PhD Dissertation

Entrepreneurial Orientation and SMEs Performance with Mediating role of Resources Acquisition and Business Model Innovation, Moderating role of Internal and External capabilities.

Researcher:

Muhammad Sualeh Khattak

58-FMS/PHDFIN/S16

Supervisor:

Prof. Dr. Syed Zulfiqar Ali Shah

Faculty of Management Sciences at International Islamic University, Islamabad, Pakistan

Department of Business Administration

Faculty of Management Sciences

International Islamic University Islamabad, Pakistan

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Muhammad Sualeh Khattak
58-FMS/PHDFIN/S16

A thesis submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Management Science with specialization in Finance at the Faculty of Management Sciences International Islamic University, Islamabad Pakistan

Supervisor

Prof. Dr. Syed Zulfiqar Ali Shah

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In the name of Allah, the most merciful and beneficent

DEDICATION

I dedicate this research thesis to my dearly beloved late parents and my supervisor whose support and encouragement has enabled me to complete this research study successfully

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DECLARATION

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Mr. Muhammad Sualeh Khattak
PHD Management Sciences (Specialization in Finance)
Faculty of Management Sciences,
International Islamic University, Islamabad Pakistan.

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Mr. Muhammad Sualeh Khattak

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Name of Student: Muhammad Sualeh Khattak

Registration No: 58-FMS/PHDFIN/S16

Accepted by the Faculty of Management Sciences INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD, in partial fulfillment of the requirements for the Master of Science/Philosophy Degree in Management Sciences with specialization in Technology Management.

Viva Voce Committee

Prof. Dr. Syed Zulfiqar Ali Shah
(Supervisor)

(External Examiner)

(Internal Examiner)

(Chairman HS & R)

Prof. Dr. Abdul Raheman

(Dean)

Date:

FORWARDING SHEET

The thesis entitled "Entrepreneurial Orientation and SMEs Performance with Mediating role of Resources Acquisition and Business Model Innovation, Moderating role of Internal and External capabilities" submitted by **Muhammd Sualeh Khattak** as partial fulfillment of PhD degree in Management Sciences with specialization in **Finance**, has completed under my guidance and supervision. The changes advised by the external and the internal examiners hava also been incorporated. I am satisfied with the quality of student's research work and allow him to submit this thesis for further process as per IIU rules & regulations.

Supervisor

Date:_____ Signature:_____

Name : **Dr. Syed Zulfiqar Ali Shah**

Abstract

This research aims to test the influence of entrepreneurial orientation on Small and Medium Enterprise's performance with the mediating role of resource acquisition and business model innovation and the moderating role of managerial networking and intellectual and financial capability. This study followed a quantitative approach. A structured questionnaire was used to collect data from 403 top managers/owners of Pakistani SMEs. This study used SPSS for screening tests; data normality, multicollinearity and common method variance, and AMOS to test the model fits; factor loadings, validity and reliability, and structural equation modeling to test the hypothesized relationships. The results revealed that entrepreneurial orientation significantly influences resource acquisition, business model innovation, and Small and Medium Enterprise's performance. Business model innovation and resource acquisition significantly contributed to SMEs' performance. Furthermore, business model innovation and resource acquisition partially mediated the relationship between Entrepreneurial Orientation and SMEs performance. Both the financial and political ties significantly moderated the relationship, while the business tie did not moderate the path between entrepreneurial orientation and resource acquisition. However, it is found that only financial ties significantly moderate the relationship between entrepreneurial orientation and business model innovation. In contrast, political and business ties did not moderate the path between entrepreneurial orientation and business model innovation. Furthermore, intellectual capital and financial capabilities significantly moderated the relationship between entrepreneurial orientation and SMEs performance. The study results implicated that SMEs should create an entrepreneurial environment to promote entrepreneurial orientation in their operational activities. SMEs should be encouraged to sponsor entrepreneurial orientation as it benefits the firms in acquiring resources and creating an effective business model innovation, thereby resulting in high performance. SMEs need to build favorable networking with external stakeholders to gain valuable resources. Moreover, it is also recommended that SMEs should focus on the intellectual skills of managers and recommended the efficient use of financial resources to enjoy desirable profitability.

Keywords: Entrepreneurial orientation, resources acquisition, managerial ties, intellectual capital, financial capability, and SMEs performance.

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List of Abbreviation

AGFI = Adjusted Goodness-of-Fit Index

AVE = Average Variance Extracted

BMI = Business model innovation

BT = Business Tie

CA = Competitive Advantage

CFI = Comparative Fit Index

CMB = Common Method Bias

CMV = Common Method Variance

COEFF = Coefficient

CR = Composite Reliability

EO = Entrepreneurial Orientation

FC = Financial Capabilities

FP = Firm's Performance

FT = Financial Tie

GFI = Goodness-of-Fit Index

IC = Intellectual Capital

IN = Innovativeness

LLCI = Lower Level Confidence Interval

M = Mean

NFI = Normed-Fit index

PERF = Performance

PR = Proactiveness

PT = Political tie

RA = Resources Acquisition

RBV = Resource Base View

RBVT = Resource Base view Theory

RMSEA = Root Mean Square Error of Approximation

RMR = Root Mean Square Residual

RSREQ = Resources Acquisition

RTK = Risk Taking

SCA = Sustainable Competitive Advantage

SCP = Sustainable Competitive Position

SD = Standard Deviation

SE = Standard Error

SMEDA = Small and Medium Enterprises Development Authority

SMEs = Small and Medium Enterprises

SN = Social Network

TLI = Tucker–Lewis index

ULCI = Upper Level Confidence Interval

VIF = Variance Inflation Fact

Chapter 1

INTRODUCTION

This chapter discusses the background of the research, statement of the problem, gap analysis, research questions, research objectives, the significance of the research, and theoretical underpinning.

1.1 Background of the Study

Globalization has resulted in the tough competition among organizations, either business or non-business. However, business firms are more affected as they are more concerned with the achievement of a sustainable competitive position and profitability (Haseeb, Hussain, Kot, Androniceanu, & Jermsittiparsert, 2019; Wang, Kafouros, Yi, Hong, & Ganotakis, 2020; Ying, Hassan, & Ahmad, 2019). In this perspective, due to the numerous resources and adequate capabilities, large firms outperform Small and Medium Enterprises (SMEs) (Degong, Ullah, Khattak, & Anwar, 2018). Small firms, due to fairly known reasons, such as; lack of resources, small sizes and lack of capabilities, find it hard to survive for a long term in the turbulent markets (Songling, Ishtiaq, Anwar, & Ahmed, 2018), and most of them prematurely quit their operational activities. For instance, Memon, Yong An, and Memon (2020) claimed that more than fifty percent of the SMEs failed in the initial stage due to a lack of resources, capabilities, support, and business model innovation (BMI). Hence, they need various internal and external capabilities to compete in the markets (Acosta, Crespo, & Agudo, 2018; Degong et al., 2018).

To mitigate high chance of failure, SMEs need both tangible resources (modern technology, financial capital and products etc.) as well as intangible resources (managerial skills, intellectual capital and information etc.) (Anwar, Tajeddini, & Ullah, 2020; Arbaugh, Cox, & Camp, 2005; Choi & Lim, 2017; Radulovich, Javalgi, & Scherer, 2018). Most recently,

studies have given more attention to entrepreneurial Orientation (EO). Mostly in SMEs, EO can spur firms' success and survival (Anwar & Shah, 2020; Karami & Tang, 2019; Nakku, Agbola, Miles, & Mahmood, 2020; Shah & Ahmad, 2019). It is also argued that the nexus between EO and firm's performance is not straightforward (Anwar, Khan, & Khan, 2018; Jiang, Liu, Fey, & Jiang, 2018; Shah & Ahmad, 2019; Sok, Snell, Lee, & Sok, 2017).

The role of EO in firm's performance can be explicated through two approaches; one approach believes in the direct influence of EO in firm's performance (Anwar & Shah, 2020; Khan, Yang, Khan, & Waheed, 2019; Kraus, Rigtering, Hughes, & Hosman, 2012), while the second approach emphasizes on the underlying mediating mechanism through which EO affects firm's performance (Rezaei & Ortt, 2018; Shah & Ahmad, 2019; Soares & Perin, 2020; Wales, Gupta, & Mousa, 2013). Both approaches have a considerable role in the existing literature. However, considering the importance of the second approach, i.e., indirect influence of EO on firm's performance, it is whispered that a firm with high EO may not be so efficient to perform over other firms unless it has sufficient intangible resources (Anderson & Eshima, 2013; Lumpkin & Dess, 1996).

In the context of SMEs, intellectual capital (as one of the important intangible resources of the firm) boosts firm's performance in the presence of EO (Adomako, 2018; Miao, Coombs, Qian, & Sirmon, 2017). Therefore, it is expected that intellectual capital could moderate the relationship between EO and the firm's performance. In addition, firms need financial capital to get superior performance while using their EO. For instance, Wang, Fonseka, Tian, and Li (2014) argued that mere resources and capabilities are not sufficient for the firm to gain competitiveness and sustainability in emerging economies unless it has adequate financial resources. Therefore, it is reasonable to state that financial capabilities, as a moderator, can strengthen the relationship between EO and firm's performance.

Given the dramatic changes in the current market, small firms have realized to advance their business model in significant ways (Anwar, 2018; Hartkamp, 2017). More precisely, business model innovation (BMI) in the current era has become a prominent factor for SMEs' success in emerging economies (Anwar & Shah, 2020; Pati, 2018). BMI is not an automatic phenomenon, but it requires internal and external capabilities to generate an effective business model (Anwar & Shah, 2020; Foss & Saebi, 2018; Teece, 2018). As argued before, this phenomenon also supports the second approach of EO that believes in the mediating factors. For instance, Kranich and Wald (2018) claimed that building sustainable BMI needs management capabilities and internal resources to stimulate a firm's performance. Furthermore, it is reported that effective BMI also needs external support and network ties (Anwar & Shah, 2020). Hence, considering the second approach, it is argued that managerial networks (financial network, business network, and political network) can significantly influence the relationship between EO and BMI.

In addition to the aforementioned discussion and considering the second approach in terms of mediating role, it is suggested that it is important to consider the relevant theories to understand the mediating role of internal resources and capabilities between EO and performance (Sok et al., 2017). For instance, resource base theory suggests that enterprises' entrepreneurial ability enables them to acquire the resources more effectively (Barney, 1991; Yin, Hughes, & Hu, 2020). It is also suggested that resource acquisition is more challenging for SMEs than for large firms (Huang & Wang, 2013; Knight, 2001), which emphasized on the mediating role of resource acquisition between EO and firm's performance. Moreover, it is also believed that resources do not come directly, but they also require external capability (networking) to gain valuable resources (Jiang et al., 2018). Similarly, social network theory states that a firm can acquire useful resources by building ties with external bodies such as

financial institutions, business partners, and government (Burt, 1992). In other words, sometimes, mere entrepreneurial activities are not sufficient to acquire valuable resources, but firms must need to build strong ties with external partners such as political, business, and financial partners to access the critical sustainable resources such as technological, physical, and financial (Acosta et al., 2018; Oskam, Bossink, & de Man, 2018).

To summarize, certain factors such as EO, external networking, intellectual capital, and financial capabilities play a crucial role in the acquisition of resources and building an effective BMI, which in turn boost the business performance. However, little attention has been given to these factors, especially in SMEs operating in emerging economies. Based on empirical evidence, this study is an attempt to examine the role of SMEs' internal and external capabilities in their success and survival. This study aimed to unleash the role of EO in firm's performance by investigating the mediating roles of resources acquisition, BMI, and the moderating role of internal-external capabilities in the EO-performance relationship.

To achieve the objectives of this study, collected empirical evidence from top managers of Pakistani SMEs. Pakistan is placed relatively in the best business trade zone, e.g., between the Asian and the European markets. According to a recent study, in Pakistan, SMEs constitute more than 90% of businesses and contribute more than 40% to the GDP of the country (Memon et al., 2020). The research model examined in this study significantly contributes to the existing literature of EO, networking, intellectual capital, financial capabilities, BMI, and SMEs performance. For instance, the results advance the understanding concerning the RBV and social networking theory in the context of SMEs in emerging markets. In addition to the theoretical contribution, this study also has some useful managerial and policy implications highlighting the importance of EO, networking and capabilities for BMI, resource acquisition and firm's overall performance. This research also

has implications for the managers/owners of SMEs to understand the cost-effective factors for the achievement of superior performance in the competitive market.

1.2 Problem Statement

Despite having significant and manifold contributions of SMEs to sustainable development goals, economic growth, and employment, they face various challenges, barriers, and issues that may deter their survival and success. For instance, in emerging economies such as Pakistan, around 50% of the SMEs fail in their initial stages of the business cycle, and merely 4% of the SMEs survive up 25 years after startup (Anwar & Shah, 2020) just because of lack of resources, capabilities, and support (Shah, Gul, & Aziz, 2011). Similarly, in China, 67% of ventures fail in their infancy, while an overall 85% of ventures fail within the first 10 years of their operations (Parnell, Long, & Lester, 2015). The situation is not different, even in developed economies. For example, in the USA, SMEs' failure ratio is at the peak as every year, around 700,000 ventures are initiated out of which only 10% become successful (Sambasivan, Abdul, & Yusop, 2009). One of the major reasons for SMEs' failure is a lack of resources and capabilities. Acquisition of valuable resources has become a major focus of SMEs in both developed and developing economies. It is inevitable for businesses to gain the requisite resources for the smooth operation of the allied activities necessary for running the businesses, particularly in this hyper-turbulent business environment (Anwar, Rehman, & Shah, 2018; Jiang et al., 2018). This high failure ratio warrants identifying the specific factors that could facilitate the SMEs in acquiring resources to avoid their debacles, particularly in their infancy. Surprisingly, these failures are more prominent in the developed economies, where the government incubates these small industries through various platforms. The incubation services are for their initial stages; however, the long-term survival and competitiveness largely depend on these SMEs' acquisition capabilities to acquire their requisite resources from their external environment. Apparently, the inabilities of these SMEs

in acquiring adequate external resources are attributed to the lack of internal and external capabilities (Ying et al., 2019).

Notwithstanding, SMEs need to improve their internal capabilities and be equally required to reconfigure their external relationship and network, helping to gain unique resources. For instance, recent studies claim that although EO is necessary, but it is not sufficient to support SMEs to gain a sustainable competitive position; rather, firms must have additional strong internal capacities and skills as well as strong external links to outperform their competitors (Anwar & Shah, 2020). Additionally, many enterprises, especially in emerging economies, face the deficiency of financial capital, which can hamper their entrance in new markets and new territory. Therefore, financial capital can protect SMEs from different shocks and unexpected losses. Ergo, the internal resources and external resources became substantially important for the survival and success of enterprises. Existing research attempted to explore both internal and external resources that can help a firm to enhance its performance and profitability. However, the roles of internal capabilities like EO and particularly, the moderating role of external ties have been ignored in the acquisition of resources and performance of SMEs. Similarly, it is also posited how intellectual capital and financial capital can influence the nexus of EO and performance.

1.3 Research Gap

A plethora of research has been conducted to examine the role of EO in the success of SMEs. The results are mix, which resulted in surfacing several moderators and mediators to overcome these inconsistencies and comprehend the true association between the EO and firm's performance. For example, it is pointed out that the nexus of the EO-performance differs across several moderators, including marketing resources (Sok et al., 2017), government intervention (Alhnity, Mohamad, & Ku Ishak, 2016), competitive intensity (Gupta & Batra, 2016), family governance (Lee & Chu, 2017), social capital (Jalali,

Thurasamy, & Jaafar, 2017) slack resources (Kohtamäki, Heimonen, & Parida, 2019) and adaptive capabilities (Adomako, 2018). Moreover, prior studies also investigated different possible mediators between EO-performance nexus, such as competitive advantage (Anwar, Khan, et al., 2018), knowledge acquisition (Jiang, Yang, Pei, & Wang, 2016), learning orientation Wang (2008), differentiation strategy (Shah & Ahmad, 2019), technology (Choi & Williams, 2016), functional performance (Rezaei & Ortt, 2018), innovation ambidexterity (Zhang, Edgar, Geare, & O'Kane, 2016), absorptive capacity (Cui, Fan, Guo, & Fan, 2018), human resource outsourcing (Irwin et al., 2018), acquisitive learning (Gupta, Niranjan, & Markin, 2019), dynamic capabilities (Lim & Kim, 2019), marketing capability (Sok et al., 2017) and functional performance (Rezaei & Ortt, 2018). However, these studies have overlooked the possible role of resource acquisition, which warranted a research study to examine its role in the relationship between EO and performance. Therefore, this study filled this gap in the literature of RBV Theory by examining the mediating role of resource acquisition between EO and firm's performance, particularly in SMEs' context.

Different studies have used different types of innovation as a mediating variable between EO and performance nexus, such as innovation ambidexterity (Zhang et al., 2016), innovation (Ebrahimi, Shirsavar, Forootani, Roohbakhsh, & Ebrahimi, 2018), innovation effectiveness (Rochdi, Khatijah, & Muhammad, 2017), technological innovation (Choi & Williams, 2016) and innovation performance (Zehir, Can, & Karaboga, 2015). Yet, none of these studies examined the mediating role of BMI. Moreover, BMI as a specific type of innovation is considered essential for organizational success (Futterer, Schmidt, & Heidenreich, 2018) and a source of competitive advantage both in the short and long run in emerging economies (Anwar, 2018; Foss & Saebi, 2017). but still, rare attention has been given to BMI in terms of its mediating role in the EO and performance nexus. In this context, Foss and Saebi (2017) have recently suggested that to fully comprehend the EO and performance association, it is

imperative to investigate the performance implications of BMI in entrepreneurial firms. However, still, there no study was found which examined the mediating role of BMI between EO and firm's performance in emerging economies. Therefore, this study claims to fill the gap in the existing literature on the following accounts:

1. Jiang et al. (2018) conducted a study in listed large companies and examined the mediating role of resource acquisition between EO and performance. They recommended to examine the mediating role of resources' acquisition between EO and SMEs performance in small firms. In a similar notion, Huang and Wang (2013) argued that resource acquisition is a challenging task for SMEs as compared to large firms. They further argued that the nature of the association between resource acquisition, EO, and performance are totally different in large and small firms. They also suggested that the relationship between EO and resource acquisition can be tested in SME's context. Similarly, Jiang et al. (2016) and Shah & Ahmad (2019) recommended that various mediators can be tested between EO and firm's performance.
2. Kim, Steensma, and Park (2019) claimed that different types of social ties could influence the link of a firm's capabilities and its growth opportunities. It is believed that resource acquisition can help a firm to grow and expand its business in markets. Additionally, Jiang et al. (2018) also strongly recommended that different types of network ties (business, financial, and political) moderate the relationship between EO and resource acquisitions. Additionally, managerial ties as a moderator have been used between EO and firm's performance (Boso, Story, & Cadogan, 2013; Luu & Ngo, 2019; Su, Xie, & Wang, 2015). However, role of all the managerial ties (financial tie, political tie and business tie) on the relationship between EO and resource acquisition has been missed in SMEs context.

3. Since BMI has many features in common with innovation, and hence used interchangeably in different studies. In this perspective, Luu and Ngo (2019) recommended to use different ties (business, political, and financial) if they can influence innovation outcome and innovation growth. Considering the statement, it is believed that network ties facilitate BMI in the presence of EO as scrutinized by Anwar and Shah (2020) that network ties significantly contribute to BMI. Furthermore, Futterer et al. (2018) suggested that different business ties or networks can configure an effective BMI from a social network perspective. Foss and Saebi (2017) also claimed that social network ties spur various activities and, more importantly, enhances BMI among firms.
4. One stream of research on EO believes in the direct effect, while others consider the indirect impact of EO on performance. In this perspective, Chen, Huang, and Wey (2017) claimed that BMI is the best potential variable for future research that could be examined as a mediator between EO and firm's performance.
5. Anwar and Shah (2020) claimed that SMEs need an effective business model innovation (BMI). They further recommended that use BMI as a mediator between firm capabilities and performance (Shah & Ahmad, 2019). Hence, this research attempts to fill this gap and uses BMI as a mediator between EO (being a firm capability) and SMEs' performance to articulate the insights in a better way. Moreover, it is argued that BMI plays a crucial role in the improvement of entrepreneurial firm's performance (Foss & Saebi, 2017).
6. Rodrigo-Alarcón, García-Villaverde, Ruiz-Ortega, and Parra-Requena (2018) argued that EO significantly contributes to SMEs' performance. They further suggested that the relationship between EO and performance can be influenced by intellectual capital. In the present study, intellectual capital — was used to moderate the relationship between EO and performance. Existing studies point out that when firm-level capabilities are

well established and organized, the influence of EO as a driver of firm success is enhanced (Adomako, 2018; Cui et al., 2018). However, knowledge is lacking on the effect of a firm's intellectual resource capabilities on the EO–performance nexus in the SMEs context.

