs of China, identified many obstacles in TQM implementation such as the lack of resources, lack of knowledge and ineffective quality training and poor employee involvement. Despite of various difficulties, the findings showed a positive link amid TQM implementation and performance of SMEs. Valmohammadi (2011) in his study on Iranian manufacturing SMEs studied the affects of seven TQM factors, namely; leadership, customer focus, employee management, process management, supplier, tools and techniques and communication and quality information system (QIS) on the performance of SMEs.

Developing countries are blessed with a big advantage as they do not have to repeat the mistakes and blunders that were made by developed and industrialized countries in the implementation of TQM; hence, it is a critical strategy for all firms regardless of location and size (Agus, 2000). Additionally, SMEs generally do not have rules and procedures therefore they are more flexible to adapt to new changes. Moreover, many small and medium enterprises are suppliers to larger organizations and thus have more responsibility to enhance the quality standards of their products and services. There exist a dependent relationship between larger and smaller firms, Gulbro, Shonesy and Dreyfus (2000) observed that these small firms would be dropped as a supplier if they did not improve the quality.

Brah, Serene and Rao (2002) observed that TQM-adopting firms perform well and have edge over non-TQM firms. Various studies have reported that TQM is positively linked with organizational performance (Demirbag *et al*., 2006; Feng, Prajogo, Tan & Sohal, 2006). While on the other hand, Harari (1993) and Salegna and Fazel (1995) stated that there is no affect of TQM on various measures of performance. Similary, researchers

McCabe and Wilkinson (1998) and Yeung and Chan, 1998) found negative relationship amid TQM and the firm performance.

Pinho (2008) reported in his study that TQM should not be considered as the only important construct that leads to performance and that more additional relationships need to be addressed by integrating other factors as major antecedents of performance of SMEs. Furthermore, it was also suggested that several environmental variables should be considered as moderators in the relationship of TQM and performance. These limitations in the literature, however, provided a number of further insights and understanding for future research.

This study contributed to the extant literature by integrating total quality management with entrepreneurial orientation and market orientation constructs as major factors of performance of SMEs. Moreover, within the premise of contingency theory, this study is expected to enrich the literature by incorporating external environment as a moderator on the relationship amid TQM, EO, MO and performance of SMEs. Based on an in-depth literature review, five factors were identified in this study to measure the extent of TQM implementation in SME sector of Pakistan. Table 3.3 presents the factors together with their sources.

1. Leadership
2. Process Management
3. Customer Focus
4. Continuous Improvement
5. Employee Fulfillment

1. Leadership

Though some of the TQM factors may differ among different firms and industrial sectors but TQM implementation is not possible without committed leadership by top management. The person at senior executive is responsible and instrumental in defining the need for change, to devise strategic direction and to create new frameworks to improve the performance of a firm (Aalbregtse, Hejka & McNeley, 1991). The role of top management is a key requirement for successful implementation of TQM (Jabnoun, 2002).

In a similar vein, Lascelles and Dale (1990) stated that top management is the primary instrument of change that brings initiatives to shape organizational values and managerial structure for quality improvement. TQM is recognized as strategic initiative, stems from the leadership of top management which engage individual and team commitment throughout the organization by visibly committing to the program, while the failure of TQM implementation is due to lack of commitment of top management (Choppin, 1995).

In a similar context, Deming (1986) argues that top management of a firm is responsible for more than 90 percent of quality problems. Top management should provide the necessary input and resources to employees to actively participate in quality transformation and to deliver the desired quality (Jabnoun, 2002). As mentioned by Besterfield (1995) top management outlines clear quality policies, goals and plans so that employees have clear direction and vision of quality preferences and are constantly reminded that preference and top priority is customer satisfaction, not the product.

The top management plays a pivotal role to support and encourage TQM culture in the firm. Top leadership determines and establishes the vision by focusing on the priorities of the firm, with contribution and participation of everyone in the organization and then ascertains the specific mission to achieve the overall vision. Management leadership is included in this study, as it is an important dimension of TQM (Yusof & Aspinwall, 1999; Arawati, 2005; Saraph *et. al*., 1989; Black & Porter, 1996; Powell, 1995; Grandzol & Gershon, 1998; Thiagarajan *et al*., 2001; Ahire & Golhar, 1996; Anderson *et al*., 1994).

2. Process Management

Process management refers to the designing and introduction of new products and services by the combination of production, delivery requirements and managing supplier performance (Saraph *et al*., 1989; Flynn *et al*., 1995). By identifying quality problems and taking preventive approach, result in reduced rework and waste and increased output and higher product quality (Forza & Flippini, 1998; Anderson *et al*., 1994). The findings of empirical study conducted by Ahire and Dreyfus (2000) and Forza and Flippini (1998) showed that process management significantly affects the performance.

3. Continuous Improvement

Continuous improvement is essential element of TQM to steer forward the firm towards the accomplishment of its objectives (Richardson, 1997). Continuous improvement should be implemented throughout the organization based on the trust and involvement of everyone in the organization to strive to increase the performance (Crosby, 1979). Continuous improvement should be consistent by listing all the improvement

opportunities throughout the organization (Saylor, 1992). In this process it is important for the organization to identify and understand the needs of both internal and external customers.

Choppin (1995) observed that continuous improvement is an essential part of Total quality management involving continuous and measurable improvement at all levels ranging from organization performance to individual employee performance. The ever increasing global competition has led the firms to focus even more to continuously improve the quality of products, services and processes to satisfy customer's needs. Continuous improvement is a broader concept which includes innovation in process and designs by the application of new technologies, research and development effort and building up new skills and capabilities in order to gain higher market share and enhanced firm's performance (Hunt, 1993).

4. Customer Satisfaction

Customer satisfaction is the basic approach of TQM, aimed to keep customers satisfied and delighted. Competitive business trends have developed higher customer expectations, they are increasingly aware of rising quality standard in products and services (Demirbag *et al*., 2006). Hunt and Morgan (1995) emphasized that there should be continuous and effective communication between customers and organization to achieve customer's satisfaction. Any decline in customer satisfaction due to poor quality of products and services would adversely affect organization performance.

Researchers showed that increased customer satisfaction resulted in repeat customers and less customers complaints, lower operating cost, higher profit (Matzler, Hinterhuber, Daxer & Huber, 2005) and increased organizational performance (Westland, Gustafsson, Lang & Mattsoon, 2005). By keeping close to customers, listening to their needs and responding accordingly to their changing requirements is one of the important elements of TQM. Customer satisfaction and loyalty is the core of business success and it is gaining the most importance in the TQM future literature (Mehra, Hoffman & Sirias, 2001).

5. Employee Fulfillment

Employees are internal customers and are important asset of the firm. It is imperative to provide a good and conducive working environment necessary for them, so that they have pride in their job. As revealed by Anderson *et al*., (1994) and Grandzol and Gershon (1998) and Wang *et al*., (2012) organization should continuously strive to address and satisfy employee's needs, job commitment, job satisfaction and pride of workmanship. Employee fulfillment can be enhanced by appropriate reward and recognition to motivate them to work with their full potential. Employees with a sense of fulfillment in their jobs are more engaged and productive employees. Table 3.3 presents the critical TQM factors used in this study and studied by different researchers.

Table 3.3
Critical TQM Factors used in this Study and Studied by Different Researchers

Factors	Researchers
Management Leadership	Saraph *et al*., (1989); Flynn *et al*., (1995); Black and Porter, (1996); Ahire *et al*., (1996); Tamimi (1998); Yusof and Aspinwall (2000); Sila and Ebrahimpour (2005); Tari (2005); Demirbag *et al*., (2006); Salaheldin (2009); Arawati (2005); Brah *et al*., (2000); Kaynak (2003); Li *et al*. (2003) and Sureshchander *et al*., (2001).
Customer Focus	Flynn *et al*., (1995); Ahire *et al*., (1996); Black and Porter (1996); Tamimi, (1998); Rahman (2001); Sila and Ebrahimpour (2005); Tari (2005); Demirbag *et al*., (2006); Salaheldin (2009); Arawati (2005); Brah *et al*., (2000); Flynn *et al*., (1994); Li *et al*., (2003) and Samson and Terziovski (1999).
Continuous Improvement	Ahire *et al*., (1996); Anderson *et al*., (1994); Arawati (2005); Flynn *et al*., (1994); Li *et al*., (2003); Rao (2006); Saraph *et al*., (1989) and Sureshchander *et al*., (2001).
Process management	Saraph *et al*., (1989); Black and Porter (1996); Flynn *et al*., (1995); Ahire *et al*., (1996); Sila and Ebrahimpour, (2005); Tari (2005); Demirbag *et al*., (2006) and Salaheldin, (2009).
Employee fulfillment	Wang *et al*., (2012); Anderson *et al*., (1994) and Grandzol and Gershon (1998).

3.4 Entrepreneurship

Entrepreneurship originates from the French word 'entrepreneur' meaning to undertake the act. Entrepreneurship is, when a person has an innovative idea, has a capacity and willingness to develop and makes business out of it. This may result in establishing new organizations or may be part of reorganizing and restructuring mature organizations in response to a perceived future opportunity. The most apparent form of entrepreneurship is that of starting fresh businesses. Since the beginning of entrepreneurship in the 1930s, research on it has increased and grown by including number of concepts, forms and approaches (Katsikis & Kyrgidou, 2009).

Based on the study of Stevenson and Jarillo (1990) who examined the trajectory of entrepreneurship research, the researches can be grouped into three main categories. The first category encompassed the economic and market affects of entrepreneurial actions (Schumpeter, 1934; Kirzner, 1979; Leibenstein, 1968). The second category is individual entrepreneurial action based on psychological and sociological reasons (Brockhaus, 1975 & 1980; Wilken, 1979) while the third refers to methods that entrepreneurs use to attain their objectives (Silver, 1983).

Entrepreneurship is a vital element of organizational and individual success as it emphasizes to produce opportunity and create wealth (Antoncic & Hisrich, 2003; Davidsson, 2005). Most prevalent views of entrepreneurship encompass the uncertainty, risk-taking and the efforts on the part of the entrepreneur who strives to convert visions into business activities. Entrepreneurship focuses to identify new business opportunities and introduce new ideas in the market place (Brown & Eisenhardt, 1998; Eisenhardt & Martin, 2000; McCline, Bhat & Baj, 2000)

Kirzner (1979) emphasized that fundamental entrepreneurial activity involves the role of opportunities for profit, previously unnoticed. Moreover, Shane and Venkataraman (2000) argued that entrepreneurship is the process to discover, evaluate and exploit the opportunities in the market place. Scholars such as Gartner (1988); Audretsch and Keilbach (2004) and Davidsson, Delmar and Wiklund (2006) referred entrepreneurship as the creation of new economic activity including the aspects and start up of new venture, creation of new business activity of established firms. Consistent with the above definition González-Benito *et al.,* (2009) highlighted that entrepreneurship involves the development of creative, innovative projects that have an edge over those

of competitors and thus, creating a competitive advantage in terms of profitability and long-term viability and sustainability.

Entrepreneurship is a holistic concept representing the characteristic of the firm that not only focuses on the efforts of key manager, but it also describes that when the size of the firm increases then its organizational structure becomes more complex (Miller,1983). Several researchers i.e. Covin and Slevin (1989); Naman and Slevin (1993); Kemelgor (2002); Miles and Arnold (1991); Miller (1983) and Morris and Paul (1987) contributed in the academic literature by recognizing the composite nature of entrepreneurship and differentiated three key components namely, (1) innovativeness (2) proactiveness and (3) risk taking.

3.4.1 Definition of Entrepreneurial Orientation

In literature different researchers have defined entrepreneurial orienatation i.e. Miller (1983) and Covin and Slevin (1989) on one hand and that of Lumpkin and Dess (1996) on the other hand. Covin and Slevin's (1989) definition is based on three factors of entrepreneurial orientation namely, innovativeness, proactiveness and risk-taking. While Lumpkin and Dess (1996) described EO as the tendency of a firm to act autonomously, aggressively, try to innovate, take risks and act proactively to explore the market opportunities.

In the literature several definitions have explained Entrepreneurial orientation. According to Frank, Kessler and Fink (2010) entrepreneurial orientation entails the specific entrepreneurial behavior, methods and decision making. While, Zahra and Covin (1995) defined EO as a prospective strategy to achieve organizations outcomes,

through innovation, proactiveness and risk taking. As mentioned already in Chapter 1, Covin and Slevin's (1989) definition of EO was adopted in this study. The reason why Covin and Slevin's (1989) definition of EO, based on three dimensions namely innovativeness, proactiveness and risk-taking was adopted in this thesis is that there are more research studies which have chosen only the three indicators, innovativeness, risk-taking and proactiveness.

3.4.2 Literature Review on Entrepreneurial Orientation (EO)

EO refers to the decision-making activities that lead to develop new products or new entry in the market (Lumpkin & Dess, 1996). The firm can be viewed as entrepreneurial due to the outcome of organizational activities based on entrepreneurial orientation. Several researchers i.e. Hughes and Morgan (2007); Covin and Slevin (1991); Keh *et al*., (2007); Madsen (2007); Lumpkin and Dess (1996) and Wiklund, (1999) analyzed that EO is a firm-level construct related to organizational performance.

According to the research conducted by Ayyagari *et al*., (2011) 95 percent of the world's firms are SMEs; all of which are actively contributing to the global economy by generating considerable employment opportunities. So it is important to examine such firms and help them in becoming entrepreneurial and increase their performance. According to Lumpkin and Dess (1996) there are five dimensions of EO namely innovation, proactiveness, risk taking, autonomy and competitivenes. But depending on the situation different combination of these dimensions are used for the firm's performance. Hughes and Morgan (2007) noted that majority of researchers only examined three of the five dimensions. According to Lumpkin and Dess (1996) and

Covin and Slevin (1989) entrepreneurship researchers have considered EO both as uni-dimensional and multi-dimensional construct.

Empirical research conducted by Lumpkin and Dess (1996) on EO and performance relationship explored that all dimensions of EO can differ independently of each other therefore, all dimensions of EO construct should be regarded as separate independent variables. While, Covin, Green and Slevin (2006) suggested that the individual dimensions of EO may differ independently, but all the three dimensions of EO collectively influence the performance and makes the organization entrepreneurial. Several researchers have tested uni and multi dimensional approach of EO and proposed that both constructs are valid. However, Kreiser, Marino and Weaver (2002) argued that three dimensional construct of Covin and Slevin (1989, 1991) maintain and confirm cross cultural and higher convergent validity.

Entrepreneurial orientation can be explained from the lense of resource-based view, Barney (1986, 1991) put forward four criteria i.e. organizational resources must be valuable, rare, hard to imitate and hard to replace and the type of available resources affect type of strategic process firm's use to achieve competitive advantage. Many entrepreneurship researchers i.e. Covin and Slevin (1991) and Karagozoglu and Brown (1988) have also contended to view the EO-performance link in a contingency framework.

Entrpreneurial orienatation has been studied in different kinds of organizations ranging from small firms to large organizations and with different kinds of ownership structures (Covin & Wales, 2010). Many researchers argued that entrepreneurial behavior has a

considerable impact on the success of firms regardless of their size (Miller, 1983; Covin & Slevin, 1988; Lumpkin & Dess, 1996). Wiklund (1999) considered EO as a possible positive force to utilize emerging opportunities and take first-mover advantage.

Due to turbulent business environment, cutthroat competition, firms need to continuously look for new opportunities to address the increasing customer's expectations and demands for products and services (Hamel, 2000; Rauch, Wiklund, Lumpkin & Frese, 2009). Firms should develop entrepreneurial orientation because EO is regarded as being related to better firm performance (Kraus & Kauranen, 2009; Rauch *et al*., 2009). Table 3.4 presents summary of studies related to the relationship between EO and firm's performance.

Table 3.4
Summary of Studies Related to the Relationship between EO and Firm's Performance

Researcher(s)	**Dimensions**	**Uni/multi dimensional**	**Research Type**	**Findings.**
Covin & Slevin (1986)	Innovation proactiveness and risk taking	Uni	Empirical	EO positively influence the performance.
Lumpkin & Dess (2001)	Innovation proactiveness, risk taking, autonomy and competitiveness	Multi	Empirical	EO as a multidimensional construct has exclusive relationship with firm performance.
Wiklund & shepherd (2003)	Innovation proactiveness and risk taking	Uni	Empirical	EO positively effects SMEs performance.
Wiklund & Shepherd (2005)	Innovation, proactiveness and risk taking	Uni	Empirical	EO effects positively and strongly on small business performance in dynamic environment.

Table 3.4 (Continued)

Li *et al.*, (2009)	Innovation proactiveness, risk taking, autonomy and competitiveness aggressiveness	Multi	Empirical	EO positively impacts on firm performance and knowledge creation process has mediating role in this relationship.
Awang *et al.*, (2009)	Autonomy, innovativeness, proactiveness, risk taking	Muti	Empirical	EO is strongly related to SME performance.
Lan & Wu (2010)	innovativeness, proactiveness, risk taking and competitive aggressiveness	Multi	Empirical	EO is positively related to the degree of internationalization, amongst the SMEs of Chinese.
Osman *et al.*, (2011)	innovativeness, proactiveness, risk taking	Uni	Empirical	EO positively associated with the success of SMBs.
Al Swidi & Mahmood (2011)	Innovation, risk taking and proactiveness	Multi	Empirical	Positive and significant relationship between EO and firm performance.
Baba & Elumalai (2011)	Innovation proactiveness, risk taking, autonomy and competitiveness aggressiveness	Multi	Empirical	Risk taking, innovation, pro-activeness and competitive aggressiveness have significant positive relationship with organizational performance, while there is no relationship found between autonomy and SME performance.
Zhang & Zhang (2012)	-	Uni	Empirical	EO has a positive effect on business performance, and network capabilities significantly moderate relationship between EO and business performance.
Vora *et al.*, (2012)	Innovation proactiveness, risk taking, autonomy and competitiveness aggressiveness		Case study	EO is an important antecedent for SME performance.

Table 3.4 (Continued)

Martins & Rialp (2013)	Innovation proactiveness, risk taking	Uni	Empirical	EO has a strong positive relationship with performance. The impact of EO on profitability is higher when there is a fit between EO and the external environment.
Herath & Mahmood (2013)	-	Uni	Empirical	EO is positively related with the firm performance.
Mahmood & Hanafi (2013)	Risk-taking, pro-activeness, and innovation	Uni	Empirical	EO has significant relationships with performance.

3.4.3 Uni-dimensional and Multi-dimensional Approach of EO Construct

There are two main approaches found in past literature regarding EO conceptualizations, i.e. uni-dimensional approach related with the works of Covin and Slevin (1989) and Miller (1983) and the multi-dimensional approach proposed by Lumpkin and Dess (1996). Both these approaches differ from each other, whether the EO dimensions vary independently or not (Covin *et al*., 2006). According to Lumpkin and Dess (1996) and Covin and Slevin (1989) entrepreneurship researchers have considered EO both as multi-dimensional and uni-dimensional construct. Covin and Slevin (1989) used EO as a uni-dimensional construct consisted of innovativeness, proactiveness and risk-taking. Moreover, entrepreneurial firm as contended by Kreiser *et al.,* (2002) need to simultaneously be risk-taking, innovative and proactive as all of these dimensions equally contribute to a firm's overall performance.

Furthermore, Covin *et al.,* (2006) argued that EO construct would cease to exist if it is decomposed in its dimensions, hence, EO construct should be used as a package. It is significant to note that the three components of EO, innovativeness, proactiveness and

risk taking act together by constituting a basic, unidimensional strategic orientation. In the same context, George and Marino (2011) also explored that EO construct should be considered as a unidimensional construct. In contrast, Lumpkin and Dess (1996) presented multi-dimensional view of EO construct. They argued that EO dimensions exist independently from each other in many situations.

Rauch, Andreas, Wiklund, Frese and Lumpkin (2004) analyzed the dimensionality of EO based on the literature review and 51 empirical studies. It was revealed that most of the findings were in line with Covin and Slevin (1989) argument to sum up all three dimensions of EO to form a single construct, whereas, only 13 studies employed EO as a multi-dimensional construct. Hence, it was strongly recommended by Rauch *et al.,* (2004) that EO should be considered as uni- dimensional construct to explain the firm performance.

Moreover, Kreiser *et al.,* (2002) in their empirical study on EO analyzed that using of the two newer dimensions do not add much significance to EO construct, which also supports the notion of using three-dimensional approach. In a similar vein, Hughes and Morgan (2007) examined different dimensions separately and noted that the three dimensions innovativeness, proactiveness and risk-taking have shown the strongest link with firm performance. This also supports to exclude autonomy and competitive aggressiveness from EO construct. Additionally, three dimensional EO construct mentioned in literature is considered more reliable and valid (Knight, 1997; Kumar, Subramanian & Strandholm, 2002). In this study EO was used as uni dimensional construct to determine its affect on SMEs performance.

3.4.4 Entrepreneurial Orientation and Performance of SMEs

Review of past literature showed that most of the study on EO is carried out in larger firm's perspective. Recently, researchers attempted to empirically investigate the affect of entrepreneurial orientation on SMEs performance (Aloulou & Fayole, 2005) but again most of the work is done in developed countries. Since 95 percent of the world's firms are SMEs (Ayyagari *et al*., 2011). SMEs are significantly contributing to the global economy by providing considerable employment opportunities, production of innovative and novel products (Jeppesen, 2005). Therefore, it is important to study performance of SMEs and the factors affecting their performance.

Studies showed that majority of SMEs are reluctant to implement entrepreneurial orientation and mainly depend on intuition to forsee the market requirements, as a result there is a mismatch between product offerings and market needs (Zainudin, Nasution & Bain, 1990). Literature illustrated that some studies evaluated the correlation between EO and SMEs performance in developing countries of the world, found a positive linkage between EO and performance. It is suggested that EO as a significant strategic orientation among SMEs, can enhance their growth and profitability in current increased competition both at local and international level (Knight, 2001).

Globalization has increased challenges for SMEs. Dess, Lumpkin and Covin (1997) argued that firm's strategic orientation supports the firm to compete and survive well in times of uncertainty therefore, entrepreneurial firms, tend to be more successful to achieve higher growth. Aloulou and Fayole (2005) contended that EO construct consists of three dimensions i.e. innovativeness, risk taking and proactiveness. It was argued that

innovative SMEs can not be classified as entrepreneurial, until they bear risk and respond proactively towards competitor's actions and competitive business environment.

