AN EMPIRICAL STUDY ON ENTREPRENEURIAL ORIENTATION AND SMES PERCIEVED PERFORMANCE: MODERATING ROLE OF TRANSFERMATIONAL LEADERSHIP, ENVIRONMENTAL FACTORS AND ACCESS TO FINANCIAL CAPITAL

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Candidate of Doctor of Philosophy at the National University of Modern Languages Islamabad do hereby declare that the thesis entitled An Empirical Study on Entrepreneurial Orientation and SMEs Perceived Performance: Moderating Role of Transformational Leadership, Environmental Factors and Access to Financial Capital submitted by me in partial fulfillment of PhD degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

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ABSTRACT

An Empirical Study on Entrepreneurial Orientation and SMEs Perceived Performance: Moderating Role of Transformational Leadership, Environmental Factors and Access to Financial Capital

The present study examined the relationship between entrepreneurial orientation and firm performance in Small and Medium Enterprises (SMEs) of Pakistan. Entrepreneurial orientation (EO) was evaluated on three dimensions, i.e. innovativeness, risk attitude and pro-activeness. Firm performance was measured through two dimensions, i.e. growth and profitability. The moderating effects of transformational leadership, access to financial capital and environmental factors were checked on the relationship between EO and firm performance. The population of the current study consists of all SMEs operated in Khyber Pakhtoonkhwa. The sampling framework of the current study consists of Peshawar division, which include three districts of Khyber Pakhtoonkhwa including Peshawar, Charsadda and Nowshera. The study used multistage cluster sampling technique; first, the study selected Peshawar division (Peshawar, Charsadda and Nowshera) on simple random sampling technique. Secondly, through proportionate stratified random sampling technique, the study selected 254 organizations. Respondents of the study include top level managers of the selected organizations. The respondents’ responses were gathered through a structured questionnaire having a five point Likert scale.

The study found that EO is positively and significantly related to firm performance. Besides, the study also found that each dimension of EO namely innovativeness, risk attitude and pro-activeness were significantly related to firm performance and its dimensions growth and profitability. Moreover, the study also found that transformational leadership moderates the relationship between EO and firm performance. Similarly, the study also found that access to financial capital moderates the significant relationship between EO and firm performance, but environmental factor does not moderate the relationship between EO and firm performance. The study finally concluded that EO had significant impact on firm performance. Based on the findings, it is recommended that SMEs should enhance entrepreneurial orientation in their respective organizations in order to improve their performance. Furthermore, the study also recommended that SMEs may improve their performance through accessibility to financial capital and the leader leadership style, i.e. transformational leadership style as it impacts organizational performance. Limitations, practical implications, recommendations and directions for future research are also highlighted.

Keywords: Entrepreneurial Orientation; SMEs Performance; Transformational Leadership; Access to Financial Capital; Environmental Factors
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<th>Full Form</th>
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<tr>
<td>SMEs</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>SBP</td>
<td>State Bank of Pakistan</td>
</tr>
<tr>
<td>SMEDA</td>
<td>Small &amp; Medium Enterprises Development Authority</td>
</tr>
<tr>
<td>PR</td>
<td>Prudential Regulation</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>PSIC</td>
<td>Provincial Small Industries Corporation</td>
</tr>
<tr>
<td>ROI</td>
<td>Return on Investment</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Asset</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>RBV</td>
<td>Resource Based View</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>DIE</td>
<td>Directorate of Industry Establishment</td>
</tr>
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<td>SD</td>
<td>Standard Deviation</td>
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<tr>
<td>EO</td>
<td>Entrepreneurial Orientation</td>
</tr>
<tr>
<td>INV</td>
<td>Innovativeness</td>
</tr>
<tr>
<td>RA</td>
<td>Risk Attitude</td>
</tr>
<tr>
<td>PA</td>
<td>Pro-activeness</td>
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<td>FP</td>
<td>Firm Performance</td>
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<td>TL</td>
<td>Transformational Leadership</td>
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<td>EF</td>
<td>Environmental Factors</td>
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<td>AFC</td>
<td>Access to Financial Capital</td>
</tr>
<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
</tr>
<tr>
<td>EFA</td>
<td>Exploratory Factor Analysis</td>
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<td>CFA</td>
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<td>GFI</td>
<td>Goodness of Fit Index</td>
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<td>NFI</td>
<td>Normed Fit Index</td>
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<td>MI</td>
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<td>Common Method Bias</td>
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<td>Durbin Watson</td>
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<td>MLQ</td>
<td>Multifactor Leadership Questionnaire</td>
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ACKNOWLEDGEMENT

All the praises and trillions of humble thanks to Allah Almighty (the most beneficial and merciful) Who gave me the mind, ability and courage to perform such a creative work. I owe gratitude to many people. There is long list of people who share the credit though: it would be difficult for me to mention all of them here: however I would eagerly like to mention some of them. I wish to pay humble gratitude to my parents and siblings for their love, care, prayers and moral support. I am very thankful to the Rector Major Gen. Muhammad Jaffar (R), Dean Faculty of FMS Dr. Naveed Akhtar, HOD of FMS Dr. Faid Gul and Dr. Sajid Rahman for his valuable guidance and motivation.

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In the end I am very thankful to everybody who directly or indirectly helped me in the completion of my research work.

MUHAMMAD FAYAZ
DEDICATION

To my sweet parents and brothers for their unconditional love and support throughout my research whose prayers make my dreams reality
CHAPTER 1

INTRODUCTION

The topic of the small and medium enterprise (SMEs) performance has attracted the focus of researchers, practitioners and policy makers all over the world. The characteristics and determinants of the performance of SMEs have been and always will be a focus of debate and interest (McKelvie & Wiklund, 2010). SMEs have been encountering different types of problems; unskilled employees, lack of experience, poor educational background, limited financial resources, lack of technology, limited numbers of employees and managerial expertise (Khalique et al., 2011; Mahmood, 2008). SMEs undertake painstaking and essential efforts frequently to realize how to develop and to enhance their performance as this sector of the economy is considered as one of the essential engines for economic growth of the country (Ahmadani & Shaikh, 2012).

The focus of this research is to examine the impact of Entrepreneurial Orientation (EO) on the performance of SMEs in Pakistan from the perspectives of transformational leadership behavior access to financial capital and environmental factor in the organizations.

Entrepreneurial ventures focused on the process of EO in an organization, which worked as a strategic orientation and could work better than the existing competitors on the market. Moreover, Hashim (2012) stated that effective leadership in the organization comes with strategically sound direction, and it encourages the employee motivation. Leadership is very important for increasing organizational performance, because leaders are answerable for the accomplishment of strategic organizational goals. Therefore, leaders are responsible to stakeholders to utilize the optimum level of available resources and create the best possible products (Tipu et al., 2012).

The environmental factor is also an important element of SMEs performance. This factor is important for those firms, which take opportunities from various environmental factors. In an environment, where product’s demands are continually changed and new opportunities are made available for SMEs so that it could enhance their performance (Wiklund & Shepherd, 2005). It may have a strong influence on the SMEs firm viability and growth (Covin & Slevin, 1989). Furthermore, financial
capital is an essential source for enhancing the SMEs performances (Cooper et al., 1994). The ownership of financial capital is not much essential, but access to financial resources is very crucial for small firms (Wiklund & Shepherd, 2005). According to Wiklund and Shepherd (2005), access to financial resources should influence EO and firm’s performance relationship. In an environment, where the organizations deal with problems of capital structure (equity and debt) financing, access to financial capital gives the possibilities to SMEs to carry out new ideas, strategies and innovative projects (Cooper et al., 1994) and to increase their financial performance (Wiklund & Shepherd, 2005). The purpose of all these factors is to sustain and enhance performance of an organization and allow entrepreneurs (the top managers or the owners of SMEs) to show themselves better and to be more aggressive in the future market.

After this introduction, this chapter discusses in next section, 1.1 background of the study. In Section 1.2 of this chapter discuss the problem statement/research gap of the study. Section 1.3 presents the research questions and section 1.4 highlights research objectives of the study. Section 1.5 presents the significance of the study, Section 1.6 provides a summary of the thesis structure and Section 1.7 concludes this chapter.

1.1. Background of the Study

SMEs are considered as an effective tool for economic growth, economic development, income generation, employment income and poverty alleviations. The economic growth of developing countries completely depends on the performance of SMEs. For example, if someone talks about the role of SMEs in the perspective of Pakistan, it is considered as a backbone of the economy in Pakistan. It plays a vital role in economic growth and economic development of a country and also works in the best ways for the survival in the worst economic conditions (Dar et al., 2017). According to International Finance Corporation (IFC) (2012), there are approximately 3.2 Million businesses, which worked in Pakistan, in which more or less than three Millions are SMEs. Pakistani SMEs constitute more than 90% of businesses. The economic contribution of SMEs towards the GDP of Pakistan is 30%, of which 25% contributes to total earnings of the country. Due to the importance of SMEs sector in Pakistan, various numbers of objectives have been achieved by all stakeholders, including Small and Medium Enterprise (SME) bank, State Bank of Pakistan (SBP)
SME department, Small & Medium Enterprises Development Authority (SMEDA), Prudential Regulation (PR) of SBP for SMEs and different initiatives of government from time to time. Moreover, these SMEs provide a large extent of employment, which facilitate the standard of living of peoples and bring affluences in the national economy. SMEs are important and are considered as a road map for the Pakistan’s economic growth through its significant importance in the national economy (Zafar & Mustafa, 2017; Khalique et al., 2012).

The economic growth of developing countries is directly associated with the SMEs performance. The government of Pakistan has incessantly allocated a lot of funds through an assortment of resources and programs to help these SMEs to become more competitive in future in their different industries. On the other hand, the assistance of Pakistani SMEs is still lower towards the GDP and exports than those of some other developed and developing countries (Zafar & Mustafa, 2017).

The government of Pakistan provides various facilities to the SMEs; in spite of the presence of all these facilities, SMEs in Pakistan are still facing lots of problems in their business operation. Some of these problems are listed as poor management, improper infrastructure, competition with large industries, regulatory requirements difficulties, unavailability of raw materials, shortage/irregular financing facilities, non competitive products, inability to meet financing formalities, lack of new technology, lack of entrepreneurial expertise, lack of capabilities and resources, international economic factors and the availability and cost of skilled workers (Khan & Anwar, 2016; Ali, 2013; Hussain & Yaqub, 2010). All of the above discussed and some other factors have affected the performance of the SMEs and their contribution in Pakistan economy in general. Therefore, to face these challenges or difficulties, the SMEs will have to develop good entrepreneurial attitudes and leadership skills in their respective organizations.

EO is becoming a well known subject in the literature of entrepreneurship (Lumpkin & Dess, 1996). Entrepreneurship has specific functions that enhance the EO and SMEs firm’s performance relationship (Rua et al., 2017; Rauch et al., 2009). Lumpkin and Dess (1996) opine that EO is a strategic orientation of a firm and a cause of competitive advantage. Knight (2000) stated that due to scarce resources and competencies, EO functions as a useful mean for outperforming SME competitor in the global market. Therefore, the aptitude of SMEs in Pakistan is to acquire and implement EO that is fundamental for entrepreneurial success. However, Fairoz et al.,
(2010) stated that the role of entrepreneurship and the impact of EO on SMEs performance in developing economies are not well comprehended.

On the other hand, leadership has an important role in the SMEs performance. While analyzing the key links among EO, organizational performance and leadership behaviors, many organizations are focusing on increasing useful leadership in their organizations. Wang and Poutziouris (2010) investigated and suggested that there is still lack of understanding about leadership behaviors in small organizations. These researchers further declared that small businesses with strong and effective leadership can easily achieve organizational goals as compared to those who have weak and uncertain leadership. The empirical literature also suggests that there are some other factors that also affect the relationship between EO and firm performance (Arham, 2013).

According to Cooper et al., (1994) financial resource is an important source for SMEs. Access to financial resources is very essential for SMEs firms rather than the ownership of these resources (Cooper et al., 1994). Wiklund and Shepherd (2005) stated that access to financial capital influences EO and firm’s performance relationship. In a competitive environment, where SMEs often deal with the problem of capital structure (equity and debt financing), access to financial capital gives the possibility for small business to carry out new strategies and innovative projects to the existing market (Cooper et al., 1994). In such favorable circumstances companies shows their financial performance.

Environmental factor is also an important element for those SMEs firms who have exploited opportunities from the external environment. In the company’s environment, where the demands for products constantly change and new opportunities are available for the organizations within the industry environment, small business organizations take these opportunities in order to enhance their financial performance (Wiklund & Shepherd, 2005). Environmental factor has a strong effect on the small firm’s capability and growth (Covin & Slevin, 1989). Wiklund and Shepherd (2005) also asserted that within the environment; which is more dynamic, hostile and complex, the entrepreneurial firms have high levels of innovativeness, risk taking attitudes and pro-activeness. The researchers also suggested that EO affects the firm’s performance depending upon the perspective of the external environment.
Based on the above discussion, the purpose of this study is to test the proposed theoretical framework and hypotheses that signify the relationships between EO and firm performance, through moderation transformational leadership, environmental factors and access to financial capital in the context of Pakistani SMEs. By giving empirical evidences through collected data and analysis, the research will provide a greater understanding of the contributions of EO towards the SMEs, financial performance, and test that how transformational leadership, environmental factor and access to financial capital influence the relationship between EO and financial performance of SMEs in Pakistan.

1.2. Problem Statement/Research Gap

Many researchers have investigated and suggested that SMEs are considered as an essential component of growth in several economies (Zafar & Mustaf, 2017; Shabaz et al., 2014; Savlovschi & Robu, 2011). The contribution of Pakistani SMEs towards the economy is still low as compared to other developed and developing countries. According to the SMEDA report (2014), the contribution of SMEs towards GDP in Sari Lanka is 53%, in Japan is 55%, and in the UK is 55% and 60% in China. Alternatively, the contribution of SMEs in Pakistan towards GDP is 40%. This shows an important opportunity for SMEs to refine and enhance their performance to become a channel for the economic growth of the country (Zafar & Mustafa, 2017). Economic growth is very essential for decreasing unemployment and enhancing productivity as well as firm’s performance and also encouraging the process of expansion and internalization (Dar et al., 2017; Yang & Ju, 2017; Subhan, Mehmood & Sattar, 2013).

SMEs should adopt and enforce changes such as entrepreneurial and effective leadership in order to continue producing and to compete globally (Hashim, 2012). SMEs leaders should be talented/competitors, entrepreneurial and have good transformational leadership qualities for the purpose to improve their sense of direction, and to make organization able to change accordingly, more specifically to improve organizational performance. Hashim (2012) stated that effective leadership is needed for organizations to sustain growth and profitability, and also to motivate employees to accept new challenges and to get outstanding business results. Previous studies also highlight the link between EO and firm performance in developing economies (Rua et al 2017; Shirokova et al., 2016; Hasim, 2012), but up to the
researcher knowledge, no study was found to link EO with performance in the context of Pakistan. Researchers also recommended that the relationship between EO and performance may be improved due to certain organizational factors like access to financial capital, environmental factors and leadership style (Mason et al., 2015; Muchiri & McMurray, 2015). Thus, the current research is an attempt to bridge the gap by empirically testing the relationship between EO and performance. Furthermore, the study also investigates whether organizational factors such as leadership style, access to financial capital and environmental factors may enhance the relationship of EO and firm performance.

1.3. Research Questions

The following research questions need to be answered:
1. Does entrepreneurial orientation affect SMEs performance?
2. Does transformational leadership moderate the relationship between EO and SMEs performance?
3. Does access to financial capital moderate the relationship between EO and SMEs performance?
4. Do environmental factors moderate the relationship between EO and SMEs performance?

1.4. Research Objectives

The following objectives show the direction of the research:
1. To investigate the relationship between EO and SMEs performance in Pakistan.
2. To examine the moderating role of transformational leadership behavior on the relationship between EO and SMEs performance.
3. To examine the moderating role of access to financial capital on the relationship between EO and SMEs performance.
4. To examine the moderating role of environmental factors on the relationship between EO and SMEs performance.

1.5. Significance of Study

The finding and outcome of this study will add a body of knowledge in the field of entrepreneurship and leadership literature. In this area of research, a lot of studies have focused on Western culture or other industrialized countries, therefore, the focus of the study is to use the concept of EO and firm’s performance relation and
how leadership behavior influence it, how other factors like environmental factors and access to financial capital are applicable in developing country like Pakistan.

Due to lack of researchers’ attention towards the impact of EO on the firm’s performance and also the moderating role of transformational leadership, environmental factor and access to financial capital, this study provides a good understanding of the discussed concepts. This research study also provides a good understanding of leadership behaviors that would be considered more suitable and effective for entrepreneurs in Pakistani SMEs. Current research would be significant for the culture, values and working environment in Pakistan. In developing countries, the study of EO and firm’s performance is now increasing rapidly. The outcomes and finding of this research study will give additional evidence on the topic of EO and the intensity of entrepreneurial attitudes in SMEs in a developing country. This evidence will also be helpful in understanding that how the SMEs’ performance could be enhanced in the developing countries.

Current research study is essential for numerous reasons; first, the empirical finding of the current study is very important and shows that EO, transformational leadership, environmental factors, financial resources and capabilities are very vital for sustainable development. Islam et al., (2011) suggested that for every manager or owner it is essential to know about EO dimensions, i.e. innovativeness, risk taking and pro-activeness for their organizational survival. Further, managers must play an effective leadership role to ensure the applicability of EO dimensions in their respective organizations as it effect organization’s performance positively (Yang 2008; Lussier & Sonfield, 2006).

Second, as mentioned earlier, previous work on EO and performance relation was conducted in a Western context (Hooghe et al., 2004; Swierczek & Thanh Ha, 2003; Ardichvili, 2001; Bass, 1997; Lieberson & O’Connor, 1972), and limited work on this relationship was conducted in the Eastern economy particularly in Pakistan. Thus, the theoretical framework of this research study may help to disclose that how EO, interactive role of transformational leadership, access to financial capital and environmental factor to fit in the framework of entrepreneurial firms in a developing country like Pakistan.

Third, the development of the SMEs is very essential for the economic and financial performance of a country. In spite of this significance, limited research has been carried out on the relationship between EO and firm’s performance and the
mechanism through which organizations may enhance the relationship between EO and performance particularly in the Pakistani context.

Fourth, Todorovic and Schlosser (2007) argued that there are a limited number of studies on the relationship between EO and firm’s performance at the individual level. Most studies have been conducted on the related issues at the firm’s level (Wiklund, 1999; Miller & Friesen, 1982). Though, a considerable number of practitioners and researchers have suggested that EO application at the individual level could provide significant insight to both operational functions and managerial functions of the organization (Carland et al., 1988; Gartner, 1985). The study of EO at the individual level has been started to pay attention at the recent time (Davis et al., 2010). Thus, in this study the EO analysis at the individual level and from the individual perspective is applicable to provide a better contribution to entrepreneurship literature.

Finally, this research study examines and recognizes the EO and leadership behavior that would be feasible for the owners of SMEs in Pakistan. Therefore, the assortment of these factors through empirical findings is important for the development of managers or owners of the SMEs through training programs.

The outcomes and findings of this research study will also provide ways/directions to the government and other financial institutions to provide capital and financial resources in the sufficient way for SMEs. This research study will be helpful to government related agencies, such as SMEDA to initiate more specific training program for SMEs in order to develop and foster an appropriate entrepreneurial attitude among entrepreneurs in Pakistan.

1.6. Organization of the Thesis

Chapter 2 reviews and highlights the relevant literature on each variable of current study: entrepreneurial orientation, dimensions of entrepreneurial orientation, leadership behavior, environmental factors, access to financial capital and SMEs organizational performance. The definition and discussion on each variables lead to the appropriate selection of facets for entrepreneurial orientation, organizational performance, leadership behavior, environmental factors and access to financial capital. This chapter also highlights the relevant theories that support the stated relationship. Based on the cited literate the conceptual framework and hypotheses of the study were developed.
Chapter 3 explains the detailed methodology of the current research and directs the behavior of the current study. Detail description about research design, population, sample, sampling technique, research instrument, data collection method and the instrument used in the current research. Also, detailed description of the definition of the variables that includes EO, organizational performance, leadership behavior, environmental factors and access to financial capital, that compel to the development of the theoretical model of the current research.

Chapter 4 discusses and gives the results and outcomes of the study. Instrument validity and reliability was ensured through appropriate analysis. This chapter explains the results of quantitative analysis and compares it with previous research study. To test the study hypotheses, simple regression was applied after confirming all the assumptions of regression. Moderation analysis was performed through PROCESS procedures.

Chapter 5 discusses and concludes the study on the basis of the study findings. Further, based on the study findings, the study gives recommendations, practical implications, limitations and future directions.

1.7. Chapter Summary

The topic of entrepreneurship and leadership have aroused much interest in entrepreneurship and management literature (Hannay, 2009) and it has been pointed out that EO and effective leadership is essentials for SMEs performances (Gul et al., 2012; Yang, 2008; Bolden, 2007). Entrepreneurial activities are very important for the success of the organizations (Wikuland & Shepered, 2005; Lumpkin & Dess, 1996). Entrepreneurs that have effective leadership to ensure organizational success and firm’s performance; especially in the more competitive environment which is being operated by most of the firms (Ireland & Hitt, 2005). Entrepreneurs that have found the opportunity in the external environment exploit the existing opportunity and hence increase the organizational performance (Wikuland & Shepred, 2005). Access to financial resources is also important factors for the entrepreneurial firms come with innovation and take risky decisions for organizational success (Cooper et al., 1994).

Therefore, this study examines the relationship between EO and organizational performance of SMEs in Pakistan. On the other hand leadership is a complex phenomenon in the context of SMEs and also need more study in the developing countries like Pakistan. Leadership is not yet studied in the form of moderating role,
so the focus of the current study is to find out the interactive role of transformational leadership on the EO and firm performance relationship. Access to financial capital and environmental factor are also important factors for SMEs in order to compete in their industries. This study also focuses on the moderating role of access to financial capital and environmental factor on EO and firm performance relationship.

The first chapter provides a clear picture of the need and importance of the study. A short background and identification of problems provides useful information about the gap that is needed to be filed. The research questions and objectives provide clear direction for this research. Justification of the study states needs to be undertaken and what is the importance and contribution of the current study. Organization of the current study provides the researchers the direction of the thesis. The next chapter explores the literature on the EO, organizational performance, leadership behavior, access to financial capital and environmental factor.
CHAPTER 2
LITERATURE REVIEW

2.1. Introduction

In general, it is stated that the development of the economy of a country depends upon the contribution of SMEs. According to Panitchpakdi (2006) innovation, competition, economic development and increase in employment in a country are due to the development of SMEs. SMEs also enhance and support the entrepreneurial skills and spirit in the business enterprise. SMEs are also considered as the main contributor to enhance the distribution of income, if they are located in the wider area of the country than other large industries in the country. Objective of first section in the current chapter is to provide an overview of SMEs in Pakistan.

The second objective of this chapter is to give a review of literature about the variables of the study. Section 2.3 gives a review of entrepreneurship, followed by entrepreneurship. Section 2.4 gives a detail discussion and definition of EO which is followed by the key dimension of EO in section 2.5. In section 2.6 the use of EO with Uni-dimensionally and Multi-dimensionally is being discussed. Section 2.7 gives detail discussion of dependent variable organizational performance and its facets. Section 2.8 of this chapter gives a detailed discussion on the leadership definition and the next section gives an overview of different theories and approaches of leadership. Section 2.11 gives a detailed definition of environmental factors and its facets, which is followed by the next section 2.12 of access to financial capital. Sections 2.13, 2.14, 2.15, 2.16 and 2.17 of this chapter give links of all the variables. In section 2.18 of this chapter, presents a research framework the study. In section 2.19 presents summary of this chapter. However, previous researchers and their studies determining the link of the variables of EO, organizational performance, transformational leadership, access to financial capital and environmental factor, which are not extensive in the perspective of the SMEs. After the studying of all these literature and researchers finding, it gives a useful insight to the development of the current study.
2.2. **Overview of SMEs in Pakistan**

It is generally recognized that SMEs contribute extensively in a country’s economic development. Panitchpakdi (2006) stated that SMEs is a cause of economic growth, employments, economic dynamism, innovation and competition in a country. The SMEs persuade the entrepreneurial strength and flow of skills. SMEs are also considered a main contributor, increasing income distribution since they are recognized in a wider geographical area than large type of companies, containing rural areas (Tan, 2007).

Developing economies, all over the world face a lot of challenges for search of their economic growth. At the same time, as every developing economy might experience its own variety of problems, most of the countries’ economies face challenges of equitable income distribution, widespread poverty, employment creation and infrastructure and institutional deficit (Tan, 2007). To look at this scenario, the role of SMEs sector becomes critical as SMEs contribute towards equitable income, greater output, employment and export (Shah et al., 2013). The SMEs sector also adds economic dynamism towards the country’s economy. The significance of the SME sector can be measured from its contribution towards the world’s emerging and leading economies. The countries like China, Brazil, Japan, India and Malaysia among others, have deeply relied on SMEs development to stimulate economic growth through implementation of demanding SMEs strategies and policy development of private sectors (Antoncicand & Hisrich, 2004; Lumpkin & Dess, 1996; Zahra, 1993).

For Pakistan’s economy, SMEs sector is the backbone. The importance of SMEs role is obviously indicated by a variety of statistics. According to the SMEDA (2014) SMEs sector in Pakistan contributed 40% to the country’s GDP. While some of the estimates show that the manufacture sector employs 70% of the total labor force of non-agriculture. The nature of economies in Pakistan is the direct indication of SMEs sector. The Economic Census of Pakistan in 2005 files 3.2 billion business enterprises in nationwide (Islam et al., 2011). SMEs constitute 99% of all the businesses. According to an estimate their share of employment is 78% and 35% value added approximately. Nearly 53% of all the activity of SMEs are in hotel businesses, restaurants, wholesale businesses and retail trade business. The industrial
establishment’s contribution and the contribution of those companies that involved in the service sector is 20% and 22%, respectively (Subhan, Mehmood & Sattar, 2013).

The economy of Pakistan is considered as the economy of SMEs just for the reason, that about 90% of businesses are occupied in the SMEs, which play a vital role in enhancing the economic growth. According to SMEDA, the manufacturing sector of Pakistan has contributed in the GDP of Pakistan, which is about 13.20% (Ali, 2013). Moreover, these SMEs provide a large extent of employment, which help in improving the living standard of peoples and bring success in the national economy (Subhan, Mehmood & Sattar, 2013). SMEs are also considered as an engine for economic growth of Pakistan through its essential significance in the national economy. In order to maintain a vigorous SMEs sector, it is necessary to carry on SMEs development program in well established and coordinated manner, because the SMEs sector is the essential pillar of the growth (Hussain & Yaqub, 2010). Promotion and support of SMEs has exactly the part of the strategy of the government for employment generation, poverty alleviation and for economic growth. For this purpose, it is necessary for the government to initiate some policies and development programs for the SMEs development (Islam et al., 2011).

2.2.1. Definition of SMEs

The SMEs definition is widely different among various countries. However, in Pakistan SMEs are defined on the basis of number of employees or the annual sales turnover and the categories of industry (Ali, 2013; Subhan, Mehmood & Sattar, 2013). Besides it, a view on the number of employees or annual sales turn over an enterprise can also be defined the SMEs on the bases of industry category. The definition of SMEs on the basis of category SMEs are classified into manufacturing and services industry. SMEs sector is classified into two main categories, micro enterprise and SMEs on the number of values and capital value (Hussain & Yaqub, 2010).

The definition of SMEs in Pakistan is provided by various government agencies e.g. SMEDA and SBP as shown in the following table 3.1. & 3.2:
Table 2.1

**Definition of State Bank of Pakistan (SBP)**

<table>
<thead>
<tr>
<th>Nature of Business</th>
<th>Total Asset</th>
<th>Number of Employees</th>
<th>Net sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Rs.100 Million Excluding land &amp; Building</td>
<td>NO of W ≤ 250</td>
<td>Up to 300 Million</td>
</tr>
<tr>
<td>Trading/ Services</td>
<td>Rs.50 Million Excluding land &amp; Building</td>
<td>No of W ≤ 50</td>
<td>Up to 300 Million</td>
</tr>
</tbody>
</table>

*Source: SMEs policy, 2007*

According to SBP the companies are considered in SMEs that fulfill the above criteria. SMEDA also defined the SMEs in the context of employment as well as an investment in production and services.

Table 2.2

**Definition of SMEDA**

<table>
<thead>
<tr>
<th>Nature of Business</th>
<th>No of Employees</th>
<th>Useful Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Enterprise</td>
<td>between 10 &amp; 35 workers</td>
<td>02-20 Million</td>
</tr>
<tr>
<td>Medium Enterprise</td>
<td>between 36 &amp; 99 workers</td>
<td>20-40 Million</td>
</tr>
</tbody>
</table>

*Source: SMEs policy, 2007*

There is no single definition of SMEs in Pakistan. Different governmental agencies e.g. SBP, SMEDA and Federal Bureau of Statistics (FBS) use their own definitions. Therefore Government of Pakistan approves a single SME definition “that the organization having up to 250 employees and up to 250 million sales is considered as SMEs” (SME policy, 2007) also cited in (Dar, Ahmad & Raziq, 2017).

2.2.2. Development of SMEs

The term of SME inferred in different ways in various countries crosswise the world. In Pakistan, SMEs definition given by National SME Policy, (2007) businesses having employees of 250, an annual sales turnover of Rs. 250 million and Rs.25 million of paid up capital.

The economic landscape of Pakistan presents a combination of urban and rural economies. For example, there are large industries, from small to medium and very small or cottage industries (Ali, 2013). The small enterprise economy dependent on middlemen for operating capital and later on sells their product through them. The direct linkages of small enterprises towards the market are negligible. In addition, there are no strategic assets that will work as a wall against occurring events. While requiring of economics depth bound their preference to risk, return matrix, which
eliminates them from opportunity, support and from the corridor of power (Subhan, Mehmood & Sattar, 2013).

At the time of independence (1947-1980), Pakistan inherited a lean industrial base. Usually, this branch of the subcontinent provides cotton for different mills, which is situated in the industrial regions in a different place of the subcontinent. Pakistan had industrial worth of only Rs.580 million at that time. Pakistan was faced dual challenges at that time. Dealing with the arrival of refugees and mending a fragmented governance system. Pakistan’s government laid down its industrial development strategy for the industries at the very beginning. It was decided to invest in public sector defense areas, such as telegraph, telephone and hydroelectricity (Hussain & Yaqub, 2010).

For this purpose planning commission of Pakistan gives different plans for the development of industrial sector in Pakistan. In the first five year plane, the industrial plane increases 60% industrial output in the industrial sector. These sectors related to the health, education and housing sectors. In the 1970s planner tacked a U-turn in the economic thinking of people, as nationalization of various industries such as textile, cement, sugar and steel etc. afterwards, rice flour and textile mills were also nationalized. From the 1980s and onward a mixed economy system was incorporated, which were motivating the private sector to invest in all business associated activities and creating jobs and establishing a favorable business environment (Islam et al., 2011).

In any economy the importance of the manufacture sector cannot be ignored. A healthy and well established manufacture sector presents the center for self sufficiency. At the time of creation, Pakistan possessed very few manufacture sectors. The value added of the manufacturing sector is 1.4%. At the time of 1968 and 1969 the ratio increased to 8.8%. Moreover, in the last two decades the manufacturing sector achieved the average growth rate of 14%. The manufacturing sector of Pakistan has contributed to the GDP of Pakistan is about 13% of the total GDP (Akram, 2015).
Table 2.3  
*Comparison of share of manufacturing*

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<td>Germany</td>
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<td>Sweden</td>
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<td>Japan</td>
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<td>32.3</td>
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</table>

*Source: SMEDA Report, 2014*

Table 2.3 shows a share comparison of manufacturing sectors towards the Pakistan’s GDP with some of the Asian developing countries and some the developed countries. It shows that Pakistan was incapable to enhance their shares towards the GDP as compare to other developed and developing countries.

*Source: SMEAD Reports, 2014*

*Figure: 2.1 Comprising of Share Manufacturing towards GDP*
The above graph shows the share of manufacturing to GDP over the years, which did not increase, however, increase in share were considerable as compared with other Asian countries. In the 1970s, banks and the nationalization of industrial parts took place, but there was a great area of investment in the public sector, which was reserved completely (Islam et al, 2011). In the era of 1980-1998, development in industrial base almost faced the challenges by the development planners of the country. They are focused on the development of large industry. Despite alternating efforts and slowly incentives for small business trend continued for four to five decades.

After that, second five year plan was set for the development of the small industries. The second five year plan, set objectives emphasized for small industry development. The government had played a vital role in the development of small industries in terms of influencing national policies, seeking foreign assistance, coordination of activities and setting up procedures of development, conducting research, arranging training programs and information’s distribution (Shah et al., 2013). Provincial Small Industries Corporation (PSIC) was established to deal with the wishes of small industries and by the government intervention. This plane did not work because of the government inconsistency in the implementation of the development programs. The institutional support structure for the SMEs development was important. SMEDA was established in 1998 for supporting and facilitating the SMEs. Intentionally, SMEDA as the model of business entity, it draws its strength from the top authority in the public sector. For achieving quantitatively provable target SMEDA took out a complete analysis of global trends, general policies and completed economic factors that affecting the performance of the SMEs in Pakistan (SMEDA, 2014).

SMEs are considered as the engine of economic growth in the economy of Pakistan (Akram, 2015). The growth of the SMEs has a greater contribution towards the economy of the country. Shah et al., (2013) stated strong relationship between SMEs and economic growth. SMEs play a vital role in the export of Pakistan and also contributed to the economic growth (Berry, Aftab, & Qureshi, 1998). Dar, Ahmad and Raziq (2017) also stated that SMEs played positive roles in the economic growth of Pakistan. SMEs play important role in the economic progress, and also play a fundamental role to the foreign exchange earnings and to the GDP of Pakistan (Ahmadani et al., 2012). They also investigated that SMEs also provides job opportunities for the country. The role of SMEs is very important for the development of the economy; therefore the current study also selected the SMEs sector.
2.3. Entrepreneurship

The term entrepreneurship has been considered and used for decades, but there is little accord among researchers and practitioners regarding its definition (Williams et al., 2010), different views can be identified in the literature, For example Schindehutte (2008) define entrepreneurship as the formation of values, creating of change, the concept of innovation, employment generation, making of growth, creation of wealth, and the establishment of the enterprise. Stevenson and Jarilo-Mossi (1996) defined that the entrepreneurship is the process of generating value to work with the sole resources bringing together to exploit new opportunities.

In the business competitive environment, the strengthening entrepreneurship process is essential for any types of business enterprise, which is involved in improving its reactions to a changing and globalizing environment. On the basis of Schumpeter concept in 1934, entrepreneurship is characterized by different authors. For example Carland et al., (1988) entrepreneurship is the innovative behavior and strategic orientation in search of profitability and growth. Tan (2007) defined that it is the process that involve that combining the resources for value creation in organizations. Entrepreneurship also defined that it is the creation of new enterprise, new entry into the market and receiving benefits of the opportunities by combining the resources in a ways, which have an impact on the existing market (Wiklund, 1999; Lumpkin & Dess, 1996; Low & MacMillan, 1988).

Similarly, Bruyat and Julien (2000) identified and summarized certain key ideas and have been shared by a researcher and practitioner in entrepreneurship and management field;

Identification or recognition of an individual is an essential element in the generation of newness and new value. Certainly entrepreneurs are not only the people that make or generate new change in the market and society through different kinds of innovation or through the venture creation in the existing market. However, the enterprise generates a great percentage of main values, which researchers and practitioners in the entrepreneurship field consider to be necessary and essential for the main action in country economic system.

The entrepreneur is not just like a machine that is responding automatically to stimulus from the external environment, but also it is a proficient in the development of thoughts, it makes able an individual of self actualization.
Therefore, it assured a choice of action in spite of environmental factors that provides opportunities or enforcing towards the constraints. The accessible resources in the environment can play an essential role that enhances the number of employees and also can play is motivating or supporting role to enhance entrepreneurs in the nationwide. At the start of the twentieth century, entrepreneurship compared with leadership behavior that has been achieved scholarly attention, entrepreneurship is considering a new knowledge body that speedily rising (Cogliser & Brigham, 2004). Baker et al., (1997) stated that from the methodological and conceptual point of view entrepreneurship is at an early stage, relatively young as compared to the leadership field.

Krause et al., (2011) identified that entrepreneurial behavior is not only possible in new business, but also in their firms in spite of their age and size. The activities of entrepreneurial of an existing and established firm have been described in the form of entrepreneurship, corporate entrepreneurship and entrepreneurial orientation (Antoncicand & Hisrich, 2004; Wiklund, 1999; Lumpkin & Dess, 1996; Zahra, 1993). In this research study the entrepreneurial behavior or entrepreneurial activities of the established or existing firm will refer to the entrepreneurial orientation.

2.4. Entrepreneurial Orientation (EO)

EO is becoming a well known and interesting subject in the field of entrepreneurship research (Wikland, 1999). Rauch et al., (2009) also stated that research on EO in the field of entrepreneurship, where the existing body of knowledge increasing and expanding is very important. EO plays an essential role in the success of the organization, and also a driving force behind the organizational efforts towards the success. EO has become the main focus of the literature on entrepreneurship and also the focus of more than three decades of research (Yang & Ju 2017; Covin & Wales, 2012). EO in the field of entrepreneurship research in the US is well established and popular, but it is still in the early life or immature stage in the environment of the non-US businesses (Runyan et al., 2012).