7. The extant research in the SMEs' context has relied heavily only on financial performance only, while non-financial performance has been rarely considered given obvious reasons. Recently, Chen et al. (2017) and Anwar and Shah (2020) recommended that performance in financial terms and non-financial terms can be examined with EO to gain more useful insights.
8. Noteworthy is that firms in emerging economies need sufficient finances for their growth Wang et al. (2014). Hence, financial capabilities are equally important as EO for ventures operating in the regions. In this study, the moderating role of financial capabilities between EO and performance was also examined. Similarly, Anwar and Shah (2020) suggested that financial capability could be used as a moderator between EO and performance. They argued that if a firm aims to follow entrepreneurial activities and differential product development approaches, it may need financial support to formulate it.

Table 1 Research Gap

	Author	Research gap
1	Jiang et al. (2018);	They recommended to examine the mediating role of resources' acquisition between EO and SMEs performance.
2	Jiang et al. (2018) Yin, Hghes and Hu, (2020)	They recommended to use different types of network ties (business, financial and political) as moderator between EO and resource acquisitions.
3	Luu and Ngo (2019); Anwar and Shah (2020)	They recommended to use different ties (business, political, and financial) in the presence of EO to significantly contribute to BMI.
4	Chen et al. (2017); Foss and Saebi, (2017); Shah and Ahmad, (2019)	They recommended to examine the mediating role of BMI between firm capabilities and performance.
5	(Adomako, 2018; Cui et al., 2018; Rodrigo-Alarcón et al., 2018)	They suggested that the relationship between EO and performance can be influenced by internal capability i.e., intellectual capital
6	Chen et al., (2017)(Shah & Ahmed, 2019)	They recommended that both financial as well as non-financial performance of SMEs may be tested with EO to gain more useful insights
7	Li et al. (2020)	The path between EO and SMEs efficiency is moderated by financial resources needs further investigation.

1.4 Research Questions

This study examined the role of firm's internal and external capabilities in resource acquisition and performance. This study answers the following questions:

1. To what extent entrepreneurial orientation influence the SMEs' performance?
2. Does entrepreneurial orientation influence the acquisition of resources?
3. resource acquisition influence the SME's performance?

4. To what extent resources acquisition mediate the relationship between entrepreneurial orientation and firm’s performance?
5. Do managerial ties (financial, business, and political) moderate the relationship between entrepreneurial orientation and resource acquisition?
6. To what extent entrepreneurial orientation influence BMI?
7. To what extent BMI influence SMEs' performance?
8. Does BMI mediate the relationship between internal capabilities and firm’s performance?
9. Do managerial ties (financial, business, and political) moderate the relationship between BMI and resource acquisition?
10. Does intellectual capital moderate the relationship between entrepreneurial orientation and SMEs' performance?
11. Do financial capabilities moderate the relationship between each entrepreneurial orientation and SMEs' performance?

1.5 Research Objectives

Based on social network theory and resource-based view theory, this study aims to examine firms’ resources (internal) and sources (external) in terms of valuable resource acquisition and superior performance in emerging economies. The major objective of the study is to explore which types of internal capabilities and which external sources can facilitate a firm, especially in emerging economies, to acquire valuable resources and high performance. Alternatively, this study aims to identify the most significant drivers which can save SMEs from failure. Additionally, this study explores the determinants that can improve SMEs' performance, which may help enhance sustainable development goals. The general objectives of the study are the following:

1. To examine the importance of the dimensions of entrepreneurial orientation in SMEs' performance.
2. To check the effect of entrepreneurial orientation on resources acquisition.
3. To examine the effect of resources acquisition on SMEs' performance?
4. To understand the mediating role of resources acquisition between entrepreneurial orientation and SMEs' performance.
5. To understand the moderating role of managerial ties (financial, business, and political) between entrepreneurial orientation and network resources acquisition
6. To scrutinize the effect of entrepreneurial orientation on BMI.
7. To assess the effect of BMI on SMEs' performance.
8. To understand the mediating role of BMI between firm internal capabilities and performance.
9. To understand the moderating role of managerial ties (financial, business, and political) between entrepreneurial orientation and BMI.
10. To know the moderating role of intellectual capital between each dimension of entrepreneurial orientation and SMEs' performance?
11. To know the moderating role of financial capabilities between each dimension of entrepreneurial orientation and SMEs' performance.

1.6 Significance of the Study

The competitive environment has created a challenging situation for SMEs in both emerging and developed economies. In such a turbulent environment, only SMEs having enough resources and strong capabilities succeed to survive in the long run. In this study, the most significant and valuable determinants of SME's performance in emerging markets were unleashed, which are considered as influential factors of resource acquisition, BMI, and business performance in emerging markets. Moreover, this research also aimed to help top

managers/owners in understanding the moderating and mediating factors in business success. More specifically, this research answers the question “How to acquire external resources, BMI and how to sustain in the dynamic environment?”

The current study makes several theoretical contributions to the entrepreneurial finance paradigm. This study extends the knowledge of EO, BMI, resources acquisition, internal capabilities, external capabilities, and firm performance relationship. By elaborate how entrepreneurial orientation influences the BMI, resources acquisition, and firm performance. The current study is the first of its kind, focusing on the link between entrepreneurial orientation influence the BMI, resources acquisition, and firm performance, which have not been tested before in such an underlying mechanism. It is probably one of the pioneer efforts in Pakistan with a reference in an emerging economy. As such, it is a theoretical contribution to the body of literature on entrepreneurial finance for this part of the globe.

The first significance of this study is understanding the importance of EO and its dimensions in firms performance. Acknowledge the unique role of innovativeness, risk-taking and proactiveness in SME's performance is essential in emerging markets.

The second significance of this study is to find out which mediator, either BMI or resources acquisition, plays a considerable role in EO and firm performance. In other words, this research facilitates us in understanding the direct and indirect impact of EO on firm performance through BMI and resources acquisition as mediators. The mediating effect of BMI and resources acquisition on the relationship between EO and SMEs' performance is studied for the first time in an emerging market through this survey, which differentiates the study from others.

Similarly, the third significance of this study is to find out how managerial ties (political, financial, and business) affect the nexus between EO and resource acquisition. The previous

study/researcher examined the direct effect of EO on resource acquisition. But, the moderating role of managerial ties on the relationship between EO and resources acquisition examined for the first time in an emerging market through this survey, which also differentiates this study from others.

The fourth significance of this is to find out how managerial ties (political, financial, and business) can affect the nexus between the EO and BMI. This research unleashes the worth of managerial ties in the acquisition of resources and building an effective BMI. Many studies have examined the direct relationship between EO and BMI but pay less consideration to the underlying mechanism through which this relation is strengthened or weakened.

The fifth significance of this study is to examine how the internal capabilities such as EO, intellectual capital, and financial capabilities empower SMEs' performance and which of these capabilities are more fruitful for resource acquisition. Because SMEs have lack of resources and they need to find out facilitating ways to acquiring external resources. This study also contributes to the existing body of literature on entrepreneurial finance by exploring the moderating effect of intellectual capital and financial capabilities on the relationship between EO and SMEs performance.

This study does not only help to save SMEs from failure but also helps them in the achievement of sustainable development goals. Moreover, this study facilitates owners and managers of SMEs to identify and recognize less risky drivers, which can facilitate the acquisition of resources and high profitability. Finally, this study can help especially small firms who are unable to compete with little resources in the turbulent markets. As argued by Anwar and Shah (2020), more than 50% of ventures fail because of a lack of resources and ineffective BMI. This research is an attempt to explore how an effective BMI can help a firm to survive in the long run.

Our research focused on SMEs because of their widespread prevalence and contributions to the GDP. For example, SMEs contribute more than 40% of the global GDP, providing 78% of the total employment opportunities for the non-agriculture sector, adding 36% value to the manufacturing products, 30% contributions in exports, and 35% of value-added manufacturing products are from SMEs. SMEs play a key role in poverty alleviation and are the major source of employment for the local communities. Hence, these contributions warranted a research study to examine the critical factors that contribute to SMEs' success or failure. SMEs' long-term survival can enhance a country's propensity and standard of living by providing more employment opportunities. SMEDA and other responsible bodies are busy in developing policies and strategies for the promotion and growth of SMEs—finding of this research can help them to come up with effective programs and policies that can ensure the survival of SMEs. Moreover, it is also suggested to encourage financial institutions and banks towards lending finances and loans to the SMEs sector for effective operational activities. These initiatives would enable SMEs to expand their operations and survive in the market—resulting in more job creation for people and high economic growth.

1.7 Contribution of the Study

Addressing the existing gaps in the literature, this study makes several contributions to the existing empirical literature of EO, resource acquisition, SMEs performance, managerial ties, intellectual capital, and financial capabilities. More precisely, the major theoretical, practical and contextual contributions of this study are as follows.

1.7.1 Theoretical Contribution

This study examined the major theme of resource-based view (RBV) theory in the following ways. This research contributes to empirical literature and extend the RBV theory (Barney, 1991) in new ways. Though, the theory is extensively tested in prior studies with several determinants, including tangible and intangible. With respect to resources, researchers have

considered a number of tangible resources such as land, infrastructure, technology, finance and materials, etc.; and intangible resources such as information, knowledge, capabilities, networking, intellectual capital, and skills, etc. for business success while testing the RBV theory (Barney, 1991). Indeed, previous studies have significantly added to the existing literature of the RBV theory in emerging and developed economies (Ferreira & Fernandes, 2017; Jiang et al., 2018; Li et al., 2020; Ying et al., 2019). However, this study considered a wide range of intangible resources such as EO, intellectual capital, networking, and BMI; and tangible resources such as finance in a single model.

Moreover, this research empirically tested the theory with a new flagged model using a different set of mediators and moderators. For instance, EO as internal resources in RBV perspective) that might give high financial performance directly or need the support of external resources and internal capabilities, e.g., financial and intellectual capital to configure the firm's financial performance. Hence, this research claims a new zone in RBV with contemporary paths to discover either particular resources that directly spur firm's performance on their own or need external resources to improve the performance. More precisely, this research tests a clear view of RBV theory to distinguish between the importance of internal and external capabilities as well as to know if these resources are complementary.

The RBV theory argues that a firm's excessive resources, both tangible and intangible, and capabilities enhance the profitability and competitive position (Barney, 1991). Though, studies have often ignored the theme of RBV on empirical evidence, especially in emerging economies such as Pakistan. Moreover, many studies have given much attention to the internal capacities and resources, while the external sources (resource acquisition and networking) have remained untouched in the studies (Khan et al., 2019; Memon et al., 2020). In this study, based on empirical evidence from an emerging economy, a comprehensive

research model is tested to see how firm internal capabilities such as EO, intellectual capital, and financial capabilities can contribute to SMEs' performance. This research test BMI in the RBV theory context to examine and itemize new determinants of competitive advantage. Considering external capabilities being intangible resources, managerial ties in the forms of business, political and financial ties were used as external sources to examine how these connections helped a firm to acquire resources and achieve a high level of performance. Based on the results of this study, some specific future research directions are provided in the relevant section of the last chapter.

1.7.2 Practical Contributions

From a practical perspective, this study has useful implications for owners, managers, and policymakers to further improve their strategies and policies accordingly. This study, for instance, highlights the importance of particular internal resources such as EO, intellectual capital and financial capabilities as well as external resources such as business ties, political ties and financial ties in shaping their organizational performance. It also helps them to recognize more convenient and fewer risk endeavors. For instance, SMEs, due to lack of resources and skills shortage, are unable to sustain their position in a turbulent market. Moreover, SMEDA—being a responsible body for the growth and survival of SMEs in Pakistan can also benefit from the recommendations provided in this study. Additionally, responsible bodies of other developed and emerging economies may consider the importance of the internal as well as external resources identified in this research while initiating new programs to promote their SMEs sector.

1.7.3 Contextual Contributions

As aforementioned, many studies have given much attention to developed economies and SMEs in emerging economies have been rarely touched. The present study tests the model of SME's performance in the context of the internal as well as external resources to examine

how firm internal capabilities and external ties can influence its performance and profitability in emerging economies. More precisely, this study collected data from SMEs operating in an emerging market like Pakistan, which is considered a central place between the European and Asian markets. More precisely, this study investigated the role of the above-mentioned factors in SMEs operating in three different industries, such as the trading industry, manufacturing industry, and services industry of Pakistan.

1.8 Theoretical Background

This study examined the importance of firm's internal capabilities such as EO, intellectual capital and financial capabilities as well as external sources such as business network, political network and financial network in the acquisition of resources and improvement of performance. In the context of the firm's RBV theory, both the internal and external resources are important factors of firms' sustainability and survival. These two types of resources are modeled in a research model, estimated in this study to further understand the RBV theory.

RBV theory is primarily concerned with the role of a firm's resources and capabilities towards its competitive position and superior financial performance (Barney, 1991). Furthermore, Barney (1991) argues that an enterprise with sufficient resources and capabilities, rare, unique and inimitable give a superior position in the dynamic market. Hence, resources are defined as either tangible or intangible assets that are either owned or controlled by a firm; whereas capabilities are defined as firm's ability to exploit and combine these resources through organizational routines to achieve its objectives (Amabile, Conti, Coon, Lazenby, & Herron, 1996). In the present study, both resources (tangible and intangible resources) and capabilities, which can facilitate a firm to achieve superior performance and profitability, were used to examine the relationship of the internal and external resources with the firm's performance. Parsimoniously, some studies have more importance to intangible resources (Anderson & Eshima, 2013; St-Pierre & Audet, 2011;

Ying et al., 2019), while others claim emphasized on the tangible resources in predicting the firm's performance (Huy & Zott, 2019; Li et al., 2020). It is, somehow, agreed that both the resources are necessary for the firms to survive in the long run in hyper turbulent markets (Čater & Čater, 2009; Khattak & Shah, 2020). Hence, the relative importance of both types of resources was studied in this study. A common problem reported in SMEs is lack of resources; hence acquiring external resources becomes a key effort to boost operational activities (Ishtiaq, Songling, Hassan, & Hayat, 2020). However, it is not easy to acquire resources; enterprises must have internal capabilities to make it happen (Ying et al., 2019). For this study, by using RBV theory, it is essential to examine how tangible and intangible resources can be acquired through capabilities, enabling firms to enlighten their performance (Khattak & Shah, 2020b).

However, there are several shortcomings of the RBV in the prior studies, especially about the firms that operate in a turbulent market, which is likely to be the case for many entrepreneurially oriented firms (Khan, Yang, & Waheed, 2019). For instance, one of the major reasons is that financial capabilities are rarely discussed in the existing literature despite their significant role in the success of the ventures (Cooper, Gimeno-Gascon, & Woo, 1994). In a similar view, for instance, the term entrepreneurial finance that has recently gained much attention of business researchers is deemed a crucial factor for high profitability (Rodrigo-Alarcón et al., 2018). But entrepreneurial finance has not been considered in the existing RBV literature; therefore, it has been considered in this study. Generally, firms have two kinds of financial capabilities; internal and external. Internal financial capabilities are those competencies that are generated through equity, friends, and angel investors. On the other side, external financial capabilities demonstrate the firm's ability to acquire funds from external bodies such as banks, intermediaries, financial institutions and government incentives, etc. (Su et al., 2015).

Existing literature has introduced a few sub-dimensions of RBV that describe a clear picture of RBV theory. For instance, in the resource-based view perspective, EO encompasses two major capabilities, e.g., dynamic capabilities and adaptive capabilities, which enhance the firm's performance (Barney, 1991). Dynamic capabilities demonstrate a firm's ability to effectively respond to external change using internal capabilities while improving its performance (Day, 2014). The same argument is suggested for a firm's innovative ability that is the part of EO. Similarly, adaptive capability encompasses that a firm can enter or proactively act to gain the advantage of new opportunities before their competitors do (Day, 2014). In this perspective, the proactive ability, one of the dimensions of EO, demonstrates that a firm can gain benefits from new opportunities and can gain useful resources before its competitors and industrial rivals do.

Additionally, as noted earlier, that dynamic and adaptive capabilities are merged into RBV theory. Alternatively, dynamic capabilities make the firm ready for the change that occurs in the external environment (Day, 2014) while adaptive capabilities enable firms to be prepared in advance for the external change (Ma, Yao, & Xi, 2009). Looking at the concept of the external change, a firm may need external link and relationship which can facilitate moving in line with the changes (Boso et al., 2013; Cheng Lu Wang & Chung, 2013). Consequently, studies have also introduced internal intellectual capital and external intellectual capital (Khan, Yang, & Waheed, 2019). External intellectual capital demonstrates firms' relationship and connection with the external environment, other firms, and industries. Hence, it is believed that the network ties (sometimes lie in external intellectual capital) can enable firms to acquire useful resources, innovative tactics (e.g., BMI), and adjust with environmental changes to enhance performance (Mitrega, Forkmann, Zaefarian, & Henneberg, 2017). Alternatively, BMI, considered as the best approach of high performance (Foss & Saebi, 2017), does not come automatically but requires firm networking ability i.e., external

intellectual capital (Anwar & Shah, 2020). Considering the comprehensive discussion, existing research have argued external intellectual capital in the RBV perspective that builds BMI, which in turn enhances firms' performance (Breuer & Lüdeke-Freund, 2017). Similarly, internal intellectual capital indicates a firm's ability to strengthen the internal process of a firm to gain high profit (Adomako, 2018) and considered to be a less expensive resource. For instance, firms with high EO may not always be able to generate satisfactory financial performance but they need high internal intellectual capital to reconfigure the entrepreneurial activities (Adomako, 2018).

To summarize, the fundamental concept of this research is based on tangible and intangible resources that are the main theme of RBV theory. The relative importance of the internal resources and external sources, as well as tangible and intangible resources that may facilitate firm profitability, were examined in this study.

1.9 Organization of the Study

Figure 1 illustrates the organization of the study. The first chapter contains an introduction, background, problem statement, gap analysis, objectives, research questions, and theoretical background. In the second chapter, the relevant literature is critically analyzed and reviewed. The third chapter describes the research design, population, and variables. The fourth chapter is about the analysis of the data. In the fifth chapter, results are discussed; implications, limitations, and future research directions are provided.