Wiklund (1999) argued that SMEs due to their flexible and innovative structure are at advantage. It was further highlighted that SMEs simply adhering to EO, can respond more significantly to the emerging market opportunities as compared to large organizations, which do not have that quickness and flexibility. The proactive behaviors of SMEs keep them vigilant on the market changes and react rapidly and meaningfully to those changes earlier than the competitors.

Wiklund and Shepherd (2005) examined the affect of EO in 413 Swedish SMEs by utilizing environment and financial capital as moderators and discovered that EO effect positively and strongly on performance. Likewise, Keh *et al*., (2007) studied the relationship amid entrepreneurial orientation and market orientation on SMEs performance on the data collected from 294 SMEs operating in retail and services sectors in Singapore. Their findings discovered that EO affects directly and indirectly on SMEs performance.

In addition to that, Wang (2008) analyzed the correlation amid learning orientation, EO and performance of 213 SMBs in United Kingdom. It was explored that EO is a key component for the business success and learning orientation play an important moderating role to flourish and enhance the EO and SMEs performance. Fairoz, Hirobumi and Tanaka (2010) examined the effect of entrepreneurial orientation on SMBs business growth in developing countries of Asia and revealed positive correlation

between dimensions of EO construct with SMBs market share. Various researches conducted on SMEs validated that the entrepreneurial orientation improves performance in the context of SMEs, both in developing and under-developed countries. Several researchers such as Covin and Slevin (1991); Keh *et al*., (2007); Lumpkin and Dess (1996); Hughes and Morgan (2007); Madsen (2007) and Wiklund (1999) pointed out that EO is a firm-level construct that is related to the performance of organization.

Dess, Lumpkin and Covin (1997) examined that proactiveness provides SMEs the opportunity to foresee the changes in the external environment and become the first to effectively and meaningfully respond to them. It is therefore necessary for SMEs to be innovative, proactive and risk-taking firms (Miller, 1983). A firm cannot be entrepreneurial by simply changing the product-line and technology to equate the competitors without taking risk and adopting proactive approach.

Due to globalization there is an increase competition for SMEs on domestic and international front, however proactive approach can help them to sustain themselves and grow profitability in response to increased market turbulence (Dess, Lumpkin & Covin, 1997). It is significant to note that the innovative and proactive traits of SMEs in Thailand provided the antecedents for their better existence during the Asian economic crises (Ussahawanitchakit, 2007).

3.4.5 Dimensions of Entrepreneurial Orientation (EO)

The concept of EO refers to the propensity of the organizations to take risks, innovate and act proactively (Miller, 1983). Consistent with the argument stated above, Barrett, Balloun and Weinstein (2003) concluded that an entrepreneurial organization is the one

which is proactive in obtaining intelligence and information about competitors and customers; is innovative by redirecting and allocating its resources to devise a strategic response; and in the implementation of its response, involves some degree of risk and uncertainty.

Researchers such as Lumpkin and Dess (1996) and Covin and Slevin (1991) contributed a lot to entrepreneurial literature. Covin and Slevin (1991) suggested three factors that constitute the entrepreneurial orientation construct i.e. innovation, proactiveness and risk-taking and later Lumpkin and Dess (1996) further added two more dimensions namely, aggressiveness and autonomy However, as observed by Wiklund (1999) that majority of the research conducted on EO have utilized the three dimensions namely innovativeness, risk taking and proactiveness to measure the EO construct. Neverthless, all the dimensions of EO have a significant relationship with performance of firm (Lumpkin & Dess, 1996; Covin & Slevin, 1991).

1. Innovation: Different researchers have defined innovation in different ways. Innovation refers to a new way of offering quality or better value of products or services (Knox, 2002). In a similar vein, Cumming (1998) mentioned the term, as the creation of new product or process. In addition to that, according to many other scholars Chaharbaghi and Newman (1996); McAdam, Armstrong and Kelly (1998) and Urabe, Child and Kagono (1998) innovation is a form of knowledge or the creation of new idea. Knox (2002) emphasized the need of organizations to adopt innovation and innovative thinking in their decision making in order to achieve superior customer value.

According to Damanpour (1991) innovation refers to the adoption of new behaviour, idea or new activity such as innovative products and services which is new to the adopting organization. There are various dimensions of innovation, namely process, product/service and administrative innovation. Product/service innovation as defined by Nasution *et al.,* (2011) is the introduction of new products or services or modifications to the existing products and services. Lukas and Ferrel (2000) evaluated process innovation as to introduce new technology into use. Process innovations are those that affect the production or service delivery process. While administrative innovation according to Pennings (1998) involves administrative factors and their link to the social system of an organization.

Lumpkin and Dess (1996) manifests innovation as the firm's willingness and endeavors to identify novel ideas of devising solutions through experimentation and creative processes, to produce new products and services. Additionally, Covin *et al.,* (2006) strongly advocated that innovativeness as dimension of EO make the firms able to grow their businesses and the lack of innovation approach means there is no entrepreneurship in spite of the utilization of other two dimensions of EO.

2. Risk taking refers to the propensity of a firm to bear risks such as undertaking a new venture into unknown or unexplored new markets including; investing large portion of resources into any new venture with uncertain outcomes (Lumpkin & Dess, 2001). More recent studies done by Ndubisi and Iftikhar (2012) have recognized and measured the risk taking as an entrepreneurial quality. Similarly, number of previous researchers i.e. McClelland (1961); Timmons (1978); Welsh and White (1981); Morris (1998) and Brockhaus (1980) have reported risk taking as a characteristic of entrepreneurs.

Moreover, entrepreneurs calculate their risk to find ways to check and reduce it, with a view to obtain benefits, rather to gamble with little thought about these risks (Morris, 1998).

Other than that, Dess and Lumpkin (2005) shed light on the types of risk that entrepreneurs and entrepreneurial ventures take; business risk (i.e. venturing into the unknown, untested markets and employing unproven technologies); financial risk means that a firm borrows heavily or invest a large portion of its resources in order to develop and personal risk refers to the top management decision in favour of a strategic course of action (Ndubisi & Iftikhar, 2012).

Risk taking is a significant aspect of entrepreneurial orientation and important characteristic of entrepreneurs involving resource allocation in establishing a new and risky venture (Venkatraman, 1989). Miller and Friesen (1978) described risk-taking as the eagerness of entrepreneurs to invest in huge and risky ventures. Knight (1921) considered the role of risk taking is vital in the uncertain entrepreneurial environment.

3. Proactiveness refers to the attempt of a firm to seek new opportunities and to prepare for future needs by the introduction of new products and brands earlier than the competitor or abolishing those businesses which are in the mature or declining stages of life cycle (Venkatraman, 1989). Proactiveness is a firm's attempt to discover and anticipate future opportunities even when those opportunities may not be related to existing operations of the firm. Lumpkin and Dess (2001) argued that proactiveness means, forward-looking, opportunity-seeking, acting in anticipation of future demand by introducing new products or services earlier than the competitor. In the same context,

Dess, Lumpkin and Dean (2005) noted that proactiveness is the firm tendency and willingness to seize new opportunities and carefully look to the future needs and demands before these demands are evident. Whereas, Slevin and Covin (1990) stated proactiveness as firm keenness to initiate such actions, which compel competitors to respond.

3.5 Market Orientation (MO)

Market orientation (MO) is a firm's philosophy to discover and fulfil customer's needs (Narver & Slater, 1990). Kohli and Jaworski (1990) explained that market orientation is a set of specific activities and behaviors. While, Hunt and Morgan (1995) viewed MO as a resource, a basis for decision making. Past literature showed that empirical studies on MO started during early 1990s and has been known as an important business approach for SMEs as well as for large businesses.

Kotler, Armstrong and Cunningham (2005) have explored that market-oriented firms always tend to stay close to their customers to discover and meet their needs and create value for the firms in terms of profitability and market share. Market-oriented businesses seek the ways to develop superior solutions to expressed and potential needs of customers (Slater & Narver, 1995; Kohli & Jaworski, 1990; Day, 1994). Besides that, MO focuses to bring innovation in product, process and enhance the performance in the long run (Kohli & Jaworski, 1990; Chandy & Tellis, 1998; Han *et al*., 1998; Zhou, Gao, Yang & Zhou 2005). Furthermore, Narver, Slater and Tietje (1998) noted that market oriented firms assign resources more efficiently and better able to focus on customer's requirements.

3.5.1 Definition of Market Orientation

Market orientation has been defined by several previous researchers i.e. Hunt and Morgan (1995) termed MO as a source, whereas, according to Shapiro (1988) a decision-making instrument. While Kohli and Jaworski (1990) described MO, a behavior and actions, Day (1994); Deshpande, Farley and Webster (1993); Narver and Slater (1990) and Slater and Narver (1995) delineated MO as organization culture variable. Meanwhile, Narver and Slater (1990) defined market orientation as part of a firm's culture that supports required and essential behaviors to create higher value for customers and as a result higher performance.

3.5.2 Literature Review on Market Orientation

Literature on market orientation suggested that the main objective of MO is to deliver higher value to customers based on the knowledge acquired from customers and competitors analysis and dispersed this knowledge throughout the organization to respond accordingly and effectively (Narver & Slater, 1990; Felton, 1959). Morgan and Strong (1998) also reported that market-oriented firms have more ability to produce superior products and services for current and potential customers. Consistent with the above discussion, Pelham and Wilson (1996) evaluated that in today's competitive business world, market oriented firms are capable to understand the value creation for customers and achieve competitive advantage.

Demirbag *et al.,* (2006) explored that firms need to develop appropriate culture to provide better value to the customers and achieve competitive edge. It was also highlighted that market oriented firms gather the information from customers and

competitors and share this information within their departments, can achieve sustainable competitive advantage. Similarly Narver and Slater (1990) pointed out that firms create value and worth for customers generally in two ways: by increasing benefits to the customers in relation to the cost or by decreasing the customer's cost in relation to benefit of products/services.

In the same context, Reed, Lemak and Montgomery (1996) revealed that market-oriented firms will be in a better position to create higher value of the products and services for the customers which will in turn leads to a better performance of organization. Moreover, several studies also suggested that the affect of market orientation on performance depends on environmental conditions (Atuahene-Gima 1995; Narver & Slater, 1990). Therefore, market oriented firms need to focus on those environmental variables that are likely to affect their capability to enhance customer's satisfaction as compare to competitors (Baker & Sinkula, 1999).

On the other hand, Kohli and Jaworski (1990) in their study suggested that greater the level of market orientation of a firm, the greater would be the overall performance. Moreover, it was also noted that several external factors such as greater market turbulence, weaker economy and competition moderate the relationship between MO and performance. Erdil, Erdil and Keskin (2004) in their study identified that the environmental perspective of an organization will most likely affect its level of market orientation. It was explored that organizations in more dynamic and competitive environments are expected to be more market oriented.

Jaworski and Kohli (1993) pointed out that the link amid MO and performance depends on the condition of business environment of an organization. Market orientation refers to meaningfully learning through different forms of contact with customers and competitors in the business market (Slater & Narver, 2000; Day, 1994). Liu, Luo and Shi (2002) highlighted the significant importance of market orientation to enable firms understand the market needs and formulate appropriate strategies to accomplish customer's needs and wants. MO is a customer focused strategy to generate market based knowledge followed by interfunctional coordination in the organization to achieve long term business success.

Empirical studies showed mixed findings on the correlation amid market orientation and organizational performance. Some researchers i.e. Slater and Narver (1994); Jaworski and Kohli (1993) and Narver and Slater (1990) found positive relations between MO and organizational performance, while some other studies could not find any significant correlation amid MO and performance (Greenley, 1995; Harris, 2001). Similarly, Han *et al*., (1998) and Hart and Diamantopoulos (1993) also could not discover a significant link amid market orientation and performance of a firm. Table 3.5 demonstrates the summary of studies related to the relationship between MO and Firm's performance.

Table 3.5
Summary of Studies Related to the Relationship between MO and Firm's Performance

Researcher(s)	Research Type	Sector	Country	Findings
Maydeu-Olivares & Lado (2003)	Empirical	Service	Europe	MO significantly effects on performance.
Demirbag *et al.*, (2006)	Empirical	SME	Turkey	MO has a positive and significant impact on organizational performance through a mediating role of TQM.
Bozic & Radas (2006)	Empirical	Production and service	Croatia	Significant negative influence of interfunctional orientation on innovation performance.
Sorensen (2009)	Empirical	Manufacturing	Denmark	Competitor orientation is positively related to a firm's market share.
Mokhtar *et al.*, (2009)	Empirical	Manufacturing	Malaysia	Not all MO dimensions have a direct affect on organizational performance. .
Kumar *et al*., (2011)	Empirical	Mix	USA	Market orientation has a positive affect on business performance.
Mahmoud (2011)	Empirical	SME	Ghana	A significant positive relationship between market orientation and business performance.
Suliyanto & Rahab (2012)	Empirical	Technology intensive firm	Indonesia	MO effects business performance with the mediating role of innovation.
Wang *et al.*, (2012)	Empirical	Service	China	Market orientation positively affects performance.
Herath & Mahmood (2013)	Empirical	SME	-	Positive and significant relationship between MO and firm performance.

3.5.3 Dimensions of Market Orientation

Pioneers of the market orientation concept Kohli and Jaworski (1990) put forward three basic dimensions on the basis of behavior; i) intelligence generation, ii) responsiveness

and iii) intelligence dissemination. On the other hand, Narver and Slater (1990) identified MO in terms of cultural perspective as customer orientation, competitor orientation and inter functional coordination. Review of extant literature revealed that most of the studies on market orientation are carried out on the basis of these two approaches. According to Slater and Narver (1994) cultural aspect of MO, the construct of market orientation consists of three dimensions, competitor orientation, customer orientation and inter-functional coordination. Each of these three dimensions, are used to achieve enhanced performance and long-term profitability.

1. **Customer Orientation**

In literature customer orientation is considered as the basic element of marketing and MO (McNamara 1972; McKitterick 1957; Narver & Slater 1990; Webster 1988). Customer orientation refers to a firm's capacity to identify and understand customer's needs and wants and continuously create superior products and services (Narver & Slater, 1990). While, Deshpandé *et al*., (1993) defined customer orientation as the set of beliefs and approaches to give priority to the customer's preferences and interests. Similarly, Gatignon and Xuereb (1997) evaluated that customer orientation is the ability and a source of motivation to identify and respond to customer's needs and wants based on the collected information from them. Previous studies showed that customer orientation contributes positively and significantly to enhance firm's performance (Liu *et al.,* 2002; Morgan, Vorhies & Mason, 2009; Narver, Slater & Maclachlan, 2004). In fact, customer orientation is a significant tool used to distinguish SMEs from large firms, as there exist a close communication between top management and the customers in SMEs (Pelham & Wilson 1996; Appiah-Adu & Singh 1998).

2. Competitor Orientation

Competitor orientation refers to continually evaluating competitor's strengths, weaknesses, capabilities and strategies (Deshpande *et al*., 1993; Narver & Slater, 1990). The objective of competitor orientation is to provide considerable and important information pertaining to current and potential competitors for strategic decisions. According to Porter (1980) and Kumar, Scheer and Kotler (2000) competitors are those firms offering same products or services or close substitutes that serve the same customer needs. Hence, firm's current and potential competitors may be the firms with similar or even with dissimilar products and services. Competitor orientation provides the firm timely and accurate information about its current and emerging competitors (Day & Wensley, 1983).

3. **Inter-functional Coordination**

It is a process to integrate and involve all members of the firm to address and meet customer's needs better and earlier than competitors. It is the responsibility of a firm to generate customer intelligence among the employees to take strategic decisions. Inter functional coordination refers to integration and harmonizing different functional departments to produce superior products and services for customers (Narver & Slater, 1990).

3.5.4 Uni-dimensionality vs Multi-dimensionality of MO Construct

Pelham (1997) argued that market orientation concept presented by Kohli and Jaworski is too narrow. It was analyzed that to understand and anticipate the customer's

requirements and responding to those requirements need more consideration than just information analysis and decision making based on that information. Additionally, it was also suggested that even if market information is adequately and effectively shared and disseminated throughout the organization, it does not ensure a better understanding of customers. Pelham (1997) reviewed that MO should include factors related to customer understanding and how organizations create value for customers, as opposed to simply focusing on information gathering and dissemination.

On the other hand, Narver and Slater's perception of MO exhibit more reliability as it provides more value to customers, employing factors such as customer satisfaction, competitor orientation and top management interaction with internal and external customers. In the same vein, Oczkowski and Farrell (1998) indicated in their study that Narver & Slater's MO construct achieved greater validity and reliability than Jaworski & Kohli's MO approach.

Narver and Slater (1990) operationalized MO construct in their study and hypothesized MO as a unidimensional construct made up of three components: customer orientation, competitor orientation and interfunctional coordination. It was suggested that MO is a uni-dimensional construct because the three components i.e. customer orientation, competitor orientation and interfunctional coordination are closely related with each other. In a similar context, several other researchers i.e. Day (1994); Deshpandé and Webster (1989) and Deshpandé and Farley (1998) in their studies also advocated the MO approach of (Narver & Slater, 1990). Furthermore, González-Benito *et al.*, (2009) interpreted in their study that MO is a basic uni dimensional construct. In line with the

above arguments, market orientation as a uni dimensional construct was used in this study.

3.5.5 Market Orientation and SMEs Performance

Researchers and organizations worldwide are extensively investigating the impact of MO on firm performance. Market orientation is considered as one of the critical factor of firm performance and regarded as a main source of competitive advantage. Several researchers i.e. Lafferty and Hult (2001); Kumar *et al.,* (2011) and Eris and Ozmen (2012) empirically studied market orientation and supported the notion that market orientation is very important because it affects firm performance. Kumar *et al.,* (2011) indicated that the market orientation factor focuses more on customer retention rather than on their acquisition. They also viewed that MO has more prominent effect on a firm's profit than sales.

Later, Suliyanto and Rahab (2012) argued that SMEs should emphasize to implement market orientation in their firms in order to improve their performance. In the same vein, Micheels and Gow (2012) revealed that market oriented firms are in a better position to explore opportunities before competitors and thus able to maintain customer's loyalty and market share and enhance their performance. In SME literature, researchers have asserted that market-orientation provides small and medium enterprises with a potential competitive advantage over large firms, because SMEs are less formal, less structured, have reduced organizational layers and are closer to customers (Keskin, 2006). Therefore are more able to anticipate and respond to their needs and requirements more quickly and appropriately.

Consistent with the above discussion, Pelham (1997) investigated the impact of market orientation on performance of firm and concluded that market oriented firms have the ability to predict the customer's expectations and market changes and respond quickly and accurately. In contrast, researchers i.e. Peterson (1988); Meziou, (1991) and Blankson and Stokes (2002) examined that generally SMEs due to resource constraints, do not carry out market research and do not have long-term market planning. Therefore, they are more reluctant and unwilling than larger firms to implement the market orientation. On the other hand, Alam (2010); Chao and Spillan (2010); Osman *et al*., (2011) and Eris and Ozmen (2012) suggested that though SMEs do not have a formal marketing department to carry out MO but they do the marketing research in their own traditional way.

Study of extant literature related to the affect of MO on firm's performance showed mixed results (Han *et al*., 1998). For example, Narver and Slater (1990) and Ruekert (1992) found a positive correlation amid MO and performance, Hart and Diamantopoulos (1993) noted no relationship, on the other hand Jaworski and Kohli (1993) revealed mixed results. Furthermore, empirical studies conducted by Tang and Tang (2012) explored that market oriented firms have the tendency to explore more business opportunities than the non market oriented firms and create competitive edge in terms of market share and profit. Moreover, MO allows the firm to become aware of opportunities and discovers customer's current and latent needs and convert this information into new products to provide higher value to customers (Erdil *et al*., 2004).

Aziz and Yasin (2010) in their study on SMEs in Malaysia contended that customer orientation and competitor orientation are positively associated with performance. It is

significant to note that MO has been found to be an important antecedent of firm performance across diverse markets and cultures (Huit & Ketchen, 2001; Johnson, Dibrell & Hansen, 2009; Mokhtar, Yusoff & Arshad, 2009; Hinson & Abdulai, 2011).

Market oriented firms are able to anticipate future market opportunities before competitors and thus can achieve more customer loyalty and market share which contribute to superior performance (Micheels & Gow, 2012). Slater and Narver (1994) in their empirical research on several SBU's of a forest product firm found a significant link amid market orientation and performance. Similar significant relationship amid market orientation and performance were found in different business environments such as large firms of UK (Greenley, 1995) small to medium sized enterprises in the UK food sector (Tregear, 2003) as well as in buyer-supplier relationships (Bigne & Blesa, 2003).

Market orientation is considered as a culture of the organization that put forth customer satisfaction as the focus of business activity (Liu *et al.,* 2002). Therefore, organizations become able to produce superior value for customers and achieve high performance (Narver & Slater, 1990; Day, 1994). It is important for the success of a firm to effectively identify and respond to the changing market requirements and consistently deliver high quality products and services to customers (Jaworski & Kohli, 1993).

3.6 Integration between Total Quality Management, Entrepreneurial Orientation (EO) and Market Orientation

Strategic orientations have been considered as organizational resources (Barney, 1991; Hoq & Chauhan, 2011). These valuable and unique resources create competitive advantages for small and medium enterprises (Barney, 1991; Amit & Schoemaker,

1993). Lack of resources and capabilities in SMEs hampered the process to develop their own markets and to use the experience, economies of scale and scope for achieving competitive advantage (Inmyxai & Takahashi, 2009; Hoq & Chauhan, 2011). Noble, Sinha and Kumar (2002) and Bhuian, Menguc and Bell (2005) recorded that firms that continue balancing different strategic orientations, perform better, hence, alignment of different strategic orientations provided sustainable competitive advantage for firms.