Miller (1983) stated that the entrepreneurial firm has three characteristics, innovation, risk attitude and pro-activeness. He stated that entrepreneurial firm is the firm, which involved in the production of market innovations, willing to take some
risky decision and come up with pro-active manner (Miller, 1983). Miller (1983) also stated that entrepreneurial firm as compared to a non entrepreneurial firm, non entrepreneurial firm is the firm which is characterized by low levels of innovation, risk avoider, and also work as a follower rather than ahead of the competitors.

Similarly, Lumpkin and Dess (1996) defined EO as the process of activities, practices and decision making that lead the entry into the existing market. Wikuland and Shepherd (2005) also defined that EO is like a strategic orientation of a firm that look up the essential feature of EO, decision making style, activities, practices and methods. Morris and Paul (1987) defined that EO is the proclivity of a company’s top management to be innovative, to get calculated risk, and to work in the pro-active manner.

The EO definition is not seen as the current one that is adopted by the most popular scholars in the subject of entrepreneurship, but it is the earliest one which is used by different authors to define EO. In this definition, it is seen that EO is considered as a decision taken in the organization which are carried out by the top supervision of the company. For the self assessment approach to measure the EO the top managers of the SMEs are appropriate, this definition is also seems to signify and maintain the importance and scope of the study.

2.5. Key Factors or Dimensions of EO

EO from the last three decades is the most widely used concepts in the literature of strategic management and entrepreneurship (Covin & Wales, 2012; Miller 2011; Covin & Lumpkin, 2011). EO has key factor in strategy making and it has also considered essential for the performance of a firm. Various researchers investigated the positive and significant relationship between EO and firm’s performance (Covin & Walves, 2012; Covin & Lumpkin, 2011).

Miller (1983) introduced the term of EO and its concepts also in the management literature, even he did not use in writing (Covin & Lumpkin, 2011). Numerous researchers used this term EO in different terminologies. For example, some researcher used the words of strategic orientation or strategic posture (Morgan & Strong, 2003; Covin & Slevin, 1991), the world of corporate entrepreneurship (Kuratko, 2007; Zahra, Nielsen & Bogner, 1999; Zahra & Covin, 1995) and the words of EO (Moreno & Casillas, 2008; Lyon, Lumpkin & Dess, 2000; Becherer & Maurer, 1997; Lumpkin & Dess, 1996). However, some of the researchers stated that
entrepreneurial orientation is most generally used in current literature (Covin & Lumpkin, 2011).

EO refers to the process of entrepreneurial that reveal the practices, methods and decision making style that manager can apply entrepreneurial ((Lumpkin & Dess, 1996). EO represents the basic organizational level behavior that granted a basic foundation for entrepreneurial action (Covin & Wales, 2012; Rauch et al., 2009). Previous researcher and practitioners suggested that EO is the factor in the organizational success (Wiklund & Shepherd, 2005; Merz & Sauber, 1995; Covin & Slevin, 1989).

The specific dimensions or the key factors of EO are identified for the first time by Miller in 1983. Miller (1983) identified and suggested that entrepreneurial firm is the firm that “involve in product market innovation”, to take some risky decision and come up with proactive manner and work ahead for their competitor. Miller (1983) identified the vital factors of the EO; innovativeness, risk taking attitude and pro-activeness.

Miller’s (1983) identified three dimensions of EO, after more than a decade Lumpkin & Dess (1996) suggested five dimensions, innovativeness, pro-activeness, risk taking attitude, autonomy and competitive aggressiveness to complete the work of the Miller. Lumpkin and Dess (1996) identified and added two more factors, autonomy and competitiveness aggressiveness to balance the work of the Miller (1983) who proposed the three dimensions. According to Lumpkin and Dess (1996) a firm to be successful firm entail from creative entrepreneurs or strong leaders, without any restriction from the organization. On the other hand, the dimension of competitive aggressiveness evaluates the idea of Miller’s (1983) that is “beating competitors to the punch”. It states that how a firm responds to market threats, not only to identify the market opportunities as suggested by Miller’s (1983) proactive dimension.

Therefore, Lumpkin and Dess (1996) stated that EO firm is the firm refers to organizational level specific behaviors that perform risk taking attitude, engage in innovation, perform autonomous activities and outer perform proactively and aggressively to work ahead than their competitors in the existing market place. The Lumpkin and Dess (1996) five dimensions have discussed by many authors in their studies (Huang & Tsai, 2009; Hughes & Morgan, 2007; Coulthard, 2007; Wiklund & Shepherd, 2005). The five dimensions of EO are summarized in below table, and discussed in detail below.
**Table 2.4**

*Dimension of Entrepreneurial Orientation*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Innovativeness</td>
<td>The process of introducing newness and innovation through creative process and experimentation for the purpose of developing new product, goods and services and new process.</td>
</tr>
<tr>
<td>Risk Taking</td>
<td>Decisions are made and action was taken without knowing the probability of outcomes. Some activities are taken also involve in substantial resource commitment in the processes of starting a business or venturing forward.</td>
</tr>
<tr>
<td>Pro-activeness</td>
<td>Characteristic of forward looking perspective in the marketplace, that leader has the prescience take hold on the opportunities in anticipation of future demand in the market.</td>
</tr>
<tr>
<td>Autonomy</td>
<td>It is the autonomous actions taken by teams or individual for the purpose of the concept, which bringing business and carrying this to the completion.</td>
</tr>
<tr>
<td>Competitive Aggressiveness</td>
<td>An extreme effort to surpass in the industry rivals from their competitors. It is characterized by a combative posture outer perform or an aggressive response for the purpose of improving their position in the existing market or overcoming threats and opportunities in a competitive marketplace.</td>
</tr>
</tbody>
</table>

“*Adapted from the Lumpkin and Dess (2005)*”

**2.5.1. Innovativeness**

Many researchers define the innovativeness “as the ability of the firms that engage in and fully support the creation of new ideas and innovative processes, which may lead to innovative product and services, technological process and entrance to new markets (Rauch et al., 2009; Lumpkin & Dess, 2001). Innovativeness plays a vital role in identifying the business challenges and problems, and giving new solutions for such problems and challenges that leads the firm with the ability to succeed (Hult, Huriley & Knight, 2004).
The ability of a firm to innovate and offers into new market become crucial because of the firms capability to endure and rise when it is operating in situations of global competition, in advance and rapid technology and shortage of resources. According to Perez, Cabrera & Wiklund (2007) Innovation is also in critical situation when firms have feature business model life cycles than are shortening life cycle.

Cornelius et al., (2006) suggested that Innovativeness is associated with creativity. Creativity is defined by Green, Covin and Slevin (2008) as “the function of a person’s mental ability and interest to discover and learn something new”. Without creativity, innovation is impossible. There is no creativity in the firms, and there will be no force or motivation to innovate (Ireland, Hitt & Simon, 2003). Creativity is a mean of idea generating or thoughts that will lead to the innovation of technology, product, processes and markets. Ireland, Hitt & Simon (2003) suggested, general creativity is the establishment of novel behavior as it affects on the innovative product quality and quantity of firms.

Gracia and Calantone (2002) founded that in previous studies, there was lack of differences in operationalising innovation and exchangeable use of the constructs of innovation and innovativeness. According to Schumpeter in (1934) underlined that innovativeness is the central part of the entrepreneurship (Aloulou & Fayolle, 2005), and he further stated that he was the first economist and scholar that suggested that innovation is the core of the primary effort of entrepreneurial organization for development or inventing new products, new processes and finding new markets. Some researchers suggested that innovation is the source of firm’s competitive advantage (Weerawadena & Mavondo, 2011; Damanpour & Wischnevesky, 2006). Covin and Miles (1999) stated that entrepreneurship cannot be existed without innovation and it is the most important part of the business strategy. They also find out that innovation is very important for firm competitiveness which leads the firms to greater performance.

According to Davies, Hides and Powell (2000) innovation has three main types:

- Product innovation
- Process innovation
- Market innovation
Product innovation is generally refers, when a firm uses new product options and their development. This type of innovation is commonly used by technology driven firms that increase their competitive positioning within the industry. Process innovation is a type of innovation in which firms improve their internal process and capabilities, including operations and capacities of the firms. The third type of innovation is the market innovation, in which the firms select new market segments. In market innovation selection of new market segments, in which a particular firm is best served in a new way.

The firms that are innovative in nature generally can perform one or more than one type of innovation, but the innovation which is performed by the firms are not mutually exclusive (Otero, Tapio & Maria, 2009). According to Davies, Hides and Powell (2000) the level of innovation is different in different firms, depending upon the nature or characteristics of the firms and overall performance which is achieved by the firms.

Various researchers suggested that innovation is correlated with a quality of newness (Varis & Littunen, 2010; Damanpour & Wischnevsky, 2006; Johnnessen, Olsen & Lumpkin, 2001). The newness or the new knowledge used by the entrepreneurs to bring innovation in the firms. A company that is achieving the degree of newness or the level of new knowledge is commonly used to differentiate incremental innovation from radical innovation. The organizations that bring significant changes in the past method, will lead the organization to increase and improve the existing knowledge of firms.

However, the latter firms only require a small increase or improve in the existing knowledge (Luno, Wikland & Cabrera, 2011; Neira, Lindman & Fernandez, 2009). According to Zhou, Yim and Tse (2005) the incremental innovation is the innovation which is involved in “simple improvements in productivity, small changes in technology and simple line extensions that simply improve the existing performance of the firms”.

2.5.2. Risk-Taking Attitude

The idea and concept of risk taking attitude have been associated with the term of entrepreneurship since the 1800, when the word of entrepreneurship was first identified and discussed by Cantillon (Roux & Couppey, 2007; Gilmore, Carson & Donnell, 2004). In entrepreneurship literature, risk taking attitude is considered is one
of the major attributing in the dimension of entrepreneurial orientation (Aloulou & Fayolle, 2005; Venkatraman, 1989). The concept of risk taking attitude has been attempted by the entrepreneurship scholars at the firm’s level. According to Lumpkin and Dess (2001) risk taking attitude, refers to the willingness of the firms that taking calculated business risk without knowing certain outcomes in the marketplace.

The firm having risk taking behavior, considered as bold and aggressive in pursuing market opportunities and for obtaining high return, they are ready to take large and risky resource commitments (Miller, 1983). The attribute of risk taking behavior consist of the activities, such as borrowing heavily in the market place, inflowing in unknown markets and taking the high resource projects without knowing the certain outcomes (Lyon, Lumpkin & Dess, 2000; Miller, 1983).

According to the Dess and Lumpkin (2005) there are three types of risk, personal, business and financial risk that have been faced by the organization and their executives.

Business Risk: Business risk taking attitude involves starting up a new business without identifying the probability of the success. This type of risk related to entering into an untested market or implementing untested technologies.

Financial Risk: Financial risk taking behavior involves, when a firm borrows heavily from the market or committing a large portion of resources on their own risk and growth. Risk is considered as risk/return tradeoff.

Personal Risk: Personal risk is a type of risk that executives of the organization taking a stand for a strategic course of action in the industry rival.

According to Avlonitis and Salavou (2007), firms with strong entrepreneurial behavior taking high and expensive project, which posses high level of risk for obtaining a high level of return. While in contrast, the firms who are risk averse in nature avoid risky project that unknown returns and not responding to changing environments. Firms that are avoiding market opportunities, or not willing to take existing opportunities’ in the markets will result in weaker performance of firms (Hughes & Morgan, 2007).

Also, Rauch et al., (2005) found that effect of risk taking behavior towards the firm performance is smaller than the others key factors of EO. Naldi et al., (2007) investigated the relationship between EO and firm’s performance of Swedish small medium enterprise (SMEs). They found a significant negative association between
risk taking behavior and performance of Swedish SMEs. They further investigated that these family firms are risk averse than non family firms. This may lead that the owner or managers of the family firms depend upon control, ownership and continued involvement of the family in the firm, which may lead to risk averse behavior.

On the other hand, Sebora, Lee and Sukasame (2009) failed to prove the role of risk taking behavior in EO in Thai e-commerce entrepreneur success, which also, supported the study of Even Naldi et al., (2007). The explanation of the study of Sebora, Lee and Sukasame (2009) is associated with Thailand culture. The culture of Thailand shows a high level of risk adverse behavior in its decision making style (Hofstede, 2009). According to Naldi et al., (2007) that degree of risk taking behavior in EO dimension in entrepreneurial firms is affected by some other additional factors, such as organizational factors, national culture and corporate governance.

From the above literature, it is clear that the behavior of risk taking of a firm’s attentiveness to start a new business into uncertain market is risky. Despite the fact that risk taking behavior is a major characteristic of EO in entrepreneurship, which have a positive allegation for firm performance and growth. Therefore, there are some studies that were failing to explain the relationship of risk taking attitude and firm performance. Moreover, it is revealed that some types of entrepreneurs are less considers than the others. Family firms are recognized as risk taking behavior in an organizational context, while engaging and evaluating entrepreneurial activities, but they perform lesser risk taking activities than non-family firms. Organizational context, governance and culture are the some other factors which identified and add to firm’s risk taking attitude. This entails that a firm’s proclivity to take a risk and hence the relationship of risk taking attitude and firm performance is appears different in different contexts.

2.5.3. **Pro-activeness**

Pro-activeness can be defined as taking inventiveness by anticipating and evaluating new market opportunities associated with upcoming demand and by becoming implicated in existing emerging market (Lumpkin & Dess, 1996). Hughes and Morgan (2007) stated that the firm’s pro-activeness is established and identified by its alertness which is responsiveness towards signals of the market.

Rauch et al., (2009) stated that the firm’s pro-activeness is an opportunity seeking on the market and forward looking perspective, distinguished by the
identification and introduction of new products, goods and services in advance from their competition and having acted in anticipation of future demand.

According to Frishammar and Andersson (2009), a firm, which is proactive in nature, might be yield first mover advantage, in the absence of complete product in the market by making high profit in new markets for new products. Pro-activeness involves in monitoring the market trends and identifying, introducing and evaluating new market opportunities (Kropp, Lindsay & Shoham, 2008). Proactive firms engage in such activities and are capable of introducing new products to the existing market first from their competitors. Proactive firms are the firms that have well and insight into new opportunities, such types of firms are considered as a leader rather than a follower (Lumpkin & Dess, 1996).

Pro-activeness roles in the firm, performance are different at the different stage of the firm performance development (Coulthard, 2007; Hughes & Morgan, 2007). The role of pro-activeness at the embryonic stage of firm growth is very critical, and after that it is less important in the firm’s establishment. Pro-activeness firm’s have the ability, to enable young emerging firms to strong and secure its position in its existing markets and to insure the strategic development and propensity (Hughes & Morgan, 2007).

Pro-activeness and competitive aggressiveness both terms are used interchangeably in the entrepreneurship literature (Lumpkin & Dess, 1996). They differentiate from each other, suggesting that pro-activeness refers to a firm’s reaction against opportunity in existing market place, while competitive aggressiveness is the firm’s response to the challenges of the competitors. After it, an empirical study of Lumpkin and Dess (2001) suggested that both terms, i.e. pro-activeness and competitive aggressiveness are different and independent dimensions of entrepreneurial orientation.

The entrepreneurship literature review suggests that the level of pro-activeness is positively associated with its collection information ability applicable to resources and existing opportunity in the industry. It means that firms which have the characteristics of the pro-activeness firstly scan the environment more systematically and then identify and evaluate the opportunities in the existing market and external environment of the industry.

On the basis of these assumptions, such firms are likely to be more knowledgeable in regard to the collection of information and opportunity resources
than proactive fewer firms. On the other hand the attribute of pro-activeness allows the entrepreneurial firm to perform better than their less pro-activeness firms.

2.5.4. Autonomy

According to Lumpkin and Dess (1996) the term autonomy refers to the firm’s ability to take decisions and to continue with action autonomously, also free from any restrictions from their organization. Li, Huang and Tsai (2009) also stated that autonomy is “a person strong desire having freedom in idea development and implementation of it”.

Autonomy can enable an individual or a team not only to perform the solution of problems, but first define the existing problems and objectives that will be met and help in solving the existing problems (Lumpkin, Cogliser & Schneider, 2009). Lumpkin, Cogliser and Schneider (2009) also asserted that autonomy should occur in strategic level of the organization and to achieve a high level of EO. Prottas (2008) asserted that autonomy can enhance the performance of the organization by giving autonomy to their employees and to motivate them to work in a positive way. Coulthard (2007) studying four research papers and using samples from Australian different industries, suggested that without giving autonomy to the employees of any organization cannot function entrepreneurially.

On the basis of his finding, autonomy is the most vital factors for the organization to enhance the performance of the organization within industries. It would clear that giving autonomy to all their employees to motivate them in organization to act entrepreneurially and in turn enhance the performance of the organization. Covin, Green and Slevin (2006) investigated from the sample of 418 of the manufacturing firms in the US having employees, fifty or more than fifty, suggested that firm having a growth-oriented are most likely to execute a less participative or more autocratic style of top management in their organization. It is clearly identified from it, that autonomy cannot exist without risk. In case of more decentralization of power and most participative leadership, offering autonomy might lead to declining innovation of product or new process (Gebert, Boerner & Lanwehr, 2003). According to Gebert, Boerner and Lanwehr (2003) that this type of negative effect can be removed or prevented with proper counter strategies, like as conflict resolution and conflict avoidance.

Literature and practitioners of the autonomy suggest that offering autonomy to the player in an organization might lead to a desirable outcome for both, player and
for the organization. For a player of the organization, which provides autonomy for employee job satisfaction motivate them and in turn work better. It will not be difficult to achieve better performance from the motivated and satisfied employees of the organization. However, some other researchers also suggested that it will not be possible to achieve always positive results from the autonomy in particular companies.

Moreover, the workout of autonomy by employees in the organization in some situations may hinder the achievement of the organizational goals and objectives. For the above reason, freedom of action and independent spirit, offering autonomy to the forum members, while to see the firm’s leaders attribute and firm’s development stages in the market. Observably, autonomy should be executed appropriately according to the firm’s policy, in such a way that it may evaluate and supports the attainment of objectives and goals of the firms.

2.5.5. Competitive Aggressiveness

Competitive aggressiveness is the tendency of a firm to extremely and openly challenge its competitors to improve position or achieve entry in the given market (Lumpkin & Dess, 1996). Lumpkin and Dess (1996) also stated that competitive aggressiveness is performing better in their industry challenger in the market place. According to Lyon, Lumpkin and Dess (2000) “Firm with the behavior of competitive aggressiveness be inclined to assume an aggressive position towards competitors in an effort to exceed competitors that intimidate its endurance or market in the industry”.

A firm’s aggressive behavior can be implemented through responsive or reactive behavior. The responsive behavior is a behavior, in which a firm may attack directly on competitor’s action or in the form of head to head competition, and firm achieves entry in the market, where already competitors exist. In contrast to responsive behavior the reactive behavior is a behavior in which the firms show direct reactions on competitor’s action in the market place; for example, this type of firm might cut the prices and sacrifice their profitability to uphold market position, where competitors’ introduce new methods, new products and new technologies to the existing market (Dess & Lumpkin, 2000).

Researchers and practitioners suggested that competitor firms get the competitive advantage, when the competitive movement plays a significant role in making competitiveness. The competitor firms are being aggressive in competition, which allows the firms to enhance its market situation by deflation its competitors in
the market place. Such type of firms implies frequent and aggressive moves, like enhancing the performance of firms. However, it might not be the way that small and medium enterprises compete successfully in the market. SMEs, which is described by restricted resources, do not like to engage in destructive and common competitive moves, which are expensive. Moreover, in competition the aggressive behavior is not always suitable due to cultural consideration.

2.6. Uni-dimensionality versus Multidimensionality of the EO Concept

Researcher and practitioners view about the degree of EO dimension is divided, which is necessary for a firm’s entrepreneurial deliberation. According to Miller (1983) entrepreneurial firm posses three dimensions of EO, such as innovativeness, risk taking attitude and pro-activeness. Miller (1983) also suggested that researchers would not call an entrepreneurial firm if it change its’ product line or technology (“innovativeness” according to existing market terminology), basically by copying competitors while declining to take any risk. Pro-activeness would be also an important dimension. By any indication, highly financial leverage firm that are risk taking may necessarily be measured in entrepreneurial firms. This type of firm also engaged in technological innovation or in new product line.

Miller’s work (1983) which is supported by Covin and Slevin (1991) suggested that the dimensions of EO are observed best as a uni-dimensional concept. Lumpkin and Dess (1996) asserted that firm is considered entrepreneurial only, when it involved in valuable combination of, innovativeness, risk taking attitude, pro-activeness, autonomy and competitive aggressiveness. This study suggests that for a firm to become entrepreneurial in nature, it is not necessary to coexist these all five dimension (Chow, 2006). According to Lumpkin and Dess (1996) EO is considered as a multidimensional concept and the effect of each dimension can be viewed individually and independently. Kreiser, Marino and Weaver (2002) for examining the entrepreneurial process, it is important to find out and identify the unique role of all sub-dimensions of EO, such that firm search for the best combination of EO to enhance firm performance.

The argument of Lumpkin and Dess (1996) for EO in nature is a multidimensional concept, which has been supported by numerous researchers (e.g., Hansen et al., 2011; Frishammar & Andersson, 2009; Hughes & Morgan, 2007).
Hughes and Morgan (2007) analyzed and investigated the emerging young firms in the United Kingdom found the relationship between EO and firm performance. They found that innovativeness and pro-activeness are the most vital factors of the EO that enhance the firm performance. Unpredictably, the dimension of EO autonomy and competitive aggressiveness has no effect on firm performance. Furthermore, the remaining dimension of EO risk taking was negatively associated with firm performance. Frishammar and Andersson (2009) asserted that only one dimension of EO; pro-activeness is positively contributed to international performance of Swedish SMEs. Hansen et al., (2011) also find out the relationship between EO and firm performance across seven countries. They studied the psychometric of the EO and stated that each dimension of EO contributed independently.

The above studies find out that some factors of EO contribute to firm performance, while remaining dimensions of EO have no influence or little influence on firm performance at all. These studies suggest that the roles and effects of each dimension of EO on firm performance are different, possibly depending on the business environment, different industry context and country or stages in the development of a firm. Miller (1983) introduced first time three main factors of EO are; risk taking attitude, pro-activeness and innovativeness. In prior research studies the researcher used these three dimensions of EO widely and extensively (Moreno & Casillas, 2008; Lumpkin & Dess, 1996; Covin & Slevin, 1989). After more than a decade, Lumpkin and Dess (1996) added two other dimensions to EO, competitive aggressiveness and autonomy. While they suggested that these two dimensions of EO are the additional factors of EO and firm performance. They also agreed on the factual work of Miller (1983), which states that innovativeness, risk taking attitude and pro-activeness are the specific dimensions of the EO.

In the current study only three key dimensions of EO are used, namely, innovativeness, pro-activeness and risk taking attitude. According to Aloulou and Fayolle (2005), the firm is innovative but not considered an entrepreneurial in nature, if it is not proactive to the environment or to the competitors and does not take any risky decision in the environment. A firm that should exhibit an admirable performance with these three dimensions can be considered high performing firm and entrepreneurial in nature (Covin & Slevin, 1989). They also suggested that entrepreneurial style of top managers involved in innovative activities, liable to take
sustainable business risks and compete proactively with others firm in the existing market.

2.7. Organizational Performance

A lot of research studies have been identified, to examine entrepreneurship widely, as its action not only to the outcome of the macroeconomic factors, but also to firm performance. The primary objective of the entrepreneurial firm is to enhance the firm performance, as it displays the success level of its business operation of the organization. In studies of prior entrepreneurship, a lot of firm performance measures have been applied. According to Murphy, Trailer and Hill (1996), numerous types of research studies did not provide any explanation for the selection of measure used. While specific measurement is essential to understand the performance of the firms, no agreement has been found on the assignment of an accurate set of measurements of EO among entrepreneurship scholars (Murphy, Trailer & Hill, 1996).

Following figure (2.2) shows the classification of the scheme provided by Venkatraman and Ramanujam (1986), who described the domain or field of business performance. They suggested that in the overall concept of organizational effectiveness, business performance is a unique subset. They also suggested that business performance not only cover the financial performance of the organization, but also operational performance. The latter incorporates indicators that are associated with technological efficiency, such as product quality, market share and effectiveness of marketing.

Figure (2.2) indicates the financial performance of the organization which is considered as the main component of the domain of organizational effectiveness. Financial performance is necessary to measure the performance of the firm but is not enough for measuring total business performance of the organization (Murphy, Trailer & Hill, 1996; Venkatraman & Ramanujam, 1986). According to Wiklund and Shepherd (2005) and Knight (2000) that for capturing the aspects of firm performance, it’s necessary to have multiple measures, i.e. financial and non-financial measure should be employed.
Domain of Business Performance of organizational effectiveness

Figure: 2.2 Defining the Domain of Business Performance
Adapted from Venkatraman and Ramanujam (1986)

Most of the entrepreneurship research, as well as EO, for assessing business performance only financial measurement has been applied. This fact is also supported by Murphy, Trailer and Hill (1996), who studied and carried out a literature of 51 published papers of entrepreneurship from 1987-1993. Murphy, Trailer and Hill (1996), identified and suggested three dimensions of financial performance, i.e. profit, growth and efficiency of the firms. The term efficiency includes gross revenue per employee, return on net worth, Return on Investment (ROI), Return on Asset (ROA) and Return on Equity (ROE). The profit consists of pre-tax profit, return on sales and profit margin. Growth contains changes in employees, changes in sales and change in market shares. It is interesting to say that Venkatraman and Ramanujam (1986) and Murphy, Trailer and Hill (1996) fluctuate that how to divide the dimension of financial performance of the organization, such as ROA, ROA and ROI. The dimensions of financial performance classified by previous researchers as an efficiency measurement, while the later take them as a profit.

A number of studies supported the concept of Venkatraman and Ramanujam’s (1986), which is based on the business performance by using both operational and financial measurements to enhance and develop a complete assessment of the firm’s performance. Wouter and Tom (2008) investigated 125 firms in the software industry of the Netherlands, in addition to financial performance and measured technological
performance, such as quality of product and services and speed in developing new products and services. Knight (2000) investigated 268 SMEs in Canada, employed market share and other financial indicators to examine the performance of these SMEs.

The performance of the firm can be calculated subjectively as well as objectively. The previous researchers depend on the secondary data or accounting data, while the latter is viewed as perceptions’ or respondent and self reported data. There has an advantage for objective measurement in decreasing method bias. The other researchers, Stam and Elfring (2008) suggested that it is difficult to measure the objective. The alternate can be easier, which could be subjective. Dess, Lumpkin and Covin (1997) supported the previous research which used subjective measure (e.g., Venkataraman & Ramanujam, 1986), and also asserted that performance of subjective measure are usually associated with objective measures.

There are some advantages of subjective measures over the objective measure (Runyan, Droge & Swinney, 2008). More respondents are expected to answer the question in subjective or self report measurements, especially in case of financial measurement rather than objective measurement. Firms show a great disinclination to release the information in sensitive matters of financial detail. Using the self - respondent report could be an adequate and required way of operating in key construct when carefully performed (Lyon, Lumpkin & Dess, 2000).

Becherer and Maurer (1997) asserted that subjective measurements are generally measured by comparing current performance with previous performances of the firms or with the competitors in the markets (Haider et al., 2017; Wang, 2008; Madasen, 2007). Other studies of entrepreneurship have measured the financial performance outcomes by comparing them with the previous performance, but also with their own competitors in the market (Wiklund & Shepherd, 2005; Knight, 2000).

Similarly, Runyan, Droge and Swinney (2008) accomplished a more widespread comparison by observing the performance of 267 SMEs in different industries of the US, and using the (1) comparison of similar firms in the industry (2) comparison to their major’s competitors and (3) compared with their prior performance. The above performance comparison approach is encouraged and supported by Smart and Conant (1994), as it may give essential information to the organization and evaluating this information to an extent in which the firms have achieved their objectives.
According to Richard et al., (2008) the firm performance is an essential dependent variable for the researchers who are related to the area of management. Obiwuru et al., (2011) also suggested that firm performance variable clarifies that how well a firm perform in the industry? It refers to the capability of the enterprise to accomplish their objectives such as growth, high profit, a large number of market shares, good financial outcomes, good quality products and long term servile, by using appropriate strategies for action (Koontz & Donnell, 1976). According to HO (2008) firm performance is an indicator that how firm achieves their objectives.

Further, Lusthaus et al., (2002) asserted that for ensuring organizational success the analysis of firm performance is an important step, but there is little agreement to set a criteria for measuring firm performance due to the involvedness of the construct. The literature of organizational research shows that firm performance has been used widely as a dependent variable (Gupta & Batra, 2015; March & Sutton, 1997; Richard, 2008).

Firm performance can be described on the basis of following elements, efficiency, accuracy (how an organization can transfer the input/resources into output/results), effectiveness (ability of the firm or organization to achieve its objectives), financial capability (ability of the organization to raise funds) and application (being adaptive to stakeholders and its environment). According to Richard et al., (2008) described the organizational performance surround three specific areas of outcomes; Product and market performance, (market share, sales, growth etc.), financial performance (profit of the firm, return on asset, return on investment, return on equity etc.), shareholders return, (economic value added, total shareholders return etc.).

Tangent (2003) identified and suggested that the efficiency and effectiveness shows of the organization are turned to its performance measure. Carton and Hofer (2006) suggested five categories of firm performance measure and give detail of these categories, (1) operational measure; (this comprise on non-financial variable such as customer satisfaction and shares in market); (2) accounting measure (this type of measure basis on financial information); (3) servile measure (long term organizational strategies and organizational performance); (4) economic value measure (these adjusted accounting measure) and (5) market based measure (market values ratios of the organization that is return to shareholder to market value added). The measure of accounting can be further categorized into leverage, growth measure, profitability.
measure, efficiency measure and liquidity and cash flow measure. As the result the researchers concluded that for assessing for organizational overall performance, each of the above categories has its own strengths and weakness.

Similarly, Carton and Hofer (2006) also suggested that no other or additional category of performance measure can be accepted for performance measurement and concluded further that analysis needs to be carried out for providing better understanding of this construct. Chong (2008) asserted that firm performance can also be calculated through financial measures and non-financial measures. Financial measures refer to turnover and profit before tax and non-financial measures refers to the issues such as customer satisfaction, delivery time and employees turn over and transfer rates in the organization. Kaplan and Norton (2001) stated that indicators of financial measures are very important for financial measures. For improving long term financial performance the firm provides to the managers long term incentives to work better for the organization and finally improve the overall performance. On the other hand, Moers (2000) suggested that financial performance measures are considered “backward looking” and also focus on short term financial performance of the organization.

Similarly, Zulkiffl and Parera (2011) for measuring business performance analyzed basic approaches and methodologies, also used SMEs as sample in their research paper. They suggested that in the current business environment, business performance assessment is a critical issue for managers and academic scholars. It is a vital and important to measure firm’s achievement. For measuring business performance of the SMEs, most of the researchers and scholars used subjective measures, because most of the SMEs did not reveal or publish their actual firm’s financial performance. Dess and Robinson (1984) stated that firm’s objective data do not show its actual performance, yet if the data are available, but the managers of the firms used the data in order to control or avoid corporate taxes or personal taxes. Therefore, the researchers and the literature suggest, while using subjective evaluation as an accurate alternative for objective evaluation.

According to Wall et al., (2004) for assessing business performance the managers are motivated and encouraged to use in general subjective measuring rather than more precise objective measures. In particular, for evaluating SMEs it is necessary to use subjective measures where there is an option for incorrect of financial record (Wall et al., 2004). On the other hand, Roger et al., (2006) suggested
that subjective measures are the best alternative for objective measures when SMEs focus on their current condition, and they also allow comparisons to be made across the industry or infirm contexts and economic condition of firms (Micheal et al., 2005).

The firm’s performance is considered as a multidimensional concept (Caron & Hofer, 2006; Lumpkin & Dess, 1996), for this purpose researcher should be using multiple measure of firm performance. The main objective of SMEs is to become a high performer in the industry (Ahmad & Ghani, 2010; Madrid et al., 2007). Guijarro et al., (2007) stated that a firm is capable to create, diversity of benefits for society and companies such as creating wealth, jobs and attracting resources are high performing firm.

The above authors also asserted that reliable performance measures provide better insight that how to improve performance, what strategies could be developed, meet consumer expectation, arrange useful resources and compete successfully. Unfavorable uses of performance measures produced poor results and show a pitiable competition in the market (Guijarro et al., 2007). According to Murphy et al., (1996), efficiency, growth and profitability are considered as the most common factors of firm performance in entrepreneurship literature. In this study, the dimensions profitability and growth is used for firm performance of the SMEs (Matzler et al., 2008; Tan, 2007). According to Covin and Slevin (1991) profitability and growth of the firms are essential factors to show financial firm performance. Steffens et al., (2012) also asserted that profitability and growth both are the significant dimensions of SMEs performance. Davidsson et al., (2002) suggested that many studies discussed the major and basic factors of the firm's growth related to entrepreneurship. The dimension of growth has been considered as an important factor for profitability and for competitive advantage (Markman, 2002), and it is difficult to separate persistent growth from the profitability of the firm (Fitzsimmons et al., 2005).

According to Wiklund (1999) asserted that growth is the most vital and important performance measure indicators than accounting measure indicators, which is more precise and easily accessible and hence it is provides a better indicator of firm financial performance in the sense of SMEs. Steffens et al., (2006), in entrepreneurship studies that growth is often considered as indication of success of firms, and it is used as the most important and paramount available proxy for firm performance due to the reason that most accurate data of SMEs is difficult to obtain. The various measures of growth factors and financial measures are positively
associated with one another (Wiklund, 1999). On the basis of this analysis concluded and recommended that growth might be an accurate and proper strategy for SMEs that increase their financial performance. According to Ferreira and Azevedo (2008) that growth may lead to an important outcome for the organization of the entrepreneurial behaviors of SMEs. Fitzsimmons et al., (2005) asserted that profitability is considered as one of the common factors of the business performance, as it is improbable growth of the firm is constant without profit. The generation of rents through innovation looking at entrepreneurship (Stewart, 1991), in which rents are described as earnings is above the average relative to competitors, and the last profitability measures also seem to be appropriate for SMEs (Norton & Moore, 2002).

In prior studies of entrepreneurship, for firm performance the growth is commonly used as a proxy, which is considered more appropriate and comparatively easier to achieve than an accounting measure of financial performance of the firm (Wiklund & Shepherd, 2005). On the other hand, Fletcher and Watson (2007) suggested that growth is also considered as critical a factor not only for service of the business but also important for policy maker. The business growth also provides more job opportunities in the future. While some other researchers have used different dimensions of financial performance to measure the performance of the firms, such as Lumpkin and Dess (1996) highlighted that the multidimensional nature of the firm performance is associated entrepreneurial activity. They also suggested that using one dimension of firm performance may lead to positive outcome, while on the other hand using different dimensions of firm performance may lead to negative outcomes. And finally they suggested that for measuring firm performance, researchers and practitioners should consider the attribute and nature of the business in their mind.

Consequently, reviewing the planned research questions and the future scope of this study, profitability and growth may be the most correlated factors in the perspective of SMEs. These main two dependent factors or measures show the two basics for the establishment of SMEs, to continue with operating and to earn profit.

2.8. Leadership Definition

Previous literature on leadership directs that there is no single agreed definition of leadership (cited by Saleem et al., 2017; Rost, 1993; Bass, 1990). For the last four decades, researchers attempted to untie the importance of leadership. Bass (1990) found 3500 and more definitions of leadership and accomplished that “there
are almost as many definitions of leadership as those who have attempted to define
the concept” (Bass, 1990).

Some Researchers define leadership quite narrow while some authors explore
it in quite detail. For example, according to Yukl (2012) “leadership is the process of
getting others to understand and follow what should be accomplished and how, and
the process of facilitating individual and collective efforts to accomplish shared
objectives”. On the other hand, Moore and Diamond (2000) narrowly define
leadership as the individual ability to influence people to achieve common goals or the
ability to engage people to achieve specific objectives (Northouse, 2007). Bass (1990)
recommended leadership definition as the relationship of two or more individuals
from a group that may restructure the situation, keeping members’ perceptions and
expectations in mind. Leaders are considered as agents of the change because such
individual affects the behavior of the other individuals more than the other person’s
behavior affects them.

The comprehensive leadership definitions are the results of the various
attempts of scholars and researchers while studying leadership concept. Although,
these definitions are developed to match different aspects of leadership that interest
that specific individual, or to accord their own leadership perspectives with certain
situation that they want to focus on. Thus, as to avoid the confusion it may be better to
appropriately define leadership. Hence, the current study focuses on the following
leadership definition, also used by previous researchers.

“Leadership refers to how a person behaves and takes actions to motivate,
stimulate and encourage a group of individuals to achieve organizational goals”

The current study used self-perception measures for leadership measurement,
and the above definition allows leaders to evaluate their own leadership based on how
they behave, how they engage their followers, and what actions they take to load. The
current leadership definition is appropriate for two reasons; it shows leader behaviors
while dealing with employees. It focuses on those actions of leader that influence
employee engagement.