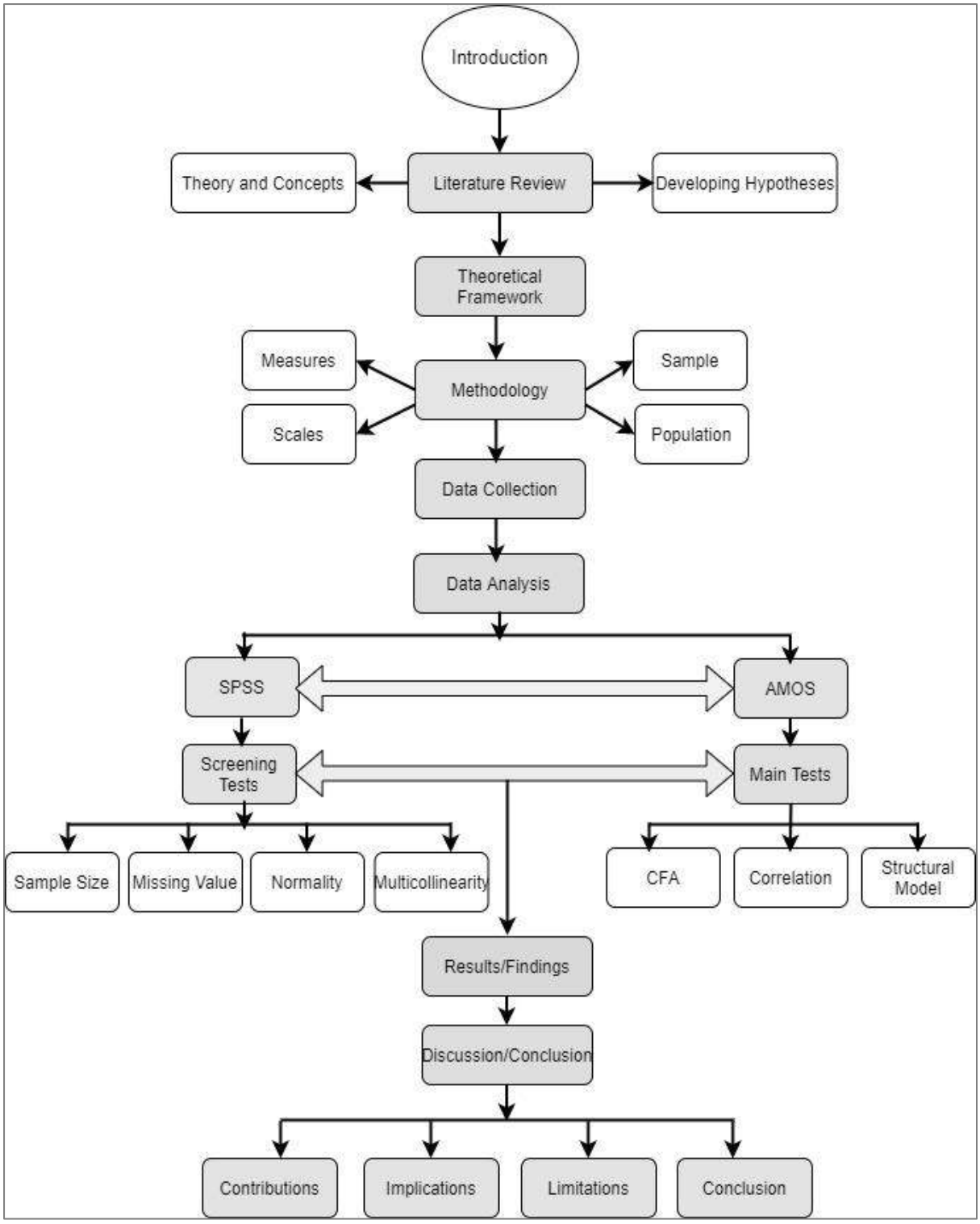

Figure 1 Organization of the Study

Chapter 2

LITERATURE REVIEW

This chapter demonstrates the definition and background of each of the variables used in the research model. We have also discussed the relationships explained by previous research studies for proposing the hypotheses. In the end, we have given the conceptualized research model.

Many researchers have investigated the EO and their effect on SMEs' performance in different cultures and environments and studied the relationship of EO with resource acquisition and BMI. Some of their results are very relevant and valuable for this present study. Furthermore, a limited review of the prior studies regarding the relationship of EO with performance of SMEs, resources acquisition, BMI, internal and external capabilities. The flow of the literature review is displayed in the diagram provided below.

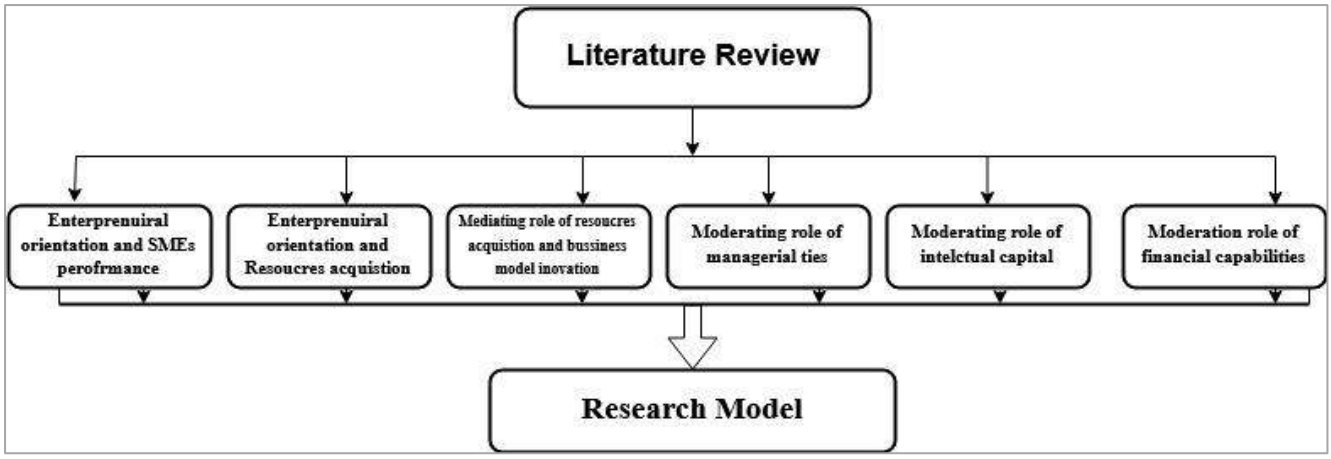

Figure diagrammatical flow of literature review

2.1 **Firm's Performance**

There is no common definition of a firm's performance. Researchers define it according to their research objectives. From SMEs' perspective, performance refers to the "value" contributed to customers, owners, and top managers (Anwar & Shah, 2020). In a similar vein, Laitinen (2002) defined enterprise performance as "the capability of an entity/business/firm to generate results in predetermined dimensions about a target". In previous studies, an enormous discussion has been done regarding assessing the firm's performance and finally concluded that it is a multidimensional construct. Therefore, it is more appropriate to use various dimensions of firm's performance in the empirical study (Anwar et al., 2018). Typically, a firm's financial performance can be assessed with sales growth, return on Assets (ROA), Return on Equity, and Investment, etc., when archived data are available. It is generally acknowledged that there is a strong propensity among SMEs to show reluctance in provides financial data (Khan, Yang, & Waheed, 2019). However, studies indicate that there is a strong relationship between self-reported measurement of performance and objective performance measurement (Semrau, Ambos, & Kraus, 2016). Furthermore, they suggested that self-reported measure provides more valuable outcomes than archived base data in an emerging market.

Hence scholars suggested that using a self-reported tactic for assessing SMEs financial performance by asking them to rate their financial performance keeping in view, ROA sales growth, investment and return on equity etc. compared with their industry competitors during the last 3 or 5 years (Anwar et al., 2018; Memon et al., 2020). In contrast, non-financial performance is related to product quality, customer satisfaction, loyalty, manufacturing process, marketing effectiveness, and competitive advantage. Usually, Non-financial performance refers to operational performance as used by (Anwar & Shah, 2020; Ryu, Lee, & Choi, 2014). Santos and Brito (2012) recommended that scholars should use both types of

performance in empirical studies. Recent some scholars in emerging economies also used both types of performance in EO literature (Anwar et al., 2018; Anwar & Shah, 2020).

2.2 Small and Medium Enterprises (SMEs)

There is no universal definition of SMEs across the globe. These discrepancies are attributed to the underlying dimensions which are used to define the SME. For example, it is often defined as three major dimensions; a number of employees, total assets, and yearly turnover ((Anwar et al., 2018; Dar, Ahmed, & Raziq, 2017). Some important definitions of SMEs across the globe are provided and compared in Table 2. However, in the Pakistani context, the Small and Medium Enterprise Development Authority (SMEDA) defined SMEs as per the above three criteria, such as those ventures that have less than 250 employees, paid-up capital equals to PKRs. 25,000,000 and annual sales equal to PKRs. 250,000,000 (Dar et al., 2017). This definition is comparable to the meanings used by other authorities across the globe, as mentioned in Table-2; therefore, we relied on the definition of the SMEDA for the selection of the sample of this study. Besides, the operationalization of other variables of the study are provided in Table- 3.

SMEs can be found anywhere in the world. SMEs are considered the "engine'' of economic growth in industrial and growing economies (Khan, Yang, & Waheed, 2019; Khattak & Shah, 2020b).

According to a recent report, out of 3.2 million, there are more than 95 percent SMEs functioning in Pakistan and contribute more than 40 percent to the Gross domestic product (GDP) of the country and play an essential role in poverty reduction, which is a need of the day in emerging economies (Memon et al., 2020). However, a competitive and turbulent environment put the SMEs under pressure and challenged their survival in the market (Anwar et al., 2020). In such an environment, owners and managers of SMEs look for sources and resources to enhance performance and survive in the market.

2.3 **Entrepreneurial Orientation**

According to Wiklund and Shepherd (2005), EO captures specific characteristics such as decision-making approaches of firms, techniques, and procedures in strategic making activities.

The concept of EO was initially discussed in the literature of strategic studies and provides a vision in the perspective of strategic studies. Miller and Friesen (1982), being the pioneer of this concept, argued that entrepreneurial enterprises endeavor to acquire a CA by consistently engaging in innovative activities and aggressively accepting the risk. At the same time, the foremost aspects of the entrepreneurial strategy are activities related to innovativeness, risk-taking, and proactive. Hence, Miller (1983) made a pivotal contribution to this field of research by providing theory and research instruments, which enabled researchers to examine the strategic relationships among environmental and strategic factors that significantly impact the firm's performance. This contribution is vital because Miller diverted the focus from the individual entrepreneur to the entrepreneurship process.

Prior studies suggested that the EO remains a dynamic research topic, attractive discussion, and frequent attention of the researchers (Martens, Lacerda, Belfort, & de Freitas, 2016; Monteiro, Soares, & Rua, 2019). EO captures the firm's actual entrepreneurial behavior (Wiklund & Shepherd, 2005) and is positively associated with its performance (Khan, Yang, & Waheed, 2019; Shah & Ahmad, 2019).

EO has not yet received a standardized definition due to its dimensions. Some studies believed in three dimensions; innovativeness, risk-taking, and proactiveness. Covin and Slevin (1989) have taken three dimensions to explain EO: innovativeness, proactiveness, and risk-taking. Lately, other scholars approach five dimensions by adding two new dimensions, such as competitive aggressiveness autonomy (Lumpkin & Dess, 1996).

The first dimension of EO innovativeness, in general, has defined "as an organizational culture which inspires to introduce a new idea or novel process" (Hurley & Hult, 1998), and the formation of new goods, services, and advanced technologies (Antoncic & Hisrich, 2001). Innovativeness states the process that motivates the company to adopt new creative ideas related to new products, services, and new technology (Tajeddini, 2010). Innovativeness also tries to motivate firms to invest more in new knowledge and technology as well as to develop new products that may improve performance (Calantone, Cavusgil, & Zhao, 2002). Besides, Gumusluoglu and Ilsev (2009) define "Innovativeness as the predisposition to engage in creativity and experimentation through the introduction of new products/services as well as technical leadership through the research and development in new methods". Whereas proactiveness demonstrates the situation in which enterprises take constructive marketing policies, actions, which encourage firms to present a new product, process, latest technologies, which leads to go beyond their competitors (Lumpkin & Dess, 1996).

Innovativeness is the key factor linked to the characteristic of an individual entrepreneur as well as the firm. First, Schumpeter (1934) discusses innovation as an essential endeavor of entrepreneurial firms because innovation is necessary for developing new products or innovating new processes. However, the concept of innovation is broken down into four different types given as; product, process, radical and incremental innovation. The attribute of innovativeness explains the organization's capability of introducing novelty with value-added. It reflects the proclivity to involve in generating novel ideas (Aloulou & Fayolle, 2005).

Besides innovativeness, Risk-taking is another important aspect of EO; rather, risk-taking is necessary to change innovative ideas into innovation because the risk of failure may deter a firm from shaping ideas into products. According to Miller (1987), risk-taking is "the measure to which manager is ready to create huge risky resource faithfulness, to support

those which have a reasonable option of special stop working". According to Lumpkin and Dess (1996), risk-taking tendency is a behavioral measurement of an EO beside which opportunity is tracked.

Risk-taking displays the condition in which the company takes audacious action with the perception to gain maximum return. Risk-taking may lead to gain or loss by a firm, but the company may react or take bold risks against its rivals to gain maximum profits (Kreiser & Davis, 2010). Risk-taking normally uses to explain the doubt or uncertainty, which is the result that may come from entrepreneurial conduct (Tajeddini, 2010).

.Risk-taking also supports the creative organization to investigate, learn, and absorb the latest external technology that improves firm's performance. The market risk-taking firm also shows the willingness and the ability to enter into new markets to expect new market demands.

The third dimension of entrepreneurial orientation is proactiveness. This concept two main attributes are posited in literature: 1) aggressive competitive behavior to outperform competitors and 2) The organizational hunt to cease the available or favorable business opportunities (Dess, Lumpkin, & Covin, 1997). Hence proactiveness can be referred to "as a response to opportunities such that once identified should be ceased and lead the market". In contrast, competitive aggressiveness talks about the response to threats from the competitive market trends or demands in the marketplace.

Proactive firms tend to progress immediately by implementing new strategies into the current markets and become new markets (Venkatraman, 1989). Therefore, these firms are more likely to be efficient toward gaining a competitive edge in the market. Hence, the common belief of proactiveness firms is more "rules of the game" in the specific industry. They have the edge over their competitors that just react to change in the atmosphere and the rivals'

strategic activities (Thomas Lumpkin & Dess, 2001). Thus above three dimensions describe the conception of EO in a great view (George & Marino, 2011)

The results of a meta-analysis conducted by Rauch and his coworkers in 2009 demonstrated that 70 percent of the research studies favor three dimensions of EO. Hence, the present study also used the three dimensions to provide a comprehensive picture of EO.

2.4 Business Model Innovation

Schumpeter (1949) proposed five different categories of innovations 1) product innovation, 2) production procedures innovation, 3) supply bases innovation, 4) exploitation of innovative markets, and new methods to manage the business. On the other hand, researchers have intentionally amalgamated all the categories of innovation into a sole concept called "Business Model Innovation". However, no single definition of BMI has been confirmed (Zott, Amit, & Massa, 2011).

In the mid-90s, it was only the entrepreneurship and the strategy researchers who deemed the recreation as a holistic picture of the company's business process and explained the phenomena of their interrelation (Zott et al., 2011). The BM studies are categorized into three streams. Firstly, BM is useful since 21 century for enterprise categorization, as after the emergence of business ventures, the concept of BM was rapidly adopted to classify and identify value drivers of e-commerce (Zott & Amit, 2010). Secondly, BM is associated with the firm's performance, as it is one of the prime factors. The evidence suggests that the firms using BM successfully outperform other firms (Cortimiglia, Ghezzi, & Frank, 2016). Thirdly, BM is deemed as one of the most prominent factors for innovation (Mitchell & Coles, 2003). Due to its importance, studies have generated an extended version of BM termed as BMI (Foss & Saebi, 2017).

Scholars elucidate the Business model (BM) with several dimensions. For instance, Anwar and Shah (2020) defines BMI as a "firm's persistent effort and struggle for changing

products, processes, structures, and approaches of delivery, considering all the internal and external factors." Similarly, Pedersen, Gwozdz, and Hvass (2018) defined BMI as "innovation to the way business is done by creating a competitive advantage through superior customer value while contributing positively to the company, society, and environment while minimizing harm".

Osterwalder and Pigneur (2010) define a BM as "the rationale of how an organization creates, delivers, and captures value".

Anwar, Shah, Khan, and Khattak (2019) define BMI as "the process of bringing about a change in the manner and range of business activities conducted by a firm, to achieve and enhance economic sustainability".

Although having an effective BM, sometimes renowned enterprises fail because of histrionic fluctuations in the external climate and dynamic markets (Teece, 2018). On the other hand, these unexpected variations have a sizable impact on the enterprises' current resource, capabilities, and values creation process. In response to this change, enterprises pursue new strategies to gain a competitive advantage (Anwar & Shah, 2020). Thus, in reaction to these changes, the novel tactic "BMI" has emerged, which exhibits firm innovative actions synchronously considering all internal and external factors (Anwar, 2018).

Some scholars defined BMI "as a process that deliberately changes the core elements of a firm and its business logic" (Bucherer, Eisert, & Gassmann, 2012). Similarly, BMI signifies "the conceptualization and adoption of new ways of conducting economic exchanges" (Zott & Amit, 2007).

Saebi, Lien, and Foss (2017) define BMI as "the firm's value proposition and market segments, the structure of the value chain required for realizing the value proposition, the mechanisms of value capture that the firm deploys, and how these elements are linked

together in architecture". In recent study Teece (2018) defines BMI "as design or architecture of the value creation, delivery, and capture mechanisms of a firm".

Cucculelli and Bettinelli (2015) define BMI as "the action of modifying the firm's existing activity system and renewing its core business logic, to enact and exploit opportunities".

2.5 Entrepreneurial Orientation and Firm's Performance

Firm level EO is often seen from the lens of RBV theory (Barney, 1991), defined as a distinct firm internal capability that assist firms to gain an SCA and improve their performance (Anwar et al., 2018; Brouthers, Nakos, & Dimitratos, 2015; Shirokova, Bogatyreva, Beliaeva, & Puffer, 2016). SMEs sector faces a tough challenge to compete in the turbulent markets for the long term profitably and efficiency (Ishtiaq et al., 2020) due to a lack of resources and capabilities (Martin, Javalgi, & Ciravegna, 2020; Ying et al., 2019). One of the possible strategies to survive in the market is entrepreneurial orientation (EO) and entrepreneurial culture (Khan et al., 2019; Khattak & Shah, 2020a). For instance, Jiang et al. (2018) claimed that SMEs use entrepreneurial skills to respond to external changes and threats.

Scholars usually accept EO as a tool for gauging an enterprise's inclination toward entrepreneurship (Lages, Marques, Ferreira, & Ferreira, 2017) and a significant predictor of firm's performance (Khan, Shuangjie, Khan, & Anwar, 2019). Though multiple factors may contribute to firm's success in the perspective of entrepreneurship, EO explains the strategic view of an entrepreneur. Hence Chirico, Sirmon, Sciascia, and Mazzola (2011) termed 'mobilizing vision of the firm' a result of proper execution of EO.

Extensive literature has gathered enough evidence to suggest that EO has a significant influence on enterprise performance. For example, Wiklund and Shepherd (2003) concluded that EO spurs firm's performance significantly. Multiple studies have tested the same hypothesis in different geographical contexts and found significant positive nexus between

EO and firm's performance. For instance, Wang (2008) in the UK, Wang and Yen (2012) in Taiwanese, Su et al. (2015) in China, and Irwin et al. (2018) in the USA, tested the same hypothesis and agreed on a single conclusion that EO is significantly linked to the performance of the firm.

The meta-analysis studies further strengthen the validity of the hypothesis that EO has a significant influence on firm's performance. For example, Rauch, Wiklund, Lumpkin, and Frese (2009), in their meta-analysis, claimed that EO and firm's performance nexus are positively significant. Likewise, Soares and Perin (2020) scrutinized that EO is a significant predictor of firm's performance. Surprisingly, during the recession, mostly dubbed as "The great recession." Kraus et al. (2012) found EO significantly related to a firm's performance. However, they argue that it is because of firms' proactive characteristics that not only shielded entrepreneurial firms from the financial shocks; instead, these firms over-performed even in the hard-financial times.

Bogatyreva, Beliaeva, Shirokova, and Puffer (2017) investigated the EO and firm's growth relationship in the emerging Russian market and developed Finnish market context. The results displayed that EO dimensions have a positive influence on firm growth in SMEs.

Recently, in emerging economies, an intensifying amount of studies has given enormous attention to investigate the nexus of EO and SMEs' performance. Scholars and researchers for a long time have shown their interests to scrutinize the EO and enterprises performance relationship in emerging markets and finally realized that there is a strong association between EO and firm's performance (Anwar et al., 2018; Hossain & Al Asheq, 2019; Shah & Ahmad, 2019; Tang & Tang, 2012).