On the other hand, Keskin (2006) and Dharmasiri (2009) emphasized that strategic orientations have a very crucial role in the success of firms both in developed and developing countries. In keeping with the above discussion, Chandrakumara, Zoysa and Manawaduge (2011) recommended the need to investigate the impact of more than one strategic orientation on firm performance in developing countries. It is significant to note that previous researchers have used different strategic orientations separately or combination of two orientations as predictors of SME performance (i.e. Ledwith & Dwyer, 2009; Li *et al*., 2008; Gao *et al*., 2007; Santos-Vijande *et al*., 2005). In the same vein, Hakala and Kohtamaki (2010) and Kropp *et al*., (2008) also pointed out that lot of studies have examined the affect of single orientation or individual orientation coupled with other factors on performance.

Many researchers i.e. Arawati (2005); Sohal and Terziovski (2000); Saravanan and Rao (2006); Sohail and Hoong (2003); Cruickshank (2003); Yasin *et al*., (2004); Al-Swidi and Mahmood (2011c); Das *et al*., (2008); Demirbag, Glaister and Tatoglu (2007) and Dahar, Faize and Niwaz (2010) explored the affect of TQM on the performance of different types of firms such as manufacturing, service, education, SMEs and public sector firms. However, Al-Swidi and Mahmood (2012) and Pinho (2008) emphasized

that TQM alone cannot lead to the success of firms in the current dynamic and competitive economies. Therefore, it was suggested to integrate various strategies to attain competitive advantage and achieve improved performance.

Al-Swidi and Mahmood (2012) explored that TQM and EO jointly enhanced the overall organizational performance. Moreover, Wang *et al.,* (2012) highlighted that TQM and MO together can constitute important firm strategy and provide a competitive edge to respond effectively to the business environment. Similarly, Zhou *et al*., (2005) and Baker and sinkula (2009) argued that EO aligned with MO would lead to better performance. In a similar context, Osman *et al*., (2011) emphasized that integration between strategies such as entrepreneurial orientation (EO) and market orientation (MO) will assist small and medium sized businesses in gaining success not only in short-term but over the longer period of time as well. While on the other hand, Herath and Mahmood (2013) suggested that there is a significant link amid entrepreneurial orientation, market orientation, learning orientation and SME performance in developing countries.

There is no research conducted to identify the aligned impact of important strategic orientations, i.e. total quality management (TQM), entrepreneurial orientation (EO) and market orientation (MO) using external environment as a moderator on the performance of SMEs in developing countries like Pakistan. Therefore, this research study examined the combined affect of TQM, EO, MO using external environment as a moderator on the performance of SMEs in Pakistan.

3.7 Rationality of External Environment Variable as a Moderator

Moderator is largely used in business studies, as it affects and strengthens the link between independent variable (predictor) and dependent variable (Shields, Deng & Kato, 2000). Organization's strategies, its capabilities and resources aligned with the external environmental factors determine firm's long-term competitiveness (Powell, 1992; Beer *et al*., 2005; Fuchs *et al*., 2000). In addition to that, several researchers i.e. Dess and Beard (1984); Zahra and Bogner (1999) and Li and Atuahene-Gima (2001) suggested that external environment moderate the link amid organizational strategies and performance of a firm.

Total quality management, Entrepreneurial orientation and Market orientation are important organizational strategies that play a very significant role in improving the firm's performance. Total quality management is an extensively acknowledged management philosophy and has become significant indicator that contributes to strive for achieving competitive advantage and improved performance (Sureshchandar *et al.*, 2001). However, review of past studies showed incolclusive results between TQM and performance. Sila and Ebrahimpour (2002) based on their comprehensive review of the TQM literature identified that the findings are mixed between TQM and organizational performance relationship.

On the other hand Ehigie and McAndrew (2005) suggested that some variables should be examined that might influence TQM and organizational performance relationship. Steel and Jennings (1992) considered TQM as an open system that interacts with the external environment and this external environment bring changes in firm's operations

(Wang *et al*., 2012). Pinho (2008) suggested that SMEs perform in a very competitive environment, therefore some environmental variables should be considered as a moderator to study the affect of TQM on performance of SMEs.

Similarly, the review of previous studies suggested that Entrepreneurial orientation as a meaningful strategic orientation among SMEs, enhance their growth and profitability (Knight, 2001). Rauch *et al*., (2009) explored that the businesses that implemented EO perform much better than the firms that do not implement EO. While some other studies reported lower influence of EO on performance or were even unable to find a significant relationship. Rauch *et al*., (2009) while examining the link between entrepreneurial orientation and performance highlighted the importance of involving and assessing additional variables as moderators. EO has been studied from many different aspects, examined as direct impact of EO on performance as well as indirectly moderating or moderated by many other factors (Becherer & Maurer 1998; Jantunen, Puumalainen, Saarenketo & Kyläheiko, 2005; Wiklund & Shepherd, 2005; Rauch *et al.*, 2009).

Correspondingly, literature on entrepreneurial orientation suggested that the degree of the relationship between entrepreneurial orientation and performance of a firm seems to vary across studies (Tang, Tang, Marino, Zhang & Li, 2008). It was contended that EO and firm performance relationship is dependent upon the factors of external environment as well as upon internal organizational processes. According to Martins and Rialp (2013) external environment is always highlighted as an important contextual factor in the EO-performance relationship.

Like TQM and EO, Market orientation is also considered as one of the very important factor that contribute to firm performance and regarded as a main source to create competitive advantage and enhance performance (Kumar *et al*., 2011; Eris & Ozmen, 2012). Though MO is considered as a key strategy however, studies showed inconsistent results between market-orientation and performance of a firm (Han *et al*., 1998). Studies conducted by Narver and Slater (1990) and Ruekert (1992) found a positive relationship amid MO and performance. While, Hart and Diamantopoulos (1993) noted no relationship, on the other hand Jaworski and Kohli (1993) revealed mixed results between MO and performance.

Slater and Narver (1994) and Kohli and Jaworski (1990) identified that environmental conditions may affect MO and performance relationship. They considered moderators such as the competitive environment and economic situation that affect the market orientation and firm's performance relationship. In a similar vein, several other studies also suggested that the affect of market orientation on performance also depends on external environmental conditions (Atuahene-Gima, 1995; Narver & Slater, 1990). Market oriented firm's are required to focus on those external environmental factors that are expected to affect their ability to enhance customer satisfaction (Baker & Sinkula, 1999).

Chandler (1962) and Lawrence and Lorsh (1967) explored that contingency approach stresses that the firm structure or strategy differs based on its contextual situation. Moreover, Garengo and Bititci (2007) argued that the proper alignment between key organizational factors with the context or environment leads to better performance.

The significance of proper alignment of strategies with the environment refers that firms must develop those capabilities and characteristics that make them able to cope with their environments (Yeoh & Jeong, 1995). Khandwallas's contingency perspective (1972) highlighted that firm's outcome should not be measured based on its attributes (structure, management style, etc.) but rather results should be determined from the fit between firm's dimensions within a specific environment. Furthermore, Yamada and Eshima (2009) also pointed out that the external environment may have a strong impact on SMEs performance.

These above mentioned arguments, however, are in consistent with the assumptions of contingency theory that focuses on the fit concept. That is, the more the fit between strategies such as TQM, EO and MO and external environment, the more successful and effectiveness would be the strategy implementation. The effect of total quality management, entrepreneurial orientation and market orientation on performance have been extensively studied separately, however their joint role has rarely been addressed.

In line with the suggestion put forward by Dess and Beard (1984); Zahra and Bogner (1999) and Li and Atuahene-Gima (2001) external environment was used as a moderator to successfully implement TQM, EO and MO to achieve higher firm performance. Based on the concept of Jaworski and Kohli (1993) this study adopted external environmental factors i.e. market turbulence and competitive intensity to determine the moderating effect amid TQM, entrepreneurial orientation, market orientation and performance.

3.8 Theoretical Framework

The theoretical base of this study is developed in line with the suggestions and evidence highlighted in the past and latest relevant literature. In the literature, relationship between the TQM, entrepreneurial orientation, market orientation, external environment and performance of SME have been identified. Based on extensive literature review, it can be argued that the three strategic orientations TQM, EO and MO qualify as predictors of SME performance in a research framework. TQM, EO and MO are very important strategic orientations, have not previously been studied in a single research framework. Therefore, these three orientations were integrated into the research framework. Moreover, this research was intended to examine the moderating role of external environment on TQM-performance, EO - performance and MO - performance. Figure 3.1 presents the theoretical framework of the study

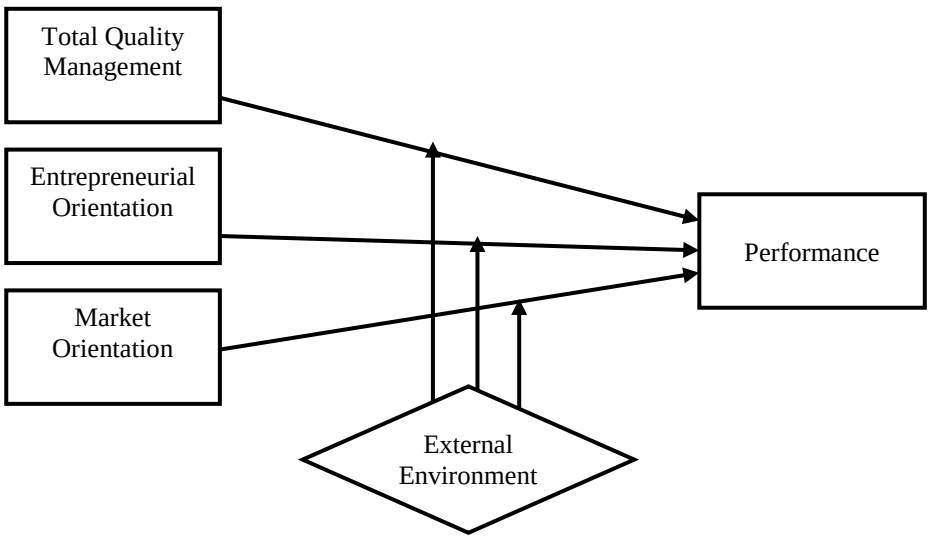

Figure 3.1
Theoretical framework of the study

3.9 Hypotheses Development

Based on the past and current relevant literature, in this section the hypotheses of this study addressed the three relationships between Total Quality Management (TQM) – Performance (P), Entrepreneurial Orientation (EO) – Performance (P) and Market Orientation (MO) – Performance (P) followed by the moderating role of external environment on TQM – P, EO – P and MO – P.

3.9.1 TQM and Performance

Study of previous literature on quality management revealed that there is lot of research work conducted on the relationship amid TQM and firm's performance (Corredor & Goni, 2011). Firms that implemented TQM practices and emphasized on continuous improvement, involved and motivated employees, achieved quality output and focused to satisfy customer's needs are more likely to perform better than those firms that did not implement TQM (Joiner, 2007). Similarly, Sila and Ebrahimpour (2002) also evaluated that most of the researches on TQM have confirmed that TQM implementation will ultimately add value to all organization types.

In a similar context, Fotopoulos and Psomas (2009) examined that TQM is an important component to enhance performance. It was stated that critical success factors of TQM are leadership, customer focus, human resource management, education and training and supplier quality management. On the other hand, Anderson *et al.,* (1994) examined the affect of critical factors of TQM such as visionary leadership, learning, internal and external cooperation, process management, employee fulfilment, continuous improvement and customer satisfaction that leads to improve the performance of a firm.

In a similar vein, Brah *et al*., (2002) and Powell (1995) observed that firms that adopted TQM obtained a competitive advantage over other that did not. Furthermore, Chettiar and Fallah (2011) stated that TQM is a philosophy which focuses to improve quality, customer satisfaction, profitability, market share while decrease defects and price reduction. In consistent with the above discussion, several scholars such as Waldman (1994); Karuppusami and Gandhinathan (2006) and Kumar, Grosbois, Choisne and Kumar (2008) also addressed the role of TQM to improve performance and increase customer satisfaction.

Moreover, Demirbag *et al*., (2006); Awan, Bhatti and Bukhari (2007) and Kumar, Choisne, Grosbois and Kumar (2009) also examined that TQM enables the firms to enhance their performance. In a similar vein, Antony, Leung, Knowles and Gosh (2002) argued that successful implementation of TQM will result in increased productivity, improved communication and employee involvement, better quality and less reworks. Moreover, several studies found that TQM is positively linked with firm's performance outcomes, like profitability and financial performance (Cummings & Worley, 1997) and human outcomes like employee and customer satisfaction (Lawler, Ledford & Mohrman, 1995). Samson and Terziovski (1999) and Brah *et al*., (2000) found that there is significant positive link amid TQM and Performance of firm. Solis, Rao, Raghu-Nathan, Chen and Pan (1998) found that TQM significantly associated to performance outcomes.

Anderson *et al*., (1994) observed the impact of seven factors of TQM such as management leadership, resource management, customers focus, quality management, service design, training and process management on performance of organization.

Although most of the researchers i.e. Samson and Terziovski (1999); Hendricks and Singhal (2001); Brah, Tee and Rao (2002) and Kaynak (2003) found a positive relationship amid TQM and firm performance but some studies done by McCabe and Wilkinson (1998) and Yeung and Chan (1998) reported a negative link amid these two variables. Subsequently, some other researchers i.e. Ali, Yusoff and Abas (2001); Powell (1995); Llorens Montes and Verdu Jover (2004) and Yasin *et al.,* (2004) reported that not all key factors of TQM were found to be significantly related to performance of a firm.

Study of previous literature revealed that some researchers i.e. Das, Handfield, Calantone and Ghosh (2000) and Samson and Terziovski (1999) argued to consider TQM as a multidimensional construct, while some other scholars i.e. Arawati (2005); Choi and Eboch (1998); Arawati and Ridzuan (2001) and Douglas and Judge (2001) used TQM as unidimensional construct. Likewise, several researchers i.e. Hendricks and Singhal (1996, 1997); Choi and Eboch (1998); Chenhall (1997) and Easton and Jarrell (1998) examined and supported the concept that single TQM construct should be used to evaluate the link amid TQM and performance. Later, Kaynak (2003) in his study found a positive link amid TQM and firm performance. He supported the suggestion put forward in the studies of Douglas and Judge (2001); Easton and Jarrell (1998) and Hendricks and Singhal (1996, 1997) in which TQM was used as a unidimensional construct.

In this research study TQM was used as a unidimensional construct built on the assumption that TQM strategy should be implemented as a package rather than

separated practices. Therefore, on the basis of the above arguments led to the following hypothesis to be proposed.

H1: TQM has a significant relationship with performance.

3.9.2 Entrepreneurial Orientation and Performance

EO is an important strategic construct aimed to enhance the performance of a firm (Lumpkin, Cogliser & Schneider, 2009; Covin *et al*., (2006). It is used in the field of entrepreneurship to measure firm ability to innovate, bring changes in its processes and improve the performance. It is significant to note that many scholars i.e. Guth and Ginsberg (1990); Dess, Lumpkin and Dean (2005); Zahra and Covin (1995) and Wiklund and Shepherd (2005) have given considerable importance to entrepreneurial orientation in improving the performance of large businesses and SMEs performance. Study of the past literature illustrated that lot of studies on EO and performance were conducted on large organization but very few have focused to study the link amid entrepreneurial orientation and SMEs performance specifically in the context of developing countries (Aloulou & Fayole, 2005).

EO as a firm level construct encompasses firm's strategies and decision making processes to explore the opportunities through proactive behavior, innovation and risk taking (Covin & Slevin, 1991; Frank, Kessler & Fink, 2010). EO enables SMEs to counter the situations, which occur from competitive business environment which are often turbulent (Bogan & Darity, 2008). Consistent with the above discussion, many scholars such as Dess, Lumpkin and Covin (1997); Knight (2001) and Morris and Paul (1987) considered that EO ensures high level of SME's performance in times of market

upheavals. Firms that adopt EO are able to innovate frequently, take risks in developing their product and markets (Miller & Friesen, 1982) and often exhibit higher performance (Ireland, Hitt & Sirmon, 2003).

However, the extent of the relationship linking EO and performance seems to differ across different research studies. Some studies i.e. Covin and Slevin (1986); Lee, Lee and Pennings (2001); Hult, Snow and Kandemir (2003) and Wiklund and Shepherd (2003) have found that EO strongly and significantly impact on performance and confirmed the notion that entrepreneurial firms perform much better than non entrepreneurial firms. On the other hand, some studies also reported lower correlation between EO and performance i.e. Dimitratos, Lioukas and Carter (2004); Zahra (1991) and Lumpkin and Dess (2001) while some studies were unable to discover a significant relationship amid entrepreneurial orientation and performance (George, Wood & Khan, 2001; Covin, Slevin & Schultz, 1994).

Lumpkin and Dess (1996) and Covin and Slevin (1989) have studied EO both as multi-dimensional and uni-dimensional construct and explored that all the dimensions of EO affect the firm's performance but it is strongly argued that EO should be considered as unidimensional construct to determine the firm's performance (Rauch *et al*., 2004). On the basis of previous discussion, it is therefore hypothesized that,

H2: EO has a significant relationship with performance.

3.9.3 Market Orientation and Performance

Several researchers have examined the market orientation and performance relationship. MO refers to gather and collect information from customers, share this information within the organization and on the basis of such information, responds appropriately to the changing needs of the market. Li *et al.*, (2008) and Kara, Spillan and DeShield (2005) found that market orientation is positively associated with firm's performance. Several other researchers i.e. Liao, Chang, Wu and Katrichis (2011) and Pandelica, Pandelica and Dumitru (2009) also tried to explore the relationship amid MO and performance.

Akimova (2000) and Jeong, Pae and Zhou (2006) submitted that in the beginning, most of the studies on MO have been conducted by US scholars. However, later it was extended quickly out of US. Study conducted by Jaworski and Kohli (1993) revealed that performance of a market oriented firm is better in the business market because their activities and business approaches are directed towards identifying and responding to customer needs and wants. Addressing and satisfying customer's requirements lead to sustainable competitive advantage for a firm. In the same line, Day (1994) highlighted that acquiring the necessary skills ensures capabilities. This in turn, ensures coordination of functional activities all of which direct the organization to explore and respond to changing market requirements to deliver superior performance. Market orientation provides sustainable competitive advantage to firms that set the organization ahead of competitors (Narver & Slater, 1990). It was suggested that to achieve sustainable competitive advantage, it is necessary to adopt and implement necessary behaviors by the management to deliver higher value to customers.

On the other hand, Day (1994) explored that it is necessary to acquire necessary capabilities and skills to anticipate and respond to changing market requirements in order to attain superior performance. Narver and Slater (1990) carried out first empirical studies which actually tested the association amid MO and performance. The authors developed a scale of market orientation and analyzed its affect on performance using a sample of 140 business units. They found out that there is a significant link amid MO and performance.

Furthermore, studies conducted on MO and performance relationship by several other researchers i.e. Ruekert (1992); Pelham and Wilson (1996); Pulendran, Speed and Widing (2000) and Pitt, Caruana and Berthon (1996) have found a positive link between market orientation and performance. However, study conducted by Greenly (1995) found no link amid MO and performance while, Hart and Diamantopoulos (1993) discovered weak association amid MO and performance relationships. Similarly, Han *et al.,* (1998) found no significant link between market orientation and objective and subjective performance measures. Later extensive research conducted by Narver and Slater (1990) suggested that market orientation is a one-dimensional theoretical construct consisting of three indicators (customer orientation, competitor orientation and interfunctional coordination) and argued that each indicator is equal determinant of performance of a firm. The above discussion leads to formulate the following hypothesis,

H3*:* MO has a significant relationship with performance.

3.9.4 External Environment Moderates the Relationship between TQM and Performance

Total quality management has been regarded as a key component to improve the performance (Deming, 1982, 1986; Fotopoulos & Psomas, 2009). Many researchers have studied a linkage between TQM and performance (Prajogo & Sohal, 2006; Kaynak 2003; Easton & Jarrell, 1998; Powell, 1995; Hendricks & Singhal, 1997, 2001; Samson & Terziovski, 1999). Motwani, Mahmoud and Rice (1994) and Christiansen and Lee (1994) addressed the relationship amid total quality management and performance improvement for manufacturing firms while Kanji and Tambi (1999) and Brah, Wong and Rao (2000) studied on service organizations. Whereas, Hendricks and Singhal (1997); Powell (1995) and Easton and Jarrell (1998) studied both manufacturing and service firms. These studies showed that effective quality implementation in an organization leads to performance improvement.

On the other hand, it has also been found that due to flaws in their implementation approaches in most of the organizations, they have been unable to realize maximum benefits of TQM practices (Awan, Raouf, Ahmad & Sparks, 2009). Review of past literature showed mixed results between the relationship of TQM and performance. Sila and Ebrahimpour (2002) based on their comprehensive review of the TQM literature revealed inconsistent findings between TQM and organizational performance relationship. On the other hand Ehigie and McAndrew (2005) suggested that some variables should be incorporated, that might influence TQM and organizational performance relationship. Steel and Jennings (1992) considered TQM as an open system that interacts with the external business environment and this external environment

bring changes in firm's operations. Consistent with the above argument, Wang *et al*., (2012) examined that external environment factors act as a moderator between TQM and performance relationship. On the basis of above discussion it is hypothesized that,

H4: External Environment moderates the relationship between TQM and performance.

3.9.5 External Environment Moderates the Relationship between EO and Performance

EO has been acknowledged as potentially beneficial for performance (Wiklund & Shepherd, 2005). Covin and Slevin (1991) stated that EO involves the willingness by an organization to innovate, to take risks to explore and to produce new products, services and markets by utilizing the opportunities in the business market place more proactively than the competitors. In consistent with the above discussion, scholars such as Moreno and Casillas (2008) and Casillas, Moreno and Barbero (2010) analyzed the link amid EO and performance of SMEs. The results of these studies showed that EO and performance of a firm are positively related but the relationship is complex and influenced by a number of other moderating variables i.e. the conditions of the environment, the availability of resources and the employee involvement and organization culture.