The above definition clearly shows that any type of leadership must be
attended by some practical actions to certify that employees are integrated, inspired,
encouraged and focusing to achieve organizational goals. The Yukl (2010) definition
mainly focuses on the behavior of a leader, also including those activities that are
significant to fulfill a leader’s responsibility. These leader’s activities include
pursuing others to achieve their goals and objectives of the organization (Khattak et al., 2017; Yukl, 2010; Northouse, 2007).

2.9. Leadership Approaches

Leadership could be traced back from various religious beliefs. The term “Leadership” has gained great importance in the last 20 years as a result of complexity in an organization and different function of the organization. It is vital to understand the meaning of function of leadership in organizations. There are different leadership styles. In the current research study, only transformational leadership style is taken to study with its different dimensions. In the current study, western approaches to transformational leadership styles are studied. In most eastern countries leadership is attached with religious dogmas and beliefs (Spreitzer et al., 2005; Judge & Piccolo, 2004).

2.9.1. Transformational Leadership

Different situational factor models about leadership effectiveness result in differences towards a leadership approach. Researchers started thinking about developing new approaches towards leadership. Burns (1978) for the first time introduced the concept of transformational leadership. After that from the last three decades’ leadership and management literature started a discussion and debates and shown more interest regarding this specific leadership theory (Zhu et al., 2012; Kimura, 2012; Hannay, 2009).

Burns (1978) also stated that both transactional and transformational leadership are two different concepts. He further stated that transactional leader is that who plans to control the self-interest of his follower. In such leadership style leader mainly focus as to work standards, task assignments and compliance by followers. To influence subordinate’s performance, such leaders, give rewards and punishments. On the other hand, transformational leaders instigate and motivate employees in order to accomplish organizational goals in the most effective way and a high level of self-actualization through instilling a clear vision and mission and also building up reliance and self-confidence (Burns 1978).

Bass (1985) refined Burns (1978) idea of transformational and transactional leadership. He stated that transformational leaders transform their organization to a greater height and achieve better performance (Bass 1985, 1990, 1990). Bass made two different modifications to Burn’s preliminary transformational leadership
concept. His first modification was that he was disagreeing with Burn on the ground that transformational leadership and transactional leadership are two different terms. Burns considered these two terms as the reverse end of a field. Bass (1985) also claimed that transactional and transformational leadership behavior were not two different concepts, but representing two dimensions of a single concept. It means that efficient leaders can possess both transactional and transformational leadership behaviors (Zhu et al., 2012; Bryman, 2004).

After that, Bass extended through light on both types of transformational leadership and transactional leadership (Judge & Piccolo, 2004). The concept of transformational and transactional leadership behavior was developed by Burns (1978). In 1985 Bass added a third dimension of leadership which he named as laissez-faire leadership. He described laissez-faire leadership as no leadership in true sense. This type of leadership has no concern towards employees’ needs responsibility (Hartog et al., 1997). Bass (1985) affirmed that transactional leaders are those who practice the exchange of cost-benefit to meet the existing psychological, physiological and material needs of the subordinates in return for the services which is rendered by the subordinates (Bass, 1985). According to the Kuhnert and Lewis (1987), transactional leaders provide something to the followers that they want in return followers to provide something that the leaders want. Transactional leaders focused on the self-interest of their employees by using negative and positive reinforcement. Employees are granted and praised when they achieve their objectives and targets. When they fail to meet their objectives, negative reinforcement such as penalizing action or negative feedback are used by the leaders (Bass & Riggio, 2012; Bass et al., 2003; Bass, 2000). It is a fixed exchange process between the leaders and the followers to reach the essential standard of performance.

Bass (1990) also stated that transactional leaders are generally risk averse. They perform well in a stable and predictable environment, because they are punished or rewarded based on performance. Thus, such leaders want stability in the organizations and want to perform routine work or exchange transactions to achieve organizational goals (Lussier & Achua, 2001). Level of transaction is the main base for the relationship of leader and followers. For example, those subordinates who perform well in their jobs receive rewards and appreciation from the leader in exchange. Alternatively, followers are punished on lower performance by his or her leader. This relationship of leader and follower is stronger in cases where the
followers perform well and achieve more transactions which benefit both parties i.e. leader and followers. On the other hand, transformational leadership is the process where the leaders engage their followers and create a culture to increase motivation and morality of both the leader and followers. Such leader gives full attention to the follower’s needs and motives as well as tries to fulfill their needs and motives (Northouse, 2007). Such leader motivates followers to perform beyond the expectations (Bass, 1985).

Effective leader motivates his followers and renovates the organization through increasing awareness among employees about the ways and means of achieving organizational goals. Such leader gives due importance to the ideas and needs of the followers. Such leader increases followers’ knowledge about what is important, and encourages followers for achievement and self-actualization (Bass, 2000). Such leader motivates their followers to work for the betterment of their group more than for self-interest (Bass & Riggio, 2012; Bass, 2000).

Transformational leaders have the quality to motivate employees to do extra effort for the welfare of the organization; the followers do it due to their commitment to the leader, committed to high performance, low level of turnover intention, intrinsic work motivation, or a clear set of mission that drives them to excel beyond the standard performance (Bass et al., 2003; Howell & Avolio, 1993).

Also, Lussier and Achua (2001) illustrated that transformational leaders often challenge the “status quo”. They want the introduction of new rules and regulation to enhance organizational productivity. They keep informed his followers from the pitfalls in the organization and help subordinates in eradicating such problems to achieve organizational goals. Sarros and Santora (2001) stated that transformational leader enhances subordinate job performance by engaging them in productive activities and give due importance ideas and opinions of the subordinates.

Similarly, Bass (1995) also proposed a third leadership style which he described as a laissez-faire leadership style. Such leaders are reluctant to become actively involved in the process. It is also called passive or evident leadership which is the type of do nothing leadership and no leadership (Avolio & Bass, 2004; Gartner & Stough, 2002). From the Bass (1985) full range theory of leadership, laissez-faire is considered as the least effective form of leadership. Here leadership does not exist in the true form. Laissez-faire leader does not have strong decision making power. Such leader does not interrupt in day to day affairs of the organization (Greiman, 2009;
Bass & Avolio, 1995).

There are two basic propositions, which contribute to the foundation of laissez-fair leadership style. The first proposition states that in a laissez-fair leadership subordinates know their duties and job task. They are well aware about organizational structure. That is why, laissez-fair leader seldom interfere in the routine work of the subordinates. The proposition states that laissez-fair leaders are always in state of election-based position. In such position a leader is not willing to exert power over subordinates. There is always the lack of information supplied to subordinate (Eyal & Kark, 2004). Previous research also concluded that there is no positive and significant relationship of laissez-faire leadership style with organizational outcomes (Judge & Piccolo, 2004; Yammarino & Bass, 1990; Bass & Avolio, 1989; Bass, 1985; Singer 1985). Thus, this leadership style is not included in the current study.

2.9.2. Key Dimensions of Transformational Leadership

As we know that transformational leadership is the process of encouraging, motivating subordinates for achieving maximum productivity. Transformational leaders enhance employee’s interest by considering them an important and significant asset of the organization. Such type of leader uses different techniques by encouraging subordinates such as creating awareness among employees, giving due importance to the ideas and opinion of the subordinates (Bass, 1985, 1990, 2000). Transformational leader unveils the purpose and process before subordinates in order to keep them engaged in the work. There are four main dimensions or facets of transformational leadership style, i.e. idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass & Riggio, 2012; Bass & Avolio, 1997, 2004; Bass et al., 2003).

In idealized influence, the leader provides mission and vision to their followers, instills pride, and gives respect to the employees and the trust of his subordinates (Bass & Riggio, 2012; Bass, 1990). Such leader excites, instigate, energize and encourage their employees in order to motivate them for taking active part in the business of organizing and thus facilitating the accomplishment of organizational goals (Bass & Avolio, 2004). In this type of leadership, the leaders create trust and increase confidence of their employees. Such leader takes actions or stands, establishes belief, and request employees on an exciting level (Judge & Piccolo 2004). This dimension of transformational leadership is also called charismatic attribute. It is the main factor of transformational leadership style (Yukl,
Inspirational motivation articulates a futuristic and inspiring vision which is appealing to followers. Such leaders inspire and motivate their subordinates to achieve a high level of standards, be optimistic about the achievement of goals and give importance to the current task (Judge & Piccolo, 2004; Bass et al., 2003). Inspirational leaders converse about high expectations, to focus on the attempt and use sign and symbols and communicate significant purposes towards employees in simple ways (Muenjohn & Armstrong, 2008; Bass 1990, 1996). On the other hand, they communicate their goals and common understanding of what is right and essential in a convenient way to their subordinates (Bass & Riggio, 2012; Bass & Avolio, 2004).

The third dimension of transformational leadership is intellectual stimulation. It means that transformational leader work for increasing intellectual and cognitive abilities of the followers and their problem solving abilities (Bass 1990; Bass & Riggio, 2012). Due to this dimension, the leader takes chances, challenge assumptions, and implore employees’ views or opinions. Such leader encourages creativity and innovation in their employees (Judge & Piccolo, 2004). Due to such behavior, transformational leaders provide an opportunity to their employees to look old problems in a new way, thus, encourage innovative thinking and give full support to employees to solve unforeseen problems (Bass & Avolio, 2004). Researcher like Kirkbride (2006) stated that one of the best qualities of transformational leadership is that they promote autonomous problem solving and process of decision making.

Finally, individualized consideration dimension of transformational leadership explains that the leader gives full and personal attention to each employee (Bass & Riggio, 2012; Bass, 1990). It also refers to the degree, in which leaders focus on the needs of each employee, act as a coach or a mentor to employees and pay attention to their apprehension and needs (Judge & Piccolo, 2004). The leader, coach and advise employees productively by giving close attention to each employee (Muenjohn & Armstrong, 2008). Such leader tries to solve not only the current needs of the employees, but also explore and give a solution to those needs for the purpose to maximize and developed the full potential of the employees.
2.10. Contingency Theory of Leadership

Fielder, (1967) introduced the contingency approach to leadership. According to this approach, there is no one theory or style of leadership that fit in all situations (Langton & Robbins, 2007). Certain factors like organization culture, quality of followers, environmental changes, steeper competition and other related variables may also affect or contingent with leadership style (Moore, 2011). Thus, a leader may adopt a particular leadership style based on internal and external factors in mind. Factors like environment, the personal and organization dynamic was not in the control of the leader. In general, there is no one best leadership style or theory that performs well in all situations, so for effective leadership the leader must adopt him/her according to the situation (Fielder, 1967).

2.11. Resource Based View

Barney (1991) RBV based on two basic assumptions, while studying the internal strengths and weaknesses of the firms. First, he worked on Penrose (1959) strategy; he suggested that firms have a lot of productive resources, while others firms have a little number of these resources. This assumption is called firm’s resource heterogeneity. The second assumption is drawn from Ricardo (1966) and Selznick (1957) approaches, this type of approach assumes that supply some of these resources are inelastic or very expensive. The second assumption is called resource immobility.

The most important attribute of RBV is to focus on the firm’s internal forces. Focus on internal force approach is linked to the original work of Penrose (1959). According to Miller and Shamsie (1996) and Grant (1991) reinforced interest in role of resources and capabilities is the basic foundation of the firm’s strategy. This reinforced interest replicates some discontent with the equilibrium, static and framework economic, industrial organization, where the focus was only on the external environment and the strategy of the organization (Grant, 1991). A number of few advances have taken place on special strategic levels and all of these advances have contributed to the firm, which termed as RBV. RBV explains a firm in the conditions of the resources that these resources incorporate in the firm. Miller and Shamsie (1996) suggested that firm’s resources are not in the unit, but it must have resources in a group. Wernerfelt (1984) suggested that the term resource is restricted to characteristics that increase firm’s efficiency and effectiveness.
According to Miller and Shamsie (1996), firm’s have the resources and these resources should have the capacity to produce profit for firm’s and avoid losses. The firm’s competitive advantage will become due to the availability of resources. If a firm’s reached to receive a sustained competitive advantage and high level of performance, the firm’s need to attain varied resources, which is complicated for other firms to construct, imitate or substitute these resources.

The resources of the organization can be intangible or tangible in nature. According to Runyan et al., (2006) intangible resources refer to EO, skill, knowledge and reputation among others, while tangible resources include access to financial capital, capital and location among the entrepreneur. The firm’s growth and success depend upon the resources that can be found in the firms’ internal environment, with the availability of these resources, the firm might have great potential to construct a basis for achieving sustained and competitive advantage in the existing market (Peteraf, 1993).

2.12. Environmental Factors

Environmental factors have been considered as one of the most critical contingencies in organizational theory and in strategic management. Previous researchers pointed out that EO and strategy making is under the control of the manger. Rauch et al., (2009) identified and pointed out that the relationship between EO and firm performances is need to environmental factors as moderator.

Generally speaking, anything outside the organization that affect organizational activities is considered environmental factors. Ducan (1972) defined the environment from organizational decision making. He pointed out that there are two relevant social and physical factors incorporated outside the boundary of the organization. He further stated that there are two levels of business environment; internal and external environmental factors. The internal environmental factors contain human resource management, marketing and financial operation of the organization.

The external environment is further divided into two categories; general environment and task environment. Task environment directly correlates with the operation of the business and also control the external forces that effect on the entrepreneurial organization within the industry. An organization task environment is essential to management research from almost all major perspectives.
Boyd et al., (1993) affirmed three most important theories; theory of population ecology, resource dependence theory and contingency theory. The population ecology theory competes that survival of the organization growth of the organization is identified by the environmental factors. This theory stated that environment is a system of resource availability and interconnection of the organizations. The theory of contingency has shown that firms implement different types of right strategies in various conditions. Dess and Beard (1984) stated that environmental dependence is the easy availability of the resources to the organization and various sources from which resources are raised. It is only rational to project that environmental factors may play a significant role in EO.

Similarly, Lenz and Engledow (1986) determined five approaches that modeling the environments; cognitive model, population ecology model, an industry model, resource dependence model and organizational field model. All these models depend on the assumptions concerning the environmental structure. These models give details and describe the causes and effect of environmental change, and also states that how a manger gain knowledge and information from the environment. Bourgeois (1980) have identified three different environmental perspectives. First perspective is mainly focused on the external group of the organization such as, suppliers, competitor customers and regulatory group. The second focuses on the external forces such as dynamism, munificence’s and environmental complexity. The third perspective is mainly depends on the managerial perspective concerning the environmental factors such as environmental dynamism, environmental hostility and environmental complexity.

2.13. Access to Financial Capital

Entrepreneurship literature with large number of approaches and theories and it has been also studied in various ways for various purposes. Researchers and practitioners from all fields of social sciences, i.e. sociology, anthropology, psychology, economics, politics, history and different branches of enterprising science have studied it. These all theories have been given a great contribution to the entrepreneurship literature. The entrepreneurship research field has been considered as the most assorted area of the study and it is developing in management literature very fast (Davidson, 1989; Sexton & Bowman, 1987; Ronen, 1983).
It looks like an important factor to recognize the strategic variable which may carry out the process, the organizational method and practice and decision making styles that SMEs used in their firms, which most likely influences the growth of their organization. However, a strategy, it is wide and has a great concept. The strategy has large numbers of definition as well as typologies of probable strategic choices in SMEs firms. To recognize the most significant strategic dimensions in SMEs, it may consider as from starting point, the strategic firm typologies recommended by theoretical authors by the SMEs organizations. A large numbers of developing strategy models recommended by different authors can be found in the literature. Very famous models include are: (1) Miles and Snow (1978) strategic typology; (2) Porter (1980) presented generic strategies; (3) the Barney (1991) suggested the VRIO model of strategy; (4) and entrepreneurial orientation of Lumpkin And Dess (1996).

From the above every one related to the group variables, which do not affect the growth of the firms. Beside from these models, Miller (1983) empirically tested the results and the relationship of these variables.

A large number of authors and researchers are referred to Recourse Based View (RBV) and work more in strategic context, suggested resources and capabilities that are important for gaining constant competitive advantage and at the result better performance for the SMEs (Runyan et al., 2006; Janney & Dess, 2006; Gordon et al., 2005). According to Porter (1985) and Wernerfelt (1984) RBV as a strategic point of view and resources of strength that SMEs firms can be used to create the strategies and implement in their organization. Grant (1991) suggested that for formulating strategy in the firms, resources and capabilities of the organization are the core competencies.

Access to resources make it easy for entrepreneurs to exploit the opportunities aggressively before from the competitors due to environmental pressure (Barney, 1996; Wernerfelt, 1984). Resources that are physical and non physical assets essential to apply “value creating strategies” and utilizes the opportunities available in the environment by successful EO (Eisenhardt & Martin, 2000; Barney, 1986). Access to resources and after that its well-organized reallocation or rearranging is very important for EO, if not and resources are wastage it will have diverse effects on the process of entrepreneurship (Fahy, 2002). Timmons (1977) suggested that successful economic, entrepreneurial activity needs of the entrepreneur to access and influence the resources to generate value added. The entrepreneur should be capable to seize an
opportunity and after that assign the essential resources in order to perform the entrepreneurial role effectively and exploit market opportunities.

Access to financial resources is identified by formal and informal relation owner’s interaction with other for enterprise (Alvaro, 2005; Birley, 1985). According to Alvaro (2005) suggested that the link of entrepreneurs with other member of the society increases the possibility to motivate others, for the benefit of the task, have the quality to access the resources, diversify risk, minimize transaction cost and utilize opportunity more effortlessly. Claessens et al., (2000) also asserted that competition and specialization in the present resources enhance the innovation process and finally enhance entrepreneurial orientation.

Access to financial capital is a term to the accessibility to financial capital and other financial services to SMEs (Kelley et al., 2000). Likewise, Bouri et al., (2011) also defined that Access to financial capital refers to financial resources availability i.e. internal debt and equity for SMEs. Access to financial resources also refers to financial services that are presented by financial institutions. According to Mazanai and Fatoki (2012) Access to financial capital refers to the difference between SMEs, financial resources demand and supply of the financial institution of financial resources. In other words, the definition of access to financial resources is “as the absence of barriers to accessing financial and non-financial services and resources”. It also refers to the degree that financial services and resources are applicable to the user at a rational cost of capital (Ganbold, 2008).

2.14. Entrepreneurial Orientation (EO) and Firm’s Performance Relationship

Scholars and researchers in the field of entrepreneurship explained firm performance through the investigation of firm’s EO (Arzubiaga et al., 2018; Wiklund & Shepherd, 2003). Thus, the relationship between firm performance and EO is the main interesting factor of EO (Covin, Green & Slevin, 2006). Till to date studies found a mix results regarding EO and firm performance relationship. Some researchers found a direct relationship of these two while others found an indirect positive association of EO and firm performance (Arzubiaga et al., 2018; Li, Huang & Tsai, 2009; Hughes & Morgan, 2007; Krauss et al. 2005; Wiklund & Shepherd, 2005).
Thus, it is clear that those firms which practice EO will better perform than those which did not practiced such activities. One may relate this situation with shorter product life cycle and dynamic environment (Rezaei & Ortt, 2018; Rauch et al., 2009). Also, the competitors’ actions and also customers are unpredictable. Thus, to gain competitive advantage and to gain higher performance, organizations must aptitude for autonomy, proactive, risk taking, innovativeness and competitive aggressiveness. Thus, it is clear from the above discussion that effective EO practices are a good predictor of the firm’s performance.

Similarly, Hughes and Morgan (2007) examined the relation from each dimension of EO with firm performance. They found that EO dimension and its effect on firm performance varies, and competitive aggressiveness and autonomy have no direct correlation with firm performance. They also concluded that all dimensions of EO contribute little to the firm performance directly. On the other hand, researchers may also find a direct relation or effect of EO and its dimensions on firm performance (Wang, 2008; Wiklund & Shepherd, 2005). Also, researchers used different moderators to the EO and firm performance relation as well (Arzubiaga et al., 2018; Covin & Slevin, 1991).

Interestingly, the empirical result of EO and firm performance and its relationship studies are mixed. According to Covin, Slevin and Schultz (1994) there is no significant relationship between strategic orientation or EO and firm performance. Slater and Narver (2000) were failed to find out or gave any evidence of positive and significant relationship between EO and firm performance. Furthermore, EO did not improve the SMEs firm performance (Lee et al., 2001). There are some factors that are contributing to the contradictory of the relationship between EO and firm’s performance studies, for example samples, research design and research methodologies (Rauch et al., 2009).

According to the studies of Hughes and Morgan (2007) pointed out the fact that organization are observed at various stages of its development. Thomas and Mueller (2000) and Knight (1997) asserted that the factors of national culture may also moderate EO and firm performance relationship. Lee et al., (2001) studied 137 start up companies of technology of Korea to investigate EO and suggested that a weak support is provided by EO for startup companies’ performance. They suggested that at least two years is required for EO to enhance organizational performance significantly. To some extent, this finding is in line with Wiklund (1999) who state
that EO has a long-term effect on performance. They also suggested that firm should invest on EO to gain fruitful results in the long term.

Similarly, Fairoz et al., (2010) investigated the effect of EO on business performance of SMEs by using innovativeness, pro activeness and risk taking factors. They found that in a majority of SMEs there is a moderate degree of EO. A positive and significant relationship was found among risk taking, innovativeness, pro activeness and overall EO. It was concluded that all dimensions of EO have a sound effect on the performance of SMEs and market share. It was also determined in their studies that share price; profit and sales growth are higher for those firms having a high EO than those having low EO. Naldi et al., (2007) the dimension of EO may be employed variously crosswise countries and culture. It is not surprising; Lumpkin and Dess (2005) suggested for future research to find out the effect of culture on the association between EO and firm performance.

\[ H_1: \text{Entrepreneurial orientation is significantly and positively related to firm performance (growth and profitability).} \]

\[ H_{1a}: \text{Innovativeness is significantly and positively related to firm performance (growth and profitability).} \]

\[ H_{1b}: \text{Risk attitude is significantly and positively related to firm performance (growth and profitability).} \]

\[ H_{1c}: \text{Pro-activeness is significantly and positively related to firm performance (growth and profitability).} \]

2.15. Transformational Leadership and SMEs

No one ignored the importance of leadership in managing organizations (both small and large), but there is limited literature on the role of leadership in small businesses and new venture (Ardichvili, 2001). Researchers and scholars tried their most to investigate the impact of both transactional and transformational leadership on SMEs performance (Damirch et al., 2011; Yang, 2008; Visser et al., 2005; Hood, 2003), few of them investigated that transformational leadership is significantly related to SMEs performance and internal environment of the organization (Lee & Chu, 2017; Matzler et al., 2008; Ling et al., 2008). Also, Hayat and Riaz (2011) studied and found that both transformational and transactional leadership are strongly related to SMEs business environment.

Similarly, Matzler et al., (2008) found that there is a strong relationship
between transformational leadership and SMEs and entrepreneurship. They based their findings on the notion that one of the dimensions of transformational leadership idealized influence, which mainly deal with one to one contact of leader with their followers and in this case SMEs has fewer numbers of employees and it’s possible for the transformational leader to meet each employee of the organization. Also, another dimension of transformational leadership is inspirational motivation. Here the leader personally communicates with each employee regarding their expectations from the leader or from the organization.

On the second ground they argue that SMEs play a significant role in addressing intrinsic and extrinsic motivation of the employees as there is limited resources in SMEs, because these are incapable to exercise widespread extrinsic motivation and sometime give reward to subordinate in this transaction for achieving organizational goals as they do not possess financial flexibility in sufficient. Finally, the researchers determined in research studies that SMEs work with a global economy and in such environment which is dynamic and forceful, and renowned by changeable threats and opportunities. Therefore, the use of transformational leadership is suitable for SMEs to adapt this type of environment.

Same as like Matzler et al., (2008), Ling et al., (2008) transformed the notion that transformational leadership style is mandatory for SMEs because such leader motivate their followers through intrinsic motivation rather than extrinsic motivation. The reason is that newly born SMEs have fund shortage and they cannot afford exchange transaction like large organizations. Thus, transformational CEO of SMEs will benefit the organization both financially and non-financially. CEOs of SMEs have more power and decision making authorities than that of large organizations. Hood (2003) examined the effect of transnational, transformational and laissez faire leadership styles on SMEs performance in the US context. The researcher gathered the data from 382 CEOs of high technology firms. They determined that there was a significant relationship between SMEs performance and transformational leadership more than that of transnational and laissez faire leadership style. The author also accomplished that transactional leader also follows moral practices that have legal mandates while on the other hand, transformational leaders go ahead to permit requirements and participate more generally dependable in moral practices.

Similarly, Visser et al., (2005) conducted a research study in South Africa. He selected 535 SMEs and find out that transformational leadership was the dominant
leadership styles of the owners and managers. It was also found this research study that there is a positive and significant relationship between EO and transformational leadership. They concluded that top managers and owners of SMEs operating in South Africa seize both qualities of transformational leaders and entrepreneurs.

It is evident from the above cited literature that both transactional and transformational leadership theory is applied to SME business and operational environment. Irrespective of the organization size, leaders produce positive results for their organizations while effectively deploying transformational and transactional leadership styles.

2.16. Entrepreneurial Orientation, Transformational Leadership and Firm Performance

Entrepreneurial attitude and good leadership are considered the key elements that drive the success of SMEs (Arham et al., 2013). Evidence suggests that poor management skills and inadequate leadership are considered the primary factors for SMEs failure (Davies et al., 2002). It has been noticed that a company needs entrepreneurship, but to have good leadership, it’s mandatory to maintain operation and to guide the enterprise (Abraham et al., 2011).

Thus, an entrepreneur needs to be a good leader or to develop leadership behavior to run the enterprise in both good and bad times. At the time of crisis, the enterprise need appropriate leadership to keep their employees focused and motivated. To prevent organizational failure and to achieve good organizational performance one may introduce right leadership. As Fiedler (1996) recognized, effective leaders are important because they contribute to the success or failure of a group, an organization and even a whole country. Strong leadership is required to successfully implement lean production in SMEs (Achanga et al., 2006). Sound leadership behavior facilitates the combination of all structures in the organization and instills a vision for the organization, which could enhance firm performance.

Furthermore, Valdiserri and Wilson (2010) studied the impact of leadership behavior on firm profitability and success by taking a sample of 48 small businesses in West Virginia. They found that transactional and transformational leadership mainly contribute to organizational success. They found a moderate correlation between transactional and transformational leadership and firm performance and a strong correlation between transactional and transformational leadership and
profitability. They also stated that both transactional and transformational leaders can produce a positive atmosphere, encourage followers to perform their best. To improve firm performance, the leaders of small businesses develop and sustain a good leadership behavior in their respective organizations (Hernez, Broome & Hughes, 2004).

Also, Chen (2004) also studied the effect of leadership and culture on firm performance in Taiwan by taking a sample of 749 respondents from SMEs. The study found that top management commitment and good leadership is essential for organizational success. He further concluded that transformational leadership is important for organizational performance because such leader promote innovation and creativity in the organization.

On the same way, Yang (2008) argued that various leadership behaviors may affect firm performance differently. In line with the above statement, Pedraja-rejas et al., (2006) investigated the impact of leadership behavior on firm performance by taking a sample of 96 managers from SMEs in Chile. They found that the principal form of leadership in Chile SMEs is transformational leadership. They found a positive and significant relationship between transformational leadership and SMEs effectiveness. They also found that transactional and laissez faire leadership styles have a negative but significant relationship with SMEs effectiveness.

Similarly, Ling et al., (2008) studied the impact of transformational leadership behavior on the firm’s performance by taking 121 CEOs from SMEs. They argued that SMEs plays significant role in providing a setting which is advantageous to all and particularly for CEOs who possess transformational leadership style. These CEOs play vital role in enhancing firm performance. The reason they argued that the CEO of SMEs is more powerful than those of large organizations and thus they can empower their followers. The CEOs of SMEs have the potential for establishing high expectations and instilling individual commitment. Hence, the most significant and vital role of transformational leadership is evident in potential and task oriented environment of the SMEs. The above arguments are supported by the study finding as well as they found a positive and significant relationship between CEO transformational leadership and firm performance. The above findings are in contrast with many studies as they found that CEO transformational leadership has insignificant relation to firm performance of large organizations (Agle et al., 2006; Ensley et al., 2006; Waldman et al., 2001). Ling et al., (2008) argued that
transformational CEOs influenced both objective and subjective measures of performance by encouraging new thinking in their subordinates and closely observe to implement firm’s strategy.

Accordingly, Behery (2008) stated that the impact of knowledge sharing behaviors and leadership behaviors on firm performance in UAE business environment. The sample of their study was 504 respondents from large scale companies operated in UAE. To measure leadership a questionnaire developed by Bass and Avolio (1985) called MLQ was used for the study. The study found that both transactional and transformational leadership styles have significant association with firm performance. The study also found that knowledge sharing behavior is significantly related to firm performance. Geyer and Steyrer (1998) also studied the impact of leadership styles and bank performance. The sample of their study was 1456 employees from 116 branches of 20 different banks operated in Australia. They found that transformational and transactional leadership correlates with firm objective performance. They also found that the individualized consideration dimension of transformational leadership has insignificant relation with long term performance of Australian banks. They also argued that transformational leadership has a higher effect on the firm’s performance than transactional leadership.

While some of the researchers and practitioners argued that leadership is essential for firm success and other relate the breakdown of SMEs with deprived leadership practices (Ihua, 2009; Beaver, 2003). Beaver (2003) identified and concluded with his observation of subjective and from empirical research that the success or failures of the SMEs or small business can be recognized from the internal factors. These internal factors may be the leadership skill and lack of the management abilities of the top managers the SMEs. Gibb and Webb (1980) examined 200 bankrupts firm’s records and exposed that the lack of knowledgeable skill and disregard of the top management are the key factors of the failure of SMEs. The players or the owners of these SMEs eventually have not the aptitude and abilities that are essential to increase of the business. They suggested that for SMEs to be productive, innovative and competitive. These types of SMEs need to have key players with the adequate leadership behavior united with luck, favorable timing and passable training and support.

Also, Ihua (2009) conducted a comparative study for the purpose to find out key failure factors of UK and Nigeria SMEs. The study found that lack of leadership
and poor management are the main factors of failure of SMEs operating in the UK. While in the case of Nigeria the main factors for failure of SMEs are inadequate infrastructure and poor economic conditions. Due to a small sample size of only 45 questionnaires and two interviews, from both countries were selected. Based on such a small sample size one may not generalize the results of their study. However, their finding suggests that management skills and leadership, although these factors are applicable at UK but not to Nigeria. They concluded that 77% of the UK respondents chose leadership and management as compared to only 44% in Nigeria. UK policy makers gave more attention to these internal factors to improve SMEs performance. They suggested the Nigerian government should improve infrastructure and address difficult economic conditions which may create the main cause for SMEs growth.

The development and establishment of entrepreneurship play significant role in the productivity of small business units. Its role is also of immense importance in creating awareness among employee about a changing and inconsistent global environment (Aloulou & Fayolle, 2005). It is believed that EO role is also of immense importance for the growth and development of small business enterprises (Wang, 2008).

Similarly, Davis et al., (2010) conducted a research study and determined that there is a significant relationship between three sub-dimensions of entrepreneurship and organizational performance and growth. It is also found that personal attribute of top managers has significant impact on the performance of SMEs. Rauch et al., (2009) pointed out that there is a positive and significant relationship between EO and organizational performance. It is also concluded that top managers having high risk taking attitude also affect organizational performance. Such managers not only take risks, but also motivate employees for innovation. Managers with high pro-activeness also have sound effects on the performance of the organization.

Similarly, Smart and Conant (1994) explored the relationship between EO and business performance in the US by taking a sample of 599 SMEs. They found that a firm having a high degree of EO has good business performance than those having a low or moderate degree of EO. They also concluded that those entrepreneurs having a high level of EO are more successful and provide more fruitful results in resource allocation to different sections and also play a significant role while taking timely and important decision. All these actions and process result in significant organizational performance.
Therefore, leader practiced a form of leadership behavior may impact organizational performance positively or negatively (Morris et al., 2007). In case of SMEs, top management, leadership behavior has a strong effect on firm innovativeness, creativity and performance of the firms (Matzler et al., 2008). Due to global competition, SMEs need new direction and new vision to help SMEs to compete in the global environment and to sustain their business. The leadership style of the owner or CEO of the firm plays significant role in giving an appropriate direction to the employees. Top managers give due importance to vision and ideas of the employees and thus ensure the performance of the employees.

Also, Stewart (1989) argued that one of the important elements of entrepreneurial process is leadership. This is the leadership style of management that motivates entrepreneurial development in SMEs. Similarly, Soriano and Martinez (2007) explored the leadership importance in the transmission of entrepreneurial spirit to the working team in SMEs. They found a positive impact of relation oriented style of leadership in a situation where the leader is an entrepreneur. The leaders fully support their employees regarding entrepreneurial positional, rewards and personal consideration. The finding of the above-mentioned study is also supported by a study of Wang and Poutziouris (2010). They suggested that the leader or manager of SMEs should encourage and apply people oriented leadership style instead of task oriented leadership approach for the purpose to gain success in their organization.

In Pakistani context, Hayat and Riaz (2011) studied the relationship between EO top level management and leadership style with business performance. To increase the intensities of business and to respond quickly or timely to an effective leadership is required. Thus, it is paramount important for top managers and leaders of the SMEs to take opportunity of the rapidly changing global situation and adjust to this rapidly changing environment. They found a positive and significant relationship between transformational and transactional leadership styles with firm performance. They also concluded that EO and firm performance is directly related with each other, means that the higher the EO higher will be the business performance. They also concluded that EO dimensions, namely innovativeness and pro activeness will contribute more towards firm performance than risk taking the dimension of EO.

Accordingly, Kang et al., (2010) conducted a research study in order to study the influence of leadership styles and cultural values of firm performance by taking EO as a mediator. They take a sample of three Korea entrepreneurial companies. They
found that long term orientation and transformational leadership have a positive and direct relationship with organizational performance. They found that EO partially mediates the significant relationship of transformational leadership and organizational performance. It is determined in this study that transformational leadership style of the top managers or owners of the SMEs plays the most significant role to shape and develop a perception of the employees about EO. They found that such employees under transformational leadership styles have positive perception about EO and hence help to improve organizational performance.

Also, Bhattacharyya (2006) concluded that to develop entrepreneurial behavior the right leadership behavior is important which ultimately creates and develops climate for innovation and creativity in organizations. Entrepreneur with good leadership practices, such leaders who set expectations, business objectives, articulate vision and inspirational motivation. Such leader motivates workforce and management not to interfere with day to day operations unless necessary, but they listen what other may say about accomplishment, and to confirm that team performance is better than that of competitors. Therefore, this type of leadership behavior creates ways for an organization to become more entrepreneurial in its approach (Todorovic & Schlosser, 2007).

Up to date a limited research is there to link EO, leadership and organizational performance simultaneously. But as we mentioned in the above literature, most of the studies separately examined the relationship of leadership and organizational performance and EO and organizational performance, thus, both above factors are important indicators of organizational performance. Leadership is important to provide motivation, direction and clear guidance to employees and to drive focus on organization and EO provides the strategic orientation which can give a competitive edge.

Entrepreneurial firms show risk taking, innovativeness, and pro activeness characteristics (Aloulou & Fayolle, 2005). Yang (2008) argued that the success of a new business venture is critically determined by the role of the entrepreneurial leader.

**H2:** Transformational leadership style, strengthen or weaken the significant relationship between entrepreneurial orientation and firm performance (growth and profitability).
**H$_{2a}$:** Transformational leadership style, strengthen or weaken the significant relationship between Innovativeness and firm performance (growth and profitability).

**H$_{2b}$:** Transformational leadership style, strengthen or weaken the significant relationship between Risk attitude and firm performance (growth and profitability).

**H$_{2c}$:** Transformational leadership style, strengthen or weaken the significant relationship between Pro-activeness and firm performance (growth and profitability).

### 2.17. Entrepreneurial Orientation, Environmental Factors and Firm Performance

The importance of EO cannot be denied in the modern global business world. It is the strategy that firm applies for innovative actions. Firms are required to be proactive and take risks to achieve stipulated organizational goals (Covin & Slevin, 1989). The current environment of the business enterprises is a dynamic one. It is not static and it changes rapidly. In such changing situation, there are no clear resources for a firm. Firms are in search of regular resources and new opportunities for its product. Each firm needs a continuous supply of financial resources in order to maintain its competitiveness in the market. EO helps companies in various ways. It generates new ideas and support for commercialization of these new ideas and end product and useful services. These attributes of the entrepreneurial firm give more fruitful result in such situation when firm face different types of organizational and structural challenges. To achieve this task, the firm is inclined towards observing EO strategies and actions (Rauch et al., 2009).

It is concluded that EO role in firm performance is crucial and it enhances firm growth and also precedes the resources in a better way (Rauch et al., 2009). However, there is no unity among researchers about that scope of the EO role in the better performance of the firm. It was determined by Lumpkin and Dess (1996) that the context of the procedure plays vital role in the relationship between EO and firm performance. It means that the relationship between firm performance and EO is largely dependable on two types of factors or characteristics. One type of characteristic is external environmental characteristics and the other is internal organizational characteristic (Wiklund & Shepherd, 2005). This context of the
relationship may be best represented by the introduction of moderating variable. Moderating variable describes and the situation which deals with the condition under which EO is significant (Wales et al., 2011). If external characteristics of the firm (environmental factors) are suitable, then EO shows better results in the form of accomplishment of organizational goals. On the other hand, if external characteristic does not favor the situation, then EO strategies do not give a fruitful result and it is wastage of time and energy. It may require extra investment in the form of different resources.