When enterprises have a higher level of entrepreneurial-orientated capabilities, they enjoy the superior performance (Anwar & Shah, 2020). Entrepreneurial orientation is the most dominant element for a new venture to upsurge its performance (Perera, Nag, &

Venkateswarlu, 2019) and gain a competitive position in the marketplace (Anwar et al., 2018). For example, Ying et al. (2019) claimed that SMEs use entrepreneurial skills to gain a sustainable position and survive for a long period in the turbulent market. Besides, EO significantly influences the new venture performance (Khan, Li, Safdar, & Khan, 2019; Khan et al., 2019).

When top managers favor entrepreneurial activities, i.e. innovative, risk-taking, and proactiveness, they achieve higher level performance (Semrau et al., 2016). Especially the dimensions of EO, innovative, risk-taking, and proactiveness play a significant role in the performance of newly born ventures (Anwar et al., 2018; Shah & Ahmad, 2019; Wang, Thornhill, & De Castro, 2017). In a similar vein, the three EO dimensions are the most vibrant elements that help firms to become successful in developing countries (Anwar & Shah, 2020; Shan, Song, & Ju, 2016). For example, Cui et al. (2018) used multi-sourced data on Chinese high-tech firms to realize a significant association between EO and firm's performance.

The proactiveness dimension of EO plays a vital role in gaining and sustaining a competitive advantage in the competitive market by introducing new products (Adel & Habib, 2018). Therefore Proactiveness firm takes more rapid action toward the market by having the market opportunities more certainly than their rivals (Hughes & Morgan, 2007) and improve their performance (Anwar & Shah, 2020) but also maintain their competitive growth (Okangi, 2019). Proactive firms can achieve from their current opportunities through the important facts into the environment that could make them content into markets (Khattak & Shah, 2020a). Furthermore, those firms that have proactive behavior are more effectively and efficiently pursuing external opportunities to gain high performance than firms with no proactive behavior (Shah & Ahmad, 2019).

The proactiveness dimension of EO enables firms to be the initial movers in the completive environment; therefore, give them an advantage of setting the price and reap the rewards (GLumpkin & Dess, 2001). For instance, Anwar et al. (2020) establish a direct relationship between proactiveness and SMEs performance. Similarly, Fairoz, Hirobumi, and Tanaka (2010) argued that proactiveness is significantly linked with SMEs' sales growth.

Risk-taking is a foremost dimension of EO, and for higher risk-taking firms, higher will be its growth and profitability (Okangi, 2019). In a similar manner, (McCarthy, Puffer, & Lamin, 2018) found that risk-taking firms can sustain more development than the lack of risk-taking firms. Firms that dare to take risks gain can become more efficient to gain maximum profit, which leads the firm to gain competitive advantage (Anwar et al., 2018).

The most common belief between risk-taking and firm's performance is that the more the firm has the risk-taking capability, the higher its performance will be. To support this argument, Jin, Jung, and Jeong (2018) concluded that firms' risk-taking behavior significantly improves the profitability of Korean SMEs. Another similar study conducted by Okangi (2019) in Tanzania establishes a significantly positive association between a firm's growth and risk-taking capability. In the turbulent market, owners with high risk-taking behaviors significantly improve their firms' efficiency compared to those with low risk-taking behaviors (Engelen, Kube, Schmidt, & Flatten, 2014). Similarly, Buli (2017) found a significant positive relationship between risk-taking and SMEs' performance in Ethiopian enterprises' manufacturing industries. Apart from the above discussion, Some Prior studies also reported that risk-taking is insignificantly associated with firm's performance (Aloulou, 2018; Fadda, 2018; Musa, Ghani, & Ahmad, 2014). In contrast, some studies reported a negative association between risk-taking and firm's performance (Kreiser, Marino, Kuratko, & Weaver, 2013; Rezaei & Ortt, 2018). Furthermore, some studies reveal no linear relationship between risk-taking and firm performance in transition economies (Luu & Ngo, 2019).

Numerous studies found that firms try to become efficient by implementing innovative strategies (Acar, Melcher, & Aupperle, 1989; Davidson, Mariev, & Pushkarev, 2018). Besides, in the European context, Hilmi, Ramayah, Mustapha, and Pawanchik (2010) concluded that the innovativeness dimension of EO is the internal factor within the control of firms, and if properly utilized, then it can support firms to gain higher profitability and efficiency. Similarly, Centobelli, Cerchione, and Singh (2019) found a significant positive influence of innovativeness on firm financial performance. Additionally, firms will invest heavily in innovative projects when revenue from the successful implementation of innovative projects will be greater than the cost to gain sustainable performance (Karimi & Walter, 2016).

Besides, Udriyah, Tham, and Azam (2019) suggested that small enterprises gain their growth and competitive advantage through innovativeness. In the context of Pakistan, Anwar and Shah (2020) conclude that innovation becomes a successful differentiation strategy and significantly enhances firm's performance. A recent study conducted by Wang et al. (2020) found that firm innovativeness plays a significant role in firm profitability and efficiency in emerging economy china.

Some researchers reported insignificant results about EO and firm's performance relationships (Madison, Runyan, & Swinney, 2014). The reasons for such contradictory results might be due to the omission of important mediating and moderating variables. Similarly, Kurtulmuş and Warner (2015) investigate the EO and Financial Performance nexus of Turkish SMEs. They found that EO does not significantly influence Turkish SMEs' financial performance. The main reason behind this contradictory result is the tough financial conditions in the market. But keeping in view the majority of findings and inclination of scholars, this study hypothesizes that:

H1*: EO has a significant positive influence on SMEs' performance.*

2.6 Entrepreneurial Orientation and Resources Acquisition

Firms require bundles of resources to retain their position in the market for a longer period. According to the RBV theory, resources such as external and internal resources are essential for the long-term survival of an enterprise (Barney, 2001) and become a source of CA (Ying et al., 2019). However, Khattak and Shah (2020b) concluded that firm internal capabilities are significantly related to resource acquisition and enhance firm profitability (Helfat & Martin, 2015). More essentially, Wiklund and Shepherd (2003) demonstrate that "EO could be an important measure of the way a firm is organized" which in turn enables the enterprises to utilize the resources effectively. Furthermore, Li, Jiang, Pei, and Jiang (2017) scrutinized that EO is a significant factor that may facilitate a firm to acquire useful resources efficiently and effectively. Researchers suggested that the accomplishment of resources from outside sources remained a crucial task for the firm (Ishtiaq et al., 2020). For instance, researchers suggested that the motivation of entrepreneurially oriented firms to acquire resources may be high while those firms having a lower level of Entrepreneurial capabilities may have less passion to acquire resources (Jiang et al., 2018; Yin et al., 2020). Similarly, those firms which are highly entrepreneurial oriented are screening the opportunities to easily seized resources acquisition (Martin & Javalgi, 2016). More prominently, resource acquisition from the external environment is a crucial task that required internal capabilities and skills (Ishtiaq et al., 2020; Khattak & Shah, 2020b). In emerging economies, small enterprises face numerous challenges and resource constraints. In such an uncertain situation, entrepreneurial orientation assists them to gain adequate resources in a turbulent market (Engelen et al., 2014). In emerging economies such as Pakistan, new venture faces resource constraints in such circumstances; strong internal capabilities facilitate firms to acquiring sufficient external resources (i.e., technological & financial resources) (Ying et al., 2019). Entrepreneurial capabilities permit SMEs to efficiently use the intangible resources to achieve high

profitability (B. S. Anderson & Eshima, 2013) For instance Wang, Chen, and Fang (2020) revealed that firms use EO as internal capabilities to obtain satisfactory knowledge and useful resources to respond to external changes and threats. Similarly, Khattak and Hassan (2019) argued that entrepreneurial capabilities are very essential for the acquisition of resources which in turn improve the growth and firm effectiveness. EO as an intangible capability enables an enterprises to respond efficiently to environmental change and support them to obtain valuable evidence about market tendencies (Cui et al., 2018). For instance, Yin et al. (2020) argue that EO helps new venture to acquire resources that may not be obtained through other sources.

H2*: Entrepreneurial orientation has a significant positive influence on resource acquisition.*

2.7 Resources Acquisition and Firm's Performance

According to the RBV theory, an enterprise with inimitable resources achieves a sustainable competitive status in the market as compared to other firms in the competitive environment (Barney, 1991). Attainment of resources is essential at different stages of business processes; therefore, it is imperious for the managers to be involved proactively at each level of business operations to gain the stipulated resources for efficient and effective performance (Ying et al., 2019). Ge, Hisrich, and Dong (2009) employed a sample of SMEs from three major Chinese cities, found that the acquisition of resources significantly improves performance.

The top management requires the entrepreneurial capabilities to assess the current scenario of resources and seek alternatives in the external setting that are arising out of the changes in the external environmental demographics (Koryak et al., 2015). Entrepreneurs persistently struggle to acquire enough resources to remain competitive in a dynamic market (Zott & Huy, 2007). In a dynamic market, a firm with adequate resources and capabilities can achieve a highly competitive position over other firms (Degong et al., 2018). For instance, adequate

resources enable enterprises to make effective strategies and plan to improve efficiency (Khattak & Shah, 2020b).

Besides, Ishtiaq et al. (2020) argued that a firm with useful and valuable resources is more efficient and competitive as compared to the firms that face a resources shortage. For instance, Degong et al. (2018) suggested that SMEs' performance depends on sufficient resources to survive in the long run. Ying et al. (2019) and Ferreira and Fernandes (2017) scrutinized that adequate resources enable firms to build effective strategies that are beneficial for the firm's efficiency.

Drawing on the RBV theory, sufficient resources enable firms to perform their operational activities efficiently that can stimulate their overall organizational performance (Barney & Arikan, 2001). For instance, Khattak and Shah (2020b) claimed that adequate resources are very vital for the smooth running of operational activities. They further argued that the attainment of sufficient resources significantly improves firm efficiency. Ishtiaq et al. (2020) reported that adequate resources upsurge firms' performance and productivity while the shortage of resources clues to failure.

Chen, Lin, and Wang (2018) found that sustainable resources acquisition is necessary for the business activities of newly launch ventures. For initially growing firms, resources acquisition is necessary to recognize new opportunities that are useful for their innovative success (Zane & DeCarolis, 2016). Consequently, Ishtiaq et al. (2020) concluded that resources (i.e., internal & external) play an essential role in firm's performance. Additionally, in SMEs context, the acquisition of external resources plays a critical role in the long term survival and sustainable growth (Dezi, Ferraris, Papa, & Vrontis, 2019) as they have inadequate inside resources.

As discussed earlier by RBV theory (Barney, 1991) the performance of SMEs is directly associated with resource acquisition as the accessibility of sufficient resources is vital for

higher performance (Zhao, Fisher, Lounsbury, & Miller, 2017). Similarly, Ying et al. (2019) reveal that adequate resources support enterprises to pursuit their foreseeable opportunities and respond quickly to the competitive environment for long-term survival. Additionally, it is concluded that adequate resources are indispensable to execute the business operation efficiently and attain higher performance (Ko & McKelvie, 2018). Based on these assertions, we also argue that the acquisition of the resources is important for the firms' performance; therefore, we state the next hypothesis as

H3*: Resources acquisition has a significant positive influence on SMEs' performance.*

2.8 Mediating Role of Resources Acquisition between EO and Firm's Performance

From the RBV theory perspective, the organization's resources and capabilities significantly contributed to firms' performance (Barney, 2001). However, EO may not significantly enhance the firm's performance directly but can first gain sufficient resources (Yin et al., 2020), which can improve firm growth (Gupta, 2019).

There is no qualm that EO directly influences the firm's performance; however, the nexuses between EO and the firm's performance are not so forthright. Various studies argued that EO does not directly enhance firm's performance. Believe in the second approach that claims the indirect influence of EO on SMEs performance. For instance, different studies that considered different black boxes for the explanation of the nexus between EO and the SMEs' performance; for example, (Anwar, Khan, et al., 2018) identified the competitive advantage of the firm as a mediator between the EO and the firm's performance. Jiang et al. (2016) also claimed that EO influences the firm's knowledge acquisition, which ultimately affects the firm's performance. Additionally, they argue that to attain a highly sustainable competitive position, a firm needs to have enough resources and capabilities

Many other studies have confirmed that the factors such as learning orientation (Catherine L Wang, 2008), technology (Choi & Williams, 2016), functional performance (Rezaei & Ortt,

2018), innovation ambidexterity (Zhang et al., 2016). Absorptive capacity (Cui et al., 2018) and human resource outsourcing (Irwin et al., 2018), acquisitive learning (Gupta et al., 2019), Dynamic Capabilities (Lim & Kim, 2019), and marketing capability (Sok et al., 2017), etc. can mediate the nexus between EO and firm's performance in developed and developing economies.

Many firms rely on their managers' internal capabilities because due to these capabilities, they can acquire resources efficiently, which in turn enhances the firm's performance (Ying et al., 2019). Internal capabilities are helpful to gain valuable resources that are essential for firm efficiency (Khattak & Shah, 2020b). To attain sufficient unique resources, organizations required entrepreneurial skills, which in turn help in the progress of firm success (Yin et al., 2020). For instance, Khan et al. (2019) suggested that EO spur performance via acquiring distinctive resources.

External capabilities such as networking do not directly influence firm's performance. Still, initially, firms need internal capabilities (i.e., EO), which helps them obtain valuable resources from the external bodies and then utilize these external resources to improve their performance (Jiang et al., 2018). Similarly, this notion is favored by Ying et al. (2019), who found that the nexus of manger's intangible capabilities and SMEs' performance were significantly mediated by resource acquisition.

A current study conducted by Khattak and Shah (2020b) elucidates the significance of resources for firm efficiency and superior growth; proposes that internal capabilities are a prerequisite for precious resources.

EO uses different varieties of capabilities to contribute to firm's performance. For instance, in the resource-based view perspective, EO encompasses two major capabilities, e.g., dynamic capabilities and adaptive capabilities, which enhance the firm's performance (Barney, 1991). Dynamic capabilities demonstrate an ability to respond to external change using internal

capabilities to improve its performance (Day, 2014). The same argument is suggested by a firm innovative ability that is the part of EO. Similarly, adaptive capability encompasses that a firm can enter or proactively act to gain the advantage of the new opportunity before the competitors do (Day, 2014). In this perspective, the proactive ability that is the dimension of EO demonstrates that a firm can gain benefits from new opportunities and can gain useful resources before its competitors and industrial rivals do. In addition to the stated discussion, Dasí, Iborra, and Safón (2015) stated that EO facilitates firm's to gain new knowledge, new information and useful resources to avoid the slack of resources, thus in turn it can configure a firm's performance and can also help to enter into the foreign market. In the same line, (Jiang et al., 2016) argued that EO stimulates enterprises to acquire information and knowledge from external partners which in turn improve innovative performance. Believing in the strong background of the second theory, we argue that EO does not directly enhance a firm's performance but resource acquisition mediates the relationship.

Therefore, based on these assertions, we also hypothesize the same mediating relationship and state the next hypothesis as

***H4**: Resources acquisition significantly mediates the relationship between EO and SMEs Performance.*

2.9 Moderating Role of Managerial Ties between EO and Resources Acquisition

In emerging economies such as Pakistan, around half of the SMEs fail in the initial stages of the business cycle (Shah et al., 2011). One of the core causes of these debacles is attributed to the lack of requisite resources (Anwar et al., 2018; Jiang et al., 2018). Therefore, acquiring valuable resources have become a major focus of SMEs in both the developed and under-developed economies. Scholarly interest has diverted from studying the characteristics of firms' resources as a source of competitive advantage to understanding the internal

capabilities (e.g., EO) and external capabilities (e.g., managerial ties) through which firms acquire, manage, configure, orchestrate, and transform their external tangible and intangible resources (Wang, Li, & Jiang, 2019; Ying et al., 2019). Although adequate resources are essential but insufficient to achieve a competitive advantage, the top managers must build ties with external bodies to acquire requisite resources (Sirmon & Hitt, 2003).

Managerial ties define as "the firms' associated interactions and linkages with external entities through boundary-spanning and relation-building activities" (Anwar et al., 2018). There are three types of managerial ties: financial, business, and Political ties (Anwar & Shah, 2020). Business ties are "managers' connections with their counterparts at other firms such as buyers, suppliers, and competitors" (Li, Zhou, & Shao, 2009). Financial ties refer to "building relationships with banks and financial institutions to access financial resources and loans" (Anwar & Shah, 2020).

Different types of managerial ties (business, political and financial) that the enterprises have built with external partners play an essential role in resource acquisition and information availability (Cheng Lu Wang & Chung, 2013). For instance, entrepreneurially oriented firms acquire external resources very proactively, which boosts their firm's profitability (Okangi, 2019). Not only the entrepreneurial skills but also the managerial networking influences the embeddedness of resources' fusion among firms (Danso, Adomako, Damoah, & Uddin, 2016; Lin, Cao, & Cottam, 2020). Hence, for the procurement of opportune resources, firms improve their external capabilities and internal capabilities (Khattak & Shah, 2020b; Yu, Zhang, Lin, & Wu, 2017).

Entrepreneurial capabilities significantly acquire adequate resources and boost firm's performance if they have strong network ties (Gunawan, Jacob, & Duysters, 2016; Khan et al., 2019). In short sufficient resources spur firms' productivity while lack of resources leads to failure. Therefore, top managers should focus on requiring external resources to sustain in

the turbulent market in the long run (Degong et al., 2018). The top management team establishes different networks with external bodies to gain useful resources necessary for the firm's efficient performance (Kauppila, 2015; Sirmon & Hitt, 2003). In emerging economies such as Pakistan, Anwar et al. (2020) argued that firms need a satisfactory level of resources for the efficient operation of business activities, which can be feasible only via build strong ties with external bodies.

Zhang, Soh, and Wong (2011) recognized that political tie is key in accessing entrepreneurial resource acquisition. Besides, Luo (2003) also shed light on the political tie and demonstrated that entrepreneurs need a strong government tie to access worthy resources for their operational activities in China. We argue that in addition to EO, the political tie should be gained for accessing useful resources

Su, Xiao, and Yu (2019) argued that political ties support firms to obtain government funds and valuable resources possessed by the government, which is essential for business operations and success. The strong political tie is very important as it helps to access industrial and financial resources that are essential for the attainment of high performance (Sheng, Zhou, & Li, 2011). Those firms having strong Political connections got more benefits as compared to those firms having week political connections. Therefore, most of the enterprises are interested in building a favorable relationship with the government and political officers (Hung, Jiang, Liu, Tu, & Wang, 2017).

Boso et al. (2013) found that firms with EO and strong network ties can attain a superior position in the markets as compared to those who have weak network ties. For instance, Cecere, Corrocher, and Mancusi (2020) suggested that in the early stage, venture required financial support for various activities; if they obtain week financial support, then ventures cannot respond in an effective way to the change in the external environment. Furthermore,

Anwar and Shah (2020) demonstrate that strong financial ties enable enterprises to sustain and achieve competitive status in a turbulent market.

Jiang, Guo, Wei, and Wang (2018) revealed that financial tie assists top managers to secure resources in a better way. Additionally, it is claimed that financial ties enable firms to gain both internal and external resources that are crucial for the survival of enterprises (Anwar & Shah, 2020). Alcalde-Heras, Iturrioz-Landart, and Aragon-Amonarriz (2019) claimed that SMEs should strengthen their network with financial institution to obtain valuable resources that are crucial for growth and effectiveness.

Wang, Jiang, Yuan, and Yi (2013) revealed that managers and owners use their business ties to gain rare and valuable resources. Likewise, Lee, Tuselmann, Jayawarna, and Rouse (2019) demonstrated that a satisfactory level of social capital and network enables managers to access desirable resources in rural regions. Similarly, Zhang (2010) revealed that entrepreneurs face a problem in acquiring resources. Hence, most of the entrepreneurs having high entrepreneurial skills significantly focus on building a business network to access valuable resources

***H5**: Financial tie significantly moderates the relationship between EO and resource acquisition.*

***H6**: Business tie significantly moderates the relationship between EO and resource acquisition.*

***H7**: Political tie significantly moderates the relationship between EO and resource acquisition.*

2.10 Entrepreneurial Orientation and Business Model Innovation

Schneider and Spieth (2013) deliberate BMI as a strategic enterprise initiative. The nature of entrepreneurial orientation is mainly stressed on an enterprise's readiness to innovate within the organization. It is a firm’s level of efficiency and competency in creating innovation to react to the changes in the environment and fulfill customer desires (Baker & Sinkula, 2009).