However, Wiklund and Shepherd (2005) and Li *et al.*, (2009) analyzed that inconclusive findings were found in the association linking EO and performance. Moreover, Rauch *et al*., (2009) suggested the importance of integrating and assessing moderators to study the link amid EO and performance. Lumpkin and Dess (2001) examined the moderating affect of environment and industry life cycle on the link between EO and organizational

performance. Additionally, Caruana, Ewing and Ramaseshan (2002) emphasized that the external environmental factors affect positively on EO and the performance. Consistent with the previous argument, Khandwalla (1977) also observed that external environmental indicators moderate the link amid EO and performance of a firm. Similarly, some other researchers i.e. Miller and Friesen (1978) also suggested that link amid EO and performance is affected by external environmental factors. On the basis of above discussion, it is hypothesized that the external environment construct as a moderator enhances the relationship between entrepreneurial orientation (EO) and performance,

H5: External Environment moderates the relationship between EO and performance.

3.9.6 External Environment Moderates the Relationship between MO and Performance

Market orientation as noted by Narver and Slater (1990) is the focus and a priority of a firm to meet and exceed customer's needs. Researchers in marketing have stated that market orientation is a set of specific behaviours, approaches and activities Kohli and Jaworski (1990); a resource, Hunt and Morgan (1995); a basis for decision making, Shapiro (1988) or a characteristic of organizational culture (Slater & Narver, 1995; Deshpande *et al.*, 1993). Market oriented firm's are required to focus on those environmental variables that are likely to affect their ability to increase customer satisfaction as compare to competitors (Baker & Sinkula, 1999).

Slater and Narver (1994) and Kohli and Jaworski (1990) identified that environmental conditions may affect MO performance relationship. The authors considered to use moderators such as the competitive environment and economic situation that affect the market orientation-performance relationship. In a similar vein, several other studies also suggested that the effect of market orientation on organizational performance also depends on external environmental conditions (Narver & Slater, 1990; Atuahene-Gima, 1995). On the basis of above arguments, it is hypothesized that,

H6: External Environment moderates the relationship between market orientation and performance.

3.10 Underpinning Theory of Study

Organizations are formed and established to generate sustainable competitive advantage through continuous improvement and ability to leverage other capabilities for better performance. Researchers and managers are always interested to understand how small and medium enterprises (SMEs) successfully perform and what factors positively lead to better performance than competitors. This study aimed to study the moderating affect of external environment on the link amid TQM, EO, MO and performance of SMEs. This research study used both RBV and Contingency theory as underlying framework for understanding the antecedents of performance in the context of SMEs in Pakistan. The following sub-sections discussed these theories and provided supportive arguments.

3.10.1 RBV Theory (Resource-Based View of the Firm)

RBV theory provides a comprehensive explanation on the theory of competitive advantage and how firms can attain competitive advantage through its ability to utilize its resources and capabilities (Makadok, 2001; Newbert, 2007; Nasution *et al*., 2011; Wernerfelt, 1984). In line with the above discussion, several other researchers Peteraf, (1993); Carmeli and Tishler (2004); Amit and Schoemaker (1993) and Dierickx and Cool (1989) revealed that the Resource-based View of the firm (RBV) suggests that a firm can sustain its competitive advantage if it is able to: (a) generate sustainable economic growth; (b) utilize its ability to identify, develop, deploy and preserve particular resources and; (c) it distinguishes these from its competitors. In comparison to tangible resources, intangible resources such as knowledge, know-how, skills, perceptions, culture, reputation and network (Hall, 1992; Connor, 2002) are immobile and heterogeneous in nature (Peteraf, 1993; Barney, 1991) and all tangible and intangible resources have a strong impact on firm's performance.

According to resource-based view, strategic capabilities i.e. TQM, EO, MO are a pool of internal resources that create competitive advantages (Barney, 1991). So, these rare and distinctive combinations of strategic resources within a firm have potential to enhance firm performance and create constant competitive advantages (Barney, 1995; Miller & Shamsie, 1996). The RBV theory is considered as one of the most phenomenal theoretical perspectives in current strategic management literature (Barney, 1991; Helfat & Raubitschek, 2000; Eisenhardt & Martin, 2000; Teece, Pisano & Shuen, 1997; Wernerfelt, 1984).

The ability of a firm to identify, develop, employ and maintain particular resources and differentiate these from its rivals, facilitate and assist its success to sustain competitive advantage (Amit & Schoemaker, 1993; Collis & Montgomery, 1998; Carmeli & Tishler, 2004; Dierickx & Cool, 1989). Barney (1991) suggested that a firm has to possess the important and key tangible and intangible resource and strategic capabilities that are important, extraordinary, costly to imitate and non-substitutable. RBV theory was first introduced by Wernerfelt (1984) and has been considered as one of the most fast growing research area in the last few decades (Galbreath, 2005). According to Wernerfelt (1984) organizational success is determined by internal resources and capabilities, such as knowledge and accumulated skills, Teece *et al*., (1997) to generate an added value for a firm (Barney, 1991).

Barney (1991) advocated that the firm's resources are employee's knowledge and skills, the firm's reputation, brand name, the capital equipment etc. These resources are valuable, rare and incomparable and considered as the strategic resources and significant factors in determining the sustainable competitive advantage (Barney, 1991, 2002). Likewise, some other researchers explored that resources are tangible and intangible assets owned by a firm (Amit & Schoemaker, 1993). Tangible business resources are those physical assets such as equipment, facilities and raw materials etc possessed by the firm (Carmeli & Tishler, 2004). While, intangible resources are the assets and capabilities identified as skills, brand name, knowledge, know-how, perceptions, reputation and culture (Connor, 2002; Hall, 1992). In a similar context, Daft (1983) highlighted that firm resources are those assets, capabilities, information, knowledge

and organizational processes etc, owned by a firm and that assist the firm to implement strategies in order to improve performance.

Porter (1980) suggested that firms should analyze and examine their competitive environment and attain the resources needed to implement strategies. Hence, firms should establish the relation between external environment and internal capabilities and strategies to achieve the competitive advantage and improved performance (Al-Dhaafri, Yusoff & Al-Swidi, 2013). The comprehensive literature review showed that the variables used in this study have been underpinned by RBV theory.

Therefore, this study examined the impact of TQM, EO, MO on performance which is in line with the RBV theory. Comprehensive literature review showed that the TQM, EO and MO are considered to be among the main capabilities that create the competitive advantage. As argued by Reed, Lemak and Mero (2000) and Escrig-Tena (2004) TQM is one of the main resources of competitive advantage, while, Weerawardena and Coote (2001) considered EO another source of competitive advantage. Moreover, MO is also strategic orientation that creates superior performance (Narver & Slater, 1990).

3.10.2 The Contingency Theory

The essence of contingency theory states that contingencies of the situation determine best practices. It explains the relationship between two phenomena or situations, that is, if one phenomenon exists and then a conclusion can be drawn about another phenomenon. Meanwhile, Schuler (2000) threw light to explain contingency theory that there are multiple strategic choices that an organization can pursue, it depends on the organization which choice it chooses among many available choices that are dependent

on or fit with the environment in which the organization operates. The concept of “fit” is explained in many ways such as consistent with, contingent upon and aligning has a crucial importance in contingency theory (Venkataraman, 1989). In a similar vein, Lawrence and Lorsch (1967) identified that concept of “fit” or “match” is the basic premise of the contingency theory. Therefore, research scholars of the contingency research and strategic management Van de Ven and Drazin (1985) and Selto, Renner and Young (1995) emphasized the necessity of the fit between the organizational strategy and some of the organizational variables as the key prerequisite for firm’s performance.

Furthermore, Naman and Slevin (1993) underlined that it has been widely argued that organizational performance could be improved if there is an effective alignment of the key organizational variables. Venkatraman (1989) in his study identified some perspectives of fit: fit as mediation, fit as moderation, fit as covariation and fit as matching.This study, therefore, is in line with the view of ‘fit as moderation’. Naman and Slevin (1993) indicated that performance of firms can be enhanced when key strategic variables are properly aligned. Similarly, Lawrence and Lorsch (1967) proposed that the basic principle of contingency theory suggests that there should be important "fit" among key strategic variables to achieve higher performance.

The literature discussed a number of variables that substantially moderate the relationship between different strategic orientations such as TQM, EO, MO and performance. Chandler (1962) and Lawrence and Lorsh (1967) explored that contingency approach states that the firm structure or strategy differs based on its contextual situation. Moreover, Garengo and Bititci (2007) argued that the proper

alignment between key organizational components with the context or environment leads to better performance.

3.11 Summary

This chapter presented the research framework of the study followed by the series of research hypotheses based on the reviewed literature. The chapter argued for the need to determine the affect of total quality management, entrepreneurial orientation, market orientation on performance of SMEs in Pakistan. Additionally, the study has investigated the moderating effect of external environment on the relationship amid total quality management, entrepreneurial orientation, market orientation and performance of SMEs in Pakistan. Next chapter 4 extensively discusses the research methodology that was adopted to test the research hypotheses of this study.

CHAPTER FOUR

METHODOLOGY

4.1 Introduction

This chapter provides a sketch of the research methodology employed in this study. This study adopted quantitative approach with a view of focusing on important business strategies employed in SMEs of Pakistan. Survey method was used as a primary source for data collection, consists of the perceptions of respondents (Zaheer, Rehman & Ahmad, 2006). This chapter discussed key respondents, sample size, sampling procedure, data collection, pilot test, reliability and validity test. The study was conducted in two stages. The first stage included the pilot test to make sure the reliability and content validity of research instrument while in the second stage, by using revised instrument, required data was collected to examine the relationship among the variables.

4.2 Research Design

Research design is a framework or plan that explains the methods and procedures to collect and analyze the required data/information in doing the research project (Zikmund, 2000). In the literature, three types of research designs have been identified, 1) Exploratory, 2) Descriptive, and 3) Causal/Hypothesis testing (Zikmund, 2000; Sekaran, 2003). The particular research type is selected on the basis of understanding and the clarity of research problem. Exploratory research is conducted when the problem is not clearly defined and it often relies on reviewing available literature and data to investigate the problem prior to develop any research framework (Zikmund,

2000; Sekaran 2003). Descriptive research is carried out when there is some knowledge and understanding of the nature of the problem and a more detailed description of the problem is provided (Zikmund, 2000; Sekaran, 2003). While, causal research or hypothesis testing further describes the nature of the relationships among variables involved in the study (Zikmund, 2000; Sekaran 2003).

Since the main objective of this research study is to examine the moderating role of external environment on the link between the TQM, entrepreneurial orientation, market orientation and performance of SMEs in Pakistan. Therefore this study focuses on descriptive, causal (hypothesis testing) and correlation approach to investigate the relationships between various variables. According to Sekaran (2003) when correlation studies are conducted in organizations, they are called field studies.

In addition to that, questionnaire survey approach was employed to collect the data through self-administered questionnaires to measure the variables under investigation. Survey research is less expensive and commonly used method with more scope and coverage. It lets and facilitates the researcher to collect data from many respondents to measure many variables in the study and to test various hypotheses (Neuman, 1997). Furthermore, the cross-sectional research setting was used in this study as it involves gathering the data at one point in time from the firm to achieve the research objectives (Cavana, Dalahaye & Sekaran, 2001). The main advantage of using a cross-sectional study is that it is more economical and does not take much time like a longitudinal study.

4.3 Target Population

Target population of the study consisted of SMEs (small and medium enterprises) because of their vital role and significance as a source to generate employment for rural and urban growing and expanding labor force to provide attractive sustainability, thus contribute to economic growth and development of a country (Fida, 2008). Furthermore, the economy of Pakistan is mainly comprised of SMEs, hence, it is undoubtedly appropriate to say, that Pakistan's economy is the economy of SMEs. There are approximately 3.2 million registered and non registered SMEs working in Pakistan, whereas 95 percent enterprises employ less than 100 people (SMEDA Policy, 2007). These SMEs include 600,000 Service sector units, 400,000 manufacturing units and 1 million trade units (retailers) and their contribution is about 40 percent to the GDP.

There are four provinces namely, Baluchistan, Khyber Pakhtunkhwa, Punjab and Sindh in Pakistan. The research population consisted of all small and medium enterprises located in the Punjab province of Pakistan. Punjab is considered as a hub of economic activities (Afza, Osman & Rashid, 2010). Out of 3.2 million SMEs, there are 65.25 percent (1,305,200) documented and non documented SMEs present in the Punjab province. Besides that, Punjab is Pakistan’s largest province, both in terms of population and size of the economy (Punjab Bureau of Statistics). Pakistan’s economic growth and development is inextricably linked to its largest province, for income and employment generation (Punjab Bureau of Statistics). However, it is alarming to note that GDP growth in the province has decreased notably over the last five years and now have become stagnant and fell drastically to 2.5 percent (Punjab Bureau of Statistics). It is

imperative to address and analyze the problem of low growth and development of SME sector in the province of Punjab, Pakistan in particular and the in the country in general.

The overall industrial structure in Punjab is dominated by SMEs. There are seven industrial zones in Punjab: Islamabad/Rawalpindi, Lahore, Gujranwala, Sialkot, Faisalabad ,Sheikhupura and Wazirabad. The Lahore district being one of the most dominated and diversified, with SMEs ranging from food, automobile parts, carpets, furniture, textiles, machinery and equipment and printing (Hussain, Khan, Malik & Faheem, 2012). Faisalabad district is considered the country's textile hub, also dominated with light engineering products (Hussain *et al.*, 2012). In Gujranwala district, SMEs are concentrated in electronics and textiles while, SMEs in Wazirabad district specializes in the manufacturing of cutlery (Hussain *et al.*, 2012). Sialkot district being the most dynamic, diverse and competing of all the industrial clusters in the province is known as manufacturing and export hub and SMEs mainly in surgical, leather and sports goods are present in Sialkot (Hussain *et al.*, 2012). Food, garments and textile SMEs are present in Islamabad/Rawalpindi, Finally, the three main industries i.e. textiles, food and machinery and equipment exist in Sheikhupura district (Hussain *et al.*, 2012).

4.4 Sampling Frame

Physical representation of the target population from where a sample is selected is known as sampling frame (Chadwick, Bahr & Albrhcht, 1984). It consists of updated and all the potential members of the sample (Foreman, 1991; Mazzocchi, 2008). It is rare that a complete list of all the firms to exist, because it is likely that undocumented firms are also in business all over the country in all industrial sector, for that reason it is

necessary to construct an appropriate list (Saunders, Lewis & Thornhill, 2007). Target population of this study consisted of SMEs operating in the province of Punjab, Pakistan. This study employed number of employees as the base for the definition of SME. According to SMEDA Pakistan, SME is identified as a business entitiy that employs a maximum of 250 employees or with a paid up capital of 25 million PK Rupees (247807 USD) or with an annual sale of up to 250 million PK Rupees (2478070 USD). Small firms are defined as those having an employee size of less than 35 people while medium size firms are those with 36-250 employees (SMEDA, 2010). The sampling frame was developed based on the list of SMEs registered with country's various institutions and federations i.e. SMEDA and FPCCI. Officers of SMEDA and FPCCI were also directly contacted through email and telephone to remove the ambiguity and verify the information related to registered SMEs.

There are approximately 3.2 million registered and non registered SMEs working in Pakistan, (SMEDA Policy, 2007). These SMEs include 600,000 Service sector units, 400,000 manufacturing units and 1 million trade units (retailers). The research population of this study consisted of all small and medium enterprises (SMEs) present in the Punjab province of Pakistan. There are 65.25 percent (1,305,200) documented and non documented SMEs present in the Punjab province (Afza & Rashid, 2009; Amjad, 2010). Out of these 1,305,200 SMEs, approximately 39,033 SMEs are registered with various institutions and federations i.e. SMEDA and FPCCI as manufacturing, service and traders/retail units in Punjab, Pakistan. Hence, these 39,033 registered SMEs comprise the sampling frame of this study.

4.5 Sample Size

When the sample units in the target population under study are limited, the researcher may select the whole population rather than taking a sample for the study (Zikmund, 2003). But when the size of population is big, then it is not practical to collect the data from whole population due to limitation of many factors such as cost, resources and personnel. Therefore, a sample size is drawn from the target population. Since it is impossible to study an entire population therefore, sampling technique was used for the purpose, to get a representative sample (Leary, 2004). There are different views of researchers to determine sample size. Sample size which is less than 500 and larger than 30 are usually considered appropriate to conduct the research study (Roscoe, 1975). Krejcie and Morgan (1970) have provided a table to simplify the decision for determining sample size from a given population. The sample size for a given population of 30,000 = 379 and sample size for 40,000 population = 380. Hence, it was deduced that the sample size from a given population of 39,033 would be = 380 to complete the survey using the questionnaire protocol.

These 380 SMEs comprised of different sectors such as manufacturing, services and retail that are registered with various institutions and federations in the province of Punjab. These three sectors (manufacturing, services and retail) are highly competitive, therefore, TQM, EO, MO constructs are simultaneously meaningful to all these three sectors. The sample size of 380 lies within Roscoe's rule of thumb for sample size; that is, smaller than 500 and larger than 30 is adequate for most research study (Roscoe, 1975). In multivariate research, the sample size should be ten (10) times (10:1) the number of variables in the study (Hair, Black, Babin & Anderson, 2010).

4.5.1 Sampling Technique

The sampling method for this research was probability sampling with simple random sampling. As observed by Burn and Burns (2007); Eriksson and Kovalainen (2008) and Ghauri and Gronhaug (2005) simple random technique allows the researcher to believe that sample characteristics refers to the total population. In addition to that, systematic random sampling offers more generalizability and offers less biasness (Sekaran, 2003). It provides each respondent an equal chance to be selected as the sample object of the study (Sekaran, 2003). Additionally, less chance of researcher's biasness against the choice of one sample over another (Salkind & Rainwater, 2003).

Random numbers were generated using a Microsoft excels program by using the mathematical formula {= rand ( )} to facilitate in the selection of individual samples from the list of sampling frame. A random starting point was selected and then every 7th name was chosen from the list in the sampling frame. For example, the sample included the 7th name, the 14th, the 21st, and so forth (Malhotra, 1996). The sample size was 380. Hair, Wolfinbarger and Ortinal (2008) suggested that the sample size should be increased in order to reduce error and to handle the non response issue. Hence, survey questionnaires were distributed randomly to 500 SMEs in the Punjab province of Pakistan. Out of 500 questionnaires, 367 complete questionnaires were received.

4.6 Data Collection Method

There are different ways of delivering survey questionnaires. It could be self-administered questionnaire, postal, internet (email) or fax. Each of the approaches has its own strengths, benefits and limitations. Several factors such as researcher’s

preference, time constraints, cost, potential response rate etc should be taken into account in the selection of method of questionnaires administration (Frazer & Lawley, 2000). However, each method could be superior to or better than the others. Data for this research study was collected through e-mail and self administered questionnaires, distributed among 500 SMEs operating in Punjab, Pakistan. According to Dilman (1978) self administered survey is more effective and influences the level of satisfactory responses of the data generated from respondents. Moreover, according to Sekaran (2003) completed survey questionnaire not only be collected in short period of time but member of the research team (data collector) can motivate and introduce the respondent with the topic and any doubt can be clarified on the spot. Therefore, this study employed the self-administered questionnaire as the mean to collect the data. A follow up calls and self visits as a reminder to respondents SMEs were performed to increase the response rate of the survey. Based on the selected criteria of firm size, 384 number of questionnaires were received; a return rate was 77 percent.

However, 367 usable and complete questionnaires making the valid response rate of 73 percent, were selected for data analysis which fulfilled all the statistical requirements for the purpose of hypotheses testing (Marri, Gunasekaran & Sohag, 2007; Al Marri, 2007). Any firm that employs exceeding the number of 250 employees, were excluded from this analysis, therefore the firm participated in this survey were employees up to 250. Data was collected from both male and female, as both are known to equally contribute towards the success of the business. The data collection process lasted for four months from October 2013 to January 2014.

4.7 Unit of Analysis

Unit of analysis for this research was the firm and studied through the owner/manager of the firm. Becuase this research study aimed to examine the hypothesized relationships amongst the variables on the level of the firm/business unit.

4.8 Key Respondents

It is vital to address the most appropriate respondents because the inappropriate respondents will be a source of inaccurate responses. As per the suggestion of Campbell (1955) key informants knowledge, formal role in the firm and also willingness to respond were the basis for respondent's screening and selection. In the context of SMEs, Owner/manager of the founding and managing businesses are always considered the operational and strategic heads and are the most likely informants because of their level of involvement in the overall operation of the firm (Osman *et al*., 2011)**.** The respondents of this study was owner/manager of the firm, as they have a good knowledge and are more directly involved with managing all the activities of the enterprise and often represent the views of entire firm (Poister & Streib, 1999).

To get managers fully involved in filling the questionnaire, they were motivated to be informed about the results of the study. In this study single informant method as a representative was used to gather data from SMEs, because TQM, EO, MO are firm level construct and deeply rooted in firm (Knight & Cavusgil, 2004). According to the argument of researchers i.e. Olson, Slater and Huly (2005) there are numerous reasons to explain the effectiveness of single respondent approach over multiple-respondent approach, firstly, single-informant approach is cost effective; secondly, it permits the

researcher to get more respondent firms involved, so as to generate a higher response; thirdly, it does not complicate the data set, as multiple responses from the same firm could complicate the analysis process and; lastly, most empirical researches in the area of TQM, EO and MO preferred single-informant approach.

Moreover, Kumar, Stern and Anderson (1993) argued that this technique is appropriate because the objective of the questionnaire needs complete and in depth information which cannot be expected to obtain from general respondents.

4.9 Survey Instrument

Survey method was used in order to distribute questionnaire and collect data. Survey is a structured way to collect information from the respondents using questionnaires. In survey research, questionnaires are considered one of the most appropriate mean to collect data (Asika, 1991). Moreover, survey approach through questionnaire administration is most generally and extensively used in strategic management research studies (Covin & Miles, 1999; Frank, Kessler & Fink, 2010; Naman & Slevin, 1993). Hence, a structured questionnaire consisted of closed-ended questions/iems was used to collect data. A good questionnaire design is a condition necessary for obtaining good survey result. According to Beins (2004) survey instrument should be tailored, taking into account the important aspects i.e. content, relevancy, accuracy and presentation of the questionnaire to encompass the scope and objectives of the research.