There are two approaches identified within the studied relationship of EO and firm performance through moderating variables; Contingency approach and Configurational approach. According to contingency approach, there are two ways of interacting. One interaction is between external characteristics of the environment and EO, and the second interaction is between EO and internal characteristics of the firm (Wiklund & Shepherd, 2005). It is observed that if the environment is hostile, than EO has a positive effect on the performance of the firm. If the environment is considerate, its effect may be diminished (Zahra & Covin, 1995; Covin & Slevin, 1989). Zahra (1991) declared that as far as availability is concerned and accesses to financial resources, it opens new way of opportunities. Access to financial resources encourages innovation and experimentation in the organization. In the long run, this positively influences the relationship between firm performance and EO. According to contingency theory, that significant relationship is crucial among different key factors of the firm such as the structure of the firm, the management style of the top managers, and strategies applied by the firm, and firm performance. It will facilitate organizational productivity and firm performance on a large scale (Lumpkin & Dess, 1996).

According to configuration approach, it is a three way approach to instructional model. It is interaction between external characteristic of the environment and EO and internal characteristic of the firm. In any firm several forces of different kinds are working to give force to firm performance. These factors may be listed as strategies applied by top management, organizational structure, process and environment. These all combine together in a group and affect firm performance and it has been proved in different research studies on EO (Wiklund & Shepherd, 2005).
It is concluded in different research studies that external and internal characteristics of the firm, moderate relationship between EO and firm performance. External characteristics are comprised of all such factors which are outside the domain of a firm. External variables or factors may be described as the hostility of the situation and environmental dynamics, uncertainty of the environment, national culture and technological development (Covin & Slevin, 1989; Lan & Wu, 2010; Stam & Elfring, 2008). All these factors are considered as an external environmental factors which have a direct effect on firm performance. On the other hand, some internal factors also moderate relationship between EO and firm performance. These internal factors are firm age, entrepreneurial style, and knowledge based resources and managerial teams (Avlotinitis & Salavou, 2007), capabilities of reconfiguring (Jantunen et al., 2005), educational level (Lan & Wu, 2010), and strategy followed by the firm (Soininen et al., 2012; Wales et al., 2011; Rauch et al., 2009).

There are some other environmental factors which are related to business environment. These businesses related factors also have a significant effect on the relationship between EO and firm performance. These factors are heterogeneous, environmental dynamism, and hostility (Miller & Friesen, 1982). Demand for growth and competition intensity are also business related environmental factors which have an effect on the relationship between EO and firm performance. It is vital for firms to adjust it to the changing environmental factors and alter its policies and strategies accordingly.

Environmental dynamism refers to the speed, level and predictability of the changes within the industry in which the firm operates. The concepts of dynamical explained the rate of unpredictable environmental changes and ambiguities of the external environment (Alexandrova, 2004; Miller & Friesen, 1983). These environmental changes contain innovation in the industry, production and service technologies, firm’ market volatility, shifts in demand and customer preferences as well as unpredictability and uncertainty changes of competitors’ behavior in the firm main industry (Aloulou & Fayolle, 2005; Caruana, Ewing, & Ramaseshan, 2002).

By adopting and responding to new challenges, a firm has to alter its business related strategies and related marketing practices. Firstly, environmental dynamism means as the development and adaptation to technological changes and competitive environment, shifts in demand of the product and also creates difficulties for the firms, which are working in uncertainty and unpredictable environmental change.
Secondly, external dynamic environmental factors create different types of new opportunities for the organization. These new opportunities are helpful in enhancing business activities in the firm and give fruitful results in the shape of better organizational performance (Ortega et al., 2013).

A firm that operates in the external business environment manipulates their strategic orientations. A number of researchers check out the relationship between environmental dynamism and EO (Ortega et al., 2013; Rauch et al., 2009; Alexandrova, 2004; Miller, 1983). Miller, Droge and Toulouse (1988) stated that dynamic environments have encouraged the entrepreneurial behavior on the organizational level. It often observed that a firm is not ready for unpredictable changes and did not respond to it quickly. To handle such changes a firm changes its strategies and adopts a more risky attitude in order to adjust to new situations. High level of dynamism always tends to encourage the process of implementing EO strategies in the firm. This may help in searching new opportunities for a firm to increase its performance in the most effective way (Rauch et al., 2009).

Furthermore, Alexandrova (2004) determined the effect of environmental factors on different dimensions of EO on Bulgarian SMEs. The results of the study stated that environmental dynamism influences on the EO. Ruiz-Ortega et al., (2013) investigated the relationship between EO and firm performance and intervening effect of environmental factor. The results of the study stated that environmental factors encourage innovativeness, forces firms to modify or adapt to the external environment by changing their market or product in order to achieve competitive advantages.

Environmental factors may also encourage firms to act proactively (ahead of their competitors). The behavior of pro-activeness helps firms in the industry to reduce the challenges of obsolescence of products and services and act ahead of their competitors in the competitive market. Risk taking behavior, EF may persuade firms to take more risky project and take risky decision when the firms faced higher risky project and complex environment (Ruiz-Ortega et al., 2013; Zahra 1991). As from the overall previous discussion and research on the environmental factor on the relationship between EO and firm performance, it may also believe that EO increases the firm performance when the firm operates in a dynamic business environment.

Environmental hostility is another factor of the environmental factor or the external business environment. The extents of hostility measure, whether or not the business environment is the challenges to the survival of firms (Miller & Friesen,
The extent of environmental hostility illustrates the consideration of such challenges as product changes, intensive price, diminishing markets for products, assessment of company to necessary inputs, governmental intervention, technological and distributional competition among the industries, unfavorable demographic condition, strict regulatory condition and other challenges in the business environment (Alexandrova, 2004; Caruana, Ewing, & Ramaseshan, 2002; Miller & Friesen, 1983).

According to the Miller and Friesen (1983) environmental hostility is the degree of threats of challenges to the firms. Alexandrova (2004) stated that environmental hostility is encompassing erect, which incorporates the factors of threats and lack of control over the driving force and actions in firm external environment. The previous researchers and practitioners investigated the relationship between environmental hostility and EO of firm (Alexandrova, 2004; Covin & Slevin 1989; Miller & Friesen, 1983; Miller & Friesen, 1982; Miller, 1983). Covin and Slevin (1989) investigated that environmental hostility is positively associated with the different dimension of EO of business firms and also stated that Entrepreneurial Strategy or entrepreneurial strategic posture strongly effect on firm performance when the firm is operating in a more hostile environment.

Further, Miller (1983) studied the impact of environmental factors on EO or firm’s entrepreneurial behavior, taking the sample of large Canadian firms. He stated that in the most hostile environment the firm will act entrepreneurially. Firms are forced in a hostile business environment to behave entrepreneurially, because this behavior helps the firms to deal efficiently with the environmental challenges which firms faced in the external environment. Firms becomes more innovative in a hostile business environment by changing/modifying their products and services in order to take actions on customers’ needs, take more risky decisions and proactive actions to achieve competitive advantage. Miller (1983) stated that there were positive correlation between EO and environmental hostility.

Competition intensity is one of the characteristic of the hostile environment. Direct competition means that competition between the companies, where firm’s product and services perform the same function and serve up for same customer needs. Firms may choose the behavior of competitive aggressiveness towards the competitor actions. Lumpkin and Dess (1996) proposed competitive aggressiveness, which refers to a way of dealing with competitors, in the market where changing occurs and firms making no need to hard work to take business form the competitors,
being very intensely and aggressively (Lumpkin & Dess, 2000). When firms are operating in highly competitive external environment, that diminishing their shares in the market create less opportunities, EO may be useful as a Strategic Orientation. In the market firm compete aggressively, the firm’s manager are tending to take business related risks to support change and innovation (Lumpkin & Dess, 1996). Therefore, it may be believed that for gaining and maintaining competitive advantage and respond to competitors’ actions, SMEs will obvious more innovative, risky and proactive behavior instead of passive and reactive actions (Wikland & Shepherd, 2005). A benign environment is the opposite of hostile environments. This type of environment provides safe environments for business activities in the industry and creates a different and beneficial business related opportunities for small and medium firms (Covin & Slevin, 1989).

Demand growth for the product and services of firms is an important factor relating to the most conducive environment for business. In the industry, where the demands for the product is increasing and the consumer is ready and have purchasing power of services and other products, such market for firms is escalating. In a favorable situation of business environment, where the demand for the product and services is growing, it is not essential for firms to adopt different strategies in order to be highly entrepreneurial.

Also, Covin and Solevin (1989) stated that such environment which is beneficial for providing new opportunities, the firm should work in such situation. In a situation where firm adopts conservative or old traditional business strategies, the firm may have not accomplished its stipulated objectives. In such situation the relation may be insignificant and weak between EO and firm performance. When the external environment of the firm is friendly and task oriented, firms will perform better due to low level of conservative and entrepreneurial behavior (Covin & Slevin, 1989). External environmental factors and internal organizational factors and intense inclination of competition are considered as the creator factors for low or high performance of the firm, and it might cause a superior level of EO and hence increase firm performance (Lumpkin & Dess, 1996; Covin & Slevin, 1989).

Contrary to the hostile environment, benign business environments are favorable for firm operating activities and for demand growth within the industry, where the level of EO is inferior. Entrepreneurial firms are less frequently found in such environment which is task oriented, as compare to a hostile environment, which
creates high risk project and highest reward for manger who favor rapid growth and new opportunities’ in the market (Miller & Friesen, 1982).

Environmental heterogeneity means involvement of external environmental business factors. In such type of business situation, there are differences in competitive tactics, customer taste, product line and other attributes of the external environments related to different markets of firms (Caruana, Ewing & Ramaseshan, 2002). There are differences among the firms, which have affected results in the market place of the firm. These differences may occur in firm marketing strategies, administration and management of the firm, distribution and production strategies and procedures in different areas where firms operate (Miller & Friesen, 1983). The instructional level of environmental heterogeneity might exert influences on EO and firm and thus affecting firm performance. Previous researchers and practitioners investigated the effect of environmental heterogeneity on firm’s entrepreneurial activity and firm’s performance (Caruana, Ewing, & Ramaseshan, 2002; Miller & Friesen 1983; Miller 1983; Miller & Friesen 1982).

Miller and Friesen (1983) stated that environmental heterogeneity creates new opportunities for firm to launch products and provide services and advancement in technology. Due to access to advanced technology, the firm can present futuristic vision and new ideas and innovation which may utilize them in various markets. Environmental heterogeneity enhances the firm assortment in administrative practices, operation procedure, and utilization of technologies and adoption of new strategies.

Firms have vast experience of production and they are operating in different challenging market place. Firm face staunch competition from another firm and this may provide new opportunities for gaining experience and new ideas. Firms do not want the status - quo and apply new and different innovative strategies. These strategies are not restricted to one market, but it deals with different market place (Miller, 1983). Some time when business activities are increased then there is the probability of high production and human force is needed. Such situation result in the development of new ideas and innovation in business strategies. This may result in the delivery of different type of services and products in the market in order to meet needs of the valued customer (Miller & Friesen, 1982). In addition to the impact of environmental heterogeneity on firm’s innovativeness, environmental heterogeneity might have an impact on risk taking and pro-activeness dimensions of EO. New
places of the market open up for the firm in heterogeneous business environments and firms take risky action to fill the places proactively to offer new product and services.

The firm’s may be the first to perform these actions in the market to reach customers and serve their needs (Miller & Friesen, 1983). Take-in consideration the results of the previous research studies on the relationship, environmental heterogeneity and EO, it might be believed that in general, the more heterogeneous environment is higher the more will be there the EO on the organizational level.

Davis (2007) stated that dynamic environments require a greater level of risk taking attitude in strategic decision making and processes to more efficiently and profitably respond to the constant state of change. Budding on the above point of view, it is obvious that an environmental dynamism will positively affect the relationships from all dimensions of EO and firm’s performance. Previous studies have stated both positive relationships (Covin et al., 2006; Zahra & Garvis, 2000) and negative relationship (George et al., 2001; Becherer & Maurer, 1997) and correlations between hostility and entrepreneurial orientation (Covin & Solvin, 1989). McGee and Rubach (1997) investigated that environmental factors influence the relationship between the dimension of EO and firm performance. Covin and Slevin (1989) stated that entrepreneurial firms work better in business hostile environment.

One may not ignore the role of environment in organizational success. It is one of the contingent factors in term of opportunities that it creates and the threats that it pretenses (Chathoth, 2002). A firm faces various types of risks due to imminent opportunities and threats arise from the external environment (Mthanti & Urban, 2014).

Numerous researchers and practitioners from the management clarify the role of environment and strategy formulation and its impact on firm performance (Dess & Beard, 1984; Bourgeois, 1980; Jurkovich, 1974; Child, 1972). These studies completed more than three decades of research from the last of the fifties to the mid of the eighties, which focused on the perspective of the environment and environmental factors and it added to the incremental growth towards the literature through conceptual and empirical research.

In the past two decades, several studies have been conducted to check the influence of environmental variables on the relationship between EO and firm performance (Davis, 2007). Now a day’s researcher also continuously examined the moderating role of environmental variables on the relationship between EO and firm
performance (Gaudici, 2013; Covin, 2006). In the existing EO literature, three main environmental variables that are commonly used are hostility, dynamism and environmental munificence. Previous studies show that these environmental factors influence EO construct in relation with firm performance as well as their impact on the relationship between the individual dimensions of risk taking and pro-activeness, innovativeness and firm performance.

The demand of one or more firms to get abundant resources available in the environment is called environmental munificence (Dess, 2007; Dess & Beard, 1984). From the empirical analysis, the munificence is directly associated with the ability of the firm to acquire resources from the external environment and also impact on firm performance. For sustain growth, munificence is the key for determining the ability of the environment (Santos, 2009). Such environment gives a greater organizational flexibility with minimum risk. In an environment where an abundance of resources is available is directly associated to the creation of an organization with essential resources (Corbo, 2012).

Hostility a counter munificence measure represents the scarcity of the resources and intensity of competition in the firm environment. The unfavorable external forces in the organizational environment are commonly described through hostility. Davis (2007) defines hostility as “the degree of threats to the firm posed by the multifaceted, vigor and the intensity of the competition and the downswings and upswings of the firm’s principal industry”. Thus, from the above definition of hostility it is clear that hostility possesses a serious threat to the feasibility of the firm (Kroeger, 2007). It has also been examined in relation to competitive behavior and firm performance (Corbo, 2012).

The most commonly considered factor in EO literature is environmental hostility. Previous studies have linked hostility and entrepreneurship and found a positive association between hostile environmental conditions and entrepreneurial behavior (Miller, et al., 1983; Khandwalla, 1977). However, several studies used hostility as moderator of the relationship between EO and firm performance (Zahra & Covin, 2005; Zahra, 1993). These studies suggested that in case of hostile environment organization innovations are negatively impacted because in such environment, competition is high and resources are limited. Theoretical arguments of the various studies support the finding of an inverse effect of environmental hostility on the EO’s performance relationship.
Other researchers have identified and suggested a questionable finding (Covin & Slevin, 1989), for example Zahra and Garvis (2005) find out a mixed relationship. Rauch (2009) investigated the conflicting findings of previous research to use the aggregated measure of EO. There is no perfect evidence of the influence of hostility on the relationship between EO and firm’s performance, as well as the impact of the environmental factor on the relationship between each dimension of EO and firm performance.

Frequent changes and unpredictability of the external environment of the organization is termed as environmental dynamism (Dess & Beard, 1984). An unpredictable and rapid change is called high environmental dynamism. In such a highly dynamic environment, a leader must be active in the environment and make crucial decisions without complete information (Wallace et al., 2010). The negative effect of the external environment can be weakened through effective leadership behavior (Conger & Kanungo, 1988). In dynamic environments, charismatic leadership has enhanced sensitivity to the environment, and can effectively implement reform and innovation, thereby adapting to changes in the external environment (Chen, Hwang & Liu, 2009) and increasing the strategic flexibility of the enterprise.

Firms should make their strategy flexible in a dynamic environment to gain competitive advantages (Lin et al., 2013). Increases in environmental dynamism increase the necessity of maintaining to a higher level of strategic flexibility to effectively respond to changes in the environment and improve performance. In a highly dynamic environment, enterprises must adjust their existing business activities and strategic orientation to address challenges of demand and technological innovation. Strategic flexibility is beneficial to improving the internal communication and coordination of an enterprise, as well as enhancing its dynamic, competitive advantage, which is positively related to firm performance.

In a relatively stable environment, the demand for strategic flexibility is reduced because the pursuit of strategic flexibility leads to increased cost and increased pressure on managers’ decisions. Moreover, excessive response reduces the focus on the existing strategy. Consequently, the effect of dynamic environments on the relationship between strategic flexibility and firm performance is revealed. Managers face uncertainty in terms of rapidly changing political and economic trends, increasing global competition, decreasing technology cycles, alteration in societal context, and shift in customer demands (Hitt et al., 2007; Reddy, 2006; Skordoulis,
To compete effectively in such conditions, firms must create innovative products and services of high quality and at low prices to satisfy their customer (Hitt et al., 1998). Can make changes in the products, services, and business processes depend on the ability to adapt quickly to environmental changes. In other words, a firm ability to adapt quickly to such conditions is crucial to its success in obtaining and maintaining sustainable competitive advantages.

Research shows that EO and performance relation depends upon the external environment of firm’s (e.g. Zahra & Covin, 1995; Zahra, 1993; Naman & Slevin, 1993; Covin & Slevin, 1989). Prior research also concluded that EO and firm performance relationship is dependent on environmental factors (Zahra et al., 1999). Lumpkin and Dess (2001) linked pro activeness and dynamism and found a significant relationship between sales growth and profitability. Previous studies suggested that dynamic environment require risk taking attitude at the time of making strategic decisions and respond more capably and efficiently to the constant state of change. Based on the mentioned arguments, the relationship between EO and firm performance is positively affected by dynamic environment. The external environment has been conceptualized in a variety of ways.

Previous researchers agreed on the perception that environmental factors might be affected on the entrepreneurial efforts of the success (Zahra & Garvis, 2000). According to Khandwalla (1977) dominating hostile environment is stressful and risky.

**H3**: Environmental factors strengthen or weaken the significant relationship between EO and firm performance (growth and profitability).

**H3a**: Environmental factors strengthen or weaken the significant relationship between Innovativeness and firm performance (growth and profitability).

**H3b**: Environmental factors strengthen or weaken the significant relationship between Risk attitude and firm performance (growth and profitability).

**H3c**: Environmental factors strengthen or weaken the significant relationship between Pro-activeness and firm performance (growth and profitability).

### 2.18. Entrepreneurial Orientation, Access to Financial Capital and Firm Performance

It has been stated that a lot of SMEs in developing economies is constrained from accessing to finance, while uncleanness of firm’s nature might be led to this
serious limitation of access to external financing capital and hence its effect the firm’s performance (Beck, Demirguc & Maksimovic, 2008). A number of studies signified that the efficiency of SMEs largely depends on the access to financial capital (Zampetakis et al., 2011; Frank, Kessler, & Fink, 2010). According to Mazanai and Fatoki (2012) access to financial capital is significantly and positively related with the performance of SMEs. Access to finance is negatively affected by the firm’s performance relationship and also distresses the full efforts of an entrepreneur of SMEs.

Access to financial capital enhances the firm’s improvement in order to improve their growth and development (Batra, Kaufmann & Stone, 2003). They further suggested that access to financial capital, enhance firm’s performances through an innovative process, entry into new markets, decline in risk behavior and finally improvement in entrepreneurial activity and the firm’s growth. It has been also argued that in developing economies a number of SMEs is constrained in accessing financial capital, which inversely affects firm’s performance (growth and development). The focus on financial resources stems from the actuality that the activities of EO totally consume financial resources of the firm (Cadogan et al., 2009; Wiklund & Shepherd, 2005), therefore, the firm that have better access to financial capital might be facilitated their entry into new markets (Voss, Sirdeshmukh, & Voss, 2008). New business opportunities should be taken by the firm’s when the firm has access to financial resources (Cooper, Gascon & Woo 1994).

To achieve higher EO and to successfully implement entrepreneurial strategies is dependent on organizational resources and the access of organization to more and more resources (Wiklund & Shepherd, 2005). These resources are considered as deterrents or facilitators to the corporate entrepreneurship (Covin & Slevin, 1991). Out of all financial resources is of greater importance because it may able the organization to fulfill other types of resources (Wiklund & Shepherd, 2005). Such that financial capital foster firm creativity and innovativeness because it facilitates experimentation. Such access to financial capital arouses risk taking because it helps in the success of risky projects. Such access to financial capital makes the firm more proactive because the firm may reinvest the resources and gain more capital in the existing market (Wiklund & Shepherd, 2005). Thus, it is clear that the availability of financial resources may strengthen the positive and significant association between
EO and firm performance. Thus, it may be a possible moderator of the relationship of EO and firm performance.

The recreation of entrepreneurial strategy needs more financial resources. According to Romanelli (1987) and Tushman and Anderson (1986) strategic option are available for a firm when there are a lot of resources in the market and Covin and Slevin (1991) stated that EO is a resource consuming strategy in the market. Therefore, the access to financial recourses makes easy the EO process. Access to financial resources is considered as the basic type of resources and has more liquidity, which easily can be transferred into other types of resources (Dollinger, 1999). In some other developing countries, there are some constrains into access to financial resources. In addition, these constrains putting some restrictions on the small firms for obtaining a proper capital structure (equity and debt financing) for their development (Winborg & Landstrom, 2000; Storey, 1994). According to Greene and Brown (1997) that most of the SMEs implicated innovation process and make innovation for achieving good and high performance in the market, for this purpose SMEs require a lot of financial resources. In venture capital industry, venture capital investor provides the financial capital for those entrepreneurial firms who typically involved in innovative process and perform extraordinary in the market place (Zacharakis & Meyer, 2000).

Moreover, the access to financial capital interrelates with the process of EO and improves performance of SMEs. Financial resources provide more options for small firms, to engage in innovation process and make experiment with new strategies that might not be possible in restricted resources are constrained environment (Cooper et al., 1994; Levinthal & March, 1981). Financial slack promotes culture of experimentation, because it protects small firms from the result of risky project and also improve and facilitate the process of experimentation with new process, practices and strategies (Bourgeois, 1981) and also product innovation in the market place (Zahra, 1991). Financial capital stimulates the innovative process in EO and hence improves the SMEs firm performance.

Risk taking is the process to take in consideration large and risky resource commitments, investing in new product, new technologies and entry into the new market for obtaining high and uncertain return by exploiting opportunities in the existing marketplace (Lumpkin & Dess, 1996; Baird & Thomas, 1985; Miller & Friesen, 1982). This proved that greater the chances of risk in EO, entrepreneurial
entrepreneur will take the risky projects enhance the SMEs returns and improve the performance.

Pro-activeness is the process in which entrepreneur withdrawing the resources in product operation in matures stage of life and these resources reinvest in new project ahead of their competitors in the existing market (Lumpkin & Dess 1996). The process of reinvestment in new project should be easier, if the firm has the possibility of more access to financial capital. Covin and Slevin (1991) stated those firms that want to implement a successful EO process in their firm they must be acquired access to financial resources.

Capital is very important for the operation and survival for any types of businesses (Wiklund & Shepherd, 2005). According to Caglayan and Demir (2014) ability of the firm to access and generate internal finance and external finance will improve the performances of the firm. On the other hand, Caglayan and Demir (2014) asserted that scarce access to financial capital will be harmful to future performance and probable growth of business. Xavier et al., (2015) stated that lack of access to financial capital is the factor that contributed towards the weak performance of the SMEs. SMEs that have insufficient financial capital or no access to financial resources are limited to chasing the goals and objectives and achieve firm’s performance (Giannetti & Ongena, 2009). Therefore the SMEs that have limited access to financial resources, then the contribution of these SMEs towards the economic growth will be very little. The access to finance for SMEs is determined and affected by the given government policies and country, financial structure (Berger & Udell, 2006). For this purpose, financial policy maker and financial, academic institutions in all over the world give wide-ranging deliberation for SMEs access to financial capital.

Moreover, Akingunola (2011) suggested positive and significant relationship between access to finance and growth of the firm’s. Likewise, Mazanai and Fatoki (2012) asserted that access to financial capital is directly associated with performances of SMEs firms. Fornoni, Arribas, and Vila (2012) stated that the effect of social capital of entrepreneur on firm performance shows that the performance of the firms depend on the access to financial resources, market and information ability of the firm. The association between firms’ financial and performances of the firms is an important and unsolved subject the finance field. Though, one important factor that can get better the abilities of SMEs, it’s access to finance, enhance the performances
of the firm and also the survival of the firm, are the strategies executed by the firm (Ganbold, 2008). Firms that have high levels of EO should have more access to finance, as it has the ability to be innovative in nature, taking risk and come with proactive manners (Fatoki, 2012; Zampetakis, Vekini, & Moustakis, 2011). Firms that have a high quality of technologies produce new product of goods for the market can enhance the ability to have more funds in long runs that attract the eventual investors from the market. EO leads access to financial capital, which can enhance the performances of SMEs.

**H₄:** Access to financial capital, strengthen or weaken the significant relationship between EO and firm performance (growth and profitability).

**H₄a:** Access to financial capital, strengthen or weaken the significant relationship between Innovativeness and firm performance (growth and profitability).

**H₄b:** Access to financial capital, strengthen or weaken the significant relationship between Risk attitude and firm performance (growth and profitability).

**H₄c:** Access to financial capital, strengthen or weaken the significant relationship between Pro-activeness and firm performance (growth and profitability).