The dynamic capability notion believes that an enterprise continually requires modifying, promoting, and integrating its capabilities and sources to gain competitiveness in the turbulent market. Bocken and Geradts (2019) point out that dynamic capabilities are deemed as essential drivers of BMI. Few scholars argued that BMI is tightly linked with an enterprise's resources and capabilities (Anwar & Shah, 2020; Teece, 2018). Scholars search for more information and knowledge to increase their understanding of the core capabilities, particularly how to continuously renovate the enterprise's existing business models.

BMI facilitates enterprises to recognize new opportunities through effective utilization of entrepreneurial capabilities in the turbulent market, which becomes a competitive advantage (Asemokha, Musona, Torkkeli, & Saarenketo, 2019).

Many scholars have found that EO has a positive influence on different types of innovation such as product innovation (Boso et al., 2013; Thoumrungroje & Racela, 2013), innovative speed (Shan et al., 2016), technological innovative performance (S. B. Choi & Williams, 2016) and innovative performance (Zehir et al., 2015).

Ndubisi and Iftikhar (2012) scrutinized that internal capabilities (e.g., EO) in SMEs will produce innovation abilities in them and enhance the enterprise's performance. While only a few studies have investigated the EO and BMI relationship. For instance, Bouncken, Lehmann, and Fellnhofer (2016) state that BMI takes benefit from the two types of dynamic capabilities, namely EO and modularity, and both Capabilities are considered two sides of

BMI. Their results indicated that EO and modularity generate BMI, and EO is exclusively favorable for BMI in the high turbulent market. Similarly, Karimi and Walter (2016) concluded that entrepreneurship attributes such as risk-taking, proactiveness, and autonomy have positive associations with the degree of BMI adoption.

(Miller & Friesen, 1982) argued that enterprises having EO capabilities are linked with a high degree of risk-taking activities. A high degree of risk-taking significantly improves innovative performance (Shan et al., 2016).

Chesbrough and Rosenbloom (2002) argued that a significant amount of risk-taking and entrepreneurial behavior is required to pursue new opportunities outside the current business model to recognize and implement an innovative business model. For instance, a Risk-taking attitude encourages an enterprise's propensity towards exploitive innovation adoption (Pérez-Luño, Wiklund, & Cabrera, 2011).

Innovativeness requires a corporate attitude and an innovative climate to foster artistic, innovation, and initiative-taking behaviors among individuals (Bhaskaran, 2006). Likewise, Salavou (2004) suggested that firm innovative behavior is related to the occurrence and judgment of adoption of innovations.

Pérez-Luño, Cabrera, and Wiklund (2007) suggested that Proactive enterprises have the ambition to be initiators, to implement innovations, and to exploit new information and knowledge either externally or internally generated.

Asemokha et al. (2019) suggested that EO has a significant direct influence on SMEs' BMI. Furthermore, they conclude that both BMI and EO are key drivers of firm's superior performance. This notion is supported by Mütterlein and Kunz (2017), who concluded that EO is a central driver of BMI. Koçoğlu, İmamoğlu, Akgün, İnce, and Keskin (2015) concluded that EO is positively associated with BMI, which in turn boost firm's performance.

For instance, entrepreneurial orientation influences business model innovation and one of the necessary conditions for effective business model innovation (Su, Zhang, & Ma, 2019).

H8: Entrepreneurial orientation has a significant positive influence on BMI.

2.11 Business Model Innovation and Firm's Performance

Business model innovation (BMI) as a specific innovation type is considered essential for the success of an organization (Futterer et al., 2018), a source of competitive advantage (Kim & Min, 2015), and as well as valuable organizational capability (Amit & Zott, 2012). BMI is a new logic to improve the profitability of specially established ventures (Trapp, Voigt, & Brem, 2018).

Firms with modern BM gain a competitive position in the market and achieve superior performance (Tavassoli & Bengtsson, 2018). For instance, effective BMI offers a high level of competencies (Bashir & Farooq, 2019) and significantly influences enterprise performance ((Pang, Wang, Li, & Duan, 2019). Besides, BMI supports the firm to gain a competitive advantage and significantly boost the overall performance of the venture (Futterer et al., 2018). For instance, BMI has been deemed as a crucial factor that enhances the performance of enterprises operating in the digital economy (Guo & Chen, 2018).

In a turbulent market, new ventures may fail due to lower performance. But BMI helps new ventures to enhance their performance to survive and compete in the volatile market in the long run (Wang & Zhou, 2020). Additionally, BMI is not similar to product innovation because BMI facilitates SMEs on the spot when the new opportunity in the form of a new market appears. By taking advantage of new opportunities in turn may assist enterprises to gain sustainable performance (Anwar & Shah, 2020).

Cucculelli and Bettinelli (2015) by taking a sample of 376 Italian small enterprises concluded that adaptation of the business model has a positive influence on the enterprises' ability to perform well. For instance, Gerdoçi, Bortoluzzi, and Dibra (2018) studied 107 Albania

enterprises, suggesting that BMI is significantly related to enterprise financial performance. Likewise, Pedersen et al. (2018) concluded that BMI has a significant positive influence on the financial performance of Swedish fashion firms.

BMI leads to a higher firm's performance (Bouwman, Nikou, & de Reuver, 2019). This notion was supported earlier by Asemokha et al. (2019), who also confirmed that BMI is the dominant source of enterprise performance. For instance, Clauss, Abebe, Tangpong, and Hock (2019) concluded that two dimensions of BMI, namely value proposition and value creation, significantly influence enterprise performance, while one dimension, such as value capture innovation has a negative impact on firm's performance.

Khan, Yang, and Khan (2019) found that BMI leads to a sustainable competitive advantage (SCA), which in turn enhances firm competence. Besides, Pang et al. (2019) suggested that managers should give more consideration to BMI to increase enterprise performance, and the role of BMI varies across different business strategies.

Researchers suggested that business model innovation may be a key channel through which opportunity recognition affects SME performance (Guo, Tang, Su, & Katz, 2017). .For instance, the successful execution of BMI leads to words strategic and architectural changes in enterprise and has a direct influence on the performance of SMEs (Gatautis, Vaiciukynaite, & Tarute, 2019). Menter, Göcke, Zeeb, and Clauß (2020) findings show that BMI has a positive impact on performance. Supporting this notion (Wang & Zhou, 2020) found that BMI has a positive influence on enterprise performance

In the European context, (Verhagen, 2018) claimed that BMI could significantly spur firm's performance in several ways. Likewise, in emerging economies like Pakistan, Khan, Yang, and Khan (2019) revealed BMI has a significant direct influence on the sustainable competitive advantage of SME firms.

***H9**: BMI has a significant positive influence on SMEs' performance.*

2.12 Mediating Role of BMI between EO and Firm's Performance

BMI has become a central focus in business organizations (Foss & Saebi, 2017). Recently studies have given enough attention to examining the role of BM in business success. One research zone tested BMI as an independent variable where it is believed that BMI significantly improves firm's performance (Anwar, 2018). In contrast, the other zone claimed that BMI does not create itself, but it needs firm innovative and entrepreneurial capabilities (Asemokha et al., 2019; Guo et al., 2017; Su et al., 2019). In this study, we believed in the second zone where BMI needs firms' internal capabilities (hereby referred as EO), which in turn facilitates ventures success. For instance, (Pati, 2018) scrutinized that all the dimensions of EO, namely innovative, proactive, and risk-taking, significantly influence BMI, which in turn leads to higher profitability.

Similarly, based on empirical evidence, Karimi and Walter (2016) also argued that BMI is the significant mediator between EO and firm's performance. Moreover, it is believed that entrepreneurial activities and BMI are significantly related to each other (George & Bock, 2011). Besides, BMI is often linked with innovation, but BMI is a broader term than mere innovation (Anwar, 2018). However, still BMI has many features in common with innovation (technological and product). In this perspective, studies have claimed that technological innovation significantly mediates the relationship between EO and firm's performance (Choi & Williams, 2016).

Many firms have recently focused on building an effective BMI because it significantly improves profitability; for this, a firm needs to promote entrepreneurial culture (Guo, Su, & Ahlstrom, 2016). Taking back the concept of BMI, it is commonly believed that it deals with different types of innovation, and it has become the main focus of entrepreneurial firms.

Thus, especially small firms may not be able to build an effective BMI unless they have enough resources and innovative capabilities (De Martino & Magnotti, 2018).

As compared to process and product innovation, BMI needs more support of valuable resources and internal and external capabilities (Teece, 2018). As EO is a key source of innovation (Aljanabi, 2018); it can enhance the business process and facilitate new product development (Morgan & Anokhin, 2020), which can stimulate BMI (Karimi & Walter, 2016).

Many firms' dependent on their internal capabilities because they can build an effective BMI due to these capabilities, which in turn boost the firm's performance and become a competitive advantage for the firm (Khan, Yang, & Khan, 2019). Furthermore, they concluded that BMI plays a partial mediating role between the nexus of intellectual capital and competitive advantage (Khan, Yang, & Khan, 2019).

Pang et al. (2019) scrutinized that BMI plays a positive mediation role between the nexus of integrative capability and firm's performance. Additionally, in the case of cost leadership strategy, BMI shows an inverse effect on firm's performance. While, in the case of differentiation strategy, BMI has a direct significant influence on firm's performance. A recent study conducted by Asemokha et al. (2019) supports Karimi and Walter (2016) notion that both BMI and EO are substantial drivers of firm international performance. Furthermore, they found that BMI is a significant mediator between EO and international performance nexus. For instance, to build an effective BMI, organizations required entrepreneurial skills, which in turn help in the improvement of firm's performance (Futterer et al., 2018).

Hence, it makes reasonable logic that building BMI is not an own born task and activity, but a firm configures their internal capabilities to spur BMI. Studies are believed in the notion that BMI is influenced by EO (Karimi & Walter, 2016; Pati, 2018). Having a strong

background for the second zone, we posit that BMI can play a mediating role between EO and firm's performance. Therefore,

H10*: BMI significantly mediates the relationship between EO and SME performance.*

2.13 The Moderating Role of Managerial Ties between EO and BMI

SME firms face various shortcomings that can hinder their survival and growth in a dynamic market. Considering the firms' various deficits, they tend to build a strong network with external bodies to gain valuable resources that are necessary for new opportunities, new ideas, and innovation (Mitrega et al., 2017). For instance, Gathungu, Aiko, and Machuki (2014) argued that networking is significantly related to EO that pertains to innovation, risk-taking, and proactiveness. It is believed that BMI plays a vital role in SMEs' success, but it cannot be generated by its own. It requires firm capabilities and networking abilities (Anwar & Shah, 2020).

Moreover, it is intended that sustainable BMI can be gained through value-based network ties that provide significant benefits to business firms (Breuer & Lüdeke-Freund, 2017). Social network ties provide useful information about various resources and capabilities that are prerequisites for building an effective BMI. Moreover, the social network helps to utilize firm resources in a useful way to gain high innovative performance (Scuotto, Del Giudice, & Carayannis, 2017). Collectivism stimulates and assists mutual alliance and attainment of incremental innovation goals (Luu & Ngo, 2019). A strong network capability can provide very useful information and opportunities for a firm that is beneficial for innovative products. These innovative products (that are developed by using strong external ties) give high performance to business organizations (Mitrega et al., 2017). Though, innovation can be stimulated through various capabilities and resources. However, networking with good partners provides access to useful resources that are very crucial for innovative activates

(Zach & Hill, 2017). For instance, Rossignoli and Lionzo (2018) claimed that various firms' capabilities are required to build strong network ties with partners. These ties in turn build a good BMI that is considered very prominent for business growth and success. Moreover, BMI that is considered a central factor for a successful business needs entrepreneurial capabilities and an entrepreneurial ecosystem. However, personal factors such as network ties in this perspective further enhance sustainable BMI in the presence of an entrepreneurial ecosystem (Neumeyer & Santos, 2018).

Anwar et al. (2018) scrutinized that firms with strong financial ties may survive and get completive status in emerging markets. Furthermore, they claimed that financial networking is deemed as a significant factor that positively contributes to BMI. Similarly, Boso et al. (2013) found that firms with EO and strong network ties can attain a superior position in the dynamic markets than others with weak network ties. For instance, Cecere et al. (2020) suggested that in the early stage, ventures required financial support for various activities; if they received weak financial support, then ventures cannot respond in an effective way to the change in external. This may prove toxic to new ventures.

Chung, Yen, and Wang (2020) conducted a study in Asian immigrant firms in Europe and revealed that business ties significantly strengthen the path between EO and enterprise innovation. Considering the strong background, we argue that managerial networking significantly enhances the relationship between EO and BMI. Therefore;

H11: *Financial tie significantly moderates the relationship between EO and BMI.*

H12*: Business tie significantly moderates the relationship between EO and BMI.*

H13*: Political tie significantly moderates the relationship between EO and BMI.*

Moderating Role of Intellectual capital between EO and Firm's Performance

The RBV theory suggests that an enterprise required valuable resources (e.g., tangible & intangible) to gain a sustainable reputation in the marketplace (J. Barney, 1991). These resources (e.g., tangible & intangible) either directly or indirectly impact the firm efficiency and growth (Anwar et al., 2020; Khattak & Shah, 2020b; Ying et al., 2019). IC has been viewed as an intangible capability within firms that can increase their performance (Khan, Yang, & Waheed, 2019). Successful companies rely on IC, such as firms' capabilities, knowledge, skills, and competencies. There is an increasing insight among the companies that IC is considered as a noteworthy component of superior performance and corporate development. IC entails knowledge, human capital, and relationship. It illustrates a positive influence on venture performance and profitability (Anwar, Khan, et al., 2018). Particularly SMEs obtain higher benefits and superior performance from the use of IC (Cleary & Quinn, 2016). Hence, According to Li et al. (2020), IC is known as a key factor of firm's performance (FP) and almost all the dimensions of IC have a substantial influence on the performance operating in an emerging market like Pakistan. IC is a prominent predictor of firm efficiency, and it makes the company rich in emerging markets (Xu & Wang, 2018).

Recently various studies in the Asian context claimed that IC significantly contributes to FP (Khan et al., 2019; Khan, Yang, & Waheed, 2019; M. S. Khattak & Shah, 2020). Similarly, Xu, Shang, Yu, and Liu (2019) claimed that firms get ample benefits of IC because it is a less expensive source and significantly enhance FP. Yao, Haris, Tariq, Javaid, and Khan (2019) scrutinized that in the Pakistani context, those firms having highly invested in IC are more profitable as compared to those firms having a low level of investment in IC. Besides, Beretta, Demartini, and Trucco (2019) argued that IC is a vital source for achieving

significant performance and plays a crucial role in smoothing operational activities. In a highly competitive market, IC is a key source for achieving more profit and attaining sustainable performance (Cabrilo & Dahms, 2018).

To get a CA and increase the potential for innovativeness, it is critical and even necessary for SMEs to use IC in effective ways because IC shows a decisive role in SCA and enterprises' success, either small or large (Khan, Yang, & Khan, 2019). IC is a strong predictor for CA and brings much positive and significant change in CA (Yaseen, Dajani, & Hasan, 2016). Similarly, Kamukama and Sulait (2017) concluded that all three IC elements are strong predictors of CA. Besides, Kadir et al. (2018) scrutinized that in the turbulent market to gain CA firms must have an adequate level of IC to staying alive in a dynamic environment in the long run. But it can be more beneficial if firms have capabilities (EO) in the presence of IC to gain a sustainable position (Adomako, 2018). IC is an important source of CA by using different analytical Skills, information, competencies and capabilities of an enterprise (Khan et al., 2019).

Researchers claimed that EO is deemed as a significant factor for firm success but the nexus can be strengthened by an enterprise's internal capabilities (Sahimi, Rizal, Husin, & Kamarudin, 2017; Shah & Ahmad, 2019). While the focus on the indirect path of EO on performance, it is claimed that intangible resources and capabilities can strengthen the nexus between EO and firm’s performance (Anderson & Eshima, 2013).

Entrepreneurial capabilities, along with intangible resources, enable firms to achieve superior performance (Jørgensen, 2017). Therefore, we anticipate that EO and IC should work jointly for a venture to grab high growth and performance. For example, Anwar et al. (2018) claimed that a SMEs performance is affected by EO and IC. Likewise, Adomako (2018) also scrutinized the relative significance of EO and IC in an enterprise's value and claimed that

enterprises should not omit any of these two because they are very essential for higher firm's performance. Moreover, intangible resources are deemed as necessary for successful business operations of SMEs; they must have an adequate investment in IC to identify novel opportunities to improve their financial performance (Agostini, Nosella, & Filippini, 2017). Efficient use of intangible resources e.g., intellectual capital facilitates business activities effectively. For instance, when an enterprise tries to identify novel opportunities in a turbulent market, it desires intangible resources and skills (McDowell, Peake, Coder, & Harris, 2018). Though the EO facilitates the recognition of opportunities for high performance, intellectual capital intensifies the paths (Khan et al., 2019).

IC is the group of intangible resources and assets, skills, knowledge, and abilities necessary for firm competitive positioning, which ultimately results in FP (Kamukama, 2013). Now a question arises: However, does EO influence the firms' performance in the presence of IC. Previous studies suggested that IC capabilities play a substantial role to moderate the relationship between EO and firm financial performance. These liaison prerequisites to be tested in the case of SMEs in developing countries like Pakistan. In accumulation, it is reasoned that EO influence the firms' performance, but the relationship can be moderated by firm internal capabilities (Sahimi et al., 2017). Therefore, we argue that firms' intellectual capital can strengthen the nexus of EO and SMEs' performance.

H14: *Intellectual capital significantly moderates the relationship between EO and SMEs performance.*

2.14 Moderating Role of Financial Capabilities between EO and Firm's Performance

It is doubtless that EO significantly enhances firm growth. However, mere EO does not help SMEs unless they have enough financial capital (Adomako, Narteh, Danquah, & Analoui, 2016). Moreover, it is also argued that entrepreneurial activities configure SMEs'

performance but most ventures need finance to transform the innovative ideas into profitable outputs (Aktekin, Dutta, & Sohl, 2018). Hence, financial capabilities are deemed essential to exploit and execute business opportunities into a physical shape that has been recognized through EO (Block, Cumming, & Vismara, 2017). In particular, newly established firms get a significant advantage through EO. However, venture capital in this regard further strengthens the association to enhance high performance using entrepreneurial capabilities (Bruining & Wright, 2002). Financial capital does not only play a substantial role in the growth and profitability of profit-based organizations, but non-profit-based firms also get equal benefits of financial capital by using the firm international capabilities (Shahriar, Schwarz, & Newman, 2016). However, a new venture having high market capabilities can get numerous advantages of financial capital in a turbulent market (De Vries, Pennings, Block, & Fisch, 2017). A firm needs several capabilities, such as human, cultural and financial, but out of these capabilities, financial capital is deemed essential that adds value to firm capabilities to enrich their growth in the dynamic circumstances (Sarfaraz, Mian, Karadeniz, Zali, & Qureshi, 2018). In a turbulent market, a firm needs financial capital to utilize the resource efficiently to improve operational performance (Gu, Qian, & Lu, 2018). A firm gives enough attention to financial capital because the existing capabilities are not sufficient to acquire maximum benefits of changing the environment (Titus Jr & Anderson, 2018). Similarly, Degong et al. (2018) also indicated that firm capabilities are not sufficient to gain high success and superior performance in the turbulent markets, but they must have adequate financial capital to use the capabilities in effective ways to gain a profitable position. In general, small firms are unable to utilize their resources and capabilities properly unless they have sufficient finance to get the benefits of the available resources.

Financial capability (FC) is a key source to gain a CA (Sauka, 2014) and positively affects the performance and profitability of firms (Huang, 2016). Managers who have stronger

access to different financial capabilities may be able to achieve various resources that enable them to gain competitive positioning (Liu, Luo, & Tian, 2016). Firms with higher financial capabilities can gain higher profitability in the short run, and they can get a CA in the long term (Wang et al., 2014). It is argued that the company may acquire funds through different sources to enhance its competitive edge in the industry among its competitors and rivals firms (Akhigbe, Borde, & Whyte, 2003). Easy, timely, adequate, and cheaper access to FC helps the firms in reducing the cost of production and delivery.