The items of the variables in the questionnaire were adapted or adopted from previous studies related with total quality management, entrepreneurial orientation, market orientation, external environment and performance to go well with the research objectives of the study and the local perspective (Gu, Hung & Tse, 2008). The questionnaire was comprised of 74 items. Respondents were requested to respond to the statement of the question using a five-point Likert scale ranging from 1 ‘‘strongly disagree’’ to 5 ‘‘strongly agree’’ to record the degree of their assessment and perception on each item. As observed by Al-swidi and Mahmood (2012) Likert scale is easy for respondents to read, understand and report their perceptions regarding behaviors, attitudes and assessments. Additionally, according to Sekaran (2006) interval scale conveniently allows to perform analysis on the data collected by using different statistical tool. Moreover, likert scale has been one of the most commonly used scales and was supported in the previous studies related to examine the effect of different strategic orientations on the firm performance.

The questionnaire was designed in a simple table using simple language, keeping in view that questions must be clear and straight forward. The respondents were required to tick their answers based on their perceptions for a statement of a question in the relavant box, so as to save time when answering the questions. Moreover, the survey instrument was pilot tested in the actual scenario and modifications were made accordingly.

All the items of constructs were measured using established measures drawn from prior studies. Some of the questions adopted and used in this study were slightly adjusted and modified to make them more applicable and relevant to the objectives of this study. The survey instrument was consisted of questions pertaining to the following five constructs

namely the TQM, Entrepreneurial orientation, Market orientation, External environment and performance.

The measurement items of constructs were based on comprehensive review of the current and past relevant literature, therefore content validity was not assessed numerically, it was subjectively analyzed and evaluated by the researchers in the relevant area (Kaplan, 1987). The 74-item questionnaire thus developed, consisting of 6 sections and it was presented to experts to check the content validity and to seek their critical comments. During review, the experts suggested certain changes to refine the questionnaire. Therefore, items of questionnaire were rearranged and reformatted.

4.9.1 Performance Measurement Scale

As stated by Demirbag *et al*., (2006) performance measurement is very crucial for the valuable management and effectiveness of an organization. According to Deming (1986) progress and improvement of something cannot be evaluated without measuring that thing. Hence, as noted by Gadenne and Sharma (2002) improvement in organizational performance needs some measurements to identify the extent of effectiveness of organizational resources on performance.

Scholars have used different types of measures such as financial, non financial or subjective measures, innovative and operational performance while examining the performance of a firm (Zehir, Ertosunb, Zehir & Müceldilli, 2012). It is more desirable to obtain objective measures to determine performance but it is difficult to obtain the objective data from the firms in Pakistan, particularly in a situation where most of the firms are not registered with official body and secondly managers usually are reluctant

to share their financial data. Several studies done by Forker, Vickery and Droge (1996); Yamin, Mavondo, Gunasekaran and Sarros (1997); Curkovic, Melnyck, Calantone and Handfield (2000); Tan, Lyman and Wisner (2002) and Tracey, Lim and Vonderembse (2005) have used the subjective measurement for performance that provided required insights of a firm. In addition to that, according to Pelham and Wilson (1996) subjective measures are widely accepted and preferred approach used by researchers in order to increase the response rate.

Thus, in this study items of subjective measures for performance were adapted from previous works of Valmohammadi (2011); Brah (2001) and Jaworski and Kohli (1993) to measure firm performance. This study utilized six items, sales growth rate, profitability, market share, customer satisfaction, employees satisfaction, overall performance of firm relative to competitors to measure performance of SME. All these items were measured and gauged using a five-point Likert scale instrument ranging from 1 (much lower performance) to 5 (much higher performance). Respondents were asked to report their satisfaction and assessment regarding firm's performance. Table 4.1 illustrates the items of performance scale with the source.

Table 4.1
Performance Scale

Construct	Code	Items	Source
Performance	P1	Sales growth rate	(Valmohammadi, 2011)
	P2	Profitability	(Valmohammadi, 2011)
	P3	Market share	(Valmohammadi, 2011)
	P4	Customer satisfaction	(Valmohammadi, 2011)
	P5	Employees satisfaction	(Brah, 2001)
	P6	Overall performance of our firm relative to competitors.	(Jaworski & Kohli, 1993)

4.9.2 Total Quality Management Measurement Scale

Based on the extensive relevant literature review, the variable Total quality management was measured using 25 items adopted from the works of Anderson and Sohal (1999); Wang *et al.,* (2012); Al-Swidi & Mahmood (2012) and Kaynak (2003). TQM was measured as a uni dimensional construct using factors i.e. leadership, process management, customer focus, continuous improvement, employee fulfillment. The items were anchored on 5-point likert scale of the research instrument ranging from 1‘‘strongly disagree’’ to 5 ‘‘strongly agree’’ to measure the degree of agreement of respondent on each item. Table 4.2 summarizes the items of total quality management scale with the source.

Table 4.2
Total Quality Management Scale

Construct	Dimensions	Code	Items	Source
Total Quality Management	Leadership	L1	In our firm, we promote quality improvement efforts.	Anderson & Sohal (1999)
		L2	Quality is a part of the way we do things in our firm.	Anderson & Sohal (1999)

Table 4.2 (Continued)

	L3	We encourage leadership throughout the firm.	Anderson & Sohal (1999)
	L4	In our firm, we add value to the community by our activities.	Anderson & Sohal (1999)
	L5	In our firm, we ensure all employees are well supported through times of change.	Anderson & Sohal (1999)
	L6	In our firm, we encourage employees to take strategic perspective.	Anderson & Sohal (1999)
Process management	PM1	In our firm, there is a strong attitude to prevent defective products from occurring.	(Wang *et al.*, 2012)
	PM2	In our firm, we ensure quality in the process for developing new products/services.	(Wang *et al*., 2012)
	PM3	Our managers and supervisor understand how to motivate employees and encourage them to perform at their highest level.	(Wang *et al.*, 2012)
	PM4	In our firm, work or process instructions are given clearly to employees.	(Kaynak, 2003)
	PM5	In our firm, we give importance to inspections, review or checking of work.	(Kaynak, 2003)
Customer focus	CF1	In our firm, our business is customer focused.	Anderson & Sohal (1999)
	CF2	In our firm, we resolve complaints and problems of our customers promptly and efficiently.	Anderson & Sohal (1999)
	CF3	In our firm, we know customers needs and requirements.	Anderson & Sohal (1999)
	CF4	We communicate customer requirements throughout the firm.	Anderson & Sohal (1999)
	CF5	In our firm, we evaluate our relationships with our customers.	Anderson & Sohal (1999)
	CF6	In our firm, we plan for future expectations and future requirements of customers.	Anderson & Sohal (1999)
	CF7	In our firm, we regularly measure customer satisfaction.	Anderson & Sohal (1999)
Continuous improvement	CI1	There is always an emphasis on the continuous improvement in all the activities at various levels.	(Al-Swidi & Mahmood , 2012)

Table 4.2 (Continued)

	CI2	In our firm, continuous improvement is emphasized in the training programs provided to employees.	(Al-Swidi & Mahmood, 2012)
	CI3	In our firm, we always emphasis on the quality-awareness programs for employees.	(Al-Swidi & Mahmood, 2012)
	CI4	In our firm, we firmly believe that by implementing continuous improvement strategies, we can survive and serve better in the highly competitive environment.	(Al-Swidi & Mahmood, 2012)
Employee fulfilment	EF1	In our firm, employees are dedicated to their job.	(Wang *et al.*, 2012)
	EF2	In our firm, employees are satisfied with their job.	(Wang *et al*., 2012)
	EF3	In our firm, employees feel that their needs are continually satisfied.	(Wang *et al*., 2012)

4.9.3 Entrepreneurial Orientation Measurement Scale

The items of entrepreneurial orientation were adapted from Al-Swidi and Mahmood (2012) and Mahmood and Hanafi (2013) which were adopted from the instrument developed by Covin and Slevin (1989) used to measure the affect of entrepreneurial orientation on the performance of a firm. Covin and Slevin (1989) developed this scale based on early work by Khandwalla (1977) and Miller and Friesen (1982). EO was measured as a uni dimensional construct using three dimensions, innovativeness, pro-activeness and risk-taking. The ten items of EO were measured using five point Likert scale on which the owner/managers had to specify and describe the degree to which the items represent their firm's strategy. Table 4.3 presents the items of entrepreneurial orientation Scale with the source.

Table 4.3
Entrepreneurial Orientation Scale

Construct	Dimensions	Code	Items	Source
Entrepreneurial orientation	Innovation	IN1	In our firm, we emphasize innovation and research and development activities critical to our performance.	(Al-Swidi & Mahmood, 2012)
		IN2	Our firm focuses to introduce new products and services at a high scale.	(Al-Swidi & Mahmood, 2012)
		IN3	It is the culture of our firm to support bold approaches to innovative product development.	(Al-Swidi & Mahmood, 2012)
		IN4	In our firm we actively seek innovative ideas.	(Al-Swidi & Mahmood, 2012)
	Proactiveness	P1	Employees in our firm are encouraged to take initiatives and proactive decisions.	(Al-Swidi & Mahmood, 2012)
		P2	Our firm is strongly proactive for high return projects.	(Al-Swidi & Mahmood, 2012)
		P3	Our firm is first to introduce new products/services, technologies and administrative techniques.	(Al-Swidi & Mahmood, 2012)
	Risk taking	RT1	we take bold decisions, necessary to achieve firm's objectives.	(Al-Swidi & Mahmood, 2012)
		RT2	We carry out high risk projects with uncertain returns.	(Mahmood & Hanafi, 2013)
		RT3	Our firm usually adopts an aggressive and bold posture when faced with uncertainty, to exploit the probability of potential opportunities.	(Al-Swidi & Mahmood, 2012)

4.9.4 Market Orientation Measurement Scale

Several scholars have developed measurement scale of market-orientation from both, organizational culture perspective (MKTOR scale of Narver & Slater, 1990) and behavioral perspective (MARKOR scale of Kohli, Jaworski & Kumar, 1993). However, as mentioned by Lado, Maydeu-Olivares and Rivera (1998b) the first market orientation (MO) scale MKTOR developed by Narver and Slater (1990) was preferred due to its

more practical features and advantages. Therefore, measurement scale developed by researchers Narver and Slater (1990) was used for this research study.

To evaluate firm's market orientation as a uni-dimensional construct, its three dimensions (i.e. customer orientation, competitor orientation and interfunctional coordination) were measured with a revised version (suitable for SMEs) with sixteen items on a five-point Likert scale (1=strongly disagree; 5=strongly agree) on which the owner/managers had to specify the degree to which the items represent their firm's strategy. Table 4.4 illustrates the items of market orientation scale with the source.

Table 4.4
Market Orientation Scale

Construct	Dimensions	Code	Items	Source
Market Orientation	Customer orientation	CO1	Our business objectives are primarily driven by customer satisfaction.	(Narver & Slater,1990)
		CO2	Our firm's strategies are determined by our belief that how can we create greater value for customers.	(Narver & Slater,1990)
		CO3	We constantly monitor our level of commitment and orientation to fulfill customer's need.	(Narver & Slater,1990)
		CO4	Our firm provides after sales service for customers.	(Narver & Slater,1990)
		CO5	We evaluate customer satisfaction continuously and systematically.	(Narver & Slater,1990)
		CO6	Our firm's strategy for competitive advantage is based on our understanding of customer needs.	(Narver & Slater,1990)
	Competitor orientation	CMO1	In our firm, sales people share information about competitor's strategies.	(Narver & Slater,1990)
		CMO2	We quickly respond to competitive actions of our competitor that threaten us.	(Narver & Slater,1990)

Table 4.4 (Continued)

	CMO3	We systematically analyze the products offered by our competitors	(Narver & Slater,1990)
	CMO4	We regularly share information with our employees concerning competitor's strengths and strategies	(Narver & Slater,1990)
	CMO5	We target those customers where we have an opportunity for competitive advantage.	(Narver & Slater,1990)
Inter functional coordination	IFC1	In our firm, all the business units are integrated in serving the needs of our target markets.	(Narver & Slater,1990)
	IFC2	In our firm we freely communicate information about successful and unsuccessful customer's experience with all the employees of the firm	(Narver & Slater,1990)
	IFC3	We regularly visit our present and prospective customers	(Narver & Slater,1990)
	IFC4	There is a strong coordination amongst all the units, which provides our firm a competitive advantage.	(Narver & Slater,1990)
	IFC5	All the employees in our firm understand how they can contribute to create customer value.	(Narver & Slater,1990)

4.9.5 External Environment Measurement Scale

The original scale used by Jaworski and Kohli (1993) was used after certain modifications to measure the moderating role of external environment with two dimensions (competitive intensity and market turbulence) in a uni dimensional construct having total of 8-items on a five point likert scale research instrument ranging from 1 (Strongly disagree) to 5 (Strongly agree). Table 4.5 summarizes the items of entrepreneurial orientation scale with the source.

Table 4.5
External Environment Scale

Construct	Dimensions	Code	Items	Source
External Environment	Competitive intensity	CI1	In our kind of business, customer's need and preferences change rapidly.	(Jaworski & Kohli,1993)
		CI2	Actions of competitors can easily be predicted and matched readily.	(Jaworski & Kohli, 1993)
	Market turbulence	MT1	We operate in a much diversified customer markets.	(Jaworski & Kohli, 1993)
		MT2	We operate in a very cutthroat competitive industry.	(Jaworski & Kohli, 1993)
		MT3	Our competitors are relatively weak.	(Jaworski & Kohli, 1993)
		MT4	Price competition is an important feature of our industry.	(Jaworski & Kohli, 1993)
		MT5	We cater to many of the same customers that we used to in the past.	(Jaworski & Kohli, 1993)
		MT6	We face difficulty in maintaining profit margins due to competitors quick response to the market opportunities.	(Jaworski & Kohli, 1993)

4.10 Questionnaire Design

The most difficult stage of survey design is to develop and design a survey instrument (Beins, 2004). The content and presentation of the questionnaire are two important aspects that required to be considered while developing the instrument. Content of the research questionnaire were in consonance with research questions and research objectives of the study and supported by a thorough literature review. Besides that, expert's opinion in the related area was also sought to make sure that the content of the questionnaire explains what it was intended to measure. Moreover, wording of the questions, the response options as well as the sequence of the questions were made sure

to be easy to read, interesting and understandable. The instructions for the respondents were mentioned clearly and precisely to avoid any ambiguity.

In terms of response choices, the closed ended format was used. The advantage of using closed ended questions is that the respondents would be capable to make quick decisions to choose among the several given choices. Moreover, closed ended questions would also facilitate the researcher to record the information easily for subsequent data analysis (Beins, 2004; Hayes, 2000; Oppenheim, 2000; Sekaran, 2003). 5- point likert scale was used instead of 7-point. McKelvie (1978) provided a strong support that cross-sectional reliability of the instrument is greater for 5-points than 7-points.

The questionnaire of the study consisted of 74 questions distributed into six sections. In the first section there were 25 questions to measure the TQM practices in SMEs. In addition, there were 10 questions in section two to measure entrepreneurial orientation (EO) construct through the perceptions of owner/ managers of SMEs. The third section, however, had 16 items to measure the responses of owners/managers related to market orientation (MO). While the fourth section consisted of 8 questions to measure the external environment.

In the fifth section, 6 items related to performance were presented. Sixth section consisted of the inquiry about the demographic information of the respondents and firm. The section 6 contained nine questions regarding the demographic data of respondent's profile and firm's information mainly consisting of multiple choice type questions. Table 4.6 summarizes the description of questionnaire.

Table 4.6
Description of Questionnaire

Construct/Variable	Section	No of Items	Sources
Total Quality Management	One	25	(Anderson & Sohal, 1999; Wang *et al.*, 2012; Al-Swidi & Mahmood, 2012; Kaynak, 2003).
Entrepreneurial Orientation	Two	10	(Al-Swidi & Mahmood, 2012; Mahmood & Hanafi, 2013).
Market Orientation	Three	16	(Narver & Slater, 1990)
External Environment	Four	8	(Jaworski & Kohli, 1993)
Performance	Five	6	(Valmohammadi, 2011;Brah, 2001; Jaworski & Kohli, 1993)
Respondent's Profile	Six	5	(Aziz & Mahmood, 2011; Saleem *et al*., 2011)
Firm's Profile	Six	4	(Aziz & Mahmood, 2011; Saleem *et al*., 2011)

4.11 Pilot Test

Pilot test as suggested by Bradburn, Sudman and Wansink (2004) was conducted to involve respondents from the same pool of the study, the real data were collected. The purpose of pilot testing is to ensure the reliability, content validity, readability, wording, format and sequencing and clarity of questions. It is also used to determine the length of time required for completion as it also establishes the accuracy and appropriateness of the research design and instrumentation. In addition to that, it also provides proxy data for selection of a sample (Saunders *et al*., 2007). Based on the feedback of pilot test, final changes were made. Expert's opinion and comments were requested to ascertain the language and structure of the instrument.

When testing theoretical constructs, reliability and internal consistency of a measurement instrument are important aspects of research study. It is primarily done to check whether the measurement is reliable and can produce the results what they are intended to measure. Internal consistency can be anticipated and determined using a reliability coefficient such as cronbach's alpha (Saraph *et al*., 1989). In this research cronbach's alpha was determined and assessed separately for each measure of the survey questionnaire. According to Onwuegbuzie and Daniel (2002) Cronbach- alpha is a common method to estimate the internal consistencies of items.

Data collected was coded and entered into SPSS 20 to test the reliability by using alpha scores for each of the construct variables. Table 4.7 shows that most of the cronbach's alpha values for independent variables lie above 0.7 cut off value. George and Mallery (2003) provided the rule of thumb that alpha value of greater than 0.50 were suggested as being satisfactory and acceptable to test for the reliability of constructs. Moreover, Nunnally (1978) suggested that the minimum advisable level is 0.7 would be adequate for the modest reliability of a construct. Table 4.7 presents reliability analysis of the construct.

Table 4.7
Reliability Analysis of the Construct

Variable	**No of items**	**Cronbach alpha**
Total Quality Management	25	.88
Entrepreneurial Orientation	10	.69
Market Orientation	16	.79
External Environment	8	.69
Performance	6	.77

4.12 Data Analysis

The data collected for this study was analyzed using the SPSS version 20 (Statistical Package of Social Sciences). However, the data was statistically analyzed through six main steps. These analyses included:

1. Cleaning and Screening of data
2. Descriptive Statistics
3. Factor and Reliability Analysis
4. Pearson Correlation Analysis
5. Multiple Regression Analysis
6. Hierarchical Regression Analysis

4.12.1 Cleaning and Screening of Data

After data collection, data cleaning and screening was conducted for any errors in coding before doing further analysis (test) on the variables through an examination of basic descriptive statistics and frequency distributions. Results of the frequency test indicated that there was no extreme minimum or maximum value exceeding the range, were detected. Additionally, no missing responses were indentified in the frequency test. Hence, it was concluded that there were no errors in data coding and data entry and the data was clean.

4.12.2 Descriptive Analysis

Prior to carrying out any statistical analysis various statistical techniques such as descriptive statistics the mean, median and standard deviation on the variables were

employed, as well as data response rate was also checked. Descriptive analysis was conducted to initially quantitatively summarize the data.

4.12.3 Factor and Reliability Analysis

Factor analysis was performed to identify the set of common underlying dimensions of a set of variables, known as a factor of the construct (Hair *et al*., 2010). Factor analysis was done to reduce a vast number of factors of variables to more illustratable, relevant and manageable smaller set of factors (Cavana, Dalahaye & Sekaran, 2001).

4.12.4 Correlation Analysis

The analysis was conducted prior to multiple regression and hierarchical regression to pinpoint the relationship and strength amongst the variables under study.

4.12.5 Preparing Data for Multivariate Analysis

At this stage, the data was prepared for the multivariate data analysis by employing four main assumptions of multivariate analysis;

1. Normality testing through normal probability plots.
2. Outlier detection through examining Mahalanobis distances.
3. Homoscedasticity and linearity check through Scatterplots.
4. Detecting and tackling Multicollinearity employing Variance Inflation Factor (VIF).

4.12.6 Multiple Regression Analysis

This method was used to analyze the hypotheses of the study by examining the significance of the relationship amid several predicting/independent variables (predictor) and one dependent (criterion) variable (Allison, 1999; Hair *et al*., 2010).

4.12.7 Hierarchical Regression Analysis

This analysis was conducted to examine the effect of moderating variables on the correlation between the independent (IV) and dependent variables (DV). Baron and Kenny (1986) and Frazier, Barron and Tix (2004) suggested that hierarchical regression analysis is considered to be an appropriate method to identify the effect of moderating variables on the relationship amid independent variables and dependent variable.

4.13 Summary

This chapter explained the research methodology employed in this study. This research is a descriptive study using a survey method to collect data. This chapter has discussed in detail the methodology adopted in collecting data and techniques for analyses of data. Moreover, this chapter provided some elaborations on the target population, sampling frame and the justification of the selection of owner/manager of SME's as being the respondents. In addition, this chapter also explained the instruments used based on the relevant literature review. Analysis of data, findings, results and discussion for this study are presented in the next chapter.

CHAPTER FIVE

RESEARCH FINDINGS

5.1 Introduction

This chapter presents the findings based on the analysis of the data provided by the respondent SMEs through survey questionnaire. This chapter begins with the general discussion on demographic factors, the description of the profile of respondents such as job position/title, gender, marital status, education level, age of the firm, number of employees and the type of firm. Followed by general descriptive statistics such as response rate and main variables involved were reported in this chapter. Finally, hypotheses were tested and results were summarized. It is expected that the results of the analysis will give an initial idea about the lacking areas in implementation of Total Quality Management, Entrepreneurial Orientation, Market Orientation and the potential weaknesses in the performance among the SMEs that needed to be addressed. This chapter provided research findings of the study based on the data collected from SMEs, including data presentation, analysis and interpretation and discussion of the outcomes of the analysis.

5.2 Data Collection Process and Survey Responses

There are different procedures such as self administered, postal, email etc to administer the questionnaires. According to Dilman (1978) effective administration of the survey questionnaire significantly influences the level of satisfactory responses of data collected. Data for this research study was collected through self administered questionnaires and via e-mail in order to increase the response rate. Consistent follow up

calls and self visits were made to the owner of SMEs as a reminder during the data collection period in order to increase the response rate. Self administered method enable the respondents to clarify any doubt regarding survey questionnaire, additionally data collectors can also refer back to the respondents to rectify and fix the incomplete responses (Sekaran, 2003).