### 2.19. Conceptual Framework of the Study

```
Entrepreneurial
Orientation
Innovativeness
Risk Attitude
Pro-activeness

Access to
Financial Capital

Transformational Leadership

Environmental Factors

Firm Performance
Growth
Profitability
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2.20. Chapter Summary

The current chapter highlights the detail of the study variables. The relevant details regarding SMEs, its definition, financial position and development in Pakistani context are highlighted in greater detail. Similarly, the detail discussion of entrepreneurship definition, EO definition, use of EO Uni-dimensionally and multidimensionality in the context of SMEs and the key dimension of EO, Innovativeness, Risk Attitude, Pro-activeness, Autonomy and Competitive Aggressiveness. The chapter also highlighted the detail regarding the dependent variable organizational performance and its facets and also use in the SMEs context. This chapter also discussed in detail leadership definition, leadership approaches, leadership relevant theories and transformational leadership theories its link with the SMEs. The detail discussion and definition about the environmental factors and access to financial capital are also given in this chapter. Next, this chapter also highlighted the direct and indirect link between the EO and firm performance in the context of SMEs. This chapter also discussed the link of the EO, transformational leadership and organizational performance. This chapter gives a detailed discussion about the link of EO, environmental factor and organizational performance. Similarly, in the last, this chapter highlighted the link of EO, access to financial capital and organizational performance. Based on the relevant literature cited, the conceptual framework of the study was developed. The last section of this chapter includes hypotheses of the study.
CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

The purpose of the current chapter is to highlight the process and procedures we follow to find out a solution to our research problem. The purpose of the current study is to find out the link between EO and small and medium enterprises (SMEs) performance through different moderators like access to financial capital, transformational leadership and environmental factors. By empirical test the above proposed theory has been used by the researcher by following method and methodology to achieve the objectives of the study and to answer the research questions of the study. This chapter highlights population of the study, a sample of the study and sampling technique used in the study. Also, several references are given to justify the sample size of the current study. The next section of the current chapter tells about methods of data collection and of sources for the data. The overall current research study design has been also discussed in this chapter. Lastly, this chapter also highlights the technique, mathematical model and software used for the data analysis and the tests applied to test hypotheses of the current study.

3.2. Population of the Study

To answer the research questions and to achieve the objectives of the study and to test and check hypotheses of the current research study, the data were collected through structured questionnaires. The population of current research study was all the top managers (CEO) of the SMEs, which are operating in KPK. KPK has certainly blessed with tremendous opportunities. There is a lot of natural resources and hard working human resources willing to take difficult endeavors and are virtually enterprising. Major economic sectors include minerals, horticulture, tourism, hydel furniture and fisheries. This means that there are a lot of small businesses operated in KPK. According to Directorate of Industry Establishment report (2014), there is a total of 2800 SMEs operating in KPK. But it is difficult for the researcher to collect data from the whole population, thus the sampling frame of the current study consists only Peshawar division of KPK. There are 739 SMEs operating in Peshawar division. Peshawar division includes three districts i.e. Peshawar, Charsadda and Nowshera.
3.3. Sampling Technique and Sampling Size

The most commonly used sampling design is probability and non-probability sampling technique. In probability sampling technique, every member or unit of the selected population has equal, non-zero chance or probability of being selected as a sample of the study. This sampling technique is important in case where a representative of the sample is important for results generalizability. On the other hand, in case of non-probability sampling technique the member or unit of the population have not an equal chance of selection. This technique is used when time, resources or other factors are given more importance than results generalizability (Sekaran & Bougie, 2010). The current study used multistage cluster sampling technique. In multistage cluster sampling we divide the population into a number of stages. In stage first, the required number of units is selected through simple random sampling, similarly, in stage to the units of the second stage is selected through systematic random sampling or other method of probability sampling and so on (Sekaran & Bougie, 2016; Sekaran, 2003). According to Alvi (2016) it is a technique where two or more than two technique of probability sampling are commonly used. Chauvet (2015) also stated that multistage cluster sampling is used when the population is spread over a wide area. Multistage cluster sampling is the combination of two or more technique and stages of sampling (Chauvet, 2015). Acharya et.al, (2013) and Gentry et.al, (1985) used multistage cluster sampling technique to reach their target population and sample.

In first stage Peshawar division is selected from the selected population through simple random sampling. In Peshawar division there are three districts namely Peshawar, Noshehra andCharsadda. In stage second, companies are selected through proportionate stratified random sampling technique from selected division. There is total 515 SMEs in Peshawar district. Through proportionate stratified random sampling formula a total of 177 respondents was selected from Peshawar district. There is total 194 SMEs in district Nowshera. A total of 67 respondents was selected from Nowshera district. Similarly, only 30 SMEs are there in Charsadda district from which 10 are selected on stratified random sampling formula. Thus, a total of 254 SMEs/respondents was selected from three selected districts.
Table 3.1
Sample Selection

<table>
<thead>
<tr>
<th>Districts</th>
<th>Total SMEs</th>
<th>Propotinate Stratified Random Sampling Formula</th>
<th>Selected Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peshawar</td>
<td>515</td>
<td>515(254/739) =</td>
<td>177</td>
</tr>
<tr>
<td>Charsadda</td>
<td>30</td>
<td>30(254/739) =</td>
<td>10</td>
</tr>
<tr>
<td>Nowshera</td>
<td>194</td>
<td>194(254/739) =</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>739</td>
<td></td>
<td>254</td>
</tr>
</tbody>
</table>

Through multistage cluster sampling technique this study finally selected a sample of 254 managers and owners of the SMEs operated in Peshawar, Nowshera and Charsadda districts of KPK. Based on previous research, the current study selected an appropriate sample size. Sekaran and Bougi (2010) argued that a study sample size should be 10 times higher than the variable of the study, which is considered as an acceptable sample size. Field (2005) also argued that a study sample size should be higher than “30” and less than “500”. The required sample suggested by Green (1991) is 200, so, the current study sample size is in line with Green (1991) and place in “good” category. Based on the study of power analysis of Cohen, (1988) a study that having 4 to 5 explanatory variables with 95% confidence interval or 0.05 level of confidence, and wish a 0.80 statistical power levels, for such situation the sample size of the study would be required 242 to 261 respectively (Soper, 2014; Cohen, Cohen, West & Aiken, 2003). Sekaran and Bougie (2010) also stated that in case where the population size is 50000, the sample size of study 284 is an acceptable range. Therefore, we can say that the current study selected the suitable and accurate sample size.

Cohen and Cohen (1975) argued that a model having 5 independent or explanatory variables that have a population correlation value of 0.30, through 187 participants, 80% power will be achieved. Also, Harris (1985) argued that for regression analysis a minimum sample size of the study should be almost 50 plus the number of explanatory variables of the study, and at least 10 individuals per variable is required in case where the number of independent variables is 6 or more. In case of factor analysis, Pedhazur and Schmelkin (1991) argued that 50 individuals or respondents are required for each individual factor. While, Tabachnick and Fidell (1996) stated that 300 respondents are required for factor analysis. Based on the
previous and above cited literature, the current study sample size is 254, which is enough for the purpose to check the validity of the questionnaire, reliability of the questionnaire, and for testing the hypotheses of the study. Also, participants’ details, including response rate, demographics and incomplete questionnaire / inappropriate questionnaire are also provided in the current chapter. The following table shows a sample size summary of the current study.

The given table 3.2 below shows the summary of the sample size of the study.

Table 3.2  
**Break Down of the Sample Size**

<table>
<thead>
<tr>
<th>Questionnaires Composition</th>
<th>Particulars No</th>
<th>Percentage of Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Distributed Questionnaires</td>
<td>254</td>
<td>100%</td>
</tr>
<tr>
<td>Received Back Questionnaires</td>
<td>212</td>
<td>83.46%</td>
</tr>
<tr>
<td>Incomplete Questionnaires</td>
<td>19</td>
<td>8.96%</td>
</tr>
<tr>
<td>Total Correct Questionnaires</td>
<td>193</td>
<td>75.98%</td>
</tr>
</tbody>
</table>

The table reported above highlights detail about sample size. As mentioned in the table 254 questionnaires were distributed in the selected sample. The researcher received 212 questionnaires received back with the response rate of 83.46%. Out of which 19 questionnaires were found incorrect or incomplete that having a percentage of 8.96%. These incomplete or incorrect questionnaires were discarded from the study. Finally, 193 usable and correct questionnaires were selected and used for further data analysis that having a percentage of 75.98%.

3.4. **Data Sources and Data Collection Methods**

The study collected the data from top level managers or owners of SMEs operated in KPK. The most important and primary source of data was individuals' top managers or owners of SMEs. To collect data regarding study variables the study used a structured questionnaire. Those managers or owners that belong to SMEs not operating in the selected region of the study are not considered for the study. It will be better to select all managers or owners of SMEs but due to limited time and resources it was impossible for the researcher to select all SMEs operated in KPK. A structured close ended questionnaire was used for data collection having a five point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”. The questionnaire of the study composes of two parts. Demographic details of the respondents like their age, gender, income, organization, qualification, no. of employees, designation, sales of the year, department and year of establishment are reported in the first part of the
questionnaire. These demographic characteristics are linked with manager or owners’ perception regarding their EO style.

3.5. Research Design

Research design is the general and common plan about how the researcher goes to meet research objectives and to answer the research questions. Research design tells about data sample size, data sampling technique, data study sources, data collection method, and the method, technique used for data analysis and testing (Saunders, & Thornhill, 2011). Sreejesh, Mohapatra, and Anusree, (2014) guide about how to carry out a research; also it is all about the actual framework of the research study.

The purpose of the current study is testing the hypotheses. Hypothesis testing proposes an enhance understanding of the relationship that exist among variables. It is a non-contrived and not experimental study. The nature of this study is explanatory (Sekaran & Bougie, 2010). The current study collected the data once, perhaps over a period from managers or owners of SMEs, thus, the nature of this study is cross sectional in nature. The current study used deductive approach. With this approach, we start from general discussion about the topic and through practice, research and with supporting arguments finally end the discussion with specific theory.

For data collection, a questionnaire is used as a tool having a five point Likert scale that is ranging from 1 “strongly disagree” to 5 “strongly agree”. All statements of the instrument are adapted per the study context. With the help of subject expertise and questionnaire development experts all instruments are rewarded or modified per the study context. Lastly, the instrument validity and reliability were checked. A pilot study is firstly conducted having 50 participants for the reason to check the instrument validity and reliability. These participants are not included in the final sample of the study. The detail regarding validity and reliability is reported in the development section of the instrument.

3.6. Operational Definitions of the Variables of the Study

In this section of the current chapter operationally defines all variables of the study. The detail, discussion and linkage of all the study variables were provided in the chapter on the literature review. For further detail definition and for clarification the concepts in this we briefly explain the all the study variables.
3.6.1. Entrepreneurship

The term entrepreneurship has been considered and used for decades, but there is little accord among researchers and practitioners regarding its definition (Williams et al., 2010), different views can be identified in the literature, For example Schindehutte (2008) define entrepreneurship as the formation of values, creating of change, the concept of innovation, generation of employment, making of growth, creation of wealth, and the establishment of the enterprise. Stevenson and Jarilo-Mossi (1996) defined that the entrepreneurship is the process of generating value to work with the sole resources bringing together to exploit new opportunities.

3.6.2. Entrepreneurial Orientation (EO)

EO is the preference of the company’s top management to calculate the proposed risk, to be innovative in nature and to exhibit pro-activeness in their business and in the strategic decision making process (Morris & Paul, 1987). On the other hand, EO is becoming a popular and interesting subject in the field of entrepreneurship research (Wikuland, 1999). Rauch et al., (2009) also stated that research on EO in the field of entrepreneurship, where the existing body of knowledge increasing and expanding. EO play a vital role in the success of the organization, and also a motivating force behind the organizational effort towards the success, has become the main focus of the literature on entrepreneurship and also the subject of more than thirty years of research (Covin & Wales, 2012). According to the Miller (1983) entrepreneurial firm have three characteristics, innovation, risk attitude and pro-activeness.

3.6.2.1. Innovativeness

Innovativeness is the propensity of the firm to engage and facilitate the creation of new ideas to produce new product and services (Lumpkin & Dess, 1996). The ability of the firms to innovate and offers into new market become crucial and firms ability to survive and grow when they are operating in situations of global competition, in advance and rapid technology and shortage of resources (Damanpour & Wischnevesky, 2006). According to Perez, Cabrera and Wiklund (2007) Innovation is also in critical situation when firms have feature business model life cycles that are shortening.

Many researchers define the innovativeness “as the ability of the firms that engage in and fully support the generation of new ideas and creative processes, which may lead to new product and services, technological process and entrance to new
markets (Rauch et al., 2009; Damanpour & Wischnevesky, 2006; Lumpkin & Dess, 2001). Innovativeness plays a vital role in identifying the business challenges and problems, and giving new solutions for such problems and challenges that leads the firm with the ability to succeed (Hult, Huriley & Knight, 2004). Landstorm (2005) suggested that Innovativeness is associated with creativity. Creativity is defined by Morris, Kuratko and Covin (2008) as “the function of a person’s mental ability and interest to discover and learn something new”. Without creativity, innovation is impossible. There is no creativity in the firms there will be no force or motivation to innovate (Ireland, Hitt & Simon, 2003).

3.6.2.2. Risk Taking Attitude

Risk taking attitude is the tendency of a firm to exploit the resources for the new projects where the outcomes are unknown or uncertain (Wilkund & Shepherd, 2005; Miller 1983). The concepts of risk taking attitude have been attempted by the entrepreneurship scholars at the firm level. According to Lumpkin and Dess (2001) risk taking attitude, refers to the willingness of the firms that taking calculated business risk without knowing certain outcomes in the marketplace. Miller (1983) stated that the firm having risk taking behavior, considered as bold and aggressive in pursuing market opportunities and for obtaining high return they are ready to take large and risky resource commitments. The attribute of risk taking behavior consist of the activities, such as borrowing heavily in the market place, inflowing in unknown markets and taking the high resource projects without knowing the certain outcomes (Lyon, Lumpkin & Dess 2000; Miller 1983). According to the Dess and Lumpkin (2005) there are three types of risk, personal, business and financial risk that have been faced by the organization and their executives.

3.6.2.3. Pro-activeness

Pro-activeness is the capability of a firm to anticipate and act on future wants and desires in the market by creating a first mover advantage ahead of their competitors (Lumpkin & Dess, 1996). Hughes and Morgan (2007) the firm’s pro-activeness is established and identified by its alertness of and responsiveness towards signals of the market. Rauch et al., (2009) stated that the firm’s pro-activeness is an opportunity seeking on the market and forward looking perspective distinguished by the identification and producing of new products, goods and services in advance from their competition and having acted in anticipation of future demand.
According to Frishammar and Andersson (2009) a firm that is proactive in nature might be yield first mover advantage, in the absence of competitive product in the market by making high profit in new markets from new products. Pro-activeness can be defined as taking inventiveness by anticipating and evaluating new market opportunities associated with upcoming demand and by becoming implicated in existing emerging market (Lumpkin & Dess, 1996). Pro-activeness involves in monitoring the market trends and identifying, introducing and evaluating new market opportunities (Kropp, Lindsay & Shoham, 2008). Proactive firms engage in these activities are capable of introducing new products to the existing market first from their competitors. Proactive firms are the firm that has will and insight new opportunities, because of these types of firm may be considered as a leader than a follower (Lumpkin & Dess 1996).

3.6.3. Organizational Performance

According to Lumpkin and Dess (1996) organizational performance is a multi-dimensional concept. The main objectives of the SMEs are to becoming a high performing firm in the market (Madrid-Guijarro et al., 2007). In studies of prior entrepreneurship, a lot of firm performance measures have been applied. According to Murphy, Trailer and Hill (1996) that, numerous types of research studies did not provide any explanation for the selection of measure used. While specific measurement is essential to understanding performance of the firms, no agreement has been found on the assignment of an accurate set of measurements of EO among entrepreneurship scholars (Murphy, Trailer & Hill, 1996).

Murphy, Trailer and Hill (1996) identified and suggested three dimensions of financial performance, profit, growth and efficiency of the firms. The term efficiency includes gross revenue per employee, return on net worth, return on investment, return on assets and return on equity. The profit consists of pre-tax profit, return on sales and profit margin. Growth contains changes in employees, changes in sales and change in market shares. It is interesting to say that Venkatraman and Ramanujam (1986) and Murphy, Trailer and Hill (1996) fluctuate that how to divide the dimension of financial performance of the organization, such as return on asset, return on equity and return investment.

The dimensions of financial performance classified by previous researchers as an efficiency measurement, while the later take them as a profit. According to Murphy et al., (1996) efficiency, growth and profitability have considered the most
common factors of a firm’s performance in entrepreneurship literature. In this study, the dimensions profitability and growth is used for firm performance of the SMEs (Matzler et al., 2008; Tan, 2007). According to Covin and Slevin (1991) profitability and growth of the firms are essential factors to show financial firm’s performance. Steffens et al., (2006) also asserted that profitability and growth both are the important factors for SMEs performance.

Mao (2009) stated that enterprise growth is the development of an enterprise for small to large and from weak to strong. Davidsson et al., (2002) defined and suggested that firm growth has the basic and major factor of the many studies that is related to growth and entrepreneurship. The dimension of growth has been considered as an important factor for profitability and for competitive advantage (Markman, 2002), and it is difficult to separate persistent growth from the profitability of the firm (Fitzsimmons et al., 2005). According to Wiklund (1999) asserted that growth is the most vital and important performance measure indicators than accounting measure indicators, which is more accurate and easily accessible and hence it is provides a better indicator of firm financial performance in the sense of SMEs.

Fitzsimmons et al., (2005) asserted that profitability is considered as one of the most common factors of the business performance, as it is improbable that growth of the firm is constant without profit. The generation of rents through innovation looking at entrepreneurship (Stewart, 1991), in which rents are described earning is above the average relative to competitors, and the last profitability measures are also seems appropriate for SMEs (Norton & Moore, 2002).

Growth is the perception of the owner or top manager that how well their firm is doing in regard market share and overall firm performance relative to their competitors.

Profitability is the perception of the owner or top manager of the firm that how well their firm is doing in regard to the return on sale and return on investment. It is the perception of the owner or top manager on whether or not their firm is making money as compare to their competitors.

### 3.6.4. Transformational Leadership

Different situational factor models about leadership effectiveness result in differences towards a leadership approach. Researchers started thinking about developing new approach towards leadership. Burns (1978) for the first time introduces the concept of transformational leadership. After that from the last three
decades’ leadership and management literature start a discussion and debates and show more interest regarding this specific leadership theory (Zhu et al., 2012; Kimura, 2012; Hannay, 2009).

Transformational leaders have the quality to motivate employees to do extra effort for the welfare of the organization; the followers do it due to their commitment to the leader, committed to high performance, low level of turnover intention, intrinsic work motivation, or a clear set of mission that drives them to excel beyond the standard performance (Bass et al., 2003; Howell & Avolio, 1993).

Lussier and Achua (2001) illustrated that a transformational leader often challenge the “status quo”. They want introduction of new rules and regulation to enhance organizational productivity. They keep informed his followers from the pitfalls in the organization and help subordinates in eradicating such problems to achieve organizational goals. Sarros and Santora (2001) stated that transformational leader enhances subordinate job performance by engaging them in productive activities and give due importance ideas and opinions of the subordinates.

As we know that transformational leadership is the process of encouraging, motivating subordinates for achieving maximum productivity. Transformational leaders enhance employee’s interest by considering them an important and significant asset of the organization. Such type of leader uses different techniques by encouraging subordinates such as creating awareness among employees, giving due importance to the ideas and opinion of the subordinates (Bass 1985, 1990, 2000). Transformational leader unveils the purpose and process before subordinates in order to keep them engaged in the work. There are four main dimensions or facet of transformational leadership style, i.e. idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass & Riggio, 2012; Bass & Avolio, 1997, 2004; Bass et al., 2003).

In idealized influence, the leader provides mission and vision to their followers, instills pride, give respect to the employees and trust on their subordinates (Bass & Riggio, 2012; Bass, 1990). Such leaders, excite, instigates, energize and encourage their employees in order to motivate them for taking active part in the business of organizing and thus facilitating the accomplishment of organizational goals (Bass & Avolio, 2004). In this type of leadership, the leaders create trust and increase confidence of their employees. Such leader takes actions or stands, establish belief, and request employees on an exciting level (Judge & Piccolo, 2004). This
dimension of transformational leadership is also called charismatic attribute. It is the main factor of transformational leadership style (Yukl, 1989; Bass, 1985).

Inspirational motivation articulates a futuristic and inspiring vision which is appealing to followers. Such leaders inspire and motivate their subordinates to achieve a high level of standards, be optimistic about the achievement of goals and give importance to the current task (Judge & Piccolo, 2004; Bass et al., 2003). Inspirational leaders converse about high expectations, to focus on the attempt and use sign and symbols and communicate significant purposes towards employees in simple ways (Muenjohn & Armstrong, 2008; Bass 1990, 1996). On the other hand, they communicate their goals and common understanding of what is right and essential in convenient ways to their subordinates (Bass & Riggio, 2012; Bass & Avolio, 2004).

The third dimension of transformational leadership is intellectual stimulation. It means that transformational leader work for increasing intellectual and cognitive abilities of the followers and their abilities of problem solving abilities (Bass 1990; Bass & Riggio, 2012). Due to this dimension, the leader takes chances, challenge assumptions, and implore employees’ views or opinions. Such leader encourages creativity and innovation in their employees (Judge & Piccolo, 2004). Due to such behavior, transformational leaders provide an opportunity to their employees to look old problems in a new way, thus, encourage innovative thinking and give full support to employees to solve unforeseen problems (Bass & Avolio, 2004). Researcher like Kirkbride (2006) stated that one of the best qualities of transformational leadership is that they promote autonomous problem solving and process of decision making.

Finally, individualized consideration dimension of transformational leadership explains that the leader gives full and personal attention to each employee (Bass & Riggio, 2012; Bass 1990). It also refers to the degree, in which leaders focus on the needs of each employee, act as a coach or a mentor to employees and pay attention to their apprehension and needs (Judge & Piccolo, 2004). The leader, coach and advise employees productively by giving close attention to each employee (Muenjohn & Armstrong, 2008). Such leader tries to solve not only the current needs of the employees, but also explore and give a solution to those needs for the purpose to maximize and developed the full potential of the employees.
3.6.5. Environmental Factors

Environmental factors have been considered one of the most critical contingencies in organizational theory and in strategic management. Previous researchers have been pointed out that EO and strategy making is under the control of the manger. Rauch et al. (2009) identified and pointed out that the relationship between EO and firm performances is need to environmental factors as moderator.

Generally speaking, anything outside the organization that affect organizational activities is considered environmental factors. Ducan (1989) defined the environment from organizational decision making. He pointed out that there are two relevant social and physical factors incorporated outside the boundary of the organization. He further stated that there are two levels of business environment; internal and external environmental factors. The internal environmental factors contains human resource management, marketing and financial operation of the organization. The external environment is further divided into two categories; general environment and task environment. The task environment is considered that it is more directly interrelates with the business operation and control the forces that affect the individual organization in the industry. An organization task environment is essential to management research from almost all major perspectives.

3.6.6. Access to Financial Capital

Access to financial recourses are term to the accessibility to financial capital and other financial services to small and medium size enterprise (Kelley et al., 2012). Likewise, Bouri et al., (2011) also defined that access to financial capital refers to financial resource availability, internal debt and equity for the SMEs. Access to financial resources also refers to financial services that are presented by financial institutions. According to Mazanai and Fatoki (2012) access to financial resources refers to the difference between SMEs financial resources demand and supply of the financial institution of financial resources. In other words, the definition of access to financial resources is “as the absence of barriers to accessing financial and non-financial services and resources”. It also refers to the degree that financial services and resources are applicable to the user at a rational cost of capital (Ganbold, 2008).
3.7. **Questionnaire Design**

The best source to collect data regarding the participants’ attitudes, experiences, beliefs, feeling and perceptions is the structured questionnaire. However, the nature of study will tell about that where to use structured or unstructured questionnaire. Normally, the questionnaire is a predetermine set of statements or questions design in such a way that gives the required information to fulfill the student needs. Oxford dictionary states and defines that questionnaire is “a set of printed or written questions with a choice of answers, devised for the purposes of a survey or statistical study”.

The questionnaire of the current study aims to capture the beliefs, experiences, perceptions and attitudes of the owners or top managers in SMEs of KPK regarding their EO and firm performance, and their leadership styles, their accessibility to the financial resources and environmental factors that may affect the situation as well.

Based on historical research finding in the field of finance and general management the questionnaire was developed accordingly. All statements of the instrument are adapted in easy language and per the study context. Also, the instrument is converted in to Urdu language for those respondents who do not English well or they have little knowledge of English. Thus, they easily understand the Urdu language and read the statement and answer accordingly. The detail about each step of questionnaire development is discussed in the next section of the current chapter.

3.7.1. **Research Questionnaire: The Demographic, Part**

Demographic information of the study respondents is reported in the first section of the questionnaire. These demographics include information about respondent gender, age, organization, qualification, department, number of employees, date of establishment of the organization, designation of the respondent, experience and last year sales. All this basic information about the sample describes characteristics of each respondent and that how demographic variables effect dependent variable of the study. Gender is coded “1” for male and “2” for female, organization are coded “1” for Manufacturing and/or Manufacturing related services, “2” Services and/or Information & Communication Technology (ICT) “3” Other (please specify):………………., qualification is coded “1” Below Secondary Education “2” equal to FA/ Intermediate “3” equal to Bachelor Degree “4” equal to Master
Degree and “5” equal to Professional Certificate/Diploma. Designation is coded as “1” Owner of the firm “2” top level manager of the firm “3” both 1 and 2. Age is coded “1” Below 30 years “2” equal to 31-40 years “3” equal to 41-50 years and “4” equal to Above 50 years, number of employees is coded “1” less than 20 employees “2” 21 – 50 employees “3” 51 – 100 employees “4” 101 - 200 and “5” more than 200, year of establishment of the organization or business is coded “1” Before 1970 “2” 1971 – 1980 “3” 1981 – 1990 “4” 1991 – 2000 “5” 2001 and onward, last year sale is coded as “1” Less than Rs 50 Million “2” Rs 51 Million - Rs 100 Million “3” Rs 101 Million - Rs 150 Million “4” Rs 151 Million - Rs 200 Million “5” Rs 201 Million - Rs 250 Million. This research study also conducted the mean comparison analysis of the study. The main purpose of the mean comparison analysis is that to find out the effect of the demographic variable on the EO and firm performance. The mean comparison detail and their statistical analysis are given in the next chapter.

3.7.2. Model of the Study

The current study has only one model. The model of the study comprises of 1 independent variable namely entrepreneurial orientation having three facets i.e. innovativeness, risk attitudes, and pro activeness, 1 dependent variable called firm performance having to facets namely, growth and profitability. The model has three moderating variables namely transformational leadership, access to financial capital and environmental factors. Entrepreneurial orientation is coded as “EO”, firm performance is coded as “FP” transformational leadership style is coded as “TLS” access to financial capital is coded as “AFC” and environmental factors is coded as “EF”.

EO has 18 questions in which 7 belong to innovativeness, 5 belong to risk attitudes and 6 belong to pro activeness. Firm performance has 8 questions from which 4 belong to growth and 4 belong to profitability. Transformational leadership has 12 questions, access to financial capital has 7 questions and environmental factors have 10 questions. For EO questionnaire help is taken form Covin and Slevin (1989). For firm performance help was taken from Koe (2013). To develop transformational leadership questionnaire help was taken from Bass and Avolio (2004). For environmental factors questionnaire help was taken from Sohnet al., (2003). For access to financial capital help is taken from Tomsic et al., (2015), Wukland and Shiperd (2005) and Kamungi et al., (2014). The help were taken from the above research finding to translate their finding into the questions and also adapting their
valuable questions. All questions are changed and modified according to the Pakistani context. All questions are modified and changed into simple language and also translates the questionnaires into their local language “Urdu” for the purpose that the respondents of the study understand easily each statement of the questionnaire or the research instrument. All theses question of the research instrument or the questionnaire are reviewed by the subject expert and questionnaire development expert and their valuable recommendations are incorporated in the latest draft of the questionnaire.

3.8. Pre-testing and Pilot Testing

Before pilot testing a prior test was conducted in order to strengthen research instrument content validity. The process of such test is to observe the degree of relevancy of individual variable item and receiving feedback from expert for the purpose to confirm proposed items or questions acceptability from a practical point of view. Those items which give misleading results or such statement that are confusing were modified or discarded accordingly. The instrument used in the current study was originally developed in English, then it was translated into Urdu language, the native language of Pakistan because the study population was Pakistani based SMEs. The purpose was that the respondents clearly understand the basic content of the instrument. For translation process a procedure developed by Brislin (1980, 1986) was followed. All statements of the instrument were then translated back into English after thorough review and discussion of subject and questionnaire experts in the field. Also, the translated version of the instrument was rechecked from industry managers who have rendered their services in SMEs for further clarification. Their views regarding the words choice and sentence structure were highly appreciated and acceptable as they are directly involved with entrepreneurial development in the country. No significant difference was found between English and Urdu language regarding measurement of the same construct of the study model. A copy of the Urdu language questionnaire was attached in appendix.

A pilot test was then conducted with 30 scholars from different universities who have command of both languages for the purpose to ensure accuracy of the translated questionnaire and also to ensure the time allocation needed to complete the survey. These 30 respondents were selected for convenience based sampling method because they have expertise in both English and Urdu language. They have better
knowledge about entrepreneur motivation and barriers (Pruett et al., 2009) and thus, their responses were significant for pilot study conduction. Business education students have depth knowledge and understanding about business related fields (Zainuddin & Ismail, 2011).

3.9. Data Collection

Data is collected from top managers of the selected SMEs operating in the selected districts of KPK. The objective is to check whether EO affects firm performance and whether transformational leadership, environmental factors and access to financial capital moderates the relationship between the dependent and independent variable of current research study. Altogether 254 questionnaires were distributed to the selected sample, i.e. respondent’s managers or owners of SMEs while keeping a non-response rate of study involving human relations (Welch & Barlau, 2013). A total of 212 questionnaires was received back from the distributed 254 questionnaires with a response rate of 83.46%. However, 19 questionnaires were found incomplete or incorrect and thus discarded from the study. The percentage of the discarded questionnaires is 8.96%. Thus, the remaining 193 questionnaires were used for analysis with a very good response rate of 75.98%. The study achieves a very good response rate and in a valuable range in the subject or field of social sciences. One possible reason for researchers to achieve such type of high response rate is that the researcher personally visits to each SMEs and waited till the questionnaires were received back from them.

There are certain factors that affect the response rate of the questionnaire. One possible factor is the questionnaire length. Baruch (1999) investigated a response rate by selecting and studying 140 research articles and found an average response rate of 55.60% with a standard deviation of 19.70%. The researcher reports those articles that were published in well routed journals in the field of social sciences like Journal of International Business Study, Human Decision Process, Applied Psychology, Human Relations, Academy of Management, and organizational psychology with total respondents of 200,000. They found a very low response rate. They argued that the response rate will be low if the respondents were managerial position holder. The study finally concluded that to achieve a high response rate the researcher may directly distribute the questionnaire. Thus, one of the possible reasons of the high response rate of the current study is that the researcher personally distributed the
questionnaire and collected the data from the owners or top managers of the SMEs operated in the selected region of the study.

Similarly, Flower (2001) conducted a study and to get a response rate of only 29% for their study. Welch and Barlau (2013) concluded, based on previous research that the average response rate of the studies ranging is, starting from 26% and to 92% with an average response rate of 59%. Odom, Settlage and Pederson (2002) obtain a response rate of 46% for their research study by conducting an online survey. Sax, Gilmartin, and Bryant (2003) conducted a questionnaire survey and found a response rate of only 22%. They argued that female participants give a response (26.6%) more than their male counterpart (13.4%). Kaplowitz, Hadlock, and Levine (2004) compared the response rate of mail survey and email survey and investigated that the response rate of mail survey is (31.50%) that is higher from an email survey (20.70%).

Researchers like Yammarino, Childers, and Skinner, (1991), Jobber and Saunders, (1993), and Tomasokovic-Devey et.al, (1994) concluded that response rate is dependent on length types of the survey. The current study also focuses to shorter the length of the study questionnaire. However, researchers and practitioners also argued that a high response rate will be achieved if the researchers follow ups contacts of the respondents (Sheehan, 2001; Sheehan & Hoy, 1997; Yammarino, Childers, & Skinner, 1991). Likewise, researchers also stated that the achievement of the higher response rate only when the researchers collect the data through paper survey not on the online survey (Tomsic et al., 2000; Underwood, Matier, & Kim, 2000; Handwerk, Blackwell & Carson, 2000). The current study used a traditional paper based survey for the purpose to achieve a high response rate.

Based on the above literature and discussion about the response rate, the current research study achieved a higher response rate. The response rate is good and valuable from the average response rate that were suggested and recommended by previous research studies. One possible and applicable reason for getting such types of a high response rate is that the researchers visited personally to all offices of the SMEs which is located in three districts and waited until the questionnaire were filled and backed by the respondent. The other possible reason for receiving such types of response rate is that researcher using paper questionnaire survey method.
3.10. Data Analysis Methods

To answer the research questions and to empirically test the research hypotheses of the study, simple regression is used. In the simple linear regression model, each facet of the independent variable EO is regressed individually with dependent variable firm performance and also the facets namely profitability and growth. This technique is useful in case, where the multiple regression analysis and coefficients face the problem of multicollinearity. After this, to check the combine effect of the facets of the independent variable dependent variable on a multiple linear regression model is applied. As mentioned earlier the mode of the study has three moderating variables. Each independent or explanatory variable is regressed with each moderator and with each dependent variable individually, because the study of Hayes, (2014) investigated and suggested that when examining the moderating or mediating effect only one explanatory or independent variable would be regressed or analyzed with the moderator or mediator and dependent variable at one time. The detailed and discussion of both models statistics is presented in the coming chapter.

3.11. Econometric Model or Equation of Simple Regression

\[ Y_i = \beta_0 + \beta_1 X_{i1} + \mu_i \]  

(3.1)

Where,

- \( Y_i \) is the firm’s performance predicted value.
- \( \beta_0 \) shows the coefficients value of the regression line.
- \( \beta_1 \) Shows the slope of the simple regression analysis, which indicates the change in the dependent variable that is firm performance because of a unit change in the independent variable EO.
- \( \beta_0 \) is the intercept of the dependent variable, the expected value of firm performance when the value of explanatory or independent variable is equal to zero.

Here the main point is that to focus on the slope of the regression line, where the value of \( \beta_0 \) is not having great importance, but it is only change the origin of the regression line. In the simple regression analysis “\( \mu_i \)” indicates error term or the residual of the regression model or analysis, which consists of all the diverse features of the respondent, containing randomness, measurement error, and individual characteristics of a respondent that affect the predicted or dependent variable \( Y_i \).
3.12. Econometric Equation of Multiple Regression Model

\[ Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_n X_n + \mu_i \] ................................. (3.2)

Where,

- \( Y_i \) is the firm’s performance predicted value.
- \( \beta_0 \) represents coefficients of the regression line.
- \( \beta_1, \beta_2, \beta_3, \ldots, \beta_n \) are the slopes of the regression line, shows the slope of the simple regression analysis, which indicates the change in the dependent variable ”Y” that is firm performance because of a unit change of each in the explanations or independent variable EO by keeping all of the variables in the model constant.

- \( \beta_0 \) is the intercept of the dependent variable, the expected value of firm performance when the value of explanatory or independent variable is equal to zero.

Here the main point is that to focus on the slope of the regression line, where the value of \( \beta_0 \) is not having great importance, but it is only change the origin of the regression line. In the simple regression analysis “\( \mu \)” indicates error term or the residual of the regression model or analysis, which consists of all the diverse features of the respondent, I, containing randomness, measurement error, and individual characteristics of a respondent that affect the predicted or dependent variable \( Y_i \).

3.13. Econometric Models of the Study

\[ \hat{Y} = \beta_0 + \beta_1 (EO) + \epsilon \] ................................. (3.3)
\[ \hat{Y} = \beta_0 + \beta_1 (INN) + \epsilon \] ......................................................... (3.4)
\[ \hat{Y} = \beta_0 + \beta_1 (RA) + \epsilon \] ......................................................... (3.5)
\[ \hat{Y} = \beta_0 + \beta_1 (PRO) + \epsilon \] ......................................................... (3.6)
\[ \hat{Y} = \beta_0 + \beta_1 (EO) + \beta_2 (TL) + \beta_3 (EO*TL) + \epsilon \] ......................................................... (3.7)
\[ \hat{Y} = \beta_0 + \beta_1 (EO) + \beta_2 (EF) + \beta_3 (EO*EF) + \epsilon \] ......................................................... (3.8)
\[ \hat{Y} = \beta_0 + \beta_1 (EO) + \beta_2 (AFC) + \beta_3 (EO*AFC) + \epsilon \] ......................................................... (3.9)
\[ \hat{Y} = \beta_0 + \beta_1 (INN) + \beta_2 (TL) + \beta_3 (INN*TL) + \epsilon \] ......................................................... (3.10)
\[ \hat{Y} = \beta_0 + \beta_1 (INN) + \beta_2 (EF) + \beta_3 (INN*EF) + \epsilon \] ......................................................... (3.11)
\[ \hat{Y} = \beta_0 + \beta_1 (INN) + \beta_2 (AFC) + \beta_3 (INN*AFC) + \epsilon \] ......................................................... (3.12)
\[ \hat{Y} = \beta_0 + \beta_1 (RA) + \beta_2 (TL) + \beta_3 (RA*TL) + \epsilon \] ......................................................... (3.13)
\[ \hat{Y} = \beta_0 + \beta_1 (RA) + \beta_2 (EF) + \beta_3 (RA*EF) + \epsilon \] ......................................................... (3.14)
\[ \hat{Y} = \beta_0 + \beta_1 (RA) + \beta_2 (AFC) + \beta_3 (RA*AFC) + \epsilon \] ......................................................... (3.15)
\[ \hat{Y} = \beta_0 + \beta_1 (PRO) + \beta_2 (TL) + \beta_3 (PRO*TL) + \epsilon \] ......................................................... (3.16)
\[ \hat{Y} = \beta_0 + \beta_1 (PRO) + \beta_2 (EF) + \beta_3 (PRO*EF) + \epsilon \] ......................................................... (3.17)
\[ \hat{Y} = \beta_0 + \beta_1 (PRO) + \beta_2 (AFC) + \beta_3 (PRO*AFC) + \epsilon \] ......................................................... (3.18)

Where: \( \hat{Y} \) = Firm Performance  \( \beta_3 (EO*TL) \) = Interaction Effect
EO= Entrepreneurial Orientation  EF= Environmental Factors
TL= Transformational Leadership  AFC= Access to Financial Capital
3.14. **Data Analysis Tools and Software**

The current study used a latest version of Statistical Package for Social Sciences (SPSS 21) software for data analysis. The study first checks out all of the assumptions of both simple regression and multiple regression analysis. These assumptions are that there should be no auto correlation, multicollinearity, outliers in the data and heteroscedasticity, and there should be homoscedasticity in the data and should be normally distributed. Using different tests all the assumptions are checked. The detailed regarding these regression assumptions are reported in the coming chapter. To get an overview of the data, descriptive statistics including minimum, maximum, standard deviation, mean, median, skewness, kurtosis, and frequency distribution are estimated. Skewness and Kurtosis tells about whether the data is suitable for regression analysis.