Moreover, the availability of FC also helps in developing business relations and avoiding delays in business transactions. In this way, the firms gain advantages just in time and gain a competitive position (Memon et al., 2020). Similarly, Febrian, Maulina, and Purnomo (2018) concluded that financial capability creates sustainable competitiveness. Besides, Khan et al. (2019) revealed that a sufficient amount of FC significantly spurs FP and a crucial factor in gaining sustainable CA and staying in the market for the long run. Similarly, in the emerging market perspective, Memon et al. (2020) scrutinized that due to more FC, firms can easily exploit investment opportunities, which upsurge firm profitability. From the Pakistani perspective, Khan, Yang, and Waheed (2019) scrutinized that FC is an essential factor contributing to FP and competitiveness. They further argued that a firm with more financial resources could easily gain a competitive position in a new dynamic market by exploiting new opportunities and investing their FC in productive activities.

New and innovative entrepreneurial firms need a significant amount of financial resources to improve their firm progress (Khattak & Shah, 2020). Therefore, the importance of financial support cannot be ignored to increase opportunities for new venture to develop, increase sustainable growth, prosperity, and increase firm efficiency to gain a competitive advantage (Anwar et al., 2020). According to Shu, De Clercq, Zhou, and Liu (2019), EO approaches are stimulated by financial support.

Waleczek, Zehren, and Flatten (2018) determine that financial support either from the internal source or from the external source seems to be a very important element to start up a new business and for the growth and performance of entrepreneurial endeavors. Therefore, Khattak and Hassan (2019) claimed that firms with sufficient FC would enjoy superior performance compared to those with less financial resources. Those firms having a satisfactory amount of FC actively extend their operating activities in a new dynamic market and successively survive for the long run. In contrast, those firms having a lesser amount of FC avoid expanding their operational activities (Khattak & Shah, 2020). Similarly, Li et al. (2020) concluded that the presence of financial resources should significantly strengthen the path of internal capabilities and firm efficiency. Hence, efficient firms need financial capabilities for innovativeness, risk-taking, and proactiveness, which leads the firm to gain maximum profit and sustain a competitive position and growth. So we asserted that adequate financial capability should be used jointly with EO in order to increase desirable performance in the turbulent environment. Therefore, we believe that financial capabilities can significantly strengthen the nexus of EO and SMEs' performance. Hence, we propose our hypothesis;

***H15**: Financial capabilities significantly moderate the relationship between EO and SMEs performance.*

In the second part of literature, we have provided a brief definition of each variable that is discussed in table 3.

2.15 Research Model

Figures 2 and 3 display the conceptualized model of the research.

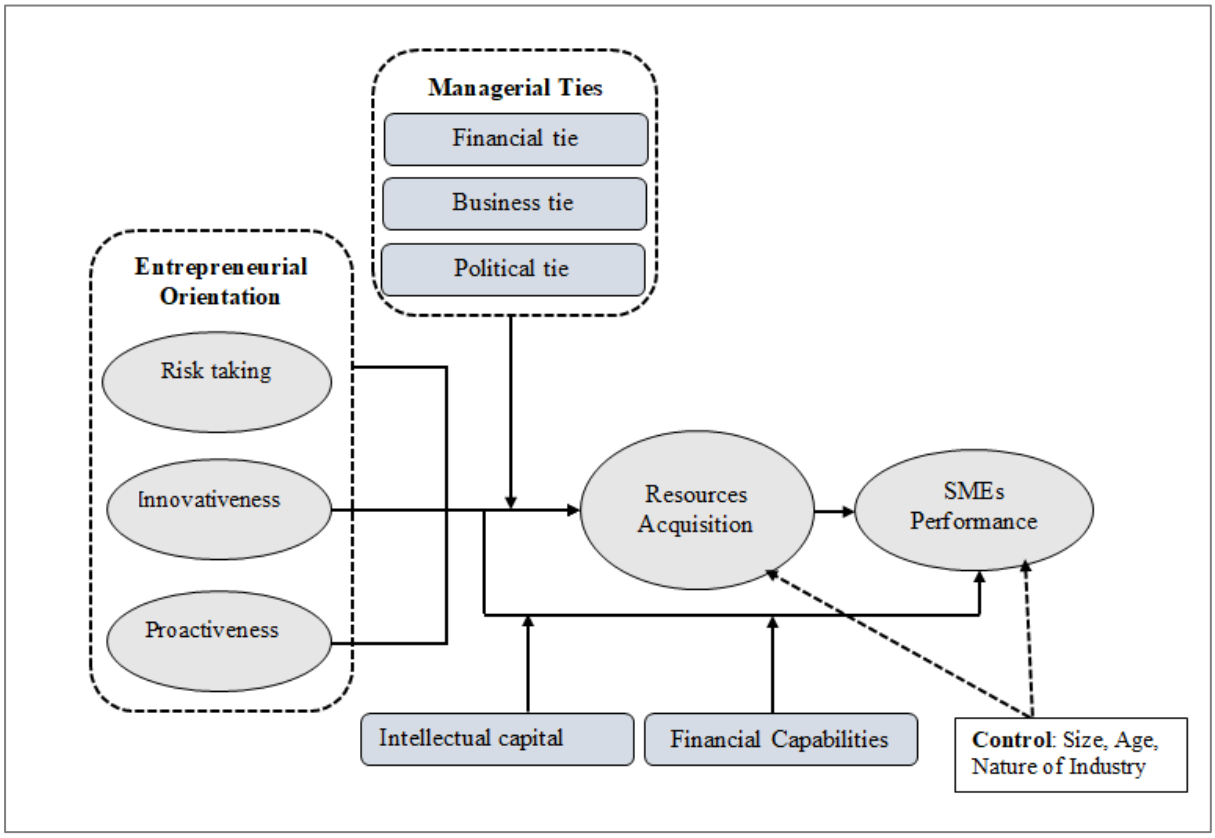

Figure 2 Model 1

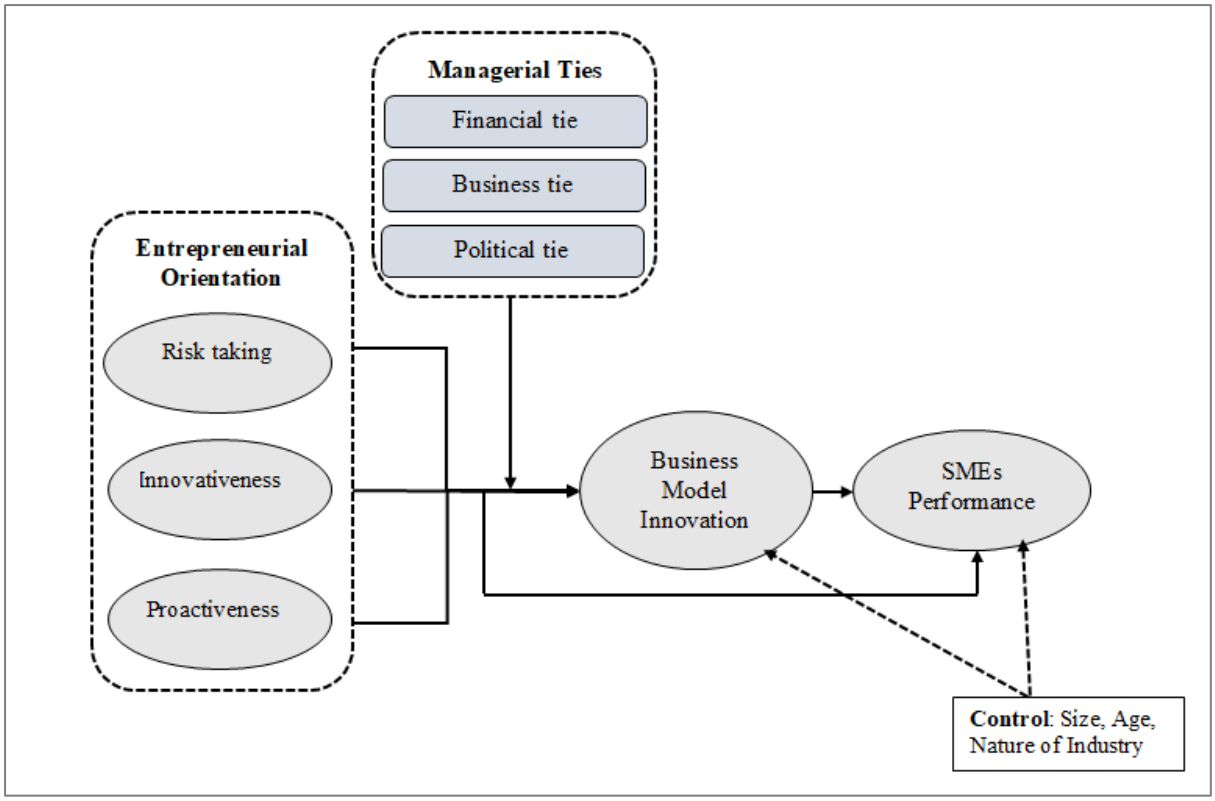

Figure 3 Model 2

Chapter 3

METHODOLOGY

The objectives of chapter 3 is to describe the research philosophy, research design, sampling procedure, target population, data collection, and its technique and data analytical tools. The chapter also contains a short description of the study variables and their measurement. Moreover, in the last part of the chapter, control variables are discussed.

3.1 Research Methodology

The methodology is one of the essential components of a research study. (Silverman, 2016) defines it as "the generic approach used by the researchers, which includes the methods of data collection to data analysis to conduct their research".

3.2 Research Philosophy

"Research philosophical paradigm are sets of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which study is carried out" (Weaver & Olson, 2006). Research philosophy directs the perspective which researchers used to formulate research questions, plan how the problem can be investigated, select research design as well as identify what methods are used and how data are collected, analyzed and interpreted (Petty, Thomson, & Stew, 2012). Therefore, it is imperative that before conducting any study, the right research paradigm is defined, which facilitates structure inquiry and selects the research approach (see figure 4).

Qualitative and quantitative approaches are the two well-known approaches used in social sciences research. In this study, a quantitative approach was employed. The quantitative approach emerged from the positivist paradigm. Quantitative research is the "measure of the phenomena under investigation through the use of statistics to analyze the raw data" (Yilmaz, 2013). Positivists take a relatively objective stance and analyze measurable variables (Collis & Hussey, 2013). In quantitative research, "The ontological assumption is that there is one

single reality (objectivist), and we are external or outside of reality" (Scotland, 2012). The epistemological assumption is that knowledge can be gained or obtained by empirically testing the hypotheses about the causal or correlational relationships between the variables of the study by using relevant statistical tools (Polit & Beck, 2010).

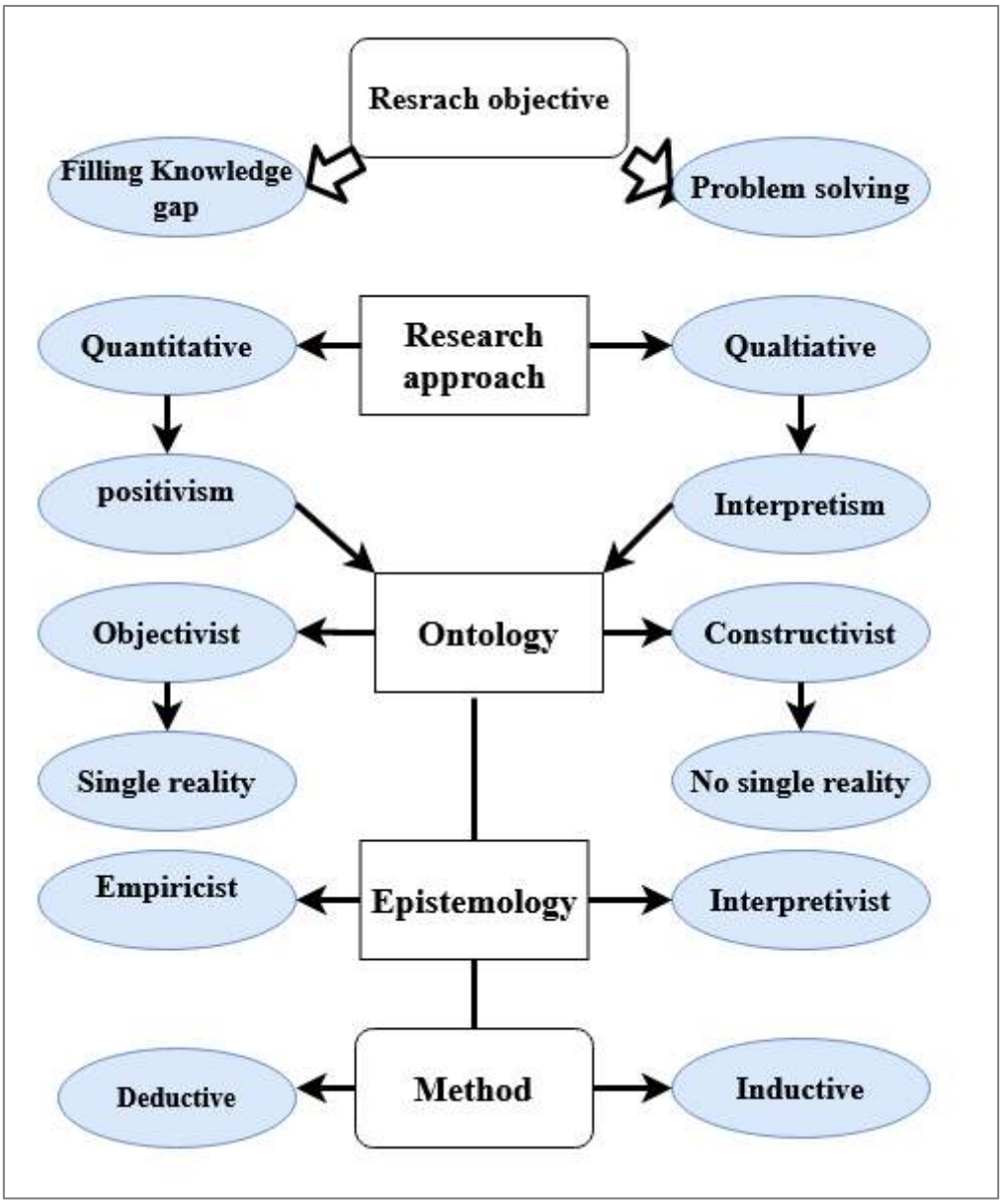

Figure 4 Research Philosophy

3.3 Research Design

Research design is “the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure” (Blanche & Durrheim, 1999).

The research design refers to the “procedure of the methodology of data collection and analysis to answer proposed questions”. The research design of the study was developed in light of the objectives of this study. This study's main objective was to examine the effects of Entrepreneurial orientation (innovativeness, risk-taking & proactiveness) on the performance of SMEs with a mediating role of resource acquisition and business model innovation and moderating role of internal and external capabilities. This study is attributed to a quantitative study using simple random sampling and following the deductive approach by testing the existing theory. A survey was conducted to collect cross-sectional data from registered SMEs in Pakistan. SPSS and AMOS were used to estimate the research model of the study.

3.4 Sample and Population

A survey was conducted to collect data from SMEs operating in Pakistan. Although there is no single definition of SMEs, it can be defined on three characteristics, including the number of employees, assets turnover, and annual sales (Anwar et al., 2018). In Pakistan's context, SMEs are defined as enterprises having less than; 250 employees, less than PKR 25 million paid-up capital and less than PKRs 250 million annual sales. Firms in Pakistan having employees up to 250 were considered for this study.

Data were collected from registered SMEs in Pakistan operating in the four big cities, namely Islamabad, Peshawar, Lahore, and Rawalpindi. We targeted the enterprises in these four cities as the majority of the firms have their head offices in these regions. The second main reason behind the selection of these four cities is because the firms operated in these cities are

registered with their respective chamber of commerce (Anwar, and shah; 2020; Khan, Yang & Waheed, 2020) and have formal operational activities and strategic platform unlike enterprises operating in small cities. Moreover, firms in small cities have not a formal operational process and transactions, which makes it difficult to get information about their business model and operational activities.

Registered SMEs' list was obtained on request from the relevant chambers such as; Islamabad Chamber of Commerce and Industries (ICCI), Sarhad Chamber of Commerce and Industries (SCCI), Lahore Chamber of Commerce and Industries (LCCI), and Rawalpindi Chamber of Commerce and Industries (RCCI), respectively. The registered firms in ICCI, SCCI, LCCI, and RCCI were around 4000, 2072, 5980, and 5408, respectively, making a total population of 17460 SMEs.

Based on the probability-based sampling formula, a sample size above 400 (applied at a 95 percent confidence level) is a good representative of the population (Morgan & Krejcie, 1971). To ensure more diversity, samples were collected from different industries, such as manufacturing, services, and trading (Fahy, 2002). Considering the average sample size in the previous studies in the relevant field (Anwar & Shah, 2020; Khan, Yang, & Waheed, 2019; Ying et al., 2019), a sample size above 250 or close to 350 will give valid insights. Additionally, Osborne, Osborne, Costello, and Kellow (2008) suggested a ratio of 8 to 10 respondents to one item as an acceptable criterion for deciding the sample size to get unbiased estimates.

Following this criterion (51 items x 8 = 408 responses), 900 questionnaires were distributed among the randomly selected firms. Firms were chosen randomly from the lists obtained from the relevant chambers. Similarly, Hair (1998) suggested that, in quantitative inquiry, data collected from at least 150 respondents is desirable to get consistent results from statistical data analysis tools.

3.4 Sampling Technique

To collect primary data, the literature suggests different sampling techniques (probability-based and non-probability sampling). While in this study, a probability-based sampling technique (simple random sampling technique) has been used to collect data from firms. When the total population is known, then probability-based sampling is the recommended and best sampling method (Khan, Yang, & Waheed, 2019). A simple random sample takes a small, random portion of the entire population to represent the entire data set, where each respondent has an equal probability of being selected. Researchers can create a simple random sample using methods like random draws.

3.5 Data Collection Techniques

The data was collected through a self-administered questionnaire filled by the executives, owners, and top managers. A single questionnaire was filled by one firm. A self-reported survey has a better response rate than an email survey, especially in emerging markets like Pakistan (Anwar, 2018). The owners and senior managers of the randomly selected firms were requested to participate in the survey as they were the right person in the firms who were more aware of their strategic planning and performance (Ying et al., 2019). An English version of a structured questionnaire was used to collect data. English is spoken as a second language in Pakistan and is easily understood by top managers of the industries (Li et al., 2020). Moreover, official work in the business industry is carried out in the English language (Khan, Yang, & Waheed, 2019); therefore, the respondents of this study had no problems in completing the questionnaire.In addition, we have written Urdu meaning of difficult words in the questionnaire where necessary. The questionnaire was designed into two sections; in the first section, respondents were asked about the main variables of the study, while in the second section, their educational background, nature of the business, age and size of the enterprises were asked. However, due to the critical nature of the data and the responses

which involved responses about the organizational performances and other variables, the respondents, through a cover letter of the questionnaire, were ensured about the confidentiality of their responses and further ensured that the data would be used only for the research purpose. This study followed a hard copy (self-administrative) tactic because an email survey gives a low response as compared to a self-administrative survey in Pakistan (Anwar, 2018). Another reason for choosing this method is to access the respondents directly in their working stations and to get their responses as either they have little time to fill the online surveys or do not bother to respond to emails. A total of 452 questionnaires were received, out of which 403 were usable responses from the selected SMEs with a response rate of 44.47%.