The sample size was 380 and survey questionnaires were distributed among 500 SMEs operating in the Punjab province of Pakistan. Based on the selected criteria of firm size, 384 questionnaires were received; a return rate was 77 percent. According to Wiersma (1993) the response rate refers to the percentage of respondents returning the survey questionnaires, while quality of response refers to completeness of data received. However, 17 incomplete questionnaires were excluded from this analysis, therefore 367 usable and complete questionnaires making the valid response rate of 73 percent were selected for data analysis which satisfied the requirement of sample size to conduct multiple regression analysis.

According to Sekaran (2003) and Hair *et al*., (2010) response rate of 30 percent is acceptable for surveys. Likewise, Pallant (2001) recommended that the sample size could lie between five (5:1) and ten time (10:1) the number of independent variables to conduct regression analysis. Therefore, a sample size of 30 respondents is suggested for the given number of variables in this study. Hence, 367 useable responses (73 percent) satisfied the requirement of sample size to conduct multiple regression analysis. The data collection process lasted for four months from October 2013 to January 2014. After collection of data, the data was keyed into SPSS (version 20) for further analysis. Table 5.1 depicts the distribution of the questionnaires and the total number of responses by

the respondents. Data was collected from both male and female, as both are known to equally contribute towards the firm's strategic and key operations and success of the business.

Table 5.1
Summary of Response Rate

Response	**Freq/Rate**
Distributed questionnaires	500
Returned Questionnaires	384
Returned and unusable questionnaires	17
Returned and usable questionnaires	367
Response rate	77 percent
Usable response rate	73 percent

5.3 Non Response Bias

The problem with the survey is the low response rate due to respondent's unwillingness to complete the questionnaire or not returning them. Before sending the questionnaires, certain steps were considered. Questionnaire was developed by taking the objectives of the study into account and made it attractive, concise and professional in order to develop respondent's interest to response. It is imperative and very likely to receive the questionnaires as non-response that could lead the possibilities of biasness (Babbie, 1990; Wiersma, 1993).

According to Wiersma (1993) the response rate represents the percentage of respondents returning the questionnaires whereas, the quality of response refers to the completeness of data. Total 500 questionnaires were distributed and administered to the owner/manager of respondent SMEs. 367 were returned fully completed. Non response

bias was checked by comparing early 200 respondents and late 167 respondents. To determine the difference between early respondents and late respondents, T-test was carried out for all the variables involved in this research study.

As per stated by Kannan, Tan, Handfield and Ghosh (1999) and Armstrong and Overton (1977) if there is sufficient and notable difference found amid early and late respondents they may show the underlying differences amid respondents and non-respondents. As no statistically significant differences were observed amid early respondents and late respondents, therefore it indicated absence of non-response bias**.** The results in Table 5.2 demonstrated that there were no significant differences found between late and early respondents across all the variables. Therefore, there was no issue of non response biasness.

Table 5.2
Non Response Bias Test

Variable	Group	N	Mean	Std. Deviation	t-value	Sig
TQM	EARLY	200	4.31	.264	-.758	.449
	LATE	167	4.33	.261		
EO	EARLY	200	4.29	.350	-.164	.870
	LATE	167	4.29	.387		
MO	EARLY	200	4.18	.317	.870	.385
	LATE	167	4.14	.384		
EE	EARLY	200	4.23	.419	-.932	.352
	LATE	167	4.27	.370		
BP	EARLY	200	4.27	.393	.226	.821
	LATE	167	4.26	.468		

5.4 Sample Composition of Respondents

The sample of this study comprised of SMEs operating in the province of Punjab, Pakistan. A total of 500 sets of survey questionnaires were administered to SMEs representing various sectors (manufacturing, service and retailers/traders) registered with various institutions i.e. SMEDA and FPCCI in the province of Punjab, Pakistan, of which only 367 complete questionnaires were returned back; the overall response rate was 73 percent (367/500).

Table 5.3
Distribution of the Respondents by Demographic Variables (n=367)
Respondent Profile

Sample Composition by Position/Title

Position of Respondent	**Frequency**	**percent**
Owner	350	95.4
Others	17	4.6
Total	367	100.0

Sample Composition by Gender

Gender	**Frequency**	**percent**
Male	339	92.4
Female	28	7.6
Total	367	100.0

Sample Composition by Marital Status

Marital Status	**Frequency**	**percent**
Married	240	65.4
Unmarried	127	34.6
Total	367	100.0

Table 5.3 (Continued)

Sample Composition by Age

Respondent Age	**Frequency**	**percent**
20-25 years	40	10.9
26-30 years	102	27.8
31-35 years	59	16.1
36-40 years	47	12.8
41-45 years	42	11.4
46-49 years	33	9.0
50 years old and above	44	12.0
Total	367	100.0

Sample composition by level of education

Level of Education	**Frequency**	**percent**
No formal qualification	12	3.3
Standard 10	36	9.8
Standard 12	75	20.4
2 years Bachelors Degree	86	23.4
4 years Bachelors Degree	62	16.9
Masters Degree	81	22.1
MS/MPhil	15	4.1
Total	367	100.0

Table 5.3 shows that majority of respondents (95.4 percent) were the owners of the firms, responsible for the firm strategic decisions and key operations. Descriptive analysis showed that out of 367 respondents, there were more male than female respondents. The results depicted that 339 (92.4 percent) of the respondents were male

and the remaining 28 (7.6 percent) were female. Both male and female respondents of the study are equally contributing to the success of the firm. Majority of respondents 240 (65.4 percent) were married, while only 127 (34.6 percent) were reported unmarried or single. A total of 40 respondents (10.9 percent) were aged between 20-25 years old, 102 respondents (27.8 percent) each were aged between 26-30 years, 59 respondents (16.1 percent) were aged between 31-35 years, 47 (12.8 percent) were aged between 36-40 years, 42 (11.4 percent) were aged between 41-45 years, 33 (9 percent) were aged between 46-49 years and only 44 (12 percent) respondents were 50 years old and above.

The data showed that out of 367 respondents, 12 (3.3 percent) respondents have no formal qualification. 36 (9.8 percent) have Standard 10, 75 (20.4 percent) have Standard 12, 86 (23.4 percent) respondents have 2 years Bachelors Degree, 62 (16.9 percent) 4 years Bachelors Degree, 81 (22.1 percent) have Masters Degree while only 15 (4.1 percent) have MS/MPhil qualification. This indicated that the study sample was well educated with a good experience of working, which creates rationality and validity of answers of questionnaire.

Table 5.4
Firm profile

Sample Composition by Nature of Firm

Nature of firm	**Frequency**	**percent**
Partnership	151	41.1
Sole proprietorship	216	58.9
Total	367	100.0

Table 5.4 (Continued)

Sample Composition by Type of Industrial Sector

Type of industrial sector	**Frequency**	**percent**
Manufacturing	119	32.4
Service	236	64.3
Others:	12	3.3
Total	367	100

Sample Composition by Size of the Firm

Number of employees	**Frequency**	**percent**
Less than 10	20	5.4
10-35	187	51.0
36-100	129	35.1
101-150	17	4.6
151-200	3	.8
201-250	11	3.0
Total	367	100.0

Sample Composition by Age of the Firm

Age of the firm	**Frequency**	**percent**
1-5 years	83	22.6
6-10 years	169	46.0
11-15 years	65	17.7
More than 15 years	50	13.6
Total	367	100.0

The results also showed that 151 (41.1 percent) SMEs were partnership businesses while, majority of SMEs 216 (58.9 percent) were sole proprietor. This also showed that SMEs structure is very simple and do not have many hierarchical levels. The result

depicted that 119 (32.4percent) SMEs were manufacturing in nature, while services sector 236 (64.3 percent), only 12 (3.3 percent) belonged to other sectors, i.e. retailers/traders.

Results from the table 5.4 illustrated that majority of the SMEs about 187 (51 percent) employed 10-35 employees.While, 20 (5.4 percent) SMEs employed less than 10 employees followed by 129 (35.1percent) employed 36-100 employees. 17 (4.6 percent) SMEs employed 101-150 employees. About 3 (0.8 percent) had 151-200 employees, while 11 (3 percent) employed 201-250 employees. The study also exhibited that majority of the SMEs 169 (46 percent) aged between 6-10 years, followed by 83 (22.6 percent) were of 1-5 years of age. Whereas, 65 (17.7 percent) aged between 11-15 years and 50 (13.6 percent) SMEs aged more than 15 years The data showed a blend of new and old firms, which provided a realistic support to determine the moderating effect of external environment on the link amid TQM, EO, MO and performance of SMEs.

5.5 Data Cleaning

After data collection, measures collected were first subjected for a cleaning process for any errors in coding before doing further analysis (test) on the variables. Results of the frequency test indicated that there was no extreme minimum or maximum value exceeding the specified range and the mean was also within the designated range, hence, it was deduced that there were no errors in data coding and entry and the data was clean.

Hair *et al.*, (2010) suggested that the ratio between the number of cases to the number of variables in the study should be at least 5:1 and ideally 10:1. However, this study had five variables and the number of responses collected was 367. Likewise, Green (1991)

suggested a formula (N ≥50 + 8m, where m= number of independent variables) to calculate minimum sample size required. Hence, this study had the acceptable number of observations to conduct the analysis.

5.5.1 Detection of Missing Data

Missing data is a common problem in statistical analysis because it is very rare to obtain complete data from every questionnaire (Pallant, 2001). Hence, it is important to examine data file for missing values. Data with less than 1 percent missing values are generally considered small, 1-5 percent manageable, while 5-15 percent needs sophisticated methods to handle and treat the missing values and more than 15 percent can significantly affect subsequent statistical analysis (Acuna & Rodriguez, 2004). According to Meyers, Gamst and Guarino (2006) no data is deleted if it did not reach 15 percent.

In the literature different methods i.e. case deletion, mean imputation and median imputation have been suggested to deal with missing data. Descriptive statistic was conducted to detect the values out of range or improperly coded. A frequency test was run for every variable to check any missing data. There was not any missing value found in the data set.

5.5.2 Outliers

Outliers are those observations or responses that have distinct attributes and uniquely different from others (Hair *et al.,* 2010). Moreover, as observed by Tabachnick and Fidel (2007) outliers are disturbing responses by respondents such as observations are

repeated, extreme value, extreme score on an individual variable or on a set of variables. They can distort the overall results, so they should be deleted. The most commonly used method Mahalanobis distance measure was used to detect outliers. In this method the distance of each observation from the mean centre of all other observations is measured (Hair *et al*., 2010).

Mahalanobis distance values were inspected and compared to the critical values in Chi-square table at 0.001 level of significance. Mahalanobis distance values ranged between .017 and 24.24. Referring to the Chi-Square distribution table the upper limit of Mahalanobis distance value was greater than the critical value of chi-square at an alpha level of 0.001 (16.27) for three independent variables. These results however indicated the existence of outliers. Among 367 cases, only two cases were indicated as outliers.

Coakes and Steed (2003) suggested that the outliers should be removed from the data if their number is big and can potentially affect the reliability of the results obtained. Since the number of outliers detected was very small, hence, all the cases were retained for further analysis.

5.6 Descriptive Analysis of the Construct

A descriptive analysis for independent variables, moderator variable and dependent variable was conducted. Details of descriptive analysis presented in Table 5.5 shows the mean scores, minimum and maximum values and standard deviation of all the variables in the questionnaire using 5-point likert scale criteria ranging from 1 ‘‘strongly disagree’’ to 5 ‘‘strongly agree. The results show high mean values for all the variables.

Table 5.5
Descriptive Statistics of the Constructs (n=367)

Constructs	Min	Max	Mean	Std. Deviation
TQM	3.60	4.92	4.32	.26
EO	3.20	5.00	4.29	.37
MO	2.94	4.88	4.16	.35
EE	2.50	5.00	4.24	.40
P	3.00	5.00	4.26	.43

For total quality management, the mean is 4.32 with a minimum 3.60 value and a maximum of 4.92 value with a standard deviation of 0.26. For entrepreneurial orientation, the mean value is 4.29; standard deviation is 0.37 with minimum 3.20 and max value of 5.00. While, for market orientation, the mean is at 4.16, standard deviation is 0.35 with a minimum 2.94 value and maximum 4.88. The mean value for external environment is 4.24; standard deviation is 0.40 with minimum 2.50 and maximum 5.00 values respectively. Meanwhile, for performance the mean value is 4.26, standard deviation score is 0.43 with 3.00 minimum value and 5.00 maximum value. The descriptive analysis result illustrated that mean values of all the variables were above 4.00.

5.7 Factor Analysis of the Research Instrument

Factor analysis is a data reduction method to refine and reduce large number of components or factors into more reasonable number prior to using them in other analysis such as multiple regression analysis (Pallant, 2001; Meyers *et al*., 2006). Factor analysis was carried out to discover the underlying structure among the variables in the analysis.

Coakes and Steed (2003) and Hair *et al.*, (2010) suggested the sample size guideline that minimum of five observation per variable is required for factor analysis. While Nunnally (1978) suggested 10 observations per variable. In this study, with five variables, a sample size of 367 is higher than the minimum requirement of the desired observations for factor analysis. Hair *et al*., (2010) proposed that a sample size of more than 350 requires a factor loading of 0.30 to evaluate statistical significance. Therefore, in this study the minimum requirement of data for factor analysis was satisfied.

5.7.1 Steps Involved in Factor Analysis

Hair *et al.*, (2010) provided the criteria for factor analysis and employed by this study are as follows:

1. Sample size should be a ratio of 5 observations per variable (5:1).
2. Bartlett's test of Sphericity (test of presence of correlation among variables) need to be significant at $p<0.05$ or smaller.
3. Kaiser-Meyer-Olkin (KMO) should be more than 0.50 (Hair *et al*., 2010).
4. Factors with eigenvalues more than 1.0 was used to determine the unidimensionality of the construct (Kaiser, 1974).
5. Factor loading of 0.30 have been set to evaluate the significance for the sample size more than 350 (Hair *et al*., 2010). The items load less than 0.30 were deleted.

Following section discussed the results of factor analysis for the dependent, independent and moderator variables.

5.7.2 Factor Analysis of Performance (P)

The dependent variable-performance was measured initially by 6 items as a unidimensional construct was subjected to factor analysis with varimax rotation using SPSS version 20. Varimax rotaion is most commonly used rotation which permits each variable to load on a single factor (Sharma, 2006). Table 5.6 depicts the results of the factor analysis for the dependent variable (performance).

Table 5.6
Results of the Factor Analysis for Performance

Items	**Description of Item**	**Factor Loading**
P5	Employees satisfaction	0.700
P2	Profitability	0.68
P6	Overall performance of our firm relative to competitors	0.676
P1	Sales growth rate	0.674
P4	Customer satisfaction	0.611
P3	Market share	0.467
Cronbach alpha		0.71
Eigenvalue		2.456
Percentage of variance		41percent
KMO		.782
Bartlett's Test of Sphericity		337.56
Significance		000

Table 5.6 depicts the factor loadings of 6 items of performance construct lie in the range of 0.47 to 0.7, which exceeded the cut off value of 0.3 (Hair *et al*., 2010) showing that sample size was adequate for factor analysis. The cronbach alpha reliability of 0.71 was

higher than the benchmark value of 0.50 (Howitt & Cramer 2003). George and Mallery (2003) stated that alpha value of greater than 0.50 is sufficient and acceptable for testing the reliability of constructs while the values of less than 0.5 were considered not acceptable. Moreover, Nunnally (1978) suggested that 0.7 would be adequate for the modest reliability of a construct. However, Jones and James (1979) suggested that alpha values of 0.44 are also acceptable because alpha is a function of the number of items in the construct. Exmamination of the correlation matrix has shown the presence of many values of 0.3 and above. The KMO value was 0.782 which is well above the prescribed value of 0.5 (Hair *et al*., 2010) and 0.6 (Kaiser, 1974) the Bartlett's test was significant with an approximate chi-square of 337.56 and the p-value is 0.000. Coakes and Steed (2007) suggested that Bartlett's test of sphericity should be large and significant. The eigenvalue is greater than 1 and percentage of variance is about 41 percent. This suggests the adequacy of applying the factor analysis.

5.7.3 Factor Analysis of Total Quality Management (TQM)

Independent variable Total quality management was measured initially by 25 items as a unidimensional construct was subjected to factor analysis with varimax rotation using SPSS version 20. Using the criteria > 0.3 to conduct factor analysis factor loading of the items less than 0.3 were removed (Hair *et al*., 2010). The three (3) deleted items (6, 20 and 21) from the initial 25 items of TQM construct were those items that indicated factor loading of the items less than 0.3 and hence, failed to fit well with other items in the construct. Consequently this study proceeded with 22 items of TQM with factor loading ranging from 0.302 to 0.591 to do the analysis of hypotheses.

Table 5.7
Results of the Factor Analysis for Total Quality Management

Items	Description of Item	Factor Loading
TQM24	In our firm, employees are satisfied with their job.	.591
TQM12	In our firm, our business is customer focused.	.572
TQM2	Quality is a part of the way we do things in our firm.	.559
TQM11	In our firm, we give importance to inspections, review or checking of work.	.539
TQM18	In our firm, we regularly measure customer satisfaction.	.534
TQM25	In our firm, employees feel that their needs are continually satisfied.	.519
TQM23	In our firm, employees are dedicated to their job.	.511
TQM5	In our firm, we ensure all employees are well supported through times of change.	.504
TQM17	In our firm, we plan for future expectations and requirements of customers	.475
TQM1	In our firm, we promote quality improvement efforts.	.452
TQM15	We communicate customer requirements throughout the firm.	.447
TQM16	In our firm, we evaluate our relationships with our customers.	.431
TQM4	In our firm, we add value to the community by our activities.	.430
TQM13	In our firm, we resolve complaints and problems of our customers promptly and efficiently.	.396
TQM14	In our firm, we know customers needs and requirements.	.390
TQM3	We encourage leadership throughout the firm.	.376
TQM9	Our managers and supervisors understand how to motivate employees and encourage them to perform at their highest level.	.344

Table 5.7 (Continued)

TQM19	There is always an emphasis on the continuous improvement in all the activities at various levels.	.338
TQM10	In our firm, work or process instructions are given clearly to employees.	.334
TQM22	In our firm, we firmly believe that by implementing continuous improvement strategies, we can survive and serve better in the highly competitive environment.	.329
TQM8	In our firm, we ensure quality in the process for developing new products/services.	.312
TQM7	In our firm, there is a strong attitude to prevent defective products from occurring.	.302
Cronbach alpha		.805
Eigenvalue		4.44
Percentage of variance		20.19 percent
KMO		0.808
Bartlett's Test of Sphericity		1272.6
Significance		0.000

Examination of the correlation matrix showed the presence of many values of .30 and above. The KMO value was 0.808 higher than the cut off value of 0.5 (Hair *et al*., 2010) and 0.6 (Kaiser, 1974) while, the Bartlett's test was significant with an approximate chi-square of 1272.61 and the p-value is 0.000. Bartlett's test of sphericity should be large and significant (Coakes & Steed, 2007).The eigenvalue is greater than 1 and percentage of variance is about 20 percent, as illustrated in Table 5.7 While cronbach's alpha reliability for 22 TQM items was 0.805 indicating high internal consistency among their items. These results imply the adequacy of applying the factor analysis.

5.7.4 Factor Analysis of Entrepreneurial Orientation (EO)

Factor analysis was done on 10 items of independent variable Entrepreneurial

orientation as a uni-dimensional construct to identify the underlying factors. The results as illustrated in Table 5.8 revealed that all the items of EO were loading ranges from 0.43 to 0.68 well above the benchmark value of 0.3 suggested by (Hair *et al.*, 2010). While cronbach's alpha reliability was 0.735 showing high internal consistency among their items.

Examination of the correlation matrix showed the presence of many values of .30 and above. The KMO was found to be 0.804 far above the cut off value of 0.5 and the Bartlett's test was significant with an approximate chi-square of 494.3 (Hair *et al*., 2010) while the p-value is 0.000. The eigenvalue is greater than 1 and percentage of variance is about 29.7 percent, as illustrated in Table 5.8.

Table 5.8
Results of the Factor Analysis for Entrepreneurial Orientation

Items	**Description of Item**	**Factor Loading**
EO9	We carry out high risk projects with uncertain returns.	0.68
EO2	Our firm focuses to introduce new products and services at a high scale	0.59
EO5	Employees in our firm are encouraged to take initiatives and proactive decisions	0.59
EO6	Our firm is strongly proactive for high return projects.	0.55
EO8	We take bold decisions, necessary to achieve firm's objectives	0.54
EO4	In our firm we actively seek innovative ideas.	0.52
EO7	Our firm is first to introduce new products/services, technologies and administrative techniques.	0.52
EO1	In our firm, we emphasize on innovation and R&D activities critical to our performance	0.52
EO3	It is the culture of our firm to support bold approaches to innovative product development.	0.47
EO10	Our firm usually adopts an aggressive and bold posture when faced with uncertainty, to exploit the probability of potential opportunities.	0.43

Table 5.8 (Continued)

Cronbach alpha	0.735
Eigenvalue	2.972
Percentage of variance	29.722
KMO	0.804
Bartlett's Test of Sphericity	494.3
Significance	0

5.7.5 Factor Analysis of Market Orientation (MO)

Market orientation was measured initially by 16 items as a unidimensional construct was subjected to factor analysis with varimax rotation using SPSS version 20. Using the criteria > 0.3 to conduct factor analysis (Hair *et al*., 2010). Table 5.9 depicts that factor loading of all the items lie in the range from 0.330 to 0.659. While cronbach's alpha reliability was 0.805 showing high internal consistency among their items. Examiantion of the correlation matrix showed the presence of many values of .30 and above. The KMO value was 0.826 well above the cut off value of 0.5 (Hair *et al*., 2010) and 0.6 (Kaiser, 1974) and the Bartlett's test was significant with an approximate chi-square of 1108.18 while the p-value is 0.000.The eigenvalue is greater than 1 and percentage of variance is about 26 percent as illustrated in Table 5.9.