3.15. **Chapter Summary**

The ongoing chapter highlights in greater detail the research methodology of the study. The current chapter highlights details about study population, sample size and sampling technique. This chapter also explains in greater detail the research design of the study, operational definition of the selected variables, data analysis methods, data collection methods, instrument design, statistical tools, econometric models of the study and software used for data analysis.

The population of the study includes owners and top level managers of SMEs operating in KPK. The sampling frame consists of three districts of KPK including Peshawar, Nowshera andCharsadda. There are total 739 SMEs in these selected districts. The main focus of the current study is to use the simple random sampling technique, but to due to some reason like security threats and non availability of the manager in their organization, this study used convenient sampling technique. The sample size of the current study consists of 254 owners and top level managers of SMEs operating in these selected districts of KPK. The nature of the current study is non-contrived and non-experimental. The nature of this study is cross sectional and hypothesis testing. The model of the current study includes one independent variable called EO having three facets namely innovativeness, risk attitudes, and pro actively, one dependent variable called firm performance having two facets namely growth and profitability, and three moderating variables including access to financial capital, transformational leadership and environmental factors. The coming chapter provides details of the results and findings of this study.
CHAPTER 4

DATA ANALYSIS AND DESCRIPTION

4.1. Introduction

The current study was conducted on the relationship between EO and firm performance in the presence of moderations transformational leadership, environmental factor and access to financial capital in the context of Pakistan SMEs. A questionnaire survey was conducted to achieve the objectives of the study. The questionnaires are distributed among the selected SMEs of KPK. The questionnaire developed from various research studies adapted and set according to the recommendation of the questionnaire development expert and subject expert in the field of entrepreneurship, strategic management and human resources management. Detail about the questionnaire development was discussed in the previous chapter of the current study. The present chapter gives detail regarding the results and findings of the current research study. Applying regression analysis first the researcher ensures reliability and validity of the questionnaire.

Kimberlin & Winetrstein (2008) stated that the main quality of a research instrument indicator depends upon the measure of the validity and reliability that it produces. According to the Warwick & Linninger (1975) research questionnaire instrument has two main purposes. It is also cited by the Gull, (2014) that the instrument of the research has two main objectives; the information that is received through a research instrument questionnaire which is related to the purpose of the study. The validity and reliability of the collected information through questionnaire should be maximized.

This chapter deals with data analysis and description. This current research study was undertaken to find out the relationship between EO and SME performance with a moderating role of transformational leadership, environmental factors and access to financial capital. This study was quantitative and descriptive by nature. Both primary and secondary data were used to undertake this current research study. For primary data, survey questionnaire was used. A standardized and adopted questionnaire was used. Data were collected through personal visit of the selected firms. As these questionnaires are already used in different countries and its reliability is confirmed, but as these are used here in Pakistan so it is necessary to check its reliability.
4.2 Reliability Result

The reliability of the research instrument tells that the research instrument gives the same results by repeated trials (Khattak, et al., 2017; Gul, 2014). Particularly, in the field of social sciences the research instrument contains unreliability to a certain level, but at different time consistency should be found in the research instrument. While on the other hand, Wilmott and Nuttall (1975) stated that researchers and practitioners should find out the reliability in the field of social sciences. Reliability referred to the propensity of the research questionnaire instrument to have regularity in continual measurements. Two main reasons for reliability estimates are identified. First, test-retest reliability; it assesses the measure of the consistency administered by using same individual at the same standard and in different time. Second, internal consistency; this type of test used to test the equivalence of the research instrument items from same test or from different viewers scoring behavior or by using same research instruments (inter-rater reliability). The coefficient value of the instrument reliability is from 0.00 to 1.00. The higher the coefficient value, the higher will be the reliability of the instruments. Generally, the acceptable reliability, value is greater than 0.6, but if the coefficient value is greater than 0.8 is the good one for research instruments.

Researcher and practitioners identified and suggested four types of reliability namely; parallel form reliability, internal consistency, inter-rater reliability and test-retest reliability. The internal consistency is most popular and usable form of the reliability in the subject of social sciences. This form of reliability measures the association of the responses of one question with other questions in research questionnaire. Thus, this type of reliability measures the consistency of the all responses in the sub groups or all items of the questionnaire. Cronbach’s alpha is the most widely used for measuring the internal consistency reliability of a research questionnaire. Besides this there are also other methods for measuring the internal consistency reliability are the Intra Class Correlation Coefficient method and Split-Haves method. But researchers like Sreejesh, Mohapatra and Anusree (2014) noted some limitations on the other methods of the internal consistency reliability and suggested that Cronbach’s alpha is the most popular and accepted method of this type of reliability. The statistics and the results of the research instrument or questionnaires are given below.
4.2.1. **Alpha Reliability Coefficient of the Variables**

*Table 4.1*  
**Alpha Reliability Coefficient of the Variables**

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>18</td>
<td>.90</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>7</td>
<td>.89</td>
</tr>
<tr>
<td>Pro-Activeness</td>
<td>6</td>
<td>.80</td>
</tr>
<tr>
<td>Risk Attitude</td>
<td>5</td>
<td>.72</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>12</td>
<td>.81</td>
</tr>
<tr>
<td>Firm Performance</td>
<td>8</td>
<td>.78</td>
</tr>
<tr>
<td>Access to Financial Capital</td>
<td>7</td>
<td>.87</td>
</tr>
<tr>
<td>Environmental Factors</td>
<td>10</td>
<td>.69</td>
</tr>
</tbody>
</table>

Table 4.1 shows reliability statistics of the instruments used in the study. SPSS was used to calculate the reliability of the questionnaire. All the values of Cronbach’s alpha are good and well above the standard value suggested by researchers. According to the Georgy and Malery (2003) that if the Cronbach’s value is less than 0.5 is an unacceptable, but if the Cronbach’s value is greater than 0.5 is an acceptable range and near to one is considered the best one and highly acceptable. Thus, there is no issue of instrument reliability.

4.3. **Validity of the Research Instrument**

Kimberlin and Winterstein (2008) stated that the validity of the research instrument is the point to which an instrument measure that what it want to measure. The ability of the instrument to measure what the researcher wants to measure is the validity (Gul, 2014). According to Smith (1991, pp. 106) validity is the degree to which the researchers measure and what he wants to measure. The researcher also stated that if the instrument are valid it must be reliable, but if an instrument may not be reliable without valid. The only reliability of the instrument is not enough if it have not valid. Before applying the regression analysis, both validity and reliability of the instrument should be checked. This section deals of current research study instrument validity. The researcher suggested three types of validity; construct validity, criterion related validity and content validity. Different types of validities of the research instrument discussed in detail below.
4.3.1. **Construct Validity**

To find out validity of an instrument, the most complicated technique is the construct validity. Kimberlin & Winterstein (2008) stated that construct validity is the result, which is based on the evidence assembling from different studies using a precise and specific measurement instrument. Correlation coefficients that fit the usual pattern and contribute support of construct validity. In the table below the coefficient of the study dependent and independent variables were given.

*Table 4.2*

*Correlation Coefficients of Model Variables*

<table>
<thead>
<tr>
<th></th>
<th>FP</th>
<th>EO</th>
<th>EF</th>
<th>AFC</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EO</td>
<td>.693*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EF</td>
<td>.133*</td>
<td>.007</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFC</td>
<td>.280*</td>
<td>.372*</td>
<td>.036</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TL</td>
<td>.251*</td>
<td>.294*</td>
<td>.013*</td>
<td>.065</td>
<td>1</td>
</tr>
</tbody>
</table>

**correlation is significant at the 0.01 level (2-tailed).**

The above table shows correlation coefficient of the study. This model shows the relationship between the independent variable and dependent variable. As the above result shows that the correlation coefficient between EO and firm performance is 0.693 which is significant at 90% confidence interval or at the level of 0.01. the value of the correlation coefficient between access to financial capital and firm performance is 0.280 which is also significant at 0.01 level. The correlation coefficient between transformational leadership and firm performance is 0.251 which is significant at 0.01 levels or 90% confidence interval. It is concluded from the above result that the instrument has the construct validity, because the correlation coefficient between the dependent and independent variables are statistically significant at 90% confidence interval.
4.3.2. Criterion – Related Validity

Criteria related validity tells about the correlation of new research instrument scores with other research instruments having the same items or nearly same items and that they are theoretically related (Kimberlin & Winterstein, 2008; Khattak et al., 2017). Although, it is necessary that actual questionnaire is valid. Based on pilot testing, the study conducted exploratory factor analysis. Construct and content validity of the current instrument is ensured through the reviewing of related literature and experts’ recommendations. To ensure criterion related validity, the principal component method is applied and retained items having a factor loading value of .5. Kaiser-Meyer-Olkin (KMO) and Bartlett’s tests are also applied for the purpose to confirm criteria related validity. Based on the results of all variable instruments the value of KMO is more than .6, which is acceptable for factor analysis. Similarly, the values of all instruments of the study variables are found significant through Bartlett’s test of Sphericity. The results of factor analysis are reported in the following tables.

4.3.3. Factor analysis of Innovativeness

<table>
<thead>
<tr>
<th>Table 4.3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>KMO and Bartlett’s Test of Innovativeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
</tbody>
</table>

The results of Bartlett’s and KMO tests of innovativeness scale are reported in the above table. As shown, KMO value is .854 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant ($p < .05$) which further confirm the phenomena. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study.
Table 4.4

Component Matrix of Innovativeness

<table>
<thead>
<tr>
<th>Statement</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>My company has introduced many new products and services in the market.</td>
<td>.840</td>
</tr>
<tr>
<td>I give due importance to Research &amp; Development, technological leadership</td>
<td>.838</td>
</tr>
<tr>
<td>and innovations in my company.</td>
<td></td>
</tr>
<tr>
<td>Our firm motivates employees for creative work and new experimentation</td>
<td>.823</td>
</tr>
<tr>
<td>Our firm emphasizes on utilizing new technology</td>
<td>.835</td>
</tr>
<tr>
<td>Our firm relies on designing new methods and procedures of production</td>
<td>.743</td>
</tr>
<tr>
<td>rather than adapting solution</td>
<td></td>
</tr>
<tr>
<td>I believe that changes in the product/service lines in my company have</td>
<td>.821</td>
</tr>
<tr>
<td>been mostly minor in nature</td>
<td></td>
</tr>
<tr>
<td>Changes in the production or services usually not planned in our firm</td>
<td>.584</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of innovativeness is reported in the above table. The instrument of innovativeness contains 7 items. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Field, 2009). Here, in this case except one item having a factor loading value of .584, and all the remaining values are near to 1, thus, represent the best case. As shown from the scree plot, there are seven dots which tell us that innovativeness questionnaire should contain 7 items. It is also clear from the result of the factor loading. Scree plot also indicates that which items contribute how much to the whole instrument.

Figure 4.1: Scree Plot of INV
4.3.4. Factor analysis of Risk Attitude

Table 4.5
KMO and Bartlett’s Test OF RA

<table>
<thead>
<tr>
<th>Measure of Sampling Adequacy</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin</td>
<td>.771</td>
</tr>
<tr>
<td>Approx Chi-Square</td>
<td>225.85</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>10</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of Bartlett’s and KMO tests of risk attitude scale are reported in the above table. As shown, KMO value is .771 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant (p < .05) which further confirm the phenomena. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypotheses. Thus, based on the above results we accept the alternate hypotheses and reject the null hypotheses of the study.

Table 4.6
Component Matrix OF RA

<table>
<thead>
<tr>
<th>Component 1</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>My firm adopts a cautious “wait-and-see” strategy in uncertain situations</td>
<td>.658</td>
</tr>
<tr>
<td>My company has a strong proclivity/tendency for high risk projects (with chances of very high returns)</td>
<td>.769</td>
</tr>
<tr>
<td>Sometime my company adopts a bold strategy in order to maximize the probability of exploiting opportunities in uncertain situations</td>
<td>.818</td>
</tr>
<tr>
<td>Manager of our firm leads the team in introducing a novel product or ideas</td>
<td>.811</td>
</tr>
<tr>
<td>Employees in this firm are encouraged to take calculated risks with new ideas</td>
<td>.591</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of RA is reported in the above table. The instrument of RA contains 5 items. All items have a factor loading value greater than .4, and thus remain in the instrument. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Field, 2009). As shown all the values are well above than the acceptable range. The value of the factor loading near to 1 is highly acceptable and good one. Here, in this case except one item having a factor loading value of .591, and all the remaining values are near to 1, thus, represent the best case. The figure below reports the scree plot of RA instrument. The scree plot tells us that how many items to be retained in the instrument. As shown from the scree plot, there are five dots which tell us that RA questionnaire should contain 5 items. It is also clear from the result of the factor
loading. Scree plot also indicates that which items contribute how much to the whole instrument. As shown from the scree plot the item 1 contribute more than the remaining items.

![Scree Plot](image)

**Figure 4.2: Scree Plot of RA**

### 4.3.5. Factor analysis of Pro-activeness

*Table 4.7*

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test OF PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
</tr>
<tr>
<td>.842</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td>370.112</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
<tr>
<td>.000</td>
</tr>
</tbody>
</table>

The results of Bartlett’s and KMO tests of PA scale are reported in the above table. As shown, KMO value is .842 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant ($p < .05$) which further confirm the phenomena. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study.
Table 4.8
Component Matrix OF PA

<table>
<thead>
<tr>
<th>Component 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In dealing with competitors, my company typically responds to actions,</td>
<td>.826</td>
</tr>
<tr>
<td>which competitors initiate</td>
<td></td>
</tr>
<tr>
<td>My company seldom introduces new products or ideas in competition.</td>
<td>.838</td>
</tr>
<tr>
<td>I like to anticipate events occurring related to my job</td>
<td>.780</td>
</tr>
<tr>
<td>Our firm have a strong tendency to ‘follow the leader’ in introducing new</td>
<td>.714</td>
</tr>
<tr>
<td>products or ideas.</td>
<td></td>
</tr>
<tr>
<td>In dealing with competitors, my company typically to begin actions</td>
<td>.721</td>
</tr>
<tr>
<td>which competitors then respond to</td>
<td></td>
</tr>
<tr>
<td>We are always on the watch out for businesses that can be acquired</td>
<td>.593</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of pro-activeness is reported in the above table. The instrument of PA contains 6 items. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Yong & Pearce, 2013; Field, 2009). The value of the factor loading near to 1 is highly acceptable and good one. As shown from the scree plot, there are six dots which tell us that PA questionnaire should contain 6 items. It is also clear from the result of the factor loading. Scree plot also indicates that which items contribute how much to the whole instrument. As shown from the scree plot the item 1 contribute more than the remaining items.

Figure 4.3: Scree Plot of PA
4.3.6. Factor analysis of Firm Performance Profitability

Table 4.9  
KMO and Bartlett’s Test OF FPP

<table>
<thead>
<tr>
<th>Measure of Sampling Adequacy</th>
<th>Kaiser-Meyer-Olkin</th>
<th>Approx. Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.632</td>
<td>60.85</td>
</tr>
</tbody>
</table>

Bartlett’s Test of Sphericity  

<table>
<thead>
<tr>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of Bartlett’s and KMO tests of firm performance, profitability scale are reported in the above table. As shown, KMO value is .632 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant as \((p < .05)\), which further confirm the phenomena. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study.

Table 4.10  
Component Matrix OF FPP

<table>
<thead>
<tr>
<th>Statement</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>My company is growing steadily for the past three years</td>
<td>.774</td>
</tr>
<tr>
<td>We are satisfied with our return on sales</td>
<td>.643</td>
</tr>
<tr>
<td>In general, my company has achieved a very positive financial</td>
<td>.727</td>
</tr>
<tr>
<td>outcome</td>
<td></td>
</tr>
<tr>
<td>We are satisfied with the return on our investments.</td>
<td>.597</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of the FPP is reported in the above table. The instrument of FPP contains 4 items. All items have a factor loading value greater than .4, and thus remain in the instrument. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Yong & Pearce, 2013; Field, 2009). As shown all the values are well above than the acceptable range. The value of the factor loading near to 1 is highly acceptable and good one. The figure below reports the scree plot of FPP instrument. The scree plot tells us that how many items to be retained in the instrument. As shown from the scree plot, there are four dots which tell us that FPP questionnaire should contain 4 items. It is also clear from the result of the factor loading. Scree plot also indicates that which items contribute how much to the whole instrument. As shown from the scree plot the item 1 contribute more than the remaining items.
4.3.7. Factor analysis of Firm Performance Growth

Table 4.11
KMO and Bartlett’s Test OF FPG

<table>
<thead>
<tr>
<th>Measure of Sampling Adequacy</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin</td>
<td>.752</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>248.28</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of Bartlett’s and KMO tests of firm performance growth scale are reported in the above table. As shown, KMO value is .752 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant \((p < .05)\) which further confirm the phenomenon. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study.
Table 4.12
Component Matrix OF FPG

<table>
<thead>
<tr>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The growth of our company is above average</td>
</tr>
<tr>
<td>Our growth is satisfying.</td>
</tr>
<tr>
<td>We have higher return on investment (than our competitors).</td>
</tr>
<tr>
<td>Our market shares are increasing faster than those of our competitors are.</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of FPG is reported in the above table. The instrument of FPG contains 4 items. All items have a factor loading value greater than .4, and thus remain in the instrument. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Yong & Pearce, 2013; Field, 2009). As shown all the values are well above than the acceptable range. The value of the factor loading near to 1 is highly acceptable and good one. The figure below reports the scree plot of FPG instrument. The scree plot tells us that how many items to be retained in the instrument. As shown from the scree plot, there are four dots which tell us that FPG questionnaire should contain 4 items. It is also clear from the result of the factor loading. Scree plot also indicates that which items contribute how much to the whole instrument. As shown from the scree plot the item 1 contribute more than the remaining items.

Figure 4.5: Scree Plot of FPG
4.3.8. Factor analysis of Transformational Leadership

Table 4.13
KMO and Bartlett’s Test OF TL

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .871 |
| Approx. Chi-Square | 1646.45 |
| Bartlett’s Test of Sphericity | df | 66 |
| | Sig. | .000 |

The results of Bartlett’s and KMO tests of transformational leadership scale are reported in the above table. As shown, KMO value is .871 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant ($p < .05$) which further confirm the phenomena. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study.

Table 4.14
Component Matrix OF TL

<table>
<thead>
<tr>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>I suggest new ways of looking at how to complete assignments</td>
</tr>
<tr>
<td>I articulate a compelling vision of the future</td>
</tr>
<tr>
<td>I get others to look at problems from many different angles</td>
</tr>
<tr>
<td>I talk optimistically about the future</td>
</tr>
<tr>
<td>I emphasize the importance of having a collective sense of Mission</td>
</tr>
<tr>
<td>I express confidence that goals will be achieved</td>
</tr>
<tr>
<td>I talk about my most important values and beliefs</td>
</tr>
<tr>
<td>I seek differing perspectives when solving problems</td>
</tr>
<tr>
<td>I specify the importance of having a strong sense of purpose</td>
</tr>
<tr>
<td>I consider the moral and ethical consequences of decisions</td>
</tr>
<tr>
<td>I re-examine critical assumptions to question whether they are appropriate</td>
</tr>
<tr>
<td>I go beyond self-interest for the good of the group</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of the TL is reported in the above table. The instrument of TL contains 12 items. All items have a factor loading value greater than .4, and thus remain in the instrument. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Yong & Pearce, 2013; Field, 2009). As shown all the values are well above
than the acceptable range. The value of the factor loading near to 1 is highly acceptable and good one. The figure below reports the scree plot of TL instrument. The scree plot tells us that how many items to be retained in the instrument. As shown from the scree plot, there are twelve dots which tell us that TL questionnaire should contain 12 items. It is also clear from the result of the factor loading. Scree plot also indicates that which items contribute how much to the whole instrument. As shown from the scree plot the item 1 contribute more than the remaining items.

![Scree Plot](image)

*Figure 4.6: Scree Plot of TL*

### 4.3.9. Factor analysis of Firm Environmental Factor

<table>
<thead>
<tr>
<th>Table 4.15</th>
<th>KMO and Bartlett’s Test OF EF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>.858</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>1220.27</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>df</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of Bartlett’s and KMO tests of environmental factor scale are reported in the above table. As shown, KMO value is .858 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant ($p < .05$) which further confirm the phenomenon. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we
accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study.

Table 4.16
Component Matrix OF EF

<table>
<thead>
<tr>
<th>Statement</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our firm products and service operation becomes out of date very quickly</td>
<td>.809</td>
</tr>
<tr>
<td>Operation of technology in our firm change very quickly</td>
<td>.778</td>
</tr>
<tr>
<td>Our firm expect the action of competitor easily</td>
<td>.826</td>
</tr>
<tr>
<td>Our firm predicts when their firm’s products/services demand changes</td>
<td>.768</td>
</tr>
<tr>
<td>Our firm forecast demand and consumer tastes easily</td>
<td>.727</td>
</tr>
<tr>
<td>Demand for the products of our industry is growing and will continue to grow</td>
<td>.778</td>
</tr>
<tr>
<td>The investment and marketing opportunities for firms in our industry are favorable in the present time</td>
<td>.760</td>
</tr>
<tr>
<td>The opportunities for firms in our industry to expand the scope of their existing products/markets are favorable</td>
<td>.768</td>
</tr>
<tr>
<td>The opportunities of tax regulatory for firms in our industry are favorable in present time</td>
<td>.770</td>
</tr>
<tr>
<td>Government supporting provision of basic utilities to firm in our industry</td>
<td>.715</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of EF is reported in the above table. The instrument of EF contains 10 items. All items have a factor loading value greater than .4, and thus remain in the instrument. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Yong & Pearce, 2013; Field, 2009). As shown all the values are well above than the acceptable range. The value of the factor loading near to 1 is highly acceptable and good one. The figure below reports the scree plot of EF instrument. The scree plot tells us that how many items to be retained in the instrument. As shown from the scree plot, there are ten dots which tell us that EF questionnaire should contain 10 items. It is also clear from the result of the factor loading. Scree plot also indicates that which items contribute how much to the whole instrument. As shown from the scree plot the item 1 contribute more than the remaining items.
4.3.10. Factor analysis of Access to Financial Capital

Table 4.17  
KMO and Bartlett’s Test OF AFC

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>.865</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. Chi-Square</td>
<td>607.26</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity df Sig.</td>
<td>21 .000</td>
</tr>
</tbody>
</table>

The results of Bartlett’s and KMO tests of access to financial capital scale are reported in the above table. As shown, KMO value is .842 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant ($p < .05$) which further confirm the phenomena. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study.
Table 4.18
Component Matrix OF AFC

<table>
<thead>
<tr>
<th>Component</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility to financial capital exposes my business to better opportunities</td>
<td>.814</td>
</tr>
<tr>
<td>Accessibility to financial capital has led to improved business risk performance</td>
<td>.816</td>
</tr>
<tr>
<td>Accessibility to financial capital for my business is very challenging</td>
<td>.822</td>
</tr>
<tr>
<td>Access to government grants and payable-loans encourages our business Performance</td>
<td>.788</td>
</tr>
<tr>
<td>Our firm fails in raising funds for new business due to absence of venture capital Investors</td>
<td>.728</td>
</tr>
<tr>
<td>Accessibility to financial capital encourages our firm's investment in research and development</td>
<td>.772</td>
</tr>
<tr>
<td>In general, our firm has been fully satisfied for their development regarding firm’s access financial capital</td>
<td>.567</td>
</tr>
</tbody>
</table>

Component matrix or factor loading of each statement of AFC is reported in the above table. The instrument of AFC contains 7 items. All items have a factor loading value greater than .4, and thus remain in the instrument. The acceptable factor loading value for each item is .4 as suggested by previous researchers (Khattak et al., 2016; Yong & Pearce, 2013; Field, 2009). As shown all the values are well above than the acceptable range. The value of the factor loading near to 1 is highly acceptable and good one. Here, in this case except one item having a factor loading value of .567, and all the remaining values are near to 1, thus, represent the best case. The figure below reports the scree plot of AFC instrument. The scree plot tells us that how many items to be retained in the instrument. As shown from the scree plot, there are seven dots which tell us that AFC questionnaire should contain 7 items. It is also clear from the result of the factor loading. Scree plot also indicates that which items contribute how much to the whole instrument. As shown from the scree plot the item 1 contribute more than the remaining items.
KMO and Bartlett’s Test of Overall Model

Table 4.19

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .741 |
| Approx. Chi-Square                  | 9641.76 |
| Bartlett’s Test of Sphericity       | df    | 1485 |
|                                     | Sig.  | .000 |

The results of Bartlett’s and KMO tests of overall model are reported in the above table. As shown, KMO value is .741 which is well above the required value of .6 as stated earlier. Thus, KMO test confirms that we should conduct factor analysis. Similarly, the value of Bartlett’s test is significant ($p < .05$) which further confirm the phenomena. The Bartlett’s test tells about the association among the items of the instrument or variables. Significant Bartlett’s test indicates that we accept the alternate hypothesis and reject the null hypothesis. Thus, based on the above results we accept the alternate hypothesis and reject the null hypothesis of the study. It is confirmed from the table that the model used in the study is fit. There is no issue of instrument validity.

4.3.11. Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is a statistical technique that used to confirm the factor structure of a set of observed variables. Surh (2006) stated that CFA allows the scholars and researchers to examine the hypotheses that exists the relationship
between the experimental variables and their main latent construct. It entails on the development of model which is based on the theatrical principals that shows the relationship the association between the variables that the researcher are supposed to represent. The result from the also used to check distinct validity (variance extracted) and internal consistency (construct reliability), to compute composite weighted scores and to check for the discriminant and convergent validity. The table reported below shows the results of the CFA. As recommended by Arbuckle (1998), the use of Modification Indices (MI) in AMOS could improve the fit of the tested model by correlating selected parameter in the model. A MI signifies the decrease in the value of chi square when the parameter is anticipated or flowing in subsequent revised model (Hair et al. 2010). Arbuckle (1998) stated that modification strategy helps to improve the overall structural validity without having change the original factor model.

To assess the goodness of fit for the hypothesized model a number of criteria were examined. These criteria are significant to find out the equivalence the theoretical model and the sample of the data (Byrne 2010; Schumacker & Lomax 2004). Several criteria are used to measure goodness of fit. Every model fit, measure is unique and they can be categorized into three categories; absolute, incremental and parsimony fit (Hair et al. 2010; Byrne, 2010). Hair et al. (2010) also suggested that it is acceptable to combine various model fit criteria to estimate the global fit measure. Maruyama (1998) also stated that everyone report their own preferred indices. For example, Kenny and McCoach (2003) suggested that there is no reliable rule for evaluating an acceptable model and used only CFI, TLI and RMSEA in their research as common fit indices. Muenjohn and Armstrong (2008) for evaluating the structural validity used only the CMIN (χ2/df), GFI AGFI and RMSEA in their research. The current research study used the following indices for the structural validity.
Table 4.20

CFA of the Variables

<table>
<thead>
<tr>
<th>V.Name</th>
<th>CMIN</th>
<th>DF</th>
<th>CMIN/DF</th>
<th>CFI</th>
<th>TLI</th>
<th>NFI</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>361.75</td>
<td>125</td>
<td>2.889</td>
<td>.923</td>
<td>.840</td>
<td>.816</td>
<td>.845</td>
<td>.789</td>
<td>.041</td>
<td>.099</td>
</tr>
<tr>
<td>FP</td>
<td>43.63</td>
<td>18</td>
<td>2.409</td>
<td>.938</td>
<td>.904</td>
<td>.901</td>
<td>.947</td>
<td>.895</td>
<td>.047</td>
<td>.086</td>
</tr>
<tr>
<td>TL</td>
<td>57.312</td>
<td>49</td>
<td>1.170</td>
<td>.989</td>
<td>.985</td>
<td>.928</td>
<td>.952</td>
<td>.924</td>
<td>.041</td>
<td>.030</td>
</tr>
<tr>
<td>AFC</td>
<td>24.673</td>
<td>13</td>
<td>1.898</td>
<td>.980</td>
<td>.968</td>
<td>.960</td>
<td>.963</td>
<td>.921</td>
<td>.042</td>
<td>.068</td>
</tr>
<tr>
<td>EF</td>
<td>59.374</td>
<td>27</td>
<td>2.199</td>
<td>.923</td>
<td>.872</td>
<td>.873</td>
<td>.946</td>
<td>.889</td>
<td>.082</td>
<td>.079</td>
</tr>
</tbody>
</table>

The aforementioned table shows the confirmatory factor analysis of all variables of the study. The results of the confirmatory factor analysis show that entrepreneurial orientation has good model fit such as CFI value is greater than 0.90, RMR value is less than 0.06 and RMSEA value is less than 0.08. The data show that firm performance data has also good model fit such as CFI value is greater than 0.90, RMR value is less than 0.05 and RMSEA value is less than 0.09. Transformational leadership data show good model fit such as CFI value is greater than 0.90, RMR value is less than 0.05 and RMSEA value also less than threshold. Access to financial capital shows also good model fit all the value of model fit according the maximum and minimum threshold. And the last variable environmental factor also shows good model fit such as CFI value is greater than 0.90, RMR value is less than 0.05 and RMSEA value also less than 0.09. Over all confirmatory factor analysis of the variables shows that data have a good model fit.

4.3.12. Assessment of Common Method Bias

The current study is the cross sectional study. In a cross sectional research study the data collected through the same questionnaire in the same period of time. However, to answer for all questions uses of single respondents may create common method variance (CMV) or Common Method Bias (CMB) and the variance is qualified to the measurement method rather than constructs of interest (Podsakoff et al., 2012). According to Craighead et al., (2011) CMB is the amount of false correlation among the variables which is produced by using the same phenomenon to measure each variable during the survey. This bias may create systematic errors of measurement that might cause to invalid results of the relationship between the existing variables by deflating or inflating the findings of the study. According to the
suggestion which is made by the Podsakoff et al., (2003), in this study the test of the Harman single factor was used to assess the CMB. Harman single-factor test is the best and most widely used technique. In the field of entrepreneurship and leadership the researchers have used this technique to concentrate on the issue of CMB (Cheung & Wong, 2011; Salanova et al., 2011; Norris, 2008).

Podsafoff et al., (2003) stated that the test is used to categorize and measure the variables that imitate the observed construct. For this test requires all the measure loading in the study into the exploratory analysis, with the assumption that CMB is present that create from the factor analysis or a common factor accounting for the majority of the covariance between the variables. The study variables were loaded into exploratory factor analysis and using principal component analysis with the unrotated factor solution. The result from the extraction sums of squared loading showed that only 26.28% variance was certified to the measured items. From this no one common factor to account for the majority of the covariance between the items (Podsakoff et al., 2003). It can be summarized and concluded that CMB did not appear as a problem in the current study.

Table 4.21
Eigen values of Overall Model

<table>
<thead>
<tr>
<th>Component</th>
<th>Total Variance Explained</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Eigenvalues</td>
<td>Extraction Sums of Squared Loadings</td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>2</td>
<td>4.692</td>
<td>8.531</td>
</tr>
<tr>
<td>3</td>
<td>3.620</td>
<td>6.581</td>
</tr>
<tr>
<td>4</td>
<td>2.804</td>
<td>5.098</td>
</tr>
<tr>
<td>5</td>
<td>2.581</td>
<td>4.693</td>
</tr>
<tr>
<td>6</td>
<td>2.251</td>
<td>4.093</td>
</tr>
<tr>
<td>7</td>
<td>1.900</td>
<td>3.455</td>
</tr>
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<td>8</td>
<td>1.634</td>
<td>2.971</td>
</tr>
<tr>
<td>9</td>
<td>1.506</td>
<td>2.737</td>
</tr>
<tr>
<td>10</td>
<td>1.349</td>
<td>2.454</td>
</tr>
<tr>
<td>11</td>
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<td>2.328</td>
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<td>12</td>
<td>1.198</td>
<td>2.177</td>
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<td>1.364</td>
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<td>.366</td>
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<tr>
<td>55</td>
<td>.016</td>
<td>.028</td>
</tr>
</tbody>
</table>

*Extraction Method: Principal Component Analysis.*

According to Herman’s single factor variance if one factor explains less than 50%, then there is no issue of the CMB. Single factor explains only 26.282%. Therefore, the data do not violate the CMB threshold. Thus, data are free from common method bias.
4.4. **Demographic Characteristics and its Importance**

Demographic variables mean those attribute and personal characteristics of human population which researcher take into consideration while conducting a research study. The main aim of demographic variables is to determine whether there is a difference in the responses of respondents concerning a variety. In any research study, demographic variables or demographic characteristics delivered important and significant information about the personal attributes and characteristics of the respondents or a sample of the research study. It plays a significant role in presenting information about respondents in a more systematic way. All information about personal characteristics and attitudes are effectively and comprehensively provided by demographic variables. Demographic variables give us useful information about respondents. It also tells us what kind of sample is selected from the population and what kind of people are serving in the organization. This current research study was undertaken SMEs. SMEs are different types. In this current research study, different demographic variables were used in order to obtain useful information about the respondents or a sample of the study. In this current research study, the nature of the firm, gender, age, qualification is used as demographic variables.

**4.4.1. Frequency Distribution according to the Nature of SMEs**

*Table 4.22*

<table>
<thead>
<tr>
<th>SME</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>130</td>
<td>68 %</td>
</tr>
<tr>
<td>Services or ICT</td>
<td>55</td>
<td>28 %</td>
</tr>
<tr>
<td>Others</td>
<td>8</td>
<td>4 %</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Table 4.22 illustrates the result of frequency distribution of the respondents according to the nature of the SMEs. This current research study is undertaken to determine the relationship between EO and firm performance with a moderating role of environmental factors, access to financial capital and transformational leadership styles. Three types of SMEs were selected. One type of SMEs is related to the manufacturing sector, the second type of SMEs was related to the Service or ICT sector. The third type of SME was belonging to different types and they are collectively termed as “others”. It is evident from the result of this table that 130 respondents were selected from manufacturing sector SMEs. It constitutes 68% of the
total sample. 55 respondents a 28% are from the Service or ICT SMEs. The result also showed that only 8 (4%) of respondents were selected from other SMEs. The result showed that total 193 respondents are selected as a sample of the study.

4.4.2. Frequency Distribution of Respondents according to establishing year

*Table 4.23*

<table>
<thead>
<tr>
<th>Year of Establishing</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1970</td>
<td>5</td>
<td>2.6 %</td>
</tr>
<tr>
<td>1971-1980</td>
<td>22</td>
<td>11.4 %</td>
</tr>
<tr>
<td>1981-1990</td>
<td>30</td>
<td>26.4 %</td>
</tr>
<tr>
<td>1991-2000</td>
<td>51</td>
<td>55.5 %</td>
</tr>
<tr>
<td>2001 and onwards</td>
<td>85</td>
<td>44.0 %</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100 %</td>
</tr>
</tbody>
</table>

It was aimed to determine the length of services that SME has provided since its establishment. Table 4.23 shows the results of the length of establishment of the SMEs. It is cleared from the result that 5 respondents were selected from SMEs who were established before 1970. Twenty-two (22) respondents were taken from SMEs who were established between 1971 and 1980. It was also evident from the result of this table that 30 respondents were selected from SMEs which were established between 1981 and 1990. Fifty-One (51) respondents were selected from SMEs which were established between 1991 and 2000. It was also determined from this result that 85 respondents were selected from SMEs which were established after 2001. The table shows that maximum number of respondents were selected from those SMEs which were established after 2001.

4.4.3. Gender wise Frequency Distribution of the Respondents

*Table 4.24*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>146</td>
<td>76 %</td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>24 %</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Table 4.24 represents gender wise, frequency distribution of the respondents working in SMEs. The table shows that out of the total 193 respondents, 146
respondents were male and 47 respondents were female. This data also means that 76% respondents were male and 24% respondents were female.

4.4.4. Sale Wise Frequency Distribution of the SME Firms

Table 4.25
Sale Wise Frequency Distribution of the SME Firms

<table>
<thead>
<tr>
<th>Amount</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50 Million (M)</td>
<td>10</td>
<td>5 %</td>
</tr>
<tr>
<td>51M-100 M</td>
<td>49</td>
<td>25 %</td>
</tr>
<tr>
<td>101M-150 M</td>
<td>65</td>
<td>34 %</td>
</tr>
<tr>
<td>151M-200 M</td>
<td>50</td>
<td>26 %</td>
</tr>
<tr>
<td>201M and above</td>
<td>19</td>
<td>10 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>193</td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

Table 4.25 describes the annual sale of the SMEs in millions. It is evident from the result of this table that annual sale of 10 SMEs was less than 50 million. Forty-Nine (49) SMEs trade 51 – 100 million rupees annually. It was also found that 65 SMEs were trading between 101-150 Million rupees annually. Those SMEs who were trading annually between 151 to 200 million were 50 in total. Only 19 SMEs was trading above 200 million annually. It is also clear from the result that maximum number of SMEs was trading between 51 million to 200 million annually.

4.4.5. Qualification Wise Frequency Distribution of the Respondents

Table 4.26
Qualification Wise Frequency Distribution of the Respondents

<table>
<thead>
<tr>
<th>Qualification</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric</td>
<td>3</td>
<td>1 %</td>
</tr>
<tr>
<td>Inter</td>
<td>5</td>
<td>3 %</td>
</tr>
<tr>
<td>Bachelor</td>
<td>47</td>
<td>24 %</td>
</tr>
<tr>
<td>Master</td>
<td>130</td>
<td>67 %</td>
</tr>
<tr>
<td>Diploma</td>
<td>8</td>
<td>5 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>193</td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

Table 4.26 indicates qualification wise differences of the respondents. The table shows vast differences in the qualification. The result shows that maximum number of respondents had high qualification. One hundred and thirty (130) respondents had Master qualification. Forty-seven (47) respondents had bachelor
qualification. Only 1% had metric qualification, 3% had Inter qualification and 5% had a diploma certificate.

4.4.6. Designation Wise Frequency Distribution of the Respondents

<table>
<thead>
<tr>
<th>Designation</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>29</td>
<td>15 %</td>
</tr>
<tr>
<td>Top Management</td>
<td>33</td>
<td>17 %</td>
</tr>
<tr>
<td>Both 1 and 2</td>
<td>131</td>
<td>68 %</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Table 4.27 describes the designation wise, frequency distribution of the respondents. The designation is an important demographic variable and it significant affects day to day business of the organizations. It is evident from the result of this table that maximum number of respondents was the owner and also working as top manager (131). Only 15% respondents were simply the owner of the SMEs and only 17% were employed as a top manager.

4.4.7. Age wise Frequency Distribution of the Respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 30 years</td>
<td>27</td>
<td>14 %</td>
</tr>
<tr>
<td>31-40</td>
<td>63</td>
<td>33 %</td>
</tr>
<tr>
<td>41-50</td>
<td>59</td>
<td>30 %</td>
</tr>
<tr>
<td>51 and above</td>
<td>44</td>
<td>23 %</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Table 4.28 illustrates age wise frequency distribution of the respondents. The result shows that 27 respondents had age below thirty (30) years. There were 63 respondents who were between 31 and 40 years of age. The result shows that 59 respondents had age between 41-50 years. Only 44 respondents had age above 51 years.
4.5. Descriptive Statistics

Table 4.29
Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. D</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>2</td>
<td>5</td>
<td>3.46</td>
<td>.835</td>
<td>.132</td>
<td>-1.47</td>
</tr>
<tr>
<td>INV</td>
<td>2</td>
<td>5</td>
<td>3.49</td>
<td>.826</td>
<td>.049</td>
<td>-1.41</td>
</tr>
<tr>
<td>RA</td>
<td>2</td>
<td>5</td>
<td>3.48</td>
<td>.821</td>
<td>.106</td>
<td>-1.46</td>
</tr>
<tr>
<td>PA</td>
<td>2</td>
<td>5</td>
<td>3.48</td>
<td>.842</td>
<td>.064</td>
<td>-1.42</td>
</tr>
<tr>
<td>FP</td>
<td>2</td>
<td>5</td>
<td>3.86</td>
<td>.640</td>
<td>-.790</td>
<td>-1.43</td>
</tr>
<tr>
<td>TL</td>
<td>2</td>
<td>5</td>
<td>3.59</td>
<td>.878</td>
<td>.059</td>
<td>-.975</td>
</tr>
<tr>
<td>AFC</td>
<td>2</td>
<td>5</td>
<td>3.58</td>
<td>.861</td>
<td>.073</td>
<td>.873</td>
</tr>
<tr>
<td>EF</td>
<td>2</td>
<td>5</td>
<td>3.37</td>
<td>.608</td>
<td>-.267</td>
<td>-.813</td>
</tr>
</tbody>
</table>

Descriptive statistics of the study variables are reported in the above table. As depicted, the table report minimum, maximum, mean, standard deviation, skewness and kurtosis statistics. As per Hair et al, (2006) criteria, the value of skewness and kurtosis falls in the acceptable range indicating that there is no significant outliers in the data. Thus, the data of the current study is normally distributed.

4.6. Result of Regression Analysis

Regression analysis is a statistical technique or approach which is used to forecast change in predicted or dependent variable as a result or effect of the dependent variable. Regression analysis represents only associative relationship between variables. Regression analysis finds the conditional expectation of the dependent variable. Before applying regression analysis to a research study, there are certain assumptions for regression analysis. These assumptions are essential to be fulfilled before applying regression analysis. Following are the assumptions of regression analysis.

4.6.1. Assumptions of Regression Analysis

4.6.1.1. Interval Scale or Ratio Scale should be used for Dependent Variable

The first assumption of regression analysis is about how to present data of the dependent variable. It states that data of dependent variable should be measured on an interval scale. For the current research study, a survey questionnaire was used for data collection. To measure the responses of the respondents, five point Likert scale applied in order to assess’ responses of the respondents. This scale was ranged from