3.6 Measurement of Variables

3.6.1 Entrepreneurial Orientation

The entrepreneurial orientation was first developed by Miller (1983) which had three core dimensions; such as risk-taking, innovativeness, and proactiveness. However, later in 1996, Lumpkin and Dess (1996) included two new additional dimensions, namely autonomy and competitive aggressiveness. Despite having rapid growth of 5 dimensions, the three dimensions of Miller are still considered a complete measurement model to measure EO. In this study, three dimensions (risk-taking, innovativeness, and proactiveness) were used for EO. The measurement for these dimensions was adopted from Lumpkin and Dess (1996) and Covin and Slevin (1989). There are 9 items, of which three for risk-taking, three for innovativeness and three for proactiveness. A sample item indicates, “In general, the top managers of my firm favor a strong emphasis on innovation”.

3.6.2 Resources Acquisition

Firms with tangible and intangible resources are more advantageous as compared to their competitors. A tool developed by Campbell and Park (2016), and used by Ying et al. (2019)

and Ishtiaq et al. (2020) in the SMEs perspective was adopted to measure the resource acquisition. The tool consisted of six items for resource acquisition (tangible and intangible resources), having acceptable reliability of 0.93 (Ying et al., 2019).

3.7.2.1 Managerial Ties

Prior studies have introduced several ties in terms of managerial ties, including social ties, social networks, networking, and top management relationships. The most used term is managerial ties, which encompass political ties, business ties, and financial ties. For this research, a 9-item tool developed by (Su et al., 2015) was used to measure the managerial ties. Each of the dimensions of the managerial ties was measured by 3 items. A sample item indicates that "Spent much effort on cultivating connections with financial institutions".

3.7.2.2 Intellectual Capital

Prior studies have measured IC both as a uni-dimensional as well as a multi-dimensional construct. However, in this research, it is used as a unidimensional construct focusing on the core aspect of IC. Therefore, six items were taken from Kianto, Andreeva, and Pavlov (2013) and Khan, Yang, and Waheed (2019) to measure IC. A sample item indicates "our firm has a clear view of knowledge, information and strategy etc".

3.7.2.3 Financial Capabilities

Financial capabilities indicate a firm's position in terms of financial capital. In this research, financial capabilities are defined as the internal finances of a firm. The four items for financial capabilities were adopted from a prior study of Boso et al. (2016) where four items were used. A sample item indicates, "The firm managers are satisfied with the financial capital available to them for operational activities".

3.7.3 Business Model Innovation

BMI is defined as "the process of bringing about a change in the manner and range of business activities conducted by a firm, intending to achieve and enhance economic sustainability" (Anwar, 2018). A sample item indicates, "We frequently introduce new ideas and innovations into our business model".

Scholars used different dimensions to measure BMI. However, in this study, a tool of the BMI measure previously used by Guo, Zhao, and Tang (2013) and Anwar and Shah (2020) was used to measure BMI. A total of nine items were used to measure the construct of BMI, which covers almost every aspect of the innovation. A sample item indicates, "The manager of this business has basic accounting knowledge"

3.7.4 SMEs Performance

It is widely recognized that SMEs are reluctant to provide their business financial data (Anwar et al., 2018). In the absence of the objective measures of the firm's performance, the alternative way is to get the self-reported measure of the performance. However, studies indicate that there is a strong association between self-reported measurement and objective performance measurement (based on financial information using archived data) measurement (Shirokova et al., 2016). Furthermore, they suggested that self-reported measure provides more valuable outcomes than archived base data in an emerging market. In this study, FP was measured by using self-reported items adopted from previous research (Anwar et al., 2018). The tool consists of four items to measure financial performance, such as sales growth, return on assets, and investment. For the non-financial aspect of the performance, another four items were used, which measured the performance in terms of product quality, customer satisfaction, and loyalty. Firms were asked to rate their performance on "return on equity, return on asset, and customer stratification" etc, as compared to their major competitors and

industry rivals during the last 3 years. The options for the responses ranged from extremely declined = 1 to extremely improved = 5.

3.8 Scales

For this research, all the variables were measured through adopted tools developed by previous researchers. All the tools were having good reliability and validity. All the variables were measured on 5-point Likert scale, with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. However, firms' performance was measured as on range from extremely declined = 1 to extremely improved = 5.

Table 2 Definitions of SMEs in different Countries

Country	Industry types	Definitions of SMEs
Canada	SME	Independent firms having less than 200 employees q
France	SME	<500 employees
Germany	SME	<100 employees
Hong Kong	Manufacturing	< 50 employees
Indonesia	SME	< 100 employees
Ireland	SME	< 500 employees
Italy	Small enterprises	< 200 employees
Japan	Manufacturing, mining and transportation Construction Whole sale trade, Retail trade and services	< 300 employees or invested capital less than10 million yen < 100 employees or capitalization less than 30 million yen < 50 employees or capitalization less than 10 million
Korea	Manufacturing Mining & transportation	< 300 employees < 300 employees construction
Malaysia	SMIs SIS MIS	< 75 full time workers or with a shareholder fund of < RM 2.5 million (US $ 1 million) Manufacturing establishments employing between 5 and 50 employees or with a shareholders fund up to RM 500,000 Manufacturing establishments
Netherlands	Small enterprises Medium enterprises	< 10 employees 10-100 employees
Philippines	Small enterprises	< 200 employees, revenue < P 40 million

Singapore	Manufacturing Services	Fixed assets < S$ 15 million < 200 employees and fixed assets < S$ 15 million
Spain	Small enterprises Medium enterprises	< 200 employees < 500 employees
Sweden	SME	Autonomous firms with < 200 employees
Switzerland	SME	No fixed definition
Taiwan	Manufacturing, mining and construction industries Service industries	< NT$60 million of sale volume and < 200 employees < NT$80 million of sale volume < 50 employees
Thailand	Labour intensive sector Capital intensive sectors	< 200 employees < 100 employees
United Kingdom	SME	No fixed definition
United States	Very small enterprises Small enterprises Medium enterprises	< 20 employees 20-99 employees 100- 499 employees
Vietnam	SME	No fixed definition, generally < 200 employees

Source: Khattak and Shah (2020)

Table 3 Definitions of variables

Variables	Definitions/operationalization
Entrepreneurial Orientation	According to Wiklund and Shepherd (2005) "EO captures specific characteristics such as decision-making approaches of the firm, techniques, and procedures in strategic making activities" EO can be defined with several dimensions. However, the most used dimension of EO is innovativeness, risk-taking, and proactivity approaches. • *Innovativeness:* "supporting and inspiring new-fangled ideas as well as investigation and creativity". • *Risk-taking:* "The degree to which owners and managers of the firms are willing to take a risk and make great resources commitments. Those commitments which have a sensible chance of costly failures". • *Proactiveness:* "strives for novel opportunities which may or may not be allied to the existing line of operations" Miller (1983).
Resources Acquisition	Several tangibles and intangible resources, technological and financial resources, managerial resources, key information, and human capital resources are deemed as resources that can be gained through a

	network. (Jiang et al., 2018).
Managerial Ties	Su et al. (2015) refer to networking as "the ability/skill of an individual to build connection/tight with constructive unions and coalitions" Managerial ties refer to the "interpersonal connections of senior executives with those of other firms" (Peng & Luo, 2000). *Financial Tie*: "making ties with banks and financial institutions to access financial capital and loan" *Business Tie*: "Developing a connection with other businesses firms, industries, competitors and suppliers to garner valuable information and unique resources" etc. *Political Tie*: "Building networks with government and political bodies to access scarce resources controlled by the government" (Su et al., 2015).
Intellectual Capital	According to Stewart (2010), IC is "the knowledge, intellectual property, information, analytical skills, competencies and expertise that can be utilized to create wealth" According to Saint-Onge (1996), there are three main elements of IC: (a) *Human Capital:* "refers to the capabilities of owners and employees that tend to provide support and solution to customers" (b) *Customer Capital:* "refers to gravity, girth, attachment, and profitability from customers" (c) *Structural Capital:* "describes the competencies of an organization to meet the market needs"
Financial Capabilities	"Financial capabilities indicate the financial strength, resources, and capital of a firm available for its operation, growth and development" etc. (Boso, Oghazi, Cadogan, & Story, 2016)
SMEs performance	This study uses two aspects of firms' performance (financial performance and non-financial performance). Financial performance "covers the firms' financial aspects and growth, such as return on assets, return on investment and profitability," etc. Non-financial measures related to "the customers and employee's satisfaction as well as a market reputation" etc.
Business model innovation	According to (Foss & Saebi, 2017), BMI define as "designed, novel, nontrivial changes to the key elements of a firm's business model and

(BMI)	the architecture linking these elements". Teece (2018) defines BMI as "design or architecture of the value creation, delivery, and capture mechanisms of a firm".

Firms' Profiles

Table 4 displays the demographic details of the SMEs who participated in this study. A total 403 owners/managers of SMEs participated in this study. Out of a total of 403, 63.3 percent (255) owners/managers were from the manufacturing industry, 18.9 percent (76) owners/managers were from the trading industry, and 17.9 percent (72) were from the service sector. Furthermore, the age of SMEs data shows that 32.01 percent (129) SMEs are in business for the last ten years or less, 29.53 percent (119) SMEs were working for 11–20 years, and 38.46 percent (155) firms were in business 21 or above years. Most of the owners/managers have Master level qualifications, and only 13.7 percent have 18 years or more education. Around 17.1 percent owners/managers took part from those firms having 20 to 50 employees, 19.6 percent were from the firms having 51-100 employees, 21.8 percent owners/managers were from firms having 101-150 employees, 26.1 percent owners/managers were from firms having 151-200 employees and 15.4 percent owners/managers from firms having 201-200 employees.

Table 2 Profile of SMEs

Particulars	Frequency	Percentage
Firm. Age		
10 years & less	129	32.01
11-- 20 years	119	29.53
21 years and above	155	38.46
Firm. Size		
20 to 50 employees	69	17.1
51 to 100 employees	79	19.6
10 to 150 employees	88	21.8
151 to 200 employees	105	26.1
201 to 250 employees	62	15.4
Education (owner/top manager)		
intermediate and less	93	23.1
Bachelor	68	16.9
Master	187	46.4
MS / MPhil	53	13.2
PhD	2	.5
Industry		
Manufacturing	255	63.3
Trading	76	18.9
Services	72	17.9
Total	**403**	**100**

3.8.2 Control Variables

To control for the effects of the demographics of the SMEs and to reduce spurious relationships, we controlled for the age of firms, size of firms, industry type and education of top management. These are the variables that are suggested by G. Li et al. (2020) to be controlled in the case of SMEs, as they influence the firm's performance. Since the nature of the industry is a categorical variable, a multi-group analysis was performed in AMOS. There were no significant differences among the results between the three different groups. Therefore, the industry type variable was excluded from further analysis. However, the results of other control variables are discussed in the structural model.

3.9 Model Specification

To analyze the hypothesized relationships, the following equations are estimated:

$$FP_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(F.Age)_{i,t}+\beta_3(F.Size)_{i,t}+\beta_4(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 1$$

$$RA_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(F.Age)_{i,t}+\beta_3(F.Size)_{i,t}+\beta_4(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 2$$

$$FP_{i,t}=\beta_0+\beta_1(RA)_{i,t}+\beta_2(F.Age)_{i,t}+\beta_3(F.Size)_{i,t}+\beta_4(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 3$$

$$FP_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(RA)_{i,t}+\beta_3(F.Age)_{i,t}+\beta_4(F.Size)_{i,t}+\beta_5(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 4$$

$$RA_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(FT)_{i,t}+\beta_3(BT)_{i,t}+\beta_4(PT)_{i,t}+\beta_5(EO*FT)_{i,t}+\beta_6(EO*BT)_{i,t}+\beta_7(EO*FT)_{i,t}+\beta_8(F.Age)_{i,t}+\beta_9(F.Size)_{i,t}+\beta_{10}(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 5$$

$$BMI_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(F.Age)_{i,t}+\beta_3(F.Size)_{i,t}+\beta_4(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 6$$

$$FP_{i,t}=\beta_0+\beta_1(BMI)_{i,t}+\beta_2(F.Age)_{i,t}+\beta_3(F.Size)_{i,t}+\beta_4(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 7$$

$$FP_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(BMI)_{i,t}+\beta_3(F.Age)_{i,t}+\beta_4(F.Size)_{i,t}+\beta_5(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 8$$

$$BMI_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(FT)_{i,t}+\beta_3(BT)_{i,t}+\beta_4(PT)_{i,t}+\beta_5(EO*FT)_{i,t}+\beta_6(EO*BT)_{i,t}+\beta_7(EO*PT)_{i,t}+\beta_8(F.Age)_{i,t}+\beta_9(F.Size)_{i,t}+\beta_{10}(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 9$$

$$FP_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(IC)_{i,t}+\beta_3(FC)_{i,t}+\beta_4(EO*IC)_{i,t}+\beta_5(EO*FC)_{i,t}+\beta_6(F.Age)_{i,t}+\beta_7(F.Size)_{i,t}+\beta_8(ED)_{i,t}+\varepsilon t_{i,t} \quad \ldots\ldots 10$$

In the above model

- **β_0** is slope intercept
- **β_1, β_2, β_3, β_4, β_5, β_6, β_7, β_8, β_9, β_{10}** symbolize expected regression coefficients of variables
- **EO** represents Entrepreneurial Orientation
- **RA** represents Resources acquisition
- **BMI** represents Business Model Innovation

- **BT** represents Business Tie
- **PT** represents Political Tie
- **FT** represents Financial Tie
- **IC** represents Intellectual Capital
- **FC** represents Financial Capabilities
- **FP** represents Firm's performance
- **εt** show Error term
- **ED** Education of manger/owner
- **F.Age** Firm age
- **F.Size** Firm size

3.10 Explanation of Econometric Models

Eq (1) is used to examine the influence of EO on the performance of SMEs. If β_1 is significant then, then the EO will have an impact on the performance of SMEs. Eq (2) is used to examine the influence of EO on resources acquisition. If β_1 is significant then, then the EO will have an impact on resources acquisition. Eq (3) is used to scrutinize the nexus between resources acquisition and performance of SMEs. If β_1 is significant then, it has relevance between resources acquisition and performance of SMEs. Eq (4) test whether there exist a mediating effect between EO and performance of SMEs. If resources acquisition give full paly to the mediating effect, then β_2 should be significant, and β_1 become significant; if partial mediation effect is exerted, then β_2 should be significant, and β_1 become decrease in significance.

Eq (5) investigates whether managerial ties play a role of moderating effect between EO and resources acquisition. And significance of the regression coefficient of interaction terms (EO*FT) β_5, (EO*BT) β_6 and (EO*PT) β_7 is mainly observed. This study adds Eq (5) on the basis of moderating effect to examine the role of managerial ties between EO and resources

acquisition. IF $\beta_{5,}$ β_6 and β_7 become significant or increases in magnitude. Then managerial ties have a moderating effect on EO and resources acquisition nexus.

Eq (6) is used to analyze the relationship between EO and BMI. If β_1 is significant then, it has relevance between EO and BMI. Eq (7) is used to analyze the relationship between BMI and enterprises performance. If β_1 is significant then, it has relevance between BMI and performance of SMEs. Eq (8) is used to test the mediating role of BMI. If BMI gives full play to the mediating effect, then β_2 should be significant, and β_1 become significant; if partial mediation effect exists between EO and performance of SMEs, then β_2 should be significant, and β_1 become decrease in significant. Eq (9) investigates whether managerial ties play a role of moderating effect between EO and BMI. And significance of the regression coefficient of interaction terms (EO*FT) $\beta_{5,}$ (EO*BT) β_6 and (EO*PT) β_7 is mainly observed. IF $\beta_{5,}$ β_6 and β_7 become significant or increases in magnitude. Then managerial ties have a moderating effect on EO and BMI nexus.

Eq (10) investigates whether IC plays a moderating role between EO and enterprises performance. And significance of the regression coefficient of interaction terms (EO*IC) β_3 is mainly observed. IF β_3 becomes significant or increases in magnitude. Then IC has a moderating effect on EO and enterprises performance nexus. Eq (11) scrutinizes whether FC plays a moderating role between EO and enterprises performance. And significance of the regression coefficient of interaction terms (EO*FC) β_3 is mainly observed. IF β_3 become significant or increases in magnitude. Then IC has a moderating effect on EO and enterprises performance nexus.

Chapter 4

RESULTS AND DISCUSSION

In this chapter, the statistical tools and techniques used in the study are discussed. First, data were cleaned and diagnostics were performed through screening tests (missing values, normality, Multicollinearity and common method bias) followed by measurement model and structural model estimation through AMOS 21. Additionally, robustness test were also performed in the last section. Finally this chapter contains the comparison of findings between current research findings with the existing research.

4.1 Statistical Analyses

To obtain more effective results, several statistical tests were applied after data collection. Confirmatory Factor Analysis (CFA) was used to confirm estimate the measurement models and also test the goodness of fit, followed by Structural Equation Modeling in AMOS. However, before testing the hypotheses of the study, several screening tests were applied to clean the data and ensure fulfillment of the assumptions of the multiple regression analysis and structural equation modeling. As suggested by Hair et al. (2014) the following diagnostics were performed:

1. Missing values: Frequency analyses were used if there is any missing value.
2. Normality: *Skewness* and kurtosis were used to check the data normality.
3. *Multicollinearity*: Variance Inflation Factor and Tolerance were used to check a prevalence of *Multicollinearity* problem.
4. Common Method Bias. Harman's one-factor test was used to test the presence of CMB in the data.
5. Confirmatory Factor Analyses. AMOS was used to conduct the CFA to see the reliability and validity of the measurement models.
6. Correlation analysis. A correlation matrix was calculated to check the level and direction of correlation between a study variables

7. Structural Models. AMOS was used to estimate the structural model for the calculation of the path coefficients between the variables of the study.
8. Robustness. PROCESS Macros developed by Hayes (2013) were used to corroborate the results of the structural equation modeling.

4.1.1 Data Analysis

The basic diagnostics, including the screening tests, were performed through the SPSS; however, the measurement models and structural models were estimated through AMOS. SEM using AMOS is recommended for the measurement models and structural model estimation due to the following reasons:

1. It provides more validity tests (convergent validity and discriminant validity) as compared to other software, e.g., SPSS.
2. It separates measurement errors from each item during the fitness of a model that cannot be done in SPSS as it gives only results of true relationships.
3. It enables researchers to tests complex research models in a single structural model.

There are certain assumptions of AMOS to be met before estimating research models. These assumptions are related to the size of the data, no-missing values, assumptions about the normality of the data, and non-prevalence of the multi-collinearity between the independent variables of the research model. After ensuring these assumptions, the results of the AMOS can confidently be reported. These assumptions are tested, and the results are provided in the following relevant sections.

Adequate Sample Size

This is the first assumption of AMOS to be considered before estimating the structural model because if this assumption is violated, AMOS fails to converge and may provide misleading results. For instance, Hair, Anderson, Babin, and Black (2010) suggested that if the sample

size is small, e.g., around 50 to 200, SMART PLS can give efficient results. However, if the sample size is greater or close to 300, AMOS is the best strategy. Since the sample size of this study is adequate, i.e., more than 300, therefore, AMOS is suitable to be used for estimation of the research model.

4.1.2 Missing Values

The major issue with AMOS is that it does not run on a dataset having any missing value. Hence, if there is any missing value, it should be addressed before conducting further analysis considering the suggestion of Hair, Black, Babin, Anderson, and Tatham (2006); if an indicator has a missing value of less than 5 percent, it can be addressed with mean replacement, but the missing value in demographic factors such as gender, occupation, and employment should not be treated same. Considering the suggestion, the respondents who missed important information in the survey were dropped from the analysis, and only the observations complete in all respect were retained for further data analysis.

4.1.3 Data Normality

Another critical assumption of AMOS is the normality of the data. Skewness and kurtosis are the two statistics which were used to test the normality of the data using SPSS. The results suggested the normality of the data (See detail for this approach under descriptive statistics) and finally, a sample of 403 respondents was used for further data analysis.

4.1.4 Multicollinearity

When independent variables overlap with each other in a single model, it suggests a multicollinearity problem that affects results (Anwar, Khan, et al., 2018; Jagpal, 1982). To scrutinize the threat, Variance Inflation Factor (VIF) and tolerance factor test (see Table5) in SPSS where the effect of all the independent variables has checked on the mediators (BMI and resource acquisition) and the dependent variable (SMEs performance). According to Hair et al. (2010), Variance Inflation Factor (VIF) should be lower than 3, and the tolerance

value should be greater than 0.10 to establish the absence of multicollinearity in the dataset. The results of the VIF and tolerance tests met the criteria because all the factors were found to be in the acceptable range, as shown in Table 4. All the factors have a VIF value of less than 3, and all the factors have their tolerance values less than 0.10, as suggested by (Khan, Yang, & Waheed, 2019).