Table 5.9
Results of the Factor Analysis for Market Orientation

Items	**Description of Item**	**Factor Loading**
MO5	We evaluate customer satisfaction continuously and systematically.	.659
MO6	Our firm's strategy for competitive advantage is based on our understanding of customer needs.	.633

Table 5.9 (Continued)

MO4	Our firm provides after sales service for customers.	.603
MO10	We regularly share information with our employees concerning competitor's strengths and strategies	.595
MO2	Our firm's strategies are determined by our belief that how can we create greater value for customers.	.582
MO1	Our business objectives are primarily driven by customer satisfaction.	.547
MO14	We regularly visit our present and prospective customers.	.542
MO11	We target those customers where we have an opportunity for competitive advantage.	.495
MO16	All the employees in our firm understand how they can contribute to create customer value.	.482
MO3	We constantly monitor our level of commitment and orientation to fulfill customer's need.	.454
MO9	We systematically analyze the products offered by our competitors	.448
MO15	There is a strong coordination amongst all the units, which provides our firm a competitive advantage.	.445
MO13	In our firm we freely communicate information about successful and unsuccessful customer's experience with all the employees of the firm	.434
MO12	In our firm, all the business units are integrated in serving the needs of our target markets.	.427
MO8	We quickly respond to competitive actions of our competitor that threaten us.	.341
MO7	In our firm, sales people share information about competitor's strategies.	.330
Cronbach alpha		0.805
Eigenvalue		4.161
Percentage of variance		26
KMO		.826
Bartlett's Test of Sphericity		1108.180
Significance		.000

5.7.6 Factor Analysis of External Environment (EE)

Factor analysis was done on 8 items of moderating variable Entrepreneurial orientation as a one-dimensional construct to identify the underlying factors. The results as

illustrated in table 5.8 revealed that all the items of EE were loading ranges from 0.399 to 0.662 well above the benchmark value of 0.3 recomended by (Hair *et al*.,2010). While cronbach's alpha reliability was 0.711 showing high internal consistency among their items. Examination of the correlation matrix showed the presence of many values of .30 and above. The KMO was found to be 0.720 far above the suggested limit of 0.5 and the Bartlett's test was significant with an approximate chi-square 483.258 (Hair *et al*., 2010). Bartlett's test of sphericity should be large and significant (Coakes & Steed, 2007). The eigenvalue is greater than 1 and percentage of variance is about 33 percent, as illustrated in Table 5.8. This indicates the adequacy of applying the factor analysis.

Table 5.10
Results of the Factor Analysis for External Environment

Items	**Description of Item**	**Factor Loading**
EE7	We cater to many of the same customers that we used to in the past.	.662
EE8	We face difficulty in maintaining profit margins due to competitor's quick response to the market opportunities	.643
EE1	In our kind of business, customer's need and preferences change rapidly.	.641
EE3	We operate in a much diversified customer markets.	.592
EE4	We operate in a very cutthroat competitive industry.	.588
EE6	Price competition is an important feature of our industry	.553
EE2	Actions of competitors can easily be predicted and matched readily	.491
EE5	Our competitors are relatively weak.	.399
Cronbach alpha		0.711
Eigenvalue		2.664
Percentage of variance		33.304
KMO		.720
Bartlett's Test of Sphericity		483.258
Significance		.000

5.8 Assumptions of Multiple Regressions

To prepare the data for multivariate analysis, various procedures i.e. outliers detection, normality, linearity, multicollinearity and homoscedasticity were employed to fulfil the assumption of multivariate analysis (Hair *et al*., 2010; Pallant, 2001). From the report of statistical analysis it can be deduced that the regression analysis conducted in this study fulfilled the five assumptions namely outliers, normality, linearity, multicollinearity and homoscedasticity required to confirm the validity of its results. All these assumptions of multiple regression were examined through output of regression analysis results. Hair *et al*., (2010) suggested the sample size guideline that minimum of five observations per variable (5:1). Hence, this study had the acceptable number of data set of 367 to conduct regression analysis.

5.8.1 Normality

Normality assumption was checked through normal probability plot of residual to assess whether the data was normally distributed. This refers that the distribution of data is normally distributed on the normal probability plot (P-P Plots). Figures 5.1 depicts that behavior of data did not deviate from the normal curve and normality assumption was achieved since all the data were associated on the normal curve at an angle of 45^0 diagonal line from the bottom left to top right.

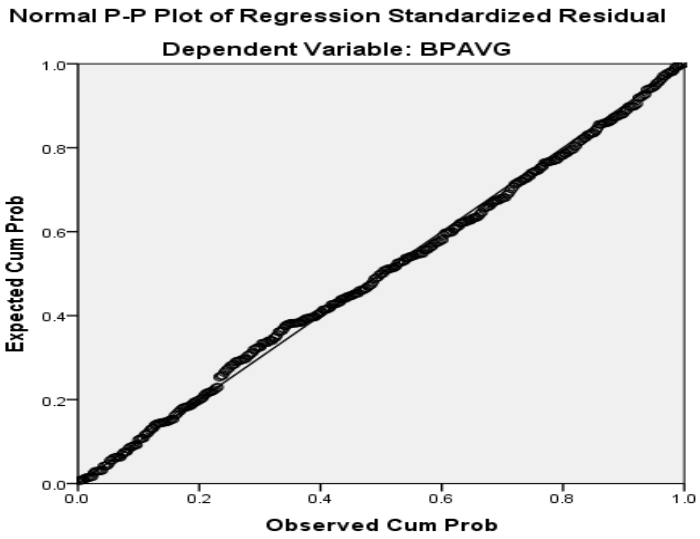

Figure 5.1
Normal Probability Plot

5.8.2 Linearity

Linearity of data was examined using residual scatter plot. Flury and Riedwyl (1998) stated that the residuals should scatter around 0 or most of the scores should present and concentrate in the centre at the 0 point indicating that linearity assumption is satisfied. Figure 5.2 illustrates that the residual scores were concentrated at the centre along the zero(0) point showing that the linearity assumption was fulfilled.

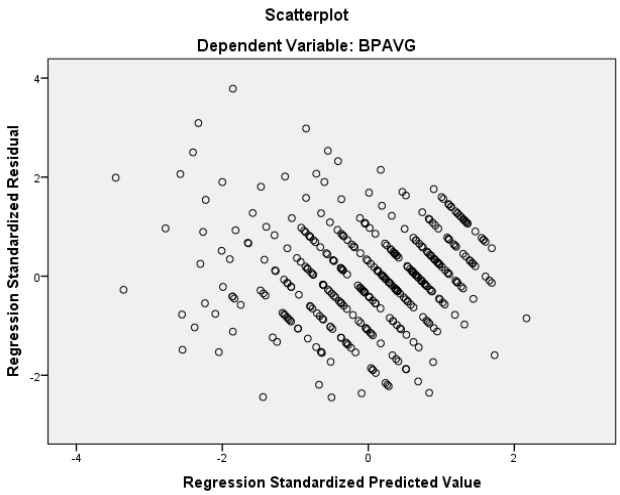

Figure 5.2
Scatter Plot

5.8.3 Homoscedasticity

According to Norusis (1999) assumption of homoscedasticity is met when there is no pattern to the data dispersion and residuals are scattered randomly around the horizontal line. Examining the scatterplot shows no pattern of data distribution and data was randomly distributed around the horizontal line thus homoscedasticity assumption was not violated.

5.8.4 Multicollinearity

Multicollinearity occurs when independent variables are highly correlated (above .90) among themselves (Hair *et al*., 2010). Existence of multicollinearity raises the difficulty to interpret the affects of different variables. This study used the tolerance value and Variance Inflation Factor (VIF) to identify the existence of multicollinearity issue among the variables. According to Pallant (2011) the tolerance refers to the variability in

a variable that is not explained by other variables while VIF indicator is the reciprocal of the tolerance value (I divided by tolerance). If tolerance value is very small (less than .10) and VIF value exceeds 10 then it shows a potential problem of multicollinearity (Hair *et al*., 2010).

Table 5.9 shows the Tolerance and VIF values for the independent variables, indicating that multicollinearity does not exist among the independent variables because the tolerance values are more than .10 and the VIF values are less than 10 which are within the recommended required range. Durbin Watson for independence of error was 1.63 also within the acceptable range of 1.5-2.5. The results indicated that multicollinearity is not a problem in this study. The data was examined for multicollinearity and outlier before proceeding to carry out for further analysis. There was no issue found in this study related with multicollinearity and outlier.

Table 5.9
Tolerance and VIF Values

Independent Variables	**Collinearity Statistics**	
	Tolerance	**VIF**
Total Quality Management	.204	4.914
Entrepreneurial Orientation	.217	4.610
Market Orientation	.547	1.828

Hence, it is concluded that the evaluation on linearity, homoscedasticity, normality and multicollinearity did not reveal any violation and satisfied the assumption of multiple regression analysis. Therefore, multiple regression analysis was considered appropriate to test research hypotheses. The results of regression analysis are reported in the following sections.

5.9 Correlation Analysis

A pearson correlation test was conducted before multiple regression and hierarchical regression analysis to identify the association and strength between the variables TQM, EO, MO and BP. The relationship is said to be small when r = ±0.1 to ±0.29, the correlation is medium when r = ±0.30 to ±0.49, While the relationship is described as strong when r is ±0.50 and above. The results of the correlation analysis between the variables are illustrated in Table 5.12, which shows that all the relationship between TQM, EO, MO and BP were found to be statistically significant at the 0.01 level of significance.

The data of this study supported the existence of significant relationships between TQM construct ($r=0.671$, $p<0.01$) and performance. Likewise, the results, also, supported the existence of significant relationships between EO ($r=0.647$, $p<0.01$) and MO ($r=0.813$, $p<0.01$) with performance.

Table 5.12
Pearson Correlation Analysis

Construct	Correlation with Performance
Total quality Management	.671**
Entrepreneurial Orientation	.647**
Market Orientation	.813**

Note. **. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

5.10 Hypotheses Testing Procedures

Before conducting multiple regression and hierarchical regression analysis to test the hypotheses in order to achieve research objectives, Pearson correlation analysis was

employed to evaluate the relationship amid TQM, EO, MO and the performance. Multiple regression analysis was employed to assess the direct link amid independent variables (predictor) and dependent variable (criterion). Hierarchical regression analysis was conducted to examine the moderating affect of external environment on the relationships between the TQM, EO, MO and the performance.

5.11 Multiple Regression Analysis

Regression analysis is one of the most extensively used multivariate statistical method employed to explore the link amid multiple independent (predictors) variables and a single dependent (criterion) variable (Hair *et al*., 2010). Furthermore, multiple regression analysis enables the researcher to identify that which of the independent variables (predictor) has more predictive power towards dependent variable (criterion).

Before conducting the multiple regression analysis, the data of this study were analyzed to fulfil various multivariate assumptions i.e. outliers, linearity, normality, homoscedasticity and multicollinearity to confirm the reliability of the results drawn subsequently. It was determined that all the statistical assumptions needed for multivariate statistical techniques were fulfilled ensuring that the obtained results were reliable and valid.

5.11.1 Results of Multiple Regression Analysis

Multiple regression analysis was conducted for independent variables Total quality management, Entrepreneurial orientation, Market orientation and dependent variable performance using SPSS 20. The main objective was to determine the relationship amid

independent variables (predictors) and a single dependent variable (criterion). The outcome of regression analysis gave the answers to the first, second and third research objectives and the hypotheses of the study.

According to the results reported in Table 5.13 it can be concluded that both TQM (β= 0.146, t=2.276, p=0.023) and MO (β= 0.649, t=16.54, p=0.000) have significant positive relationship with performance respectively, whereas, EO (β=0.105, t=1.689, p=0.092) has no impact on performance. These results, however, supported the hypotheses H1 and H3 in which the affect of TQM and MO on the performance were claimed to be significant. While H2, significant impact of EO on performance was not supported.

Table 5.13
Multiple Regression Result between TQM, EO, MO and Performance

Model	**Un Std.Beta**	**Std. Error**	**Std Beta**	**t**	**Sig**	**Tolerance**	**VIF**
(Constant)	-.612	.220		-2.776	.006		
Total Quality Management	.239	.105	.146	2.276	.023	.204	4.914
Entrepreneruial Orientation	.123	.073	.105	1.689	.092	.217	4.610
Market Orientation	.790	.048	.649	16.538	.000	.547	1.828
R	0.833						
R^2	0.694						
Adjusted R^2	0.692						
Std. Error Est.	0.238						
F	274.69						
Sig.	0.000						
Durbin-Watson	1.635						

a Dependent Variable Performance

The values of multiple correlation (R), squared multiple correlation (R^2) and adjusted squared multiple correlation (R^2adj) show how well the combination of independent variables predicts the dependent variable. Moreover, results of multiple regression indicated that multiple regression coefficients (R) of total quality management,

entrepreneurial orientation and market orientation on performance of firm is 0.833, R square is 0.694 and the adjusted R square is 0.692.

The value F is (3,363) = 274.69 ($p<.001$) which indicates the overall significant prediction in independent variables to the dependent variables. But F value does not provide the information about the importance of each independent variable. Hence, the findings confirmed that overall 0.694 of variance (R^2) has significantly explained by three variables TQM, EO, MO on overall performance of SMEs in Pakistan.

5.11.2 Hierarchical Regression Analysis Results to Examine the Moderating Effect

Hierarchical multiple regression was performed to examine the moderating effect of external environment on the relationships between TQM, EO, MO and the performance. Several researchers such as Baron and Kenny (1986) and Frazier *et al*., (2004) have suggested hierarchical regression as the technique for analysing the moderating effect of a variable. Hierarchical regression is also known as sequential regression as variables are entered in steps or blocks (Pallant, 2011).

Similarly, Baron and Kenny (1986) also suggested that hierarchical regression analysis is performed in several blocks. In the first block independent variables and dependent variable were entered. In the second block, the moderating variable was included to assess their predictive power towards dependent variable. In the third block interaction terms were entered. For the moderator effect to be present, there should be an increase in a significant R^2 square with a significant F-change value. Moreover, we look at the t-value and p-value under the coefficient table to identify the moderator affect (Tabachnick & Fidel, 2007).

Table 5.14 illustrates the result of the hierarchical multiple regression analysis of the moderating affect of External environment on the relationship between TQM, EO, MO and Performance. TQM, EO, MO were entered first in step 1, explaining 70 percent of the variance. After the entry of External Environment at step 2 the total variance explained by the model as a whole was 71 percent. In step 3, the interaction terms were entered, which resulted in additional variance explaining up to 73 percent. The Sig. F change from step 1 to 2 was at .000 significance level and from step 2 to 3 was significant at .000 level. However, inspection of the individual interaction terms between Total quality management x External Environment (β=-.135, t=-1.668, p=.096); Entrepreneurial orientation x External Environment (β=.152, t=2.051, p=.041) and Market orientation x External Environment (β=.130, t=2.620, p=.009).

In the final model moderating effect of EE is significant with only two independent variables EO and MO, with (β=.152, t=2.051, p=.041) and (β=.130, t=2.620, p=.009). respectively. While no moderating effect of external environment was found on TQM and performance (β=-.135, t=-1.668, p=.096).

Table 5.14
Hierarchical Regression Results: The Moderating Effect of External Environment on the Relationship between TQM, EO, MO and Performance

Independent variables	Std Beta Step 1	Std Beta Step 2	Std Beta Step 3
Total quality management	.235	.352	.267
Entrepreneurial orientation	.029	.022	.093
Market orientation	.639	.687	.699
Moderating variable External Environment Interaction		-.180	-.101
TQM× External environment			-.135
EO × External environment			.152
MO × External environment			.130
R^2	.700	.711	.727
Adj. R^2	.697	.708	.722
R^2 Change	.700	.011	.016
F-Change	282.08	13.987	7.091
Sig F Change	.000	.000	.000

Dependent Variable: Performance

Based on the results of multiple regression and hierarchical regression analysis conducted in this chapter, Table 5.15 summarized the findings related to the hypotheses.

Table 5.15
Summary of the Results of Hypotheses Testing

Hypothesis No	Statement of Hypothesis	Remarks
H1	TQM has a significant relationship on performance.	**Supported**
H2	EO has a significant relationship on performance.	Not Supported
H3	MO has a significant relationship on performance.	**Supported**
H4	External Environment moderates the relationship between TQM and performance.	Not Supported
H5	External Environment moderates the relationship between EO and performance.	**Supported**
H6	External Environment moderates the relationship between MO and performance.	**Supported**

5.12 Summary

This chapter presented the data analysis and findings of the study. Besides reporting empirical results of factor analysis, correlation, multiple regression and hierarchical regression tests for hypotheses, this chapter also mentioned the general characteristics of the sample and descriptive analysis of variables. The results of multiple regression indicated that total quality management, market orientation were significantly related to performance. Finally, hierarchical regression analysis was carried out to verify the moderating effect of external environment on TQM, EO, MO and performance. The results of the study indicated that external environment has a moderating effect on EO-BP and MO-BP. Further discussion of these findings and their practical and theoretical implications, conclusion and recommendations for future research are presented in chapter six.

CHAPTER SIX

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter interprets and discusses the research findings and underlines the recommendations from the study. Moreover, the chapter also entails theoretical and managerial contributions, limitations of the study and suggestions about future research.

6.2 Summary of the Study

SMEs play a vital and significant role in the economic progress and growth of any country. More than 90 percent enterprises are considered as SMEs and are the biggest industrial contributor to the Pakistani economy, but experiencing dismal performance and are battling for the survival of their business (Khawaja, 2006). Factual evidences showed that only less than 14 percent of SMEs are operating for more than 15 years. This scenario is worth investigating in order to come up with some plausible suggestion to enhance the performance and growth of SMEs and avoid rapid business failures and shutdowns.

The main objective of this study was to investigate the moderating effect of external environment (EE) on the relationship between total quality management (TQM), entrepreneurial orientation (EO), market orientation (MO) and performance of SMEs in Pakistan.

The inconclusive findings in the contemporary literature related to the relationship between Total Quality Management (TQM), Entrepreneurial Orientation (EO), Market Orientation and the Performance (P) was an important unresolved issue that needed further investigation. By studying this relationship, it is believed that the managers of SMEs would change their strategy and the performance may be improved.

The framework of this study is supported by the RBV (resource based view) and contingency theory. According to RBV theory, firm performance is influenced by its tangible and intangible resources and capabilities which can generate sustainable economic growth and sustain its competitive advantage (Barney, 1986, 1991). Whereas, contingency theory argued that the proper alignment between key organizational variables with the context or environment leads to better performance (Garengo & Bititci, 2007).

Based on the comprehensive review of relevant literature and the problem of this study discussed in Chapter 3 and Chapter 1, this study aimed to accomplish the following research objectives:

1. To examine the effect of TQM on performance of SMEs in Pakistan.
2. To examine the effect of entrepreneurial orientation (EO) on performance of SMEs in Pakistan.
3. To examine the effect of MO on performance of SMEs in Pakistan.
4. To examine the moderating effect of external environment on the relationship between TQM and performance of SMEs in Pakistan.
5. To examine the moderating effect of external environment on the relationship between EO and performance of SMEs in Pakistan.

6. To examine the moderating effect of external environment on the relationship between MO and performance of SMEs in Pakistan.

Comprehensive and relevant literature review related to the Total Quality Management (TQM) entrepreneurial orientation (EO), Market orientation (MO) and external environment (EE) was conducted and reported in chapter 3. The theoretical framework of this study was developed within the premise of RBV and contingency theory and presented in chapter 3. Quantitative research methodology was applied in order to test the theoretical framework and reported in Chapter 5.

This study used the survey questionnaire method to achieve the research objectives and considered the firm as the unit of analysis. In developing the instrument, the items/questions reflecting the constructs were adopted and modified from various previous researcher's instruments. Questionnaire with a five-point Likert scale was used to measure all the items. Survey questionnaire was checked and reviewed by academicians and practitioners to establish the face and content validity. Prior to the real data collection, Pilot test was conducted involving 52 respondents to make sure the reliability and internal consistency of the research instrument.

The population of this study included the small and medium enterprises (SMEs) operating in the province of Punjab, Pakistan. Data were collected from Owner/manager of SMEs. The sample size was 380. Email and hand delivery of questionnaire survey approach were used to collect the data. A total of 500 questionnaires were distributed. Based on the selected criteria of firm size, only 367 useable questionnaires were

collected representing a response rate of 73 percent of the total questionnaire distributed. SPSS 20 was used for analysis.

At first, the data was analyzed using descriptive statistics. After conducting factor analysis the data was then analysed using Pearson's correlation, multiple regression and hierarchical regression in order to test the research hypotheses and achieve the objectives of the study as presented in chapter 5. The results from this study have established that total quality management and market orientation are important variables contributing to enhance the performance of SMEs. The next subsection discusses the summary of the research findings.

6.3 Discussion on the Research Findings

This section reports the overall discussion on the research findings based upon the six objectives of the study.

6.3.1 TQM and Performance

Total quality management (TQM) is a business strategy aims to satisfy customer's needs, through continuous improvements of the organizational various processes and managerial practices (Kumar *et al*., 2011). Total quality management involves interaction between and within all the components of organizations to achieve quality in all terms and functions of organization (Hafeez *et al*., 2006). According to Demirbag *et al*., (2006) TQM is a holistic management approach aims to bring continuous improvement in all functions, with the participation of all employees under the

leadership of top management of an organization to produce products and services according to the needs and demands of customer's better than the competitors.

The first objective of the study was to determine the effect of TQM on performance of SMEs in Pakistan. A descriptive statistics was conducted and presented in Table 5.5 in chapter 5. Those results revealed that for total quality management, the mean is 4.32 with a minimum 3.60 value and a maximum of 4.92 value with a standard deviation of 0.26. Multiple regression analysis was performed in order to achieve the first objective of this study**.** As reported in Table 5.11 of chapter 5, it can be concluded that there is significant positive relationship between TQM (β= 0.146, t=2.276, p=0.023) and performance thus supporting the first hypothesis of this study.