‘1’ strongly disagree to ‘5’ strongly agree. It is shown that data was collected and measured on an interval scale. However, there are some researchers who do not accept Likert scale as interval scale. They consider it nominal scale. However, most of the researchers are of the view that using five points for Likert scale make it as interval scale. So, the first condition for applying regression analysis is meted out.

4.6.1.2. Two or more Independent Variables are present in Regression Model

The regression model is of two types. One is a linear regression model in which one independent variable has an effect on the dependent variable. In multiple regression two or more independent variables have an effect on the dependent variable. In this current research study, moderating variable was used to find the moderating effect on the relationship between independent variable and dependent variable. Categorical and nominal scale was used to measure independent and moderating variable and interval scale is used to measure dependent variable.

4.6.1.3. Data should be free from Autocorrelation

This is an important assumption of regression analysis model. Before applying regression analysis, autocorrelation should be checked out. Autocorrelation means that responses of all respondents or sample of the study should represent independence of residual. There should be no autocorrelation in the data or residual of different sample responses. The acceptable range of Durbin Watson value is from 0 to 4. However, most of the researchers accept the value between 1.5 and 2.5 as good one. The following table illustrates the result of Durbin Watson Statistic.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>DW Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Orientation</td>
<td>Firm Performance</td>
<td>1.65</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>Firm Performance</td>
<td>1.63</td>
</tr>
<tr>
<td>Risk Attitude</td>
<td>Firm Performance</td>
<td>1.66</td>
</tr>
<tr>
<td>Pro-Activeness</td>
<td>Firm Performance</td>
<td>1.95</td>
</tr>
</tbody>
</table>

The above table shows the Durbin Watson value of dependent and independent variables. Result declares that all values above are 1.5, which lies in the acceptable range. Hence it is clear from these values that there is no issue of autocorrelation in the data.
4.6.1.4. Data should Contain Homoscedasticity

Homoscedasticity is a term which is used to describe a situation in which the error term is the same across all values of the independent variable. Error term means random disturbance in the relationship between independent variable and dependent variable. It means that the variance of the residual along the line of best fit remains the same as the line moves. To check homoscedasticity on the data, we plot standardized residual against unstandardized predicted value. For this purpose, we plot on X-axis “ZPRED” and plot “ZRESID” on Y-axis. After plotting these two values, add a trend line to it. If the trend line is parallel to X-axis or it is equal or near to zero, it means that there is homoscedasticity in the data. The following figures and graphs show that there is homoscedasticity in the data and thus the fourth assumption of linear regression is also meted out.

4.6.1.5. Regression Residual Scatter plot for Firm Performance and EO

The following graph shows the value of standardized predicted and Standardized Residual of the EO and firm performance. The important point is the slope of the regression line. The graph shows that the slope line of the regression residual is equal to zero and also parallel to X-axis. This shows that there is homoscedasticity in the data.

![Scatter Plot of FP and EO](image)

*Figure 4.9: Scatter Plot of FP and EO*
4.6.1.6. Data should not Contain Multicollinearity

The fourth assumption of regression analysis states that data should be free from multicollinearity. This is applicable in multiple regressions where more than one independent variable is involved. The main problem of multicollinearity is that in the presence of multicollinearity one may not be able to describe that how much and what extent an independent variable is responsible for variance independent variable. Multicollinearity assumption is not valid for linear regression model. In a linear regression model only one independent and dependent variables are involved. In multiple regressions, if there is a high correlation between two independent variables it means that there is multicollinearity in the data. Multicollinearity in the data is detected by running estimate VIF/ Tolerance value. Through this test, multicollinearity in data is detected. If the VIF value is 1-10, it shows no issue of multicollinearity. VIF value is always greater than 1. This current research study analyzes the data in linear regression analysis.

4.6.1.7 Data should be free from Significant Outliers

This is the sixth assumption of regression analysis. It states that data should be free from significant outlier. If outlier exists in data it may result in biased regression coefficient and it will further affect the result of regression coefficient. This also changes significantly the outputs produced by the regression model. Box plots of the study variables are shown below. It is evident from the box plots that there is no significant outlier in the data.
4.6.2. Results of Regression Analysis

4.6.2.1. Results of Regression Analysis of EO and Firm Performance

Table 4.31a
Regression Analysis of Entrepreneurial Orientation and Firm Performance
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.707</td>
<td>.499</td>
<td>.497</td>
<td>.450</td>
<td>1.65</td>
</tr>
</tbody>
</table>

Predictor: (constant), Entrepreneurial Orientation
Dependent Variable: Firm Performance

Table 4.31a illustrates model summary results of EO and firm performance of regression analysis. The R value is .707 and R² value is .499. This R² indicates that there is 49.9% variance in our dependent variable as a result of our independent variable. Here DW value is 1.65 and it shows that there is no issue of autocorrelation in the data.

Table 4.31b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>38.551</td>
<td>1</td>
<td>38.551</td>
<td>190.44</td>
<td>.00</td>
</tr>
<tr>
<td>1 Residual</td>
<td>38.664</td>
<td>191</td>
<td>.202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77.214</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance
Predictor: (constant), Entrepreneurial Orientation

Table 4.31b describes the ANOVA result of EO and firm performance. F value is 190.44. This value of F-Statistic shows that model is fit. The P value is also significant as p < .05. It also shows model fitness.

Table 4.31c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.635</td>
<td>.046</td>
<td>.707</td>
<td>9.83</td>
</tr>
</tbody>
</table>

Table 4.31c indicates the result of regression coefficients for EO and firm performance. This t-value is significant at .05 level of confidence. The coefficient (B) value of EO is .635. This coefficient value also shows that a unit change in independent variable will bring a .635 unit change in dependent variable. The P-value is less than .05. It means that EO is significantly and positively related to firm performance.
Figure 4.10: Histogram of EO and FP

The figure reported above represents a histogram of EO and firm performance. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual means is almost equal to zero. We can say that our data is normal.

Figure 4.11: Normal PP Plot of EO and FP

The Normal PP Plot of study variable, namely EO and FP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumptions of both simple and multiple regression is fulfill.
4.6.2.2. Results of Regression Analysis of EO and Firm Performance Growth

Table 4.32a
Regression Analysis of EO and Firm Performance Growth
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.668</td>
<td>.446</td>
<td>.443</td>
<td>.544</td>
<td>1.62</td>
</tr>
</tbody>
</table>

Predictor: (constant), EO
Dependent Variable: Firm Performance Growth

Table 4.32a shows model summary $R$ value is .668 and $R^2$ value is .446. It is evident from the result of the table that our independent variable explains 44.6% variance in dependent variable. The result also shows that there is no issue of autocorrelation in the data because $DW$ Statistic value is 1.62 which is in the acceptable range.

Table 4.32b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>45.419</td>
<td>1</td>
<td>45.419</td>
<td>153.651</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>56.459</td>
<td>191</td>
<td>.296</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101.87</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: FPG
Predictor: (constant), EO

Table 4.32b illustrates the ANOVA result of regression. $F$-statistic value is 153.651. It means that the model is fit as $p$-sig value is less than .05 ($p<.05$).

Table 4.32c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.392</td>
<td>.199</td>
<td>6.996</td>
<td>.00</td>
</tr>
<tr>
<td>EO</td>
<td>.689</td>
<td>.056</td>
<td>.668</td>
<td>12.39</td>
</tr>
</tbody>
</table>

Table no 4.32c describes the coefficient of regression analysis result of EO and firm performance growth. EO coefficient value is .689, which shows that a unit change in independent variable brings .689-unit change in dependent variable. $T$-value is 12.39 which also show significance at .05 level of confidence. Beta value is .668. It also shows a positive relationship between the variables. $P$-value is .00 which is less than .05, which shows significant relationship between EO and FPG.
Figure 4.12: Histogram of EO and FPG

The figure reported above represents a histogram of EO and firm performance growth. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual means is almost equal to zero. We can say that our data is normal.

Figure 4.13: Normal PP of EO and FPG

The Normal PP Plot of study variable, namely EO and FPG is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumptions of both simple and multiple regression is fulfill.
4.6.2.3. Results of Regression Analysis of EO and Firm Performance Profitability

Table 4.33a
Regression Analysis of EO and Firm Performance Profitability

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.608</td>
<td>.370</td>
<td>.367</td>
<td>485</td>
<td>1.71</td>
</tr>
</tbody>
</table>

Predictor: (constant), EO
Dependent Variable: FPP

Table 4.33a represents the model summary result of regression analysis for EO and FPP. It is evident from the result of the table that our independent variable explains 37.0% variance independent variable as $R^2$ value is .370. The Durbin Watson Statistic value is 1.71 which is in the acceptable range.

Table 4.33b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>26.342</td>
<td>1</td>
<td>26.342</td>
<td>112.105</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>44.881</td>
<td>191</td>
<td>.235</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>71.223</td>
<td>192</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: FPP
Predictor: (constant), EO

Table 4.33b illustrates the ANOVA result of regression for EO and FPP. It means that model is fit as $p$-sig value is .00 which is less than .05 ($p < .05$).

Table 4.33c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.048</td>
<td>.177</td>
<td>11.539</td>
<td>.00</td>
</tr>
<tr>
<td>EO</td>
<td>.525</td>
<td>.608</td>
<td>10.58</td>
<td>.00</td>
</tr>
</tbody>
</table>

Table no 4.33c describes the coefficient of regression analysis result of EO and firm performance profitability. EO coefficient value is .582 which shows that a unit change in independent variable brings .525-unit change in dependent variable. $T$-value is 11.539 which also show significance at .05 level of confidence. Beta value is .608. It also shows a positive relationship between the variables. $P$-value is .00 which is less than .05. It means that there is a positive and significant relationship between EO and FPP.
The figure reported above represents a histogram of entrepreneurial orientation and firm performance profitability. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual means is almost equal to zero. We can say that our data is normal.

The Normal PP Plot of study variable, namely EO and FPP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.
4.6.2.4. Results of Regression Analysis of Innovativeness and Firm Performance

Table 4.34a
Regression Analysis of Innovativeness and Firm Performance
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.653</td>
<td>.427</td>
<td>.424</td>
<td>.481</td>
<td>1.63</td>
</tr>
</tbody>
</table>

Predictor: (constant), Innovativeness (INV)
Dependent Variable: Firm Performance

Table 4.34a represents the model summary result of regression analysis of innovativeness and firm performance. It is evident from the result of the table that our independent variable explains 42.7% variance in dependent variable as $R^2$ value is .427. The DW Statistic value is 1.63 which is in the acceptable range.

Table 4.34b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32.941</td>
<td>1</td>
<td>32.941</td>
<td>142.10</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>44.273</td>
<td>191</td>
<td>.232</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77.214</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance
Predictor: (constant), Innovativeness (INV)

Table 4.34b illustrates the ANOVA result of regression analysis. $F$-statistic value is 142.10. It means that model is fit as $p$-sig value is less than .05 ($p < .05$).

Table 4.34c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.029</td>
<td>.157</td>
<td>12.96</td>
<td>.00</td>
</tr>
<tr>
<td>INV</td>
<td>.526</td>
<td>.044</td>
<td>.653</td>
<td>11.92 .00</td>
</tr>
</tbody>
</table>

Table 4.34c describes coefficient of regression analysis result of innovativeness and firm performance. Innovativeness is the sub-facet of entrepreneurial orientation and it was used as independent variables. Coefficient value is .526 which shows that a unit change in independent variable brings .52 unit changes in dependent variable. $T$-value is 11.28 which also show significance at .05 level of confidence. Beta value is .653. It also shows a positive relationship between the variables. $P$-value is .00 which is less than .05. It means that there is a positive and significant relationship between innovativeness and firm performance.
The figure reported above represents a histogram of innovativeness and firm performance. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

The Normal PP Plot of study variable, namely INV and FP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.
4.6.2.5. Results of Regression Analysis of Risk Attitude and Firm Performance

**Table 4.35a**  
*Regression Analysis of Risk Attitude and Firm Performance*  
*Model Summary*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.539</td>
<td>.290</td>
<td>.286</td>
<td>.536</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Predictor: (constant), Risk Attitude (RA)  
Dependent Variable: Firm Performance

In the above table 4.35a, the result of model summary of regression analysis for risk attitude and firm performance was shown. The result shows that $R^2$ value is .290. $R^2$ value means that our independent variable explains 29% variance in dependent variable. $DW$ value is 1.66. It shows that there is no issue of autocorrelation in the data.

**Table 4.35b**  
*ANOVA*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>22.406</td>
<td>1</td>
<td>22.406</td>
<td>78.08</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>54.808</td>
<td>191</td>
<td>0.287</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77.214</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance  
Predictor: (constant), Risk Attitude (RA)

Table 4.35b describes ANOVA result of the regression model for Risk Attitude and firm performance. Degree of freedom value is 192. $F$-statistic value is 78.08. It shows model fitness. $P$ value is also significant at 95% confidence level. It also shows that model is fit.

**Table 4.35c**  
*Coefficient*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.207</td>
<td>0.190</td>
<td>11.62</td>
<td>.00</td>
</tr>
<tr>
<td>RA</td>
<td>.468</td>
<td>0.053</td>
<td>.539</td>
<td>8.836</td>
</tr>
</tbody>
</table>

Table 4.35c describes the regression coefficient result of risk attitude and firm performance. $T$-value is 11.62 which is significant at .05 level of significance. Beta value is .53 which shows that a unit change in our independent variable will bring .53 unit-changes in dependent variable. $P$-value is .00 which is less than .05. It shows that there is a significant relationship between risk attitude and firm performance.
Figure 4.18: Histogram of RA and FP

The figure reported above represents a histogram of risk attitude and firm performance. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

Figure 4.19: Normal PP Plot of RA and FP

The Normal PP Plot of study variable, namely RA and FP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line
which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

### 4.6.2.6. Results of Regression Analysis of Pro-activeness and Firm Performance

#### Table 4.36a

Regression Analysis of Pro-activeness and Firm Performance

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.668</td>
<td>.446</td>
<td>.444</td>
<td>0.473</td>
<td>1.95</td>
</tr>
</tbody>
</table>

Predictor: (constant), Pro-activeness (PA)
Dependent Variable: Firm Performance

Table 4.36a illustrates model summary results of Pro-activeness and firm performance. The R value is .668 and $R^2$ value is .446. This $R^2$ indicates that there is 44.6% variance in our dependent variable as a result of our independent variable. DW value is 1.95 and it shows that there is no issue of autocorrelation in the data.

#### Table 4.36b

ANOVA

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>34.476</td>
<td>154.072</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>191</td>
<td>0.224</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>77.214</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance
Predictor: (constant), Pro-activeness (PA)

Table 4.36b describes the ANOVA result of Pro-activeness and firm performance. $F$ value is 154.072. This value of $F$- Statistic shows that model is fit. The $P$ value is also significant as $p<.05$. It also shows model fitness.

#### Table 4.36c

Coefficient

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.858</td>
<td>0.164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>.552</td>
<td>.044</td>
<td>.668</td>
<td>12.413</td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance

Table 4.36c indicates the result of regression coefficients for Pro-activeness and firm performance. It is evident from the table that $t$-value is 11.32. The coefficient (B) value of Pro-activeness is .552. This positive value means that if Pro-activeness increases, it will positively and significantly increase firm performance. This
coefficient value also shows that a unit change in independent variable will bring a .552-change in dependent variable.

![Histogram of PA and FP](image)

**Figure 4.20: Histogram of PA and FP**

The figure reported above represents a histogram of pro-activeness and firm performance. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

![Normal PP Plot of PA and FP](image)

**Figure 4.21: Normal PP Plot of PA and FP**
The Normal PP Plot of study variable, namely PA and FP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

4.6.2.7. Results of Regression Analysis of Innovativeness and FPG

Table 4.37a
Regression Analysis of Innovativeness and Firm Performance Growth
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.657</td>
<td>.431</td>
<td>.428</td>
<td>.551</td>
<td>1.58</td>
</tr>
</tbody>
</table>

Predictor: (constant), Innovativeness
Dependent Variable: Firm Performance growth

Table 4.37a represents the model summary result of regression analysis for innovativeness and firm performance growth. It is evident from the result of this table that innovativeness explains 43.1% variance in dependent variable as $R^2$ value is .431. The result also shows that there is no issue of autocorrelation in the data because $DW$ Statistic value is 1.58 which is in the acceptable range.

Table 4.37b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>43.926</td>
<td>1</td>
<td>43.926</td>
<td>144.76</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>57.953</td>
<td>191</td>
<td>0.303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101.87</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance growth
Predictor: (constant), Innovativeness (INV)

Table 4.37b illustrates the ANOVA result of regression for the innovativeness firm performance growth. $F$-statistic value is 144.76. It means that the model fits as $p$-sig value is .00 which is less than .05 ($p < .05$).

Table 4.37c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.710</td>
<td>.179</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INV</td>
<td>.607</td>
<td>.050</td>
<td>.657</td>
<td>12.032</td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Growth

Table 4.37c describes the coefficient of regression analysis result of innovativeness and firm performance growth. $T$-value is 9.45 which also show
significance at .05 level of confidence. Beta value is .657. It also shows a positive relationship between the variables. *P*-value is .00 which is less than .05. It means that there is a positive and significant relationship between innovativeness and firm performance growth.

The figure reported above represents a histogram of innovativeness and firm performance growth. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.
The Normal PP Plot of study variable, namely INV and FPG is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

4.6.2.8. Results of Regression Analysis of Risk Attitude and FPG

*Table 4.38a*
Regression Analysis of Risk Attitude and Firm Performance Growth
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.520</td>
<td>.270</td>
<td>.266</td>
<td>0.624</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Predictor: (constant), Risk attitude (RA)
Dependent Variable: Firm Performance Growth

The above table 4.38a represents the result of model summary for risk attitude and firm performance growth. R-square value means that risk attitude explains 27% variance in firm performance growth. DW statistic value is 1.66 which lies in the acceptable range.

*Table 4.38b*
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>27.505</td>
<td>1</td>
<td>27.505</td>
<td>70.63</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>74.373</td>
<td>191</td>
<td>0.389</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101.87</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Growth, Growth
Predictor: (constant), Risk Attitude (RA)

Table 4.38b describes the ANOVA result of Risk Attitude and firm performance growth. F-statistic value is 70.63. It shows model fitness. The $P$ value is also significant at 95% confidence level. It also shows that model is fit.

*Table 4.38c*
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.992</td>
<td>.221</td>
<td></td>
<td>.00</td>
</tr>
<tr>
<td>RA</td>
<td>.51</td>
<td>.062</td>
<td>.520</td>
<td>8.405</td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Growth

Table 4.38c describes the regression coefficient result of risk attitude and firm performance growth. The result shows that $t$-value is 9.01 which is significant at 0.05 level of significance. Beta value is .520 which shows that a unit change in
independent variable will bring .52-unit change in dependent variable. *P*-value is .00 which is less than .05 ($p < .05$). It indicates that there is a significant relationship between risk attitude and firm performance growth.

![Histogram of RA and FPG](image1.png)

*Figure 4.24: Histogram of RA and FPG*

The figure reported above represents a histogram of risk attitude and firm performance growth. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

![Normal PP Plot of RA and FPG](image2.png)

*Figure 4.25: Normal PP Plot of RA and FPG*
The Normal PP Plot of study variable namely RA and FPG is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

4.6.2.9. Results of Regression Analysis of Pro-activeness and FPG

Table 4.39a
Regression Analysis of Pro-Activeness and Firm Performance Growth
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.571</td>
<td>.326</td>
<td>.322</td>
<td>0.600</td>
<td>1.93</td>
</tr>
</tbody>
</table>

Predictor: (constant), Pro-Activeness
Dependent Variable: Firm Performance Growth

Table 4.39a illustrates the result of model summary of regression analysis for pro-actively and firm performance growth. R value is .571 and $R^2$ is .326. It is cleared from this $R^2$ value that independent variable explains 32.6 % variance in dependent variable. DW value is 1.93. This value is in the acceptable range.

Table 4.39b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>33.214</td>
<td>1</td>
<td>33.214</td>
<td>92.38</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>68.665</td>
<td>191</td>
<td>0.360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101.87</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Growth
Predictor: (constant), pro-activeness

The above table shows the ANOVA result of the regression of Pro-activeness and firm performance growth. The result indicates that the $F$-statistic value is 92.38. It means that model of for both variables are fit.

Table 4.39c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.857</td>
<td>.208</td>
<td>11.50</td>
<td>.00</td>
</tr>
<tr>
<td>PA</td>
<td>.542</td>
<td>.056</td>
<td>.571</td>
<td>9.61</td>
</tr>
</tbody>
</table>

Dependent variable: Firm Performance Growth

In the above table of 4.39c, result of regression coefficients for the independent variable and dependent variable is given. The result indicates that $\beta$ value is .571. It tells that a unit change in our independent variable will bring .571 changes
in dependent variable. The $P$-value is .00, which is ($p < .05$). It is determined from this result that there is a significant and positive relationship between risk attitude and firm performance growth.

![Histogram of PA and FPG](image)

**Figure 4.26: Histogram of PA and FPG**

The figure reported above represents a histogram of pro-activeness and firm performance growth. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

![Normal PP Plot of PA and FPG](image)

**Figure 4.27: Normal PP Plot of PA and FPG**
The Normal PP Plot of study variable, namely PA and FPG are reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

4.6.2.10. Results of Regression Analysis of Innovativeness and FPP

Table 4.40a

Regression Analysis of Innovativeness and Firm Performance Profitability

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.566</td>
<td>.321</td>
<td>.317</td>
<td>.503</td>
<td>1.73</td>
</tr>
</tbody>
</table>

Predictor: (constant), Innovativeness
Dependent Variable: Firm Performance Profitability

Table 4.40a illustrates model summary regression analysis. $R^2$ value is .321. This $R^2$ indicates that there is 32.1% variance in dependent variable as a result of independent variable. $DW$ value is 1.73 and it shows that there is no issue of autocorrelation in the data.

Table 4.40b

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>22.852</td>
<td>1</td>
<td>22.852</td>
<td>90.236</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>48.371</td>
<td>191</td>
<td>.253</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.223</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Profitability
Predictor: (constant), Innovativeness

Table 4.40b describes the ANOVA result of Innovativeness and firm performance profitability. This value of $F$- Statistic shows that model is fit. The $p$ value is also significant as $p < .05$. It also shows model fitness.

Table 4.40c

Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.374</td>
<td>.164</td>
<td></td>
<td>14.50</td>
<td>.00</td>
</tr>
<tr>
<td>EO</td>
<td>.438</td>
<td>.046</td>
<td>.566</td>
<td>9.94</td>
<td>.00</td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Profitability

Table 4.40c indicates the result of regression coefficients for Innovativeness and firm performance profitability. This coefficient value also shows that a unit
change in independent variable will bring a .438 unit change in dependent variable. *P-value* is 0.00. It means that innovativeness is significantly and positively related to firm performance profitability.

**Figure 4.28: Histogram of INV and FPP**

The figure reported above represents a histogram of innovativeness and firm performance profitability. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

**Figure 4.29: Normal PP Plot of INV and FPP**
The Normal PP Plot of study variable, namely INV and FPP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

4.6.2.11. Results of Regression Analysis of Risk Attitude and FPP

Table 4.41a
Regression Analysis of Risk Attitude and Firm Performance Profitability
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.506</td>
<td>.256</td>
<td>.252</td>
<td>.527</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Predictor: (constant), Risk Attitude
Dependent Variable: Firm Performance Profitability

Table 4.41a describes a model summary of regression analysis of Risk-Attitude and firm performance profitability. The $R^2$ value is 0.256. The $DW$ statistic value is 1.67. It means that there is no issue of autocorrelation in the data.

Table 4.41b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>18.248</td>
<td>65.795</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>191</td>
<td>.277</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.223</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Profitability
Predictor: (constant), Risk Attitude

Table 4.41b shows the ANOVA result of regression analysis of the Risk-Attitude and firm performance profitability. $F$ value is 65.79. It shows that model is fit. $P$-value is also significant at .05 level of significance.

Table 4.41c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.408</td>
<td>.751</td>
<td>12.90</td>
<td>.00</td>
</tr>
<tr>
<td>RA</td>
<td>.422</td>
<td>.052</td>
<td>.506</td>
<td>8.11</td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Profitability

Table 4.41c illustrates the result of regression coefficient of risk attitude and firm performance profitability. $P$-Value is .00 which is less than .05 ($p < .05$). It means that there is a significant relationship between risk attitude and firm performance, profitability at 95% confidence level. The table shows that $B$ value is .422. It means
that a unit change in our risk attitude will bring .442 unit changes in firm performance, profitability.

**Figure 4.30: Histogram of RA and FPP**

The figure reported above represents a histogram of risk attitude and firm performance. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

**Figure 4.31: Normal PP Plot of RA and FPP**

The Normal PP Plot of study variable, namely RA and FPP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line
which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

4.6.2.12. Results of Regression Analysis of Pro-activeness and FPP

**Table 4.42a**
Regression Analysis of Pro-Activeness and Firm Performance Profitability

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.549</td>
<td>.302</td>
<td>.298</td>
<td>.510</td>
<td>1.53</td>
</tr>
</tbody>
</table>

Predictor: (constant), Pro-Activeness
Dependent Variable: Firm Performance Profitability

Table 4.42a describes a model summary of regression analysis. The table shows that $R^2$ value is .302. It means that independent variable illustrates 30.2% variance in dependent variable. $DW$ statistic value is 1.53, which indicates that there is no issue of autocorrelation in the data.

**Table 4.42b**
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>21.487</td>
<td>1</td>
<td>21.487</td>
<td>82.517</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>49.736</td>
<td>191</td>
<td>.260</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.223</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Profitability
Predictor: (constant), Pro-Activeness

Table 4.42b shows the ANOVA result of the pro-activeness and firm performance profitability. $F$ value is 82.51. It shows that model is fit. $P$-value is also significant at 0.05 level of significance.

**Table 4.42c**
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.31</td>
<td>.703</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>.436</td>
<td>.048</td>
<td>.550</td>
<td>9.084</td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance Profitability

Table 4.42c illustrates the result of regression coefficient of pro-activeness and firm performance profitability. The result shows that firm performance, profitability is significantly related to pro-activeness. $P$ value is .00 which is less than .05 ($p < .05$). It means that there is a significant relationship between pro-activeness and firm performance, profitability at 95% confidence level. The table shows that $B$ value is
.436. It means that a unit change in our pro-activeness will bring .436 unit changes in firm performance profitability.

![Histogram of PA and FPP](image1)

**Figure 4.32: Histogram of PA and FPP**

The figure reported above represents a histogram of pro-activeness and firm performance. The figure shows that the data is lying in the center, because all the data is lies in the U shaped curve. The upper right corner of the graph shows that residual mean is almost equal to zero. We can say that our data is normal.

![Normal PP Plot of Regression Standardized Residual](image2)

**Figure 4.33: Normal PP of PA and FPP**

The Normal PP Plot of study variable, namely PA and FPP is reported in the above figure. As shown from the figure, the data is almost lies in the straight line.
which indicate that the data is normally distributed. Thus, one of the basic assumption of both simple and multiple regression is fulfill.

4.6.2.12. Multiple Regression Analysis of DV and IV

Table 4.43a
Regression Analysis of EO and Firm Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.809</td>
<td>.649</td>
<td>.644</td>
<td>.379</td>
<td>1.601</td>
</tr>
</tbody>
</table>

Predictor: (constant), Pro-Activeness
Dependent Variable: Firm Performance Profitability

Table 4.43a describes a model summary of regression analysis of EO and firm performance. The table shows that $R^2$ value is 0.649. It means that our independent variable EO (Innovativeness, pro-activeness, Risk attitude) illustrates 64.9% variance in dependent variable. DW statistic value is 1.601. It means that there is no issue of autocorrelation in the data.

Table 4.43b
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50.121</td>
<td>3</td>
<td>16.707</td>
<td>116.55</td>
<td>.00</td>
</tr>
<tr>
<td>Residual</td>
<td>27.093</td>
<td>189</td>
<td>.143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77.214</td>
<td>192</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance
Predictor: (constant), INV, RA, PA

Table 4.43b shows the ANOVA result of regression analysis of the INV, RA and PA and firm performance. $F$ value is 116.55. It shows that model is fit. $P$-value is also significant at 0.05 level of significance.

Table 4.43c
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.249</td>
<td>.144</td>
<td>8.693</td>
<td>.000</td>
</tr>
<tr>
<td>INV</td>
<td>.192</td>
<td>.061</td>
<td>.250</td>
<td>3.151</td>
</tr>
<tr>
<td>RA</td>
<td>.327</td>
<td>.079</td>
<td>.392</td>
<td>4.110</td>
</tr>
<tr>
<td>PA</td>
<td>.205</td>
<td>.052</td>
<td>.248</td>
<td>3.947</td>
</tr>
</tbody>
</table>

Dependent Variable: Firm Performance

Table 4.43c illustrates the coefficient results of multiple regression analysis of independent variables and dependent variable. The result shows that Innovativeness, Risk attitude and pro-activeness significantly related firm performance. $P$ values is .00 which is less than .05 ($p < .05$) for all variables. It means that there is a significant
relationship between independent variables and dependent variable at 95% confidence level.

### 4.7. Moderation Analysis

#### 4.7.1 Moderating Effect of Transformational Leadership on the Relationship between EO and Firm Performance

*Table 4.44a*

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
</tr>
<tr>
<td>.621</td>
</tr>
</tbody>
</table>

Table 4.44a shows a model summary of the moderating variable. $R^2$ value indicates that there is 38.6% variance in the dependent variable because of the independent variable. The high value of the F-statistic indicates good model fitness. P-value is .00 which is less than .05.

*Table 4.44b*

<table>
<thead>
<tr>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>TL</td>
</tr>
<tr>
<td>EO</td>
</tr>
<tr>
<td>Int_1</td>
</tr>
</tbody>
</table>

Table 4.44b illustrates the result of the moderating effect of TL style on the relationship between EO and firm performance. In the above table, last row shows the moderating result of the interaction term of transformational leadership style. The $p$ value of interaction term is .0 which is less than .05. It is evident from this result that transformational leadership style significantly moderates the relationship between EO and firm performance. The interaction plot reported below also confirms the moderating role of the TL on EO and FP relationship.

![Interaction Plot](image-url)
4.7.2. Moderating Effect of Transformational Leadership on the relationship between Innovativeness and Firm Performance

Table 4.45a
Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.630</td>
<td>.397</td>
<td>.251</td>
<td>61.995</td>
<td>3.00</td>
<td>189.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.45a shows a model summary of the moderating variable. The table shows that $R^2$ value is 397. It means that there is 37.9% variance independent variable as a result of the independent variable. $F$-statistic value is 61.995. $P$-value is .00 which is less than .05.

Table 4.45b
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.731</td>
<td>.051</td>
<td>73.123</td>
<td>.000</td>
<td>3.630</td>
<td>3.832</td>
</tr>
<tr>
<td>TL</td>
<td>.166</td>
<td>.087</td>
<td>1.916</td>
<td>.057</td>
<td>-.005</td>
<td>.337</td>
</tr>
<tr>
<td>INV</td>
<td>.285</td>
<td>.096</td>
<td>2.960</td>
<td>.003</td>
<td>.095</td>
<td>.474</td>
</tr>
<tr>
<td>Int_1</td>
<td>.210</td>
<td>.055</td>
<td>3.826</td>
<td>.000</td>
<td>.102</td>
<td>.318</td>
</tr>
</tbody>
</table>

In the above table 4.45b, last row shows the moderating result of the interaction term of transformational leadership style. The $p$ value of interaction term is .0 which is less than .05. It shows that moderating variable significantly moderate relationship between independent variable and dependent variable. It is evident from this result that transformational leadership style significantly moderates the relationship between innovativeness and firm performance. The interaction plot reported below also confirms the moderating role of the TL on INV and FP relationship.

Figure 4.34: Interaction Plot of TL, EO and FP
4.7.3. Moderating Effect of Transformational Leadership on the Relationship between Risk Attitude and Firm Performance

**Table 4.46a**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R²</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.635</td>
<td>.404</td>
<td>.248</td>
<td>79.639</td>
<td>3.00</td>
<td>189.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.46a describes a model summary of the moderating variable effect. The above table shows that $R$-square value is .404. This value of $R$-square indicates that our independent variable explains 40.4% variance in dependent variable. The high value of the $F$-statistic indicates good model fitness.

**Table 4.46b**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Model</th>
<th>coeffs</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>LLCI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>3.712</td>
<td>.046</td>
<td>80.623</td>
<td>.000</td>
<td>3.621</td>
<td>3.803</td>
</tr>
<tr>
<td></td>
<td>TL</td>
<td>.180</td>
<td>.067</td>
<td>2.693</td>
<td>.008</td>
<td>.048</td>
<td>.312</td>
</tr>
<tr>
<td></td>
<td>RA</td>
<td>.263</td>
<td>.077</td>
<td>3.401</td>
<td>.001</td>
<td>.111</td>
<td>.416</td>
</tr>
<tr>
<td></td>
<td>Int_1</td>
<td>.239</td>
<td>.048</td>
<td>4.949</td>
<td>.000</td>
<td>.143</td>
<td>.334</td>
</tr>
</tbody>
</table>

Table 4.46b illustrates the result of the moderating effect of transformational leadership style on the relationship between risk attitude and firm performance. It is evident from the result of this table that $p$ value of interaction term is .0 which is less than .05. This result indicates that transformational leadership style significantly moderates the relationship between risk attitude and firm performance. The interaction plot reported below also confirms the moderating role of the TL on RA and FP relationship.

**Figure 4.35: Interaction Plot of TL, INV and FP**

**Figure 4.36: Interaction Plot of TL, RA and FP**
4.7.4. Moderating Effect of Transformational Leadership on the Relationship between Pro-Activeness and Firm Performance

Table 4.47a
Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.627</td>
<td>.393</td>
<td>.253</td>
<td>79.263</td>
<td>3.000</td>
<td>189.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.47a shows a model summary of the moderating variable. $R^2$ value indicates that there is 39.3% variance independent variable as a result of the independent variable. The high value of the $F$-statistic indicates good model fitness. P-value is .00 which is less than .05.

Table 4.47b
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.707</td>
<td>.047</td>
<td>79.257</td>
<td>.000</td>
<td>3.61</td>
<td>3.800</td>
</tr>
<tr>
<td>TL</td>
<td>.222</td>
<td>.066</td>
<td>3.387</td>
<td>.001</td>
<td>.093</td>
<td>.352</td>
</tr>
<tr>
<td>PA</td>
<td>.202</td>
<td>.075</td>
<td>2.708</td>
<td>.007</td>
<td>.055</td>
<td>.350</td>
</tr>
<tr>
<td>Int_1</td>
<td>.242</td>
<td>.048</td>
<td>5.027</td>
<td>.000</td>
<td>.147</td>
<td>.337</td>
</tr>
</tbody>
</table>

Table 4.47b illustrates the result of the moderating effect of transformational leadership style on the relationship between pro-activeness and firm performance. The $p$ value of interaction term is .0 which is less than .05. It shows that moderating variable significantly moderate relationship between independent variable and dependent variable. It is evident from this result that transformational leadership style significantly moderates the relationship between pro-activeness and firm performance. The interaction plot reported below also confirms the moderating role of the TL on PA and FP relationship.
4.7.5. Moderating Effect of Access to Financial Capital on the Relationship between EO and Firm Performance

Table 4.48a
Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R^2</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.616</td>
<td>.379</td>
<td>0.258</td>
<td>76.654</td>
<td>3.000</td>
<td>189.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.48a shows a model summary of the moderating variable. The table shows that R^2 value is .379, which explains 37.9% variance in dependent variable as a result of the independent variable. High value of F-statistic indicates good model fitness. P-value is .00 which is less than .05.

Table 4.48b
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.715</td>
<td>.047</td>
<td>79.542</td>
<td>.000</td>
<td>3.623</td>
<td>3.807</td>
</tr>
<tr>
<td>AFC</td>
<td>.232</td>
<td>.071</td>
<td>3.257</td>
<td>.001</td>
<td>.091</td>
<td>.372</td>
</tr>
<tr>
<td>EO</td>
<td>.187</td>
<td>.080</td>
<td>2.348</td>
<td>.020</td>
<td>.030</td>
<td>.344</td>
</tr>
<tr>
<td>Int_1</td>
<td>.236</td>
<td>.049</td>
<td>4.852</td>
<td>.000</td>
<td>.140</td>
<td>.332</td>
</tr>
</tbody>
</table>

Table 4.48b illustrates the result of the moderating effect of access to financial capital on the relationship between EO and firm performance. The p-value of interaction term is .0 which is less than .05. It shows that moderating variable significantly moderate relationship between independent variable and dependent variable. It is evident from this result that access to financial capital significantly moderate relationship between EO and firm performance. The interaction plot reported below also confirms the moderating role of the AFC on EO and FP relationship.

Table 4.49a
Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>$R^2$</th>
<th>MSE</th>
<th>$F$</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.625</td>
<td>.391</td>
<td>.253</td>
<td>59.507</td>
<td>3.00</td>
<td>189.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.49a shows a model summary of the moderating variable access to financial capital on the relationship between innovativeness and firm performance. The table shows that $R^2$ value is .391. It means that there is 39.1% variance in dependent variable as a result of the independent variable. The value of the $F$-statistic indicates good model fitness. P-value is .00 which is less than .05.

Table 4.49b
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.730</td>
<td>.051</td>
<td>72.877</td>
<td>.000</td>
<td>3.629</td>
<td>3.830</td>
</tr>
<tr>
<td>AFC</td>
<td>.128</td>
<td>.095</td>
<td>6.6</td>
<td>.178</td>
<td>-.059</td>
<td>.315</td>
</tr>
<tr>
<td>INV</td>
<td>.316</td>
<td>.105</td>
<td>10.2</td>
<td>.003</td>
<td>.108</td>
<td>.523</td>
</tr>
<tr>
<td>Int_1</td>
<td>.212</td>
<td>.055</td>
<td>3.4</td>
<td>.000</td>
<td>.103</td>
<td>.321</td>
</tr>
</tbody>
</table>

Table 4.49b illustrates the result of the moderating effect of access to financial capital on the relationship between innovativeness and firm performance. If the $p$ value of interaction term is less than .05, it shows that moderating variable moderate relationship. In the above table, the $p$ value of interaction term is .0 which is less than .05. It shows that moderating variable access to financial capital significantly moderate relationship between independent variable and dependent variable. It is evident from this result that access to financial capital significantly moderate relationship between innovativeness and firm performance. The interaction plot reported below also confirms the moderating role of the AFC on INV and FP relationship.

![Interaction Plot](image-url)

*Table 4.50a*

**Model Summary**

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.631</td>
<td>.398</td>
<td>.250</td>
<td>76.855</td>
<td>3.000</td>
<td>189.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.50a shows a model summary of the moderating effect of access to financial capital in the relationship between risk attitude and firm performance. The R² value shows 39.8% variance in dependent variable as a result of independent variable. This high value of the F-statistic indicates good model fitness. P-value is .00 which is less than .05.

*Table 4.50b*

**Coefficient**

<table>
<thead>
<tr>
<th>Model</th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>LLCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.716</td>
<td>.047</td>
<td>79.515</td>
<td>.000</td>
<td>3.624</td>
<td>3.808</td>
</tr>
<tr>
<td>AFC</td>
<td>.152</td>
<td>.073</td>
<td>2.070</td>
<td>.040</td>
<td>.007</td>
<td>.297</td>
</tr>
<tr>
<td>RA</td>
<td>.289</td>
<td>.082</td>
<td>3.514</td>
<td>.001</td>
<td>.127</td>
<td>.452</td>
</tr>
<tr>
<td>Int_1</td>
<td>.233</td>
<td>.049</td>
<td>4.753</td>
<td>.000</td>
<td>.136</td>
<td>.330</td>
</tr>
</tbody>
</table>

The above table 4.50b describes the results of the moderating effect of access to financial capital on the relationship between risk attitude and firm performance. The result of the interaction term indicates that p value of interaction term is .0 which is less than .05. It shows that moderating variable AFC significantly moderate relationship between the independent variable RA and dependent variable FP. It is evident from this result that access to financial capital significantly moderate relationship between risk attitude and firm performance. The interaction plot reported below also confirms the moderating role of the AFC on RA and FP relationship.
4.7.8. Moderating Effect of Access to Financial Capital on the Relationship between Pro-Activeness and Firm Performance

Table 4.51a
Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R^2</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.622</td>
<td>.387</td>
<td>.255</td>
<td>77.961</td>
<td>3.000</td>
<td>189.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.51a shows a model summary of the moderating variable. The table shows that $R$-square value is .387. It means that there is 38.7% variance in dependent variable as a result of the independent variable. High value of $F$-statistic indicates good model fitness. $P$-value is .00 which is less than .05.

Table 4.51b
Coefficient

<table>
<thead>
<tr>
<th></th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.719</td>
<td>.046</td>
<td>81.278</td>
<td>.000</td>
<td>3.629</td>
<td>3.809</td>
</tr>
<tr>
<td>AFC</td>
<td>.216</td>
<td>.066</td>
<td>3.295</td>
<td>.001</td>
<td>.087</td>
<td>.345</td>
</tr>
<tr>
<td>PA</td>
<td>.213</td>
<td>.073</td>
<td>2.909</td>
<td>.004</td>
<td>.069</td>
<td>.358</td>
</tr>
<tr>
<td>Int_1</td>
<td>.230</td>
<td>.047</td>
<td>4.841</td>
<td>.000</td>
<td>.136</td>
<td>.324</td>
</tr>
</tbody>
</table>

Table 4.51b illustrates the result of the moderating effect of Access to Financial Capital on the relationship between pro-activeness and firm performance. The $p$ value of interaction term is .0 which is less than .05. It shows that moderating variable significantly moderate relationship between independent variable and dependent variable. It is evident from this result that AFC significantly moderates the relationship between pro-activeness and firm performance. The interaction plot reported below also confirms the moderating role of the AFC on PA and FP relationship.
4.7.9. Moderating Effect of Environmental Factors on the Relationship between EO and Firm Performance

Table 4.52a
Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.576</td>
<td>.332</td>
<td>0.278</td>
<td>42.238</td>
<td>3.000</td>
<td>189.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.52a shows a model summary of the moderating variable. The table shows that $R^2$ value is 33.2%. It means that there is 33.2% variance in dependent variable as a result of the independent variable. The high value of the $F$-statistic indicates good model fitness. $P$-value is .00 which is less than .05.

Table 4.52b
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.858</td>
<td>.038</td>