The significant finding on the relationship of TQM and performance of SMEs is in line with and confirms the empirical findings of several previous studies (Flynn *et al*., 1995; Samson & Terziovski, 1999; Zhang, 2000; Douglas & Judge, 2001; Huarng & Chen 2002; Kaynak, 2003; Sila & Ebrahimpour, 2005; Demirbag *et al*., 2006; Pinho 2008; Salaheldin 2009).Therefore, the result suggests that TQM is critical factor for SMEs to attain its goals and achieve the intended performance. In conclusion, this study supported the significant importance of TQM as a determinant of performance based on the data collected from SMEs in Pakistan.

The ultimate goal of TQM is to satisfy the customer's needs, requirements and expectations through continuous improvements (Kumar *et al*., 2009). Hence, a successful implementation of TQM can help SMEs to achieve levels customers' satisfaction and enhanced performance. Furthermore, TQM ensures the quality of the

offered products and services, prevent significant defect in work process, less repetitive work and reduce the rate of errors.

The SME sector is considered as the backbone of the economy of Pakistan, so the proper implementation of TQM can give some tremendous results by boosting the performance of SMEs and contributing to the economic growth of the country. Hence, managers of SMEs and practitioners should be more concerned to take an effective and dynamic approach towards TQM, in order to achieve sustainability and effectiveness of their firm to meet the future challenges and stay ahead of competitors. Moreover, they should update their managerial skill, knowledge and capabilities regularly and equip themselves with current quality improvement techniques to achieve their performance objectives.

6.3.2 EO and Performance

Entrepreneurial orientation refers to the firm's capability to engage in product innovation and is ready to take risks to introduce new products or services into new markets and accurately discover new opportunities before their competitors. Despite the extensive research work reported in entrepreneurship literature soliciting that entrepreneurial orientation helps improve performance. But many empirical researches also pointed out insignificant results regarding the link amid entrepreneurial orientation and performance and question the appropriateness of entrepreneurial orientation (EO) strategy for higher organizational performance (Li *et al.*, 2009; Wiklund & Shepherd, 2005). A descriptive statistics results presented in Table 5.5 shows that for entrepreneurial orientation construct, the mean value is 4.29; standard deviation is 0.37 with minimum 3.20 and max value of 5.00.

While several conceptual arguments in literature favour the notion of significant results, that EO stimulates performance. But contrary to that, findings from Table 5.11 have indicated that entrepreneurial orientation (EO) (β=0.105, t=1.689, p=0.092) has insignificant relationship with the performance. Hence, the hypothesis (H2) related to these relationships is not accepted. In other words, any improvement in EO, may not result in a substantial influence on the performance of SMEs. These insignificant findings are consistent with the previous studies on entrepreneurial orientation i.e. Slater and Narver (2000); George, Wood and Khan (2001); Walter, Auer and Ritter (2006) and Hughes and Morgan (2007) who were unable to find a significant relationship between EO and performance.

Similarly, Covin *et al*., (1994) also discovered no significant correlation amid entrepreneurial orientation and firm performance. The authors pointed out that the relationship between EO and SMEs performance in developing countries turned up to be inconsistent due to limited resources, lack of management experience and dearth of knowledge. On the contrary, the researcher such as March and Simon (1968) analyzed that firms having enough access to large pool of resources will encourage them for experimentation and allowing them to take new opportunities and create competitive advantage which stimulate the performance.

Moreover, Kazem and van der Heijden (2006) could not find support for any correlation amid EO and profitability of the firm. Some other studies i.e. Dimitratos, Lioukas and Carter (2004); Zahra (1991) and Lumpkin and Dess (2001) reported lower association amid entrepreneurial orientation and performance. On the other hand, one plausible elucidation for insignificant results amid EO and performance in the context of SME

may be due to delayed effect of EO on performance (Zahra & Covin, 1995). Furthermore, Rauch *et al*., (2004) identified that EO is more related to objective performance indicators than the perceptual measures. Single informant approach used in this study could also be the likely reason to weaken the EO and performance relationship. Because different managers have different attitude and perceptions on different performance indicators. For example, entrepreneurial managers may be having a more optimistic attitude and positive perceptions of performance than others.

6.3.3 MO and Performance

MO refers to gathering information from customers, internally sharing this information within the organization and on the basis of such information, responds appropriately to the changing needs of the market (Narver & Slater, 1990). Marketing literature has established that market orientation positively influence on various indicators of firm performance such as sales growth, profitability, customer satisfaction and employee satisfaction (Alpkan, Sanal & Ayden, 2012; Baker & Sinkula, 2009; Gheyasari, Rasli, Roghanian & Nohalim, 2012; Kumar *et al* ., 2011).

Descriptive analysis presented in Table 5.5 shows the mean value for market orientation is at 4.16, standard deviation is 0.35 with a minimum 2.94 value and maximum 4.88. Whereas, the outcome of regression analysis as illustrated in Table 5.11 in Chapter 5 gave the answers to the third research objective of this study regarding the effect of MO on performance. The relationship between market orientation (MO) and performance was found to be significant at the level of $p<.001$ ($\beta= 0.649$, $t=16.54$, $p=0.000$) supporting the hypothesis H3. This finding is consistent with the findings of the

previous studies which reported that MO has significant relationship with performance (Aziz & Yasin, 2010; Kirca, Jayachandran & Bearden, 2005; Narver & Slater 1990; Kohli & Jaworski 1990).

Ogbonna and Ogwu (2013) found a positive relationship between MO and performance of insurance companies in Nigeria. Similarly Shah and Dubey (2013) indicated a significant relationship amid market orientation and organizational performance of financial institutions in the United Arab Emirates. Subramaniam and Gopalakrishna (2001) in their study found that market orientation is a good predictor of firm performance. Li *et al.,* (2008) conducted a study on Chinese small firms and reported significant moderating effects of entrepreneurial orientation on the relationship between MO and performance. The study conducted by Gaur *et al*., (2009) on small and medium enterprises in India also supported significant relationship between market orientation and performance. Hence, the findings of the present study are in line with the above mentioned studies.

MO is a customer focused strategy to enable firms understand the market needs and develop appropriate strategies to fulfill customer's needs and wants to achieve long term firm success (Liu *et al*., 2002). Therefore, it is concluded that market orientation is an important determinant to enhance performance of SMEs in Pakistan. Furthermore, the ever growing competition and shortened life cycle needs SMEs managers to stay close to customers and competitors to strategically posture their firms. It is therefore proposed that managers of market oriented firms can ensure the profitable survival of their firm by exploring and venturing into new markets and by starting up for new product development ahead of competitors than the non market oriented firms (Narver & Slater,

1990). The findings undoubtedly imply that market orientation certainly helps SMEs to achieve higher performance.

6.3.4 The Moderating Role of External Environment

External environment was employed to investigate its moderating effect between TQM, EO, MO and performance. Generally, there has been mixed results in the interaction effects of external environment on individual TQM, EO, MO construct and performance relationship. The outcomes of hierarchical regression illustrated in Table 5.12 of chapter five suggest that the moderating effect of EE was significant with only two independent variables EO and MO with performance of SMEs, by (β =.152, t=2.051, p=.041) and (β =.130, t=2.620, p=.009) respectively. These findings however, supported fifth (H5) and sixth (H6) hypotheses of this study. While there was no moderating effect of external environment found on TQM and performance (β=-.135, t=-1.668, p=0.096) relationship. Therefore, fourth hypothesis (H4) was not supported.

Different environmental factors effect on different organizations. External environmental factors are uncertain, complex and change rapidly, thus impacting on firm's capability and growth and create trouble for them (Wang *et al*., 2012). Meanwhile, it is also noted that when there is low intensity of external environmental factors, organizations can concentrate to create competitive edge by focusing on customer satisfaction (Subramanian, Kumar & Strandholm, 2009). Therefore, SMEs must not ignore and unresponsive to external environmental factors and seek information about customers and modify their products and services based on customer data. It has been observed over the past few years that a firm's better survival mainly

depends on its capacity to constantly address and satisfy the customer's needs and demands and create competitive advantage over competitors. This philosophy entails that competition never rests and emphasis should always be to strive for the improvement of performance by fulfilling customer's current and future requirements.

Moreover, Slater and Narver (1998) observed that due to rapid pace of change in customer perception and competitor activity, managers of firm must inspire and motivate their staff to maintain a competitive advantage by moving away from existing customer's needs and wants and seek to satisfy their latent and future needs. Oparanma, Hamilton and Jaja (2009) noted that external environmental conditions are complicated by dynamics of change and uncertainty, which can significantly affect business strategies. In a similar vein, Atuahene-Gima (1995) pointed out that environmental factors can moderate the management strategies and performance relationship.

This study finds that external environmental factors moderate the relationship between EO and performance and market orientation and performance of SMEs. The findings of moderating effects of external environmental factors are consistent with the studies conducted by Atuahene-Gima (1995); Kirca *et al*., (2005); Rose and Shoham (2002) and Subramanian *et al*., (2009) stated that firms must focus their attention and resources to improve and modify products and services by maintaining closer relationships with customer and concentrate to acquire and manage resources to keep pace with market demand.

Since external environmental condition produce uncertainty from competitors and customers, therefore, SMEs must increase their customer focus and carefully respond to

competitor's actions before devising strategic decisions. In general, the results of the moderating effects of EE on the relationship amid EO, MO and performance of SMEs support the literature on the contingency theory that organization's strategies aligned with the environmental factors determines firm's long-term competitiveness (Powell, 1992; Fuchs, Mifflin, Miller & Whitney, 2000; Beer, Voelpel, Leibold & Tekie, 2005).

On the other hand, the result of this study did not support the moderating effect of external environment on total quality management and performance. Scholars i.e. Dooley and Flor (1998) have argued that TQM is not adaptable to ever changing and dynamic situations. External environment is complicated and produces degree of uncertainty due to dynamics of change in customer's preferences and competitiveness of competitors (Mar Fuentes-Fuentes, Albacete-Sáez & Lloréns-Montes, 2004). Therefore, Montes, Jove and Fernandez (2003) suggested that in such uncertain and dynamic situation the results of significant improvement in performance after TQM implementation is unclear.

6.4 Contributions of the Study

This study provided insights regarding the issues of low performance of SMEs. This research was able to expand the body of knowledge as it investigated the moderating role of external environment in explaining the relationship amid the Total Quality Management, Entrepreneurial Orientation, Market Orientation and Performance. This study has many significant contributions to the current literature and provided several implications and recommendations to managers. The following sub section elaborates some of the managerial and theoretical contributions of this study.

6.4.1 Theoretical Contribution

The findings of this study attempted to significantly contribute to the existing literature by examining the moderating effect of external environment on TQM, entrepreneurial orientation (EO), market orientation (MO) and performance of SMEs. Previous studies revealed that implementation of single strategy caused suboptimal performance. This study advances and strengthens the theory by studying TQM, EO and MO as important drivers of performance of SMEs. The empirical evidence of this study supports the resources-based view (RBV). The resources-based view suggests that the strategies must be aligned to achieve higher performance. In the context of this study TQM aligned with entrepreneurial orientation and market orientation were important strategies utilized to achieve higher performance. As previously argued in chapter one and three that inconclusive results found between implemented strategies and performance was attributed to mis fit between the strategies and external environmental factors. In other words, the big disagreement in the literature regarding the implication of different strategies on performance called for further investigation and discussion. Given the fact that most of the research related to TQM, EO and MO was conducted by examining their direct relationship on performance. Since there was a gap in strategic management literature that discusses the issue of fit between implemented strategy and performance. Therefore, this study has provided an insight on this issue and added in the body of knowledge by incorporating external environment as a moderator on the relationship amid TQM, EO, MO and performance.

Based on the literature review total quality management, entrepreneurial orientation and market orientation were selected for this study because they represent the key variables

found to predict performance. Moreover, to the best of researcher's knowledge there is not any study attempted that integrate total quality management, entrepreneurial orientation and market orientation with moderating variable of external environment on the performance of small and medium enterprises (SMEs).

Within the premises of RBV and contingency theory this study found evidence that SMEs performance can be explained by aligning three strategies, TQM, EO and MO together that have been moderated by external environment. Moreover, the results of this study suggested that strategies such as TQM, EO and MO should be implemented as packages in unidimensional construct rather than separately in multidimensional construct. Because the dimensions of each construct are inter-dependent.

As argued earlier, despite the importance of the SME sector in any economy of a country, most of the studies concerning TQM, EO and MO were conducted on large scale organizations. This study however extended the existing literature concerning TQM, EO, MO and EE on SMEs performance in Pakistan. Last but not the least, in order to test the postulated hypotheses, this study rigorously validated the research instrument to make sure the valid and reliable results. Because poorly validated measures capitulate invalid conclusions.

6.4.2 Managerial Contribution

The findings of this research provided a deeper understanding on how TQM, EO, MO and EE can enhance the overall performance of SMEs in Pakistan. This research provided a guide map for the policy makers and practitioners to formulate those policies which could assist the SMEs. The analytical results indicated that managers of SMEs

require to work in close co-ordination between the marketing and quality departments which will help to promote customer satisfaction and higher performance (Lai, 2003). Since the external environment is constantly changing and firms face uncertainty from competitor and customers. It is very critical for managers of SMEs to adopt Total quality management, entrepreneurial orientation and market orientation as business strategies to understand competitor moves and strive to improve the quality standards of products and services. Managers should track the record of current and potential customers using new technologies such as email, websites or online communities to grasp the opportunities.

Empirical evidence suggests that organizational strategies are important resources that are valuable, rare, inimitable and non-substitutable and able to create competitive advantage. Realizing the need to emphasize on the growth and development of SMEs, the findings of this study would contribute to managerial implications and encourage the SME managers/owners to implement TQM, EO and MO to create competitiveness and higher performance in the turbulent business environment.

The outcome of this study empirically revealed on the significant association between some determinants of SME performance in Pakistan. The results of this study demonstrates that the total quality management and market orientation are positively related to performance, whereas, entrepreneurial orientation showed insignificant relationship with performance, thus, EO does not predict SME performance in Pakistan. Further, it was also revealed that the external environment did not moderate the relationship between total quality management and performance. Whereas, external

environment was found to moderate between TQM and performance and MO and performance.

In other words total quality management and market orientation are important factors for Pakistani SMEs to consider in order achieve higher performance. Thus, SMEs of Pakistan should strive to implement TQM and MO as a competence within the firms to achieve the competitive advantage and contribute to enhance performance. The finding of this study would be of significantly important to policy makers and practitioners such as the Small and medium enterprise development authority (SMEDA) in designing different policies and future programmes to improve SME performance.

Additionally, managers should develop quality culture in the firm by engaging and involving all the stakeholders and also to create a market orientation atmosphere in enhancing the performance (Yam,Tam,Tang & Mok, 2005). The analysis of this study confirmed the insignificant relationship amid entrepreneurial orientation and performance. This may be due to low access to financial capital and lack of entrepreneurial knowledge that EO had shown no link with performance.

Manager's long-term vision and customer-oriented mindset are important ingredients to anticipate future market's needs and wants. By integrating different management strategies and aligning them with external environment factors, managers of SMEs would be able to reap the various benefits of implemented strategies by delivering better products and services to customers.

The findings also indicate that external environment moderates the relationship amid entrepreneurial orientation (EO), market orientation (MO) and performance of SMEs.

The study suggests that SMEs that seek to improve performance should seriously consider integrating management strategies and aligning them with external environment as the study found support for the interaction among them in contributing towards higher performance. The findings will lead to many starategic decisions, the firm can adopt to ensure, that they could serve better in the marketplace and are better able to satisfy existing and future damands and needs of customers.

The following subsection discussed the limitations of this study and the possible avenues for future research.

6.5 Limitations of the Study

This study though provided good insights and many practical and theoretical contributions, yet there were some limitations in this study. It is important to recognize and consider these shortcomings and weaknesses explicitly while interpreting its results or before drawing any implications from its results. The following section addressed the observed limitations of this study.

First single informant approach was used to collect the data in this study. Owners/Managers being the strategic head of the firm were addressed to describe the state of TQM, EO, MO and EE as well as the level of performance of their respective firm. The reliability of single informant approach is questionable, as it may create possible differences in the results regarding TQM EO, MO, EE across different units within the firm. These constructs could also be evaluated and validated in some future studies by employing multiple informants or multiple stakeholders such as quality

managers, marketing managers, entrepreneurial managers etc from the firm to eliminate common method bias.

Second major limitation was the use of five-point Likert scale in which the respondents measure their degree of agreement or disagreement towards statements related to TQM, entrepreneurial orientation (EO), market orientation (MO), external environment (EE) and performance of SMEs. It was observed that respondents used to measure their perceptions regarding the questions automatically without paying careful attention and understanding to their statements. However, it is difficult to assume that all the questions have been understood completely and the data was of high quality. Future research can use mixed methods employing both qualitative and quantitative approach to further validate the results.

Third, this study was a survey questionnaire research design using a cross-sectional approach that captures and record the perceptions of respondents at a specific point in time to test the hypotheses (Siguaw, Simpson & Baker, 1998). Since the variables TQM, EO, MO are dynamic and tend to change over time and examining their association with performance in a static way as data was collected at one point will lack the accuracy. Therefore, longitudinal studies should be conducted to re-examine the effect of these strategies on the performance.

Fourth, this study used subjective measures to assess the performance which however, did not explain the actual performance of the firm. Even though prior to real data collection, pilot sudy was conducted to ensure reliability as well as validity of the construct. Future research could be extended by employing of more objective data or a

combination of perceptual and objective data to provide reliable conclusions about the performance construct.

Fifth, since the sample of this study consisted of the SMEs operating in Punjab only and is not representing the whole SMEs sector of Pakistan, so the response cannot be generalized to other parts of Pakistan, therefore, there is a need to conduct the study in other regions of the country for in depth understanding of the extent of TQM, EO and MO implementation in SMEs.

The following section discusses the suggestions for future research to overcome some of the limitations of this study

6.6 Suggestions for Future Research

This study provided the much-needed insight of the relationship amid the total quality management, entrepreneurial orientation, market orientation and performance of SMEs in Pakistan. Moreover, this study also focused on moderating affect of external environment on TQM, EO, MO and performance. As it has been discussed in the limitations section, that many future research opportunities emerged throughout the progressive work of this study. This research suggests the need for further investigation to overcome the limitations to the study.

As the cross-sectional design was used in this study, further work needs in the related literature on longitudinal research studies. Therefore, this study suggests that later future researchers should conduct longitudinal studies based on interviews to re-examine the dynamic nature of the effect of TQM EO, MO, as long term strategies, on the

performance of SMEs to provide further insights regarding probable outcomes. This approach will enable the future researchers to carry out a deeper investigation on the complex relation between TQM, EO, MO and the performance.

Since quantitative research design was employed in the present study, therefore information gathered about the variable is limited to the questionnaire's response. Future research can employ both qualitative and quantitative approach to further validate the results and get deeper insights and understanding of the problem setting.

In this study, perceptual measures were used to measure the performance of SMEs. Future research could benefit from the use of more objective data or combination of perceptual and objective data to provide reliable conclusions about the performance construct.

Single informant approach was used to collect the information regarding the variable of this study. Theses constructs could also be evaluated and validated in some future studies by employing multiple informants or multiple stakeholders such as quality managers, marketing managers, employees etc from the firm to eliminate common method bias and to get more wider and balanced perspective of TQM, EO, MO, EE and performance.

Future research, can also be conducted on SMEs with the same type of industry and by adding variable such as organization culture in order to improve the accuracy and validity of the model. Insignificant results of EO and performance can also lead to further investigation to know, under what conditions the relationship was not turned into positive.

Moreover, this study failed to accomplish the hypothesized direct relationship of EO with performance and moderating effect of external environment on TQM and performance. This may be the underdeveloped measurement scale which may require further examining.

6.7 Conclusions

SMEs are considered as a backbone for the progress and growth of economy in both developed and developing countries. Pakistan is a developing country, facing economic instability and due to high population, the unemployment rate is also increasing. SMEs are considered as an effective source to steer forward the economy and generate employment opportunities in the country. But due to weak management system, untrained and unskillful labor force, lack of capital and limited infrastructure facilities available to them, SMEs in Pakistan are exhibiting suboptimal performance.

The factual evidence shows that rate of failures of SMEs is higher in developing courtiers than in developed countries (Arinaitwe, 2006). SME sector does not get due attention and priority, that's why they do not get access to business resources. Besides that, most of the Govt policies are aimed for the development of large firms. Hence, SMEs are in low growth trap, dealing in old products, so unable to climb up the technological ladder. Consistent with the above discussion, the performance of SMEs remained one of the major issues related to the overall economic development and growth of country.

Total quality management, entrepreneurial orientation and market orientation are widely recognized as important management strategies meant to improve the performance of

organizations. Within the premise of RBV theory, that strategies must be aligned, in this study an attempt was made to investigate the link amid TQM, EO, MO and performance of SMEs.

The empirical findings of this study would help SMEs, owner/managers to better understand the effects of some variables to improve performance. Furthermore, the outcome of this study would assist them implement strategies to develop and enhance their businesses. The finding is likewise important to various government agencies and policy makers to develop the policies for improving SME performance. However, only a good strategy itself may not be enough to provide the competitive advantages and enhance the organizational performance (Chenhall & Langfield-Smith, 1998). The more critical issue is the 'fit' between implemented organizational strategy and its environment in order to achieve higher performance. This study within the contingency framework, substantially contributes to the existing literature by empirically examining the moderating role of external environment on TQM, EO, MO and performance of SMEs by using the hierarchical regression analysis.

The results revealed that TQM and MO are important drivers that contribute to higher performance in the context of SMEs in Pakistan, while external environment truly plays the role of moderator between entrepreneurial orientation and performance and market orientation and performance of SMEs. However, entrepreneurial orientation had no significant association with performance. Similarly, there was no moderating role of EE found on the relationship amid TQM and performance.

The study suggests that policy makers and practitioners should not be dependent on a particular management technique but multiple management strategies aligned with external environment should be employed for better survival and success of SMEs. Finally, the theoretical model of this study was developed from relevant current and past literature which covers the key variables such as TQM, EO, MO, EE and performance. This study provided new empirical contribution to the body of knowledge by synchronizing and relating the variables i.e. TQM, EO, MO, EE and performance in the theoretical model with underpinning theories – RBV and contingency theory.

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