<td>100.897</td>
<td>.000</td>
<td>3.783</td>
<td>3.934</td>
</tr>
<tr>
<td>EF</td>
<td>.161</td>
<td>.057</td>
<td>2.819</td>
<td>.005</td>
<td>.048</td>
<td>.273</td>
</tr>
<tr>
<td>EO</td>
<td>.432</td>
<td>.046</td>
<td>9.487</td>
<td>.000</td>
<td>.343</td>
<td>.522</td>
</tr>
<tr>
<td>Int_1</td>
<td>.098</td>
<td>.068</td>
<td>1.436</td>
<td>.153</td>
<td>-.037</td>
<td>.233</td>
</tr>
</tbody>
</table>

Table 4.52b illustrates the result of the moderating effect of environmental factors on the relationship between EO and firm performance. The $p$ value of interaction term is .153 which is greater than .05. It shows that moderating variable did not moderate relationship between independent variable and dependent variable. It is evident from this result that environmental factors did not moderate relationship between EO and firm performance. The interaction plot reported below also confirms that there is no interaction of EF on EO and FP relationship.

Figure 4.42: Interaction Plot of EF, EO and FP
4.7.10. Moderating Effect of Environmental Factors on the Relationship between Innovativeness and Firm Performance

Table 4.53a
Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>R^2</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.694</td>
<td>.364</td>
<td>.264</td>
<td>44.825</td>
<td>3.00</td>
<td>189.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

The above table 4.53a shows a model summary of the moderating variable of environmental factors in the relationship between innovativeness and firm performance. R^2 36.4% explain variance in dependent variable as a result of the independent variable. F-statistic value is 44.825, which show that the model is a good fit. P-value is .00 which is less than .05.

Table 4.53b
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.858</td>
<td>.037</td>
<td>103.391</td>
<td>.000</td>
<td>3.785</td>
<td>3.932</td>
</tr>
<tr>
<td>EF</td>
<td>.156</td>
<td>.056</td>
<td>2.808</td>
<td>.006</td>
<td>.046</td>
<td>.265</td>
</tr>
<tr>
<td>INV</td>
<td>.459</td>
<td>.047</td>
<td>9.815</td>
<td>.000</td>
<td>.367</td>
<td>.551</td>
</tr>
<tr>
<td>Int_1</td>
<td>.095</td>
<td>.069</td>
<td>1.384</td>
<td>.168</td>
<td>-.041</td>
<td>.231</td>
</tr>
</tbody>
</table>

The above table 4.53b describes the results of the moderating effect of environmental factors on the relationship between innovativeness and firm performance. The result of the interaction term indicates that p value of interaction term is .168 which is greater than .05. It is evident from this result that environmental factors do not significantly moderate relationship between innovativeness and firm performance. The interaction plot reported below also confirms that there is no interaction of EF on INV and FP relationship.
4.7.11. **Moderating Effect of Environmental Factor on the Relationship between Risk Attitude and Firm Performance**

**Table 4.54a**

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>.602</td>
</tr>
</tbody>
</table>

The above table 4.54a shows a model summary of the moderating variable of environmental factors in the relationship between risk attitude and firm performance. The result shows that $R$-square value is .363. It means that there is 36.3% variance in dependent variable as a result of the independent variable. $F$-statistic value is 46.975 which show that the model is a good fit. $P$-value is .00 which is less than .05.

**Table 4.54b**

<table>
<thead>
<tr>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>EF</td>
</tr>
<tr>
<td>RA</td>
</tr>
<tr>
<td>Int_1</td>
</tr>
</tbody>
</table>

The above table 4.54b describes the results of the moderating effect of environmental factors on the relationship between risk attitude and firm performance. The result of the interaction term indicates that $p$ value of interaction term is .263 which is greater than .05. It is evident from this result that environmental factors do not significantly moderate relationship between risk attitude and firm performance. The interaction plot reported below also confirms that there is no interaction of EF on RA and FP relationship.
4.7.12. Moderating Effect of Environmental Factor on the Relationship between Pro-activeness and Firm Performance

The above table 4.55a shows a model summary of the moderating variety of environmental factors in the relationship between pro-activeness and firm performance. $R^2$ indicates that there is 34.5% variance in dependent variable as a result of independent variable. $F$-statistic value is 43.1 which show that the model is a good fit. $P$-value is .00 which is less than .05.

The above table 4.55 b describes the results of the moderating effect of environmental factors on the relationship between the PA and firm performance. The result of the interaction term indicates that $p$ value of interaction term is .202 which is greater than .05. It is evident from this result that environmental factors do not significantly moderate relationship between PA and firm performance. The interaction plot reported below also confirms that there is no interaction of EF on PA and FP relationship.

![Interaction Plot of PA, EF and FP](image)
4.8. Summary of Hypotheses Testing

Table: 4. 56

Hypotheses Testing

<table>
<thead>
<tr>
<th>Path</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>INV → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>RA → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>PA → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>EO → TL → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>INV → TL → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>RA → TL → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>PA → TL → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>EO → AFC → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>INV → AFC → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>RA → AFC → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>PA → AFC → FP</td>
<td>Accepted</td>
</tr>
<tr>
<td>EO → EF → FP</td>
<td>Rejected</td>
</tr>
<tr>
<td>INV → EF → FP</td>
<td>Rejected</td>
</tr>
<tr>
<td>RA → EF → FP</td>
<td>Rejected</td>
</tr>
<tr>
<td>PA → EF → FP</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

4.9. Chapter Summary

The current chapter explains the results of the study in greater detail. The first section of the chapter highlights the detail regarding reliability of the research instrument. The results of the reliability analysis show that the instrument used by the current study is highly reliable. Similarly, section two reports the detail about validity. To check criteria related validity factor analysis was conducted. The results show that the instrument used in the current study is valid. Frequency distribution and mean score comparison of the study respondents was also checked. Correlation analysis was conducted and found that EO and its dimensions, i.e. innovativeness, risk attitude, and pro-activeness is highly associated with firm performance. Before applying regression, the key assumptions of regression analysis like autocorrelation, heteroscedasticity, multicollinearity, and data normality was checked and found it
satisfactory. After that, simple linear was applied. The result shows that EO is positively and significantly related to firm performance. We also found that EO has significant relation to firm performance dimensions, i.e. growth and profitability. Similarly, EO dimensions, namely innovativeness, risk attitude and pro-activeness have a significant relation with firm performance as well as its dimensions growth and profitability. After that we also check the moderating effect of transformational leadership style, environmental factors, and access to financial capital on the relationship between EO and FP. The study found that transformational leadership style and access to financial capital significantly moderate the relationship between EO and FP, while environmental factors did not moderate the relationship between EO and FP. The moderating effect of transformational leadership style, environmental factors and access to financial capital were check on each dimension of EO and firm performance and found that transformational leadership style and access to financial capital moderate the relationship among all the dimensions of EO and EP, while environmental factors did not. Based on the results all of the study hypotheses were accepted except hypothesis related to the moderating role of EF is rejected.
CHAPTER 5
DISCUSSION AND CONCLUSION

5.1. Discussion

The current study explored the relationship between Entrepreneurial Orientation (EO) and firm performance in Small and Medium Enterprises (SMEs) of Pakistan. The purpose of this study was to link each dimension of EO namely innovativeness, risk attitude and pro-activeness with firm performance and its dimension to firm performance growth and firm performance profitability. For this purpose, SMEs operating in Khyber Pakhtunkhwa was selected. There are 2800 SMEs operating in KPK. The total population of the study was 739 SMEs operating in the selected districts of Khyber Pakhtunkhwa. A total of 254 samples were taken through multistage sampling technique. From which 177 respondents were selected SMEs operating in Peshawar district. A total of 67 respondents were selected from district Nowshera. Similarly, a total of 10 respondents were selected from district Charsadda through stratified sampling technique. A total of 254 questionnaires were distributed among the respondents through stratified sampling technique. From which 212 questionnaires were received back with a response rate of 83.46%. However, 19 questionnaires were found incorrect or incomplete, having a percentage of 8.96. These incomplete or incorrect responses were discarded from the study. Finally, 193 responses were analyzed for further analysis having a percentage of 75.98.

The instrument used for the study was validated through factor analysis. The factor loading of each statement was greater than .5. KMO and Bartlett’s test of Sphericity were also applied and found satisfactory results. Similarly, the reliability of the instrument was checked through Cronbach’s alpha technique. The Cronbach’s alpha values of all the instruments were greater than .7 which confirms its reliability. Both tests showed that the instrument used by the current study is highly reliable and valid. The details regarding validity and reliability are reported in the previous chapter. Confirmatory factor analysis (CFA) was also applied. The results of the CFA confirmed the structure of the observed variables. The detail regarding the CFA was reported in the chapter in the previous chapter.

The frequency distribution of the respondents was also checked. Similarly, the mean score comparison was also performed. These tests show that respondents’
demographics like their age, gender, education, experience, the annual sale of the firms and designation may affect the study main variables i.e. EO and firm performance. The details of these tests were reported in chapter four.

Before applying simple regressions, all the key assumptions of regression analysis were checked. As the basic assumption of regression is that dependent variable should be measured on a ratio or interval scale. The current research used a five point Likert scale to measure respondents’ responses. Researchers believe that Likert scale is just like ratio or interval scale. Thus, it fulfills the basic assumption of the regression. The second key assumption of regression is that data should be free from autocorrelation. To check this assumption Durbin Watson test was applied. The results showed that the Durbin Watson values fall in the acceptable range of 1.5 to 2.5. The third basic assumption of regression analysis is that data should contain homoscedasticity and should not contain heteroscedasticity. To check this assumption regression residual scatter plot was applied. The scatter plot showed that data contains homoscedasticity and as we know that if the data contain homoscedasticity it was free from heteroscedasticity. Thus, this assumption of regression was also mated. Another important assumption of regression was that there should be no multicollinearity in the data. To test this assumption VIF and Tolerance tests was applied. The results of both tests confirm that there is no issue of multicollinearity in the data, thus, fulfills another assumption of regression analysis. Similarly, another basic assumption of regression model is that data should not contain any significant outlier because it affects the overall results of the regression analysis. The data were thoroughly checked and smoothly arranged for regression, thus, there is no significant outlier in the data. At the end data normality was checked through different tests like skewness and kurtosis, histogram and normal PP plot. The results of all these tests confirm that the behavior of the data is normal, thus, fulfill the key assumption of regression model.

The study also calculates frequency distribution and means score comparison of the variables. Based on the results of means score comparisons it is concluded that the mean score of innovativeness is higher as compared to services organizations and other types of organizations. It means that manufacturing firms have more concerned for innovativeness as compared to other firms. The mean value of newly establish firms is higher as compared to the new one indicating that new firms are more innovative as compared to old firms. Similarly, males are more innovative as
compared to their female counterpart. Respondents having master degree are more innovative as compared to those who have less qualification. The innovative ability of those who are simultaneously owner and top manager is more as compared to those who are simply owner or manager. Respondents who fall into the age bracket of 50-60 are more innovative as compared to their younger counterpart, because they have more experience and search for new ways.

The mean score comparison regarding firm performance indicate that manufacturing firms are good as compared to services and others. Firms established in the recent past have more performance as compared to the old one. One possible justification for that is that such firms adopt new technologies. It is also found that female employees have more concerns about firm performance as compared to male. Also, respondents who have higher qualification are more concerned as compared to those who have less qualification i.e. metric.

Finally, the cause and effect relationship regression analysis was conducted between the study independent variable EO and dependent variable organizational performance. The study found that EO is positively and significantly related to firm performance. One possible explanation for such a result as that entrepreneur bring innovation in their products, add new features, tests, packaging, improve the quality of the existing products, and shaped the products in new and attractive style that may attract the customers to purchase, thus, the overall sales of the firms increases which may improve their performance positively. Another plausible justification of such result is that entrepreneurial used state of the art technology which may improve product quality as well as reduce cost which ultimately improves firm performance via sales.

The results of the current study are in line with previous studies. Wang (2008) found that EO is significantly related to firm performance. The same results were found by Wiklund and Shepherd (2005); Lumpkin and Dess, (2001, 1996); Lyon et al., (2000); Miller, (1993). However, some studies also found that there is no direct or significant relationship between EO and firm performance. Rauch et al., (2009) concluded that there is no direct relationship between EO and firm performance. Similarly, Slater and Narver (2000) were failed to find out positive and significant association between EO and firm performance. Covin et al., (1994) stated that no significant relationship has been found between strategic orientation or EO and firm performance. Naldi et al., (2007) concluded that EO dimensions may vary in different
culture that may affect the overall results. Furthermore, EO did not improve the SMEs firm performance (Lee et al., 2001).

The study in hand found that EO dimension, namely innovativeness is positively and significantly related to firm performance. One reasonable justification for such a result is that in a today cut-throat competition, organizations cannot survive without innovation. One may lead the market on the basis of innovation. The customer needs and taste change with the passage of time, so organizations must know the current state of their potential customers and introduce products and services accordingly. The results of the current study are in line with previous research. Otero et al., (2009) concluded that innovation improves firm performance. Luno et al., (2011) also found that innovation is significantly related with firm performance. Also, Varis and Littunen (2010) have the same conclusion. Similarly, Davies et al., (2000); Neira et al., (2009); and Zhou et al., (2005) also confirm the positive and significant relation of innovation and firm performance.

The study found that EO dimension, namely risk attitude is positively and significantly related to firm performance. One reasonable justification for such a result is that organization may take risks to innovate new products and services. Without taking risk, innovation is impossible. But organizations should carefully study the customers’ minds and take risks to innovate new products and services accordingly, that may improve their performance. Another possible explanation for such a result is the popular quote of business that “the higher the risk higher will be the profit”. To survive in today’s tough competition organization must take calculated risk. The result of the current study is in line and contradicts with previous studies. Avlonitis and Salavou (2007) concluded that firms with strong entrepreneurial behavior taking high and expensive project, which possess a high level of risk for obtaining a high level of return. Miller (1983) stated that the firm having risk taking behavior, considered as bold and aggressive in pursuing market opportunities and for obtaining high return they are ready to take large and risky resource commitments. However, Naldi et al., (2007) investigated the relationship between EO and firm’s performance of Swedish small medium enterprise (SMEs). They founded a negative significant association between risk taking behavior and performance of Swedish SMEs. Also, some studies found no relationship between risk attitude and firm performance. Sebora et al., (2009) failed to prove the role of risk taking behavior in
EO in Thai e-commerce entrepreneur success. Hofstede, (2009) stated that the culture of Thailand is highly risk averse.

The current study found that EO dimension, i.e. pro-activeness is significantly related to firm performance. One possible reason for such a result as that organization must be ready for sudden changes in the market place. If organizations fail to occupy the needed changes they can’t compete in today's environment. So, organizations must show pro-activeness to handle routine as well as sudden changes in their environment. The results of the current study are in line with previous studies in the same field. Frishammar and Andersson (2009) found a positive and significant relation of pro-activeness and firm performance in Swedish SMEs. Similarly, Hughes and Morgan (2007) have the same findings. Hansen et al., (2011) studied EO and its dimensions with firm performance and found the same results as that of the current study. The same results were also found by Wikulan and Shpehered, (2005), and Lumpkin and Dess (2000).

The finding of the current study supports the concept that EO factor fluctuates independently in their influence on firm performance and the entrepreneurs who are ready to use each factor of EO have high possibility of success. SMEs in Pakistan needs to be competent and brave adequate to foster each factor of EO in order to accomplish the success of their firms in the environment of the globalization, legislation, reduction of trade barriers and market expansion due to the advancement in technology and innovations. If the SMEs want to go beyond their local market and also want to compete globally, they must be entrepreneurially oriented, because EO contributes to the firm ability to globalize.

The study in hand also checked the moderating effect of transformational leadership style, environmental factors, and access to financial capital on the relationship between EO and its dimensions and firm performance. The study found that transformational leadership style moderates the relationship between EO and firm performance. The study also found that transformational leadership style moderates the relationship between innovativeness and firm performance, and between pro-activeness and firm performance, and between risk attitude and firm performance. The findings of the current study are in line with previous studies, like Hayat and Riaz (2011), Matzler et al., (2008). Likewise, Matzler et al., (2008), Ling et al., (2008) also concluded that transformational leadership style is essential for SMEs performance. Engelen et al., (2015) also found that transformational leadership plays a moderating
role in the relationship between EO and firm performance. Hood (2003) also found a positive and significant relationship between transformational leadership and SMEs performance. Visser et al., (2005) also found a positive and significant relationship between transformational leadership and SMEs performance. Arham et al., (2011, 2013) concluded that transformational leadership is required for SMEs to perform best. The same results were also found by Chen (2004), Arnold et al., (2001), Stewart (1989), Soriano and Martinez (2007). However, the studies also found no relationship between transformational leadership and firm performance like Agle et al., (2006); Ensley et al., (2006); Waldman et al., (2001). This study finding also stated that transformational leadership ensures the positive effect of EO on firm performance. It states that four aspects of transformational leadership, i.e. Idealized influence, inspirational motivation, intellectual stimulation and individualized consideration enhance the EO and firm performance relationship. Contrary to expectations, leader or top management, highlighting on the accepting group goals and offering intellectual stimulation and do not act as an individualist. It is that encouraging the acceptance behavior of the group goals must be combined with the other aspects of the transformational leadership behavior to enhance the EO and firm performance relationship. Similarly, the aspect of intellectual stimulation can be expected to increase innovation, creativity and idea generation and the implementation of these ideas in the local and global marketplace may be a process of operating doing that is supported by other transformational leadership behavior. From the configurationally perspective transformational leadership leads to stronger EO and firm performance relationship. The finding of the study also stated that leaders in the organization express their ability to enhance their level of innovativeness, risk taking behavior and pro-activeness and hence increase growth and profitability.

Similarly, the study also checked the moderating effect of access to financial capital on the relationship between EO and its dimensions (innovativeness, risk attitude, pro-activeness) and firm performance. The results indicate that access to financial capital significantly moderates the relationship between EO and firm performance. Similarly, access to financial capital moderates the relationship of each dimension of EO and firm performance. One possible justification for this result is that organizations must need resources to bring innovation in their products and services, must take risks to innovate and should act proactively to market changes in order to improve their performance and to survive in the market place. The current
research study results are similar to previous studies. Theriou and Chatzoudes, (2015) have the same findings. Zampetakis et al., (2011) found the same results. Similarly, Xavier et al., (2015), Frank, et al., (2010), Wiklund and Shepherd, (2005), Mazanai and Fatoki, (2012), Akingunola (2011), and Caglayan and Demir (2014) also found the same findings. However, the current research study results are contradicting with some studies like Batra et al., (2003), and Cadogan et al., (2009).

On the same way, the study also checked the moderating role of environmental factors on the relationship between EO and firm performance. Similarly, we also checked the moderating role of environmental factors on the relationship of EO dimensions, i.e. innovativeness, risk attitude and pro-activeness and firm performance. Our findings suggest that environmental factors did not moderate the relationship between EO and firm performance. Similarly, environmental factors did not moderate the relationship of each dimension of EO with each dimension of firm performance. Few studies have the same findings as the current study. However, study matches with the studies of Zahra and Covinr, (2005); Zahra, (1993); Hameed and Ali (2011); and Covin and Slevin, (1989) as they were found no, or negative relationship of environmental factors with EO and firm performance. Some studies have contradictory result just, like, Ruiz-Ortega et al., (2013) found that environmental factors affect SMEs performance. Lumpkin and Dess (1996) also concluded that firm performance is affected by environmental factors. Martins and Rialp, (2013); Kraus et al., (2012); Mu and Benedetto, (2011); Rauch et al., (2009); Li, Zhang and Chan, (2005); Alexandrova, (2004); Miller and Friesen, (1983); and Miller, (1983) have the same findings. However, current research study results did not match with the studies of Zahra and Covinr, (2005); Zahra, (1993); Hameed and Ali (2011); and Covin and Slevin, (1989) as they found no, or negative relationship of environmental factors with EO and firm performance.

5.2. Contributions and Implications of Research Findings

The outcomes and findings of the research study create theoretical contributions and organizational and managerial implications. The contributions and implications are drawn from the discussion and conclusion of this research study.

5.2.1. Theoretical Contributions

The most important theoretical contribution of this research comes from the framework that is based on EO and firm performance relationship. This framework
was based on contingency theory of leadership and resource based view (RBV) of Bandura (1980). The current framework enhances the body of knowledge in the area of EO and firm performance direct and indirect relationship through transformational leadership, access to financial capital and environmental factors and their applicability in non-western context like Pakistan. In addition, the relationship of transformational leadership behavior and EO as organization’s resources and capabilities from RBV perspective enables us to conclusively examine whether EO and its dimensions and transformational leadership impact SMEs performance in Pakistan. Similarly, the relationship of access to financial capital and EO as organization’s resources and capabilities from RBV perspective enables us to conclusively examine whether EO and its dimensions and access to financial capital impact SMEs performance in Pakistan. On the same way, the relationship of firm performance and EO as organization’s resources and capabilities from RBV perspective enables us to conclusively examine whether EO and its dimensions and environmental factor impact SMEs performance in Pakistan. Based on the results of the study it was concluded that EO and its factors, transformational leadership and access to financial capital are important resources that enhance organizational performance. Another theoretical contribution of the current research is to test the effect of EO and its dimensions and firm performance framework in the developing economy. The findings of the current research will enhance literature regarding EO, transformational leadership, access to financial capital, environmental factor and firm performance in the developing economy like Pakistan.

5.2.2. Managerial and Organizational Implications

The main purpose of the current study by conducting in services and manufacturing industries is to give the practical and valuable outcome for these SMEs industries. The outcomes of this study summarized and conclude that EO, transformational leadership, environmental factor and access to financial capital affect the organizational performance of the SMEs directly or indirectly. The effective dimensions of the EO were positively affected on the performance of the firms. Furthermore, the establishment of the EO and transformational leadership behavior are encouraged to know the required interaction of EO and transformational leadership behavior in order to increase the organizational success.

The results of the current study are confirmed from the practices of EO, transformational leadership behavior, access to financial capital and also the factors of
the environment by the top manager or owner of the SMEs in Pakistan. As a result, for further understanding about the EO and its dimension and transformational leadership behavior in the organization, leaders are encouraged. Firstly, the practical objective for this is to learn and build up skills and knowledge regarding EO and leadership behaviors that may be most important for them and for their organization. The result of the current study also stated that results obtained from the EO and transformational leadership also to the SMEs success. The current study suggests:

In Pakistani SMEs, leaders must be exhibited, foster and carry out the practices of transformational leadership to enhance their firm performance. The attributes that are related to the behavior of transformational leadership, improve motivation level of employees and also encourage them to achieve their full potential. In return, entrepreneurs who carry out the practice of transformational leadership appear to create and obtain organizational success with business development, increase in market share and profitability.

The results and finding of the current study have also important implications for strategic orientation development in organizations. The empirical results show that the potential of SMEs in Pakistan, to innovate, proactive in their firm strategic action and ready to take risks significantly, which may affect the firm performance. The entrepreneurial attitudes are a practical and policy not only the characteristics of the leaders, but also it must be the attributes’ of every person in an organization to enhance the organizational results. The managerial implications for SMEs are that, the challenges for demonstrating and practicing high quality leadership behavior are threefold;

The leadership behavior practice must be allied with the process of innovativeness and pro-activeness in the SMEs firm. Identifying that which type of leadership behaviors in the organization favor the change to make the organization champion in entrepreneurial spirit to carry out the streamline business. It may encourage the allocation of power and making decision to enhance the creativity of the entrepreneur and its ability.

For taking bold action organization may require higher risk. The behavior of transformational leadership is more dependable on risk taking because of its attributes of advance thinking, vision, mission and willingness to spout new
ideas. In contrast, the behaviors of transactional leadership are related to the behavior of risk adverse (Bass, 1990). Therefore SMEs may develop and improve the behavior of transformational leadership to enhance entrepreneurial skills in their organization.

Basically, the findings of the current study have important implications for development and creating entrepreneurs in Pakistan. The governing body SMEDA carries out the development of SMEs in Pakistan. The training programs of the SMEDA should be based on the developing and enhancing transformational leadership behavior in an entrepreneur. Therefore, a specific training course that should be based on the transformational leadership must be mandatory for all entrepreneurs in the organization. The SMEs should further enhance the performance of its organization, if they want to align transformational leadership behavior with attributes of EO. The enduring support and assistance from the financial institutions and government would help the SMEs and enterprises to totally engage in the innovation process and pro-active process and therefore allow them to start a venture for attaining high profit.

5.3. Recommendations

Based on the study findings, it is recommended that the owners/managers of SMEs must enhance their practices regarding entrepreneurial orientations as it affects organizational performance (profitability and growth). In regard to risk attitude, it is recommended that owners consider risk as an opportunity to grow their business in the long run because risk taking attitude enable organizations to bring innovation and take proactive decisions. The study also recommended that owners and managers of SMEs adopt a transformational leadership style in order to further enhance EO and performance relationship.

It is also recommended that owners and managers of SMEs give more concern to financial capital. SME has direct and frequent access to financial capital may improve their performance as compared to those who have less or no access to get finance to run their business.

The study recommended that firms must bring innovation in their products and services. Organizational growth and survival depends on innovation. Innovation is considered a soul of the organization. Thus, to get a sustainable competitive advantage in the marketplace, organizations need to seriously focus on innovation.
Based on the results of the current research, it is recommended that proactive decisions and actions are the main driver of organizational performance.

It is also recommended that the owner or manager must be focused on EO in their firm, and leaders must demonstrate their ability to enhance their level of innovativeness, risk taking behavior and pro-active behavior to increase the growth and profitability. The study also recommended, the leader of the SMEs must take initiative step to develop new ideas, creativity and new experiment in their firm to compete globally.

5.4. Limitations and Future Research Directions

Although the study gives important insight to the field of EO and firm performance literature, but it has some limitations as well. The finding of this study also provides some opportunities for future research. It is also based on the limitation of the study and the theoretical discussion of the study. The directions for future research are raised from the finding and their limitation of the study.

First, the study evaluates firm performance on subjective measures. Such subjective measures may lead to performance evaluation bias (Moers, 2005). In the future, researchers may evaluate firm performance by using some objective measures like accounting performance or improvement in share prices.

Second, the study used cross-sectional research design by collecting the data in one time. So, we can’t draw causal inferences from such research. In the future, researchers may avoid this limitation by using a longitudinal research design by collecting the data of both dependent and independent variable in two or more points of time.

Third, the study takes only three dimensions of entrepreneurial orientation, i.e. innovativeness, risk attitude and pro-activeness and ignores other EO dimensions like autonomy and competitive aggressiveness that may affect firm performance. Researchers may further nourish the same phenomena by introducing autonomy and competitive aggressiveness to the existing EO and firm performance model.

Forth, to improve the model, the element of culture could be incorporated. Alexandrova (2004) recommended that cultural differences might influence the way people perceive their leaders. Other authors have also concluded that leadership behavior affects organizational outcomes, culture and practices, and organizational culture and practices also affect what leaders do (Antoncic & Hisrich, 2004). Thus,
the inclusion of culture could further explain the relationship between EO organizational performance and leadership behavior.

Fifth, the study collects the data from the owners of SMEs that may limit out findings to generalize. It is also suggested for future research to consider exploring EO, leadership and performance of SME leaders from the employees’ perspective. A comparative study of EO, firm performance and effective leadership between the results obtained from the leaders themselves and employees’ perception might produce a better understanding of how performance of SMEs could be further improved.

Six, the study only tested entrepreneurial orientation with firm performance and ignore other important orientations (i.e. Strategic orientation) that may also impact firm performance. Thus, it is recommended for future researchers to test the impact of strategic orientation on firm performance.

Seven, the study only check the moderating role of transformational leadership on EO and firm performance relationship and ignore other types of leadership that may also impact organizational performance. Future studies may enhance the same model by adding other leadership styles, e.g. transactional leadership style on EO – performance relationship.

Finally, the study was conducted in Pakistan. In the future, researchers may replicate the same findings in other cultures, especially in other developing countries and industry.

5.5. Conclusion

A comprehensive review of literature and the potential theories was carried out for the development of the research framework in chapter 2. Research framework that was given in chapter 2 was influenced by the RBV, transformational leadership theories and the contingency theory. Based on the literature support and the theories the theoretical framework suggests that EO is the important predictor for the SMEs performance. Transformational leadership is also important predictor for the performance of the SMEs performance as suggested by the researchers and the potential theories. Research framework of this study explored the relationship of the EO and firm performance of the SMEs. In addition, the research framework of the study also checks the moderating role of the transformational leadership, access to financial capital and environmental factor.
Based on the theoretical and research framework two stage of analysis were performed. The first stage was an empirical investigation of the effects of EO and its dimensions on the firm performances of the SMEs. The second stage was explored the moderating role of the transformational leadership, access to financial capital and environmental factor. In addition, both EFA and CFA were also applied for the reliability and goodness of fit statistics. The results from the produced due to and KMO and Bartlett’s test were acceptable and CFA also given the acceptable goodness of fit of the model. The results are summarized in below section

The current study examined the relationship of the EO and SMEs firm performance. The study also used few possible moderators in order to further nourish the relationship between the selected independent variable and dependent variable. As stated earlier the study found a positive and significant relationship between EO and firm performance. The study also found that each dimension of EO namely innovativeness, risk attitude, and pro-activeness are positively and significantly related to firm performance. Thus, it is suggested that managers or owners of the SMEs must take initiatives to improve their organization's performance by motivating and encouraging entrepreneur activities. Owners and managers of SMEs should also encourage innovation and creativity in their respective organizations. They should create such an environment that facilitates creativity because now a day’s survival of organizations will depend on product innovation. Managers and owners of SMEs adopt state of the art technology and recruit skilled and creative employees to bring innovative products and services in the market. They should apply and encourage a transformational leadership style because such leadership style may also affect individuals as well as group or organizational creativity (Khattak et al., 2017). The leaders, managers or the owners of SMEs develop strong links with financial institutions to finance their organizations. As the current study found that access to financial capital is positively and significantly moderate the relationship between EO and firm performance. Strong financial position may allow the organizations to take risks and to bring innovation in their existing products and services or introduce new products and services that attract potential customers.
REFERENCES


Barker, Richard A. "How can we train leaders if we do not know what leadership is?" *Human relations* 50, no. 4 (1997): 343-362.


International Finance Corporation (IFC) annual report 2012


RESEARCH QUESTIONNAIRE

Dear Fellow,
Your help is required to complete this questionnaire for my dissertation on An Empirical Study on Entrepreneurial Orientation and SMEs Perceived Performance: A Moderating Role of Transformational Leadership, Environmental Factors and Access to Financial Capital. The information provided by you will be confidential and will be used only for research purpose. Thank you for your precious time.

Demographic Portion

Please check/select on the most appropriate number that BEST describe your situation.

Which industry that is best to describe your organization?

(1) Manufacturing and/or Manufacturing related services
(2) Services and/or Information & Communication Technology (ICT)
(3) Other (please specify): ________________________

Year of establishment of your business;


Select any of the following;

1) The owner of this firm (2) In the top management of this firm
3) Both 1& 2

Gender

1) Male (2) Female

Age

1) Below 30 years (2) 31 – 40 years (3) 41 – 50 years (4) Above 50 years

What is your sale in last year?

(1) Less than Rs 50 Million(2) Rs 51 Million - Rs 100 Million (3) Rs 101 Million - Rs 150 Million (4) Rs 151 Million - Rs 200 Million (5)Rs 201 Million and above

How many employees do you have?

(1) Less than 20(2)21 - 50(3) 51 - 100(4) 101 - 200 (5) More than 200

Your education: Select any of the following

(1) Below Secondary Education (2) FA/Intermediate (3) Bachelor Degree (4) Master Degree
(5) Professional Certificate/ Diploma
**Entrepreneurial Orientation**

Strongly disagree = 1    Disagree = 2    Not disagree/neither agreed = 3    Agreed = 4
Strongly agreed = 5

<table>
<thead>
<tr>
<th>Code</th>
<th>Variables</th>
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<tbody>
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<td></td>
<td><strong>Innovativeness</strong></td>
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<tr>
<td>IN1</td>
<td>My company has introduced many new products and services in the market.</td>
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<td>IN2</td>
<td>I give due importance to Research &amp; Development, technological leadership and innovations in my company</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>IN3</td>
<td>Our firm motivates employees for creative work and new experimentation.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>IN4</td>
<td>Our firm emphasizes on utilizing new technology.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>INV5</td>
<td>Our firm relay on designing new methods and procedures of production rather than adapting solution</td>
<td>1</td>
<td>2</td>
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<tr>
<td>IN6</td>
<td>I believe that changes in the product/service lines in my company have been mostly minor in nature.</td>
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<tr>
<td>IN7</td>
<td>Changes in the production or services usually not planned in our firm</td>
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<td></td>
<td><strong>Risk Attitude</strong></td>
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<tr>
<td>RA1</td>
<td>My firm adopts a cautious “wait-and-see” strategy in uncertain situation</td>
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<td>2</td>
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<td>RA2</td>
<td>My company has a strong proclivity/tendency for high risk projects (with chances of very high returns).</td>
<td>1</td>
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<tr>
<td>RA3</td>
<td>Sometime my company adopts a bold strategy in order to maximize the probability of exploiting opportunities in uncertain situation</td>
<td>1</td>
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<tr>
<td>RA4</td>
<td>Manager of our firm lead the team in introducing novel product or ideas</td>
<td>1</td>
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<td>4</td>
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<td>RA5</td>
<td>Employees in this firm are encouraged to take calculated risks with new ideas</td>
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<tr>
<td>Pro-activeness</td>
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<td>PA1 In dealing with competitors, my company typically responds to actions, which</td>
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<td>competitors initiate.</td>
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<td>P2 My company seldom introduce new products or ideas in competition</td>
<td>1</td>
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<tr>
<td>P3 I like to anticipate events occurring related to my job.</td>
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<td>P4 Our firm have a strong tendency to ‘follow the leader’ in introducing new</td>
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<td>products or ideas.</td>
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<tr>
<td>P5 In dealing with competitors, my company typically to begin actions which</td>
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<td>competitors then respond to.</td>
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<td>P6 We are always on the watch out for businesses that can be acquired</td>
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<tr>
<td><strong>Firm Performance</strong></td>
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<td>FP1 We are satisfied with the return on our investments.</td>
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<td>2</td>
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<td>FP2 The growth of our company is above average</td>
<td>1</td>
<td>2</td>
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<tr>
<td>FP3 We have higher return on investment (than our competitors).</td>
<td>1</td>
<td>2</td>
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<tr>
<td>FP4 Our growth is satisfying.</td>
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<td>2</td>
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<tr>
<td>FP5 We are satisfied with our return on sales</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>FP6 Our market shares are increasing faster than those of our competitors are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>FP7 In general, my company has achieved a very positive financial outcome.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>FP8 My company is growing steadily for the past three years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Environmental Factors</strong></td>
<td></td>
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</tr>
<tr>
<td>EF1 Our firm products and services operation become out of date very quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>EF2 Operation of technology in our firm change very quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
EF3  Our firm expect the action of competitor easily  1 2 3 4 5
EF4  Our firm predict when their firm’s products/services demand changes  1 2 3 4 5
EF5  Our firm forecast demand and consumer tastes easily  1 2 3 4 5
EF6  Demand for the products of our industry is growing and will continue to grow.  1 2 3 4 5
EF7  The investment or marketing opportunities for firms in our industry are favorable at the present time  1 2 3 4 5
EF8  The opportunities for firms in our industry to expand the scope of their existing products/markets are favorable.  1 2 3 4 5
EF9  The opportunities of tax regulatory for firms in our industry are favorable in present time.  1 2 3 4 5
EF10 Government supporting provision of basic utilities to firm in our industry.  1 2 3 4 5

Access to Financial Capital

AFC1 Accessibility to financial capital exposes my business to better opportunities  1 2 3 4 5
AFC2 Accessibility to financial capital has led to improved business risk performance  1 2 3 4 5
AFC3 Accessibility to financial capital for my business is very challenging  1 2 3 4 5
AFC4 Access to government grants and payable-loans encourages our business performance  1 2 3 4 5
AFC5 Our firm fails in raising funds for new business due to absence of venture capital investors  1 2 3 4 5
AFC6 Accessibility to financial capital encourages our firm's investment in research and development  1 2 3 4 5
AFC7 In general our firm has been fully satisfied for their development regarding firm’s access financial capital  1 2 3 4 5
### Transformational Leadership

1= Not at all  2= Once in a while  3= Sometime  4= Fairly often  5= Frequently, if not always

| TL1 | I suggest new ways of looking at how to complete assignments | 1 2 3 4 5 |
| TL2 | I articulate a compelling vision of the future | 1 2 3 4 5 |
| TL3 | I get others to look at problems from many different angles | 1 2 3 4 5 |
| TL4 | I talk optimistically about the future | 1 2 3 4 5 |
| TL5 | I emphasize the importance of having a collective sense of Mission | 1 2 3 4 5 |
| TL6 | I express confidence that goals will be achieved | 1 2 3 4 5 |
| TL7 | I talk about my most important values and beliefs | 1 2 3 4 5 |
| TL8 | I seek differing perspectives when solving problems | 1 2 3 4 5 |
| TL9 | I specify the importance of having a strong sense of purpose | 1 2 3 4 5 |
| TL10 | I consider the moral and ethical consequences of decisions | 1 2 3 4 5 |
| TL11 | I re-examine critical assumptions to question whether they are appropriate | 1 2 3 4 5 |
| TL12 | I go beyond self-interest for the good of the group | 1 2 3 4 5 |