Table 3 Multicollinearity Diagnostics

Independent Variables	**Dependent Variable**					
	Firm's Performance		**Resources Acquisition**		**BMI**	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
Resources acquisition	0.668	1.497				
BMI	0.842	1.187				
EO	0.621	1.611	0.836	1.196	0.836	1.196
Political tie	0.883	1.132	0.959	1.043	0.959	1.043
Business tie	0.731	1.368	0.832	1.202	0.832	1.202
Financial tie	0.833	1.200	0.877	1.140	0.877	1.140
Intellectual Capital	0.646	1.547				
Financial Capabilities	0.606	1.651				

Note: BMI=Business Model Innovation, EO=Entrepreneurial Orientation. VIF=Variance Inflation Factor

4.1.4 Descriptive Statistics

The descriptive statistics of the variables are provided in Table 6. The table shows the mean (M), standard deviation (S.D), skewness, and kurtosis of all the factors that have shown in Table 6. The results show that EO has a mean value of 2.9340, and its SD is 0.48714. Furthermore, the result indicates that firm's performance has a mean value of 3.4988, and the SD value is 0.69416. The mean score of resources acquisition is 3.3571, and its SD is 0.66903. The mean score of BMI is 4.3390, and its SD is 0.91487. The mean value of intellectual capital is 2.9219, and its SD is 0.61375. The financial capabilities have a Mean score of 3.0590, and its SD is 0.87195, the political tie has a Mean score of 3.5671, and its SD is 0.80157, the financial tie has a Mean score of 3.7702, and its SD is 0.91484, and finally, business tie shows its Mean score of 2.5632 and its SD is 0.96251.

Furthermore, the assumption of data normality was also met as all the factors have *Skewness* and *kurtosis* scores within the cutoff range of ±1 (D. George, 2011).

4.1.5 Common Method Variance (CMV)

The problem of CMV occurs when data is collected cross-sectionally from a single source (MacKenzie and Podsakoff (2012). Such data struggles from the problem of multicollinearity and results in an inflated correlation between the variables. To check the CMV, two approaches were used (Li et al., 2020; Rialti, Zollo, Ferraris, & Alon, 2019), such as Harman's single factor test in SPSS and common latent factor in AMOS.

4.1.6 Harman's Single Factor Test

This method was executed in SPSS using explanatory factor analysis, adopting principle component analysis. All the observed variables were entered to test the total variance as well as the variance explained by a single factor. The results showed that a total of 9 factors with 72% variance, of which the first factor illustrated only 37% of the variance, which is less than 50 percent, confirming the absence of CMV in the data (MacKenzie & Podsakoff, 2012). Additionally, the common latent factor method was also used to establish the absence of the CMV in the dataset.

4.1.7 Common Latent Factor

This approach was executed in AMOS, where a new factor, "common latent factor (CLF)" was created, and its influence is checked in the measurement model (main model). The results of the two models (one without CLF and one with the CLF-new) were compared. The results revealed that the model fits indices of the original main measurement model are better than the CLF-model. Hence, it suggests that the data is free from CMB threat.

4.1.8 Non-Response Bias

Non-response bias is caused by the data missed due to non-responding elements of the sample and population. The large datasets are normally affected by non-response bias. To see

whether there is any threat from the non-response bias, the variance between the early responses (collected without reminder) and the late responses (given a reminder or late) is calculated (Rogelberg & Stanton, 2007; Sheikh & Mattingly, 1981). The difference between the two sub-groups (early respondents constitute 263, while late respondents were 140) is statistically estimated through the independent samples t-test. The results showed no significant difference between the two sub-groups — ensuring the absence of non-response bias in the data.

Table 4 Descriptive Statistics

Varaibles	Mean	Standard-deviation	Skewness	Kurtosis
Firm's Performance	3.4988	0.69416	-0.928	0.089
EO	2.9340	0.48714	-0.950	-0.019
Resources Acquisition	3.3571	0.66903	-1.384	1.337
BMI	3.3390	0.91487	-1.644	1.463
Intellectual Capital	2.9219	0.61375	-0.620	1.007
Financial Capabilities	3.0590	0.87195	-1.649	1.649
Financial Tie	3.7702	0.91484	-1.140	0.629
Business Tie	2.5632	0.96251	-1.166	0.604
Political Tie	3.5671	0.80157	-0.296	-1.317

Note: EO=Entrepreneurial Orientation, BMI=Business Model Innovation

4.2 Correlation Analysis

The correlation analysis was conducted to see the zero-order correlation between the variables of this study. The results are provided in Table-7, which show that there is a significant positive correlation between EO and firm's performance ($r=0.570$, $p < 0.01$). Furthermore, EO is significantly correlated with resources acquisition ($r = 0.416$, $p > 0.05$) and BMI ($r = 0.291$, $p > 0.05$). Similarly, resources acquisition ($r = 0.364$, $p < 0.01$) and BMI (0.385, $p < 0.01$) are significantly positive association with firm's performance. Moreover, intellectual capital ($r = -0.051$, $p > 0.01$) and financial capability ($r = -0.053$, $p > 0.01$) have significant negative relationship with the firm's performance.

Table 5 Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12
1-Age	1											
2-Size	0.062	1										
3-Education	0.015	0.108*	1									
4-EO	0.124*	0.103*	.045	(0.90)								
5-Resacqu	-0.036	0.017	0.122*	0.416**	(0.86)							
6-BMI	0.033	0.103*	0.006	0.291**	0.266**	(0.91)						
7-IC	-0.009	-0.002	-0.074	0.004	0.146**	0.096	(0.87)					
8-FC	-0.119*	0.006	0.003	-0.075	0.147**	-0.040	0.466**	(0.85)				
9-PT	0.118*	-0.003	-0.082	-0.007	0.141**	0.099*	0.207**	0.065	(0.81)			
10-FT	0.105*	-0.043	-0.034	-0.192**	0.063**	0.091**	-0.102*	0.129**	0.177**	(0.87)		
11-BT	0.060	0.044	0.037	0.315**	0.069	0.017	0.145**	0.295**	0.128*	0.183**	(0.88)	
12-FP	0.172**	0.165**	0.038	0.570**	0.364**	0.385**	0.051*	0.053*	0.007*	0.080*	0.250**	(0.87)

Note: **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2 tailed). Values in parentheses show alpha reliability score of each variable. EO=entrepreneurial orientation, Resacqu=resource acquisition, IC=intellectual capital, FC=financial capabilities, BMI=business model innovation, PT=political networking, FT=financial networking, BT=business networking. Alpha reliability has been given in the bracket parallel to the correlation values.

4.3 Confirmatory Factor Analysis

Confirmation factor analysis was conducted to check the convergent validity, discriminant validity, and composite reliability of the constructs used in this study. The maximum likelihood method of measurement model in CFA was used as it is the standard method to test validity and reliability of the factors (Ahmad, Zulkurnain, & Khairushalimi, 2016; Hu & Bentler, 1999). However, considering the complexity of the model, instead of directly jumping to the main measurement model, group-wise models were estimated to get more valid insights.

4.4 CFA-Measurement Model

The main measurement model was estimated by calculating the items' standardized loading, the model fits, construct's validity, and reliability through AMOS. In this model, all the observed variables were included in the model by connecting them to their relevant underlying factors. First, the factor loadings of the items that have been recommended above

the threshold value of 0.70 (Hair et al., 2010) were retained in the measurement model. However, sometimes an item having a lower factor loading can be retained if other factors display high standardized loading (Hair et al., 2010). For instance, factor loading 0.50 can be retained if the other two items show 0.80 and above 0.80 standardized loadings, respectively, on a particular variable because it makes an average of 0.70 (Hair et al., 2010). The measurement model fulfilled this condition and confirmed that all the items are significantly loaded ($p < 0.001$) to their relevant factors. Factor loadings are provided in Table 9. In the model fits (see Table 8), the results showed a good overall model fit ($\chi 2/df = 2.10$) as it has a value below the threshold value of 3 (Hinkin, 1998). GFI=0.81, AGFI=0.80, CFI=0.87 TLI=0.89 and NFI=0.90 values are also in the acceptable range (i.e., above 0.80) (KA, 1993; Marsh, Balla, & McDonald, 1988); moreover, as per suggestions of Steiger (1990) and Bollen and Stine (1992) the RMR (0.039) and RMSEA (0.07) values are lower than 0.09 and which confirms the goodness of fit of the model to the data. After establishing the goodness of fit of the model to the data, further estimation of the measurement models for each construct was carried out.

4.5 Validity and Reliability

Table 7 illustrates the constructs' validity and reliability.To establish the constructs' reliability and validity, three different criteria were used, such as convergent validity, discriminant validity, and composite reliability. The details of these criteria are provided in their relevant sections.

4.5.1 Convergent Validity

Convergent validity is established through the Average Variance Extracted (AVE). The AVEs of the constructs should be greater than 0.50 to establish convergent validity (Anderson & Gerbing, 1988). It is calculated as the following formula:

AVE = Square of Standardized factor loadings/number of items

Hair et al. (2010) suggested that if the overall variance explained by the items in a construct is at least 0.50, then the construct's convergent validity is established. In our results, all the constructs showed desirable AVE (see Table 9) such as AVEs for EO = 0.54, firm's performance = 0.50, resources acquisition = 0.52, BMI = 0.53, intellectual capital = 0.55, financial capability = 0.61, political tie = 0.61, financial tie = 0.70, and business tie = 0.72.

4.5.2 Discriminant Validity

Discriminant validity establishes the uniqueness of variance explained by the items in a single respective construct and requires no overlapping of the items of one factor with the items of the other factors. To establish the discriminant validity of a construct, the square root of the AVE of the construct should be greater than the construct's correlation with other constructs of the study. In this study, the square root of the AVE of the EO = 0.73, which is far higher than the correlations of EO with other constructs of the study; therefore, the discriminant validity of the EO is established. Similarly, the square root of firm's performance = 0.70, resources acquisition = 0.72, BMI = 0.72, intellectual capital = 0.74, financial capabilities = 0.78, political tie = 0.78, financial tie = 0.84, and business tie = 0.84 are greater than their intercorrelation with the other constructs of the study, therefore all the constructs' discriminant validities are established.

4.5.3 Composite Reliability

The internal consistency and reliability of the items toward their respective constructs are assessed through composite reliability. The cutoff value of composite reliability is 0.70 (Bagozzi, Yi, & Nassen, 1998). In this study, all the variables exhibited acceptable values of composite reliability (see Table 9), such as EO = 0.91, firm's performance = 0.88, resources acquisition = 0.86, BMI = 0.91, intellectual capital = 0.87, financial capability = 0.86, political tie = 0.82, financial tie = 0.87, and business tie=0.88. The results showed that all the constructs are reliable and valid; therefore, it is safe to use them in the further analysis of the

structural model for estimation of the path coefficients to substantiate the hypotheses of the study.

4.6 Structural Model

Hypotheses of the study were tested through the structural model using AMOS. To gain valid insights, each hypothesis was tested through a separate structural model. Therefore, nine different structural models were estimated. The estimation and their interpretations are provided in the relevant sections. Each subsection provides details about one hypothesis and estimates one structural model.

4.6.1 Structural Model 1

$$FP_{i,t} = \beta_0 + \beta_1(EO)_{i,t} + \beta_2(F.Age)_{i,t} + \beta_3(F.Size)_{i,t} + \beta_4(ED)_{i,t} + \varepsilon t_{i,t}$$

In this structural model (see Figure 6), the effect of EO on firm's performance was examined. The models showed a good fit on the data as can be seen in Table-8, such as $\chi 2/df = 2.145$, which shows the overall goodness of fit of the model(Hinkin, 1998). In addition, GFI=0.82, AGFI=0.81, CFI=0.89 TLI=0.90 and NFI= 0.91 scores are in the desirable range (above 0.80) (KA, 1993; Kline, 2015; Marsh et al., 1988). Moreover, Steiger (1990) suggested that RMR and RMSEA values should be lower than 0.09, and the values 0.041 and 0.07 for RMR and RMSEA, respectively, are below the threshold level of 0.09.

The results of the first structural model estimation (see table 10) show that EO has a significant linear positive impact on firm's performance ($\beta = 0.57$, $p < 0.05$), which substantiates the hypothesis H_1. These results imply that firms with a high level of EO are in a better position to achieve superior performance. However, the control variables, such as the age of the firm, size of the firm, and manager's education, have an insignificant influence on the firm's performance. The Value of R^2 shows that a 33% change in firm's performance is explained by EO while controlling for the effects of age of the firm, size of the firm, and educational background of top managers.

4.6.2 Structural Model 2

$$RA_{i,t} = \beta_0 + \beta_1(EO)_{i,t} + \beta_2(F.Age)_{i,t} + \beta_3(F.Size)_{i,t} + \beta_4(ED)_{i,t} + \varepsilon t_{i,t}$$

In this structural model (see Figure 7), the effect of EO on resource acquisition was examined. The Table 8 shows a good fitness of the model as the values of $\chi 2/df=2.087$, GFI=0.837, AGFI=0.82, CFI=0.845, TLI=0.91 and NFI= 0.90, RMR = 0.05 and RMSEA = 0.06 are all in the acceptable range.

The results of the second model (see Table 10) show that EO has a significant influence on resource acquisition ($\beta = 0.35$, $p < 0.05$), which supported hypothesis H_2. These results implying that entrepreneurial-orientated firms are highly motivated and efficiently acquire valuable external resources.R^2 indicates that EO explained only a 12% variation in resource acquisition.

4.6.3 Structural Model 3

$$FP_{i,t} = \beta_0 + \beta_1(RA)_{i,t} + \beta_2(F.Age)_{i,t} + \beta_3(F.Size)_{i,t} + \beta_4(ED)_{i,t} + \varepsilon t_{i,t}$$

The impact of resource acquisition on firm's performance was tested through structural model-3 (see Figure 8). The Table 8 shows a good fitness of the model as the values of $\chi 2/df= 2.491$, GFI=0.827, AGFI=0.869, CFI=0.919, TLI=0.90, NFI=0.90 RMR = 0.05 and RMSEA = 0.07 are all in the acceptable range.

The results of the third structural model estimation (see Table 10) show that resource acquisition has a significant positive impact on firm's performance ($\beta = 0.33$, $p < 0.05$), which supports the hypothesis H_3 of the study. These results suggesting that firms having enough tangible and intangible resources are enjoy superior performance. R^2 score indicates that resources acquisition explained 12% of the variation in firm's performance after controlling for the control variables; education of the top managers, size, and age of firms.

4.6.4 Structural Model 4

$$FP_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(RA)_{i,t}+\beta_3(F.Age)_{i,t}+\beta_4(F.Size)_{i,t}+\beta_5(NB)_{i,t}+\varepsilon t_{i,t}$$

In this structural model of the study, the mediating role of resource acquisition was checked between EO and firm's performance relationship (see Figure 9).

The goodness of fit tests showed a good model fit As $\chi 2/df = 2.31$, GFI=0.818, AGFI=0.80,CFI=0.81, NFI=0.88, TLI=0.89 RMR = 0.05 and RMSEA = 0.07 are in acceptable range .

The fourth structural model estimation results (see Table 11) indicate the mediating role of resource acquisition between the EO and firm's performance. The indirect path of EO on firm's performance remained significant ($\beta = 0.031$, $p < 0.05$) in the presence of resources acquisition. While the direct path of EO on firm's performance is also significant ($\beta = 0.093$, $p > 0.05$). This result tells that resource acquisition plays a partial mediating role between EO and firm's performance. These results partially support the hypothesis H_4. These results implying that EO assists firms to acquire satisfactory resources, which inturns improve the performance of SMEs. R^2 shows a 32% change in the firm's performance brought by EO in the presence of resources acquisition.

4.6.5 Structural Model 5

$$BMI_{i,t} = \beta_0 + \beta_1(EO)_{i,t} + \beta_2(F.Age)_{i,t} + \beta_3(F.Size)_{i,t} + \beta_4(ED)_{i,t} + \varepsilon t_{i,t}$$

The effect of EO on BMI was examined through structural model-5 (see Figure 10). The Table 7 showed a good model fitnes as $\chi 2/df = 2.06$, GFI=0.832, AGFI=0.867,CFI=0.921, NFI=0.89, TLI=0.901 RMR = 0.03 and RMSEA = 0.06 are in the acceptable ranges.

The results of the fifth structural model (see table 10) indicate that EO has a significant positive linear impact on BMI ($\beta = 0.29$, $p < 0.05$), which supports hypothesis H_8 of the study. These results infer that firms with a high level of EO are in a better position to build an effective BMI. R^2 shows that EO explained 0.08% of the variation in BMI.

4.6.6 Structural Model 6

$$FP_{i,t} = \beta_0 + \beta_1(BMI)_{i,t} + \beta_2(F.Age)_{i,t} + \beta_3(F.Size)_{i,t} + \beta_4(EB)_{i,t} + \varepsilon t_{i,t}$$

The effect of BMI on firm's performance was examined through structural model- 6 (see Figure 11). The goodness of fit tests show a good model fit as $\chi 2/df$ =2.79, GFI=0.834, AGFI=0.883,CFI=0.920, NFI=0.93, TLI= 0.91, RMR = 0.05 and RMSEA = 0.07 are in the acceptable ranges.

The results of the sixth structural model (see Table 10) showed that BMI has a significant and positive influence on the firm's performance ($\beta = 0.36$, $p < 0.05$), thereby supports hypothesis H_9. These results are inferring that firms with effective BMI are in a better position to achieve superior performance. R^2 shows that the BMI explains 14% change in the firm's performance after controlling for the top manager's education level, age, and size.

4.6.7 Structural Model 7

$$FP_{i,t}=\beta_0+\beta_1(EO)_{i,t}+\beta_2(BMI)_{i,t}+\beta_3(F.Age)_{i,t}+\beta_4(F.Size)_{i,t}+\beta_5(NB)_{i,t}+\varepsilon t_{i,t}$$

The structural model (see figure 12) estimated the mediating role of BMI between EO and firm's performance. The result of seventh structural model meets the model fits criteria, as $\chi 2/df$=2.14, GFI=0.80, AGFI=0.80, CFI= 0.83 TLI= 0.91, NFI=089, RMR = 0.06 and RMSEA = 0.08 are in the acceptable ranges.

The results of the seventh structural model (see Table 12) show that the indirect path of EO on firm's performance is significant ($\beta = 0.026$, $p < 0.05$) in the presence of BMI. Similarly, the direct path of EO on firm's performance is also significant ($\beta = 0.066$, $p > 0.05$). These significant paths suggest that BMI plays a partial mediating role between EO and firm's performance. These results partially support the hypothesis H_{10}. These results suggesting that high entrepreneurial capability stimulates firms to build effective BMI and improve performance of SMEs..R^2 shows that EO brings a 35% change in firm's performance in the presence of BMI.

4.6.8 Structural Model 8

$$FP_{i,t}=\beta_0+\beta_1(INV)_{i,t}+\beta_2(RTK)_{i,t}+\beta_3(PRO)_{i,t}+\beta_4(RA)_{i,t}+\beta_5(F.Age)_{i,t}+\beta_6(F.Size)_{i,t}+\beta_7(NB)_{i,t}+\varepsilon t_{i,t}$$

In the eighth structural model (see Figure 13), the effect of each dimension of EO on the firm's performance was estimated with a mediating role of resource acquisition. The result of seventh structural model meets the model fits criteria, as $\chi 2/df=2.18$, GFI=0.82, AGFI=0.83, CFI= 0.89, TLI= 0.90, NFI=0.91, RMR = 0.03 and RMSEA = 0.06 are in the acceptable ranges. After ensuring the fitness of the model (see table 8), we moved to the discussed results.

The results (see Table 13) show that the direct effect of innovativeness on SMEs performance is significant ($\beta = 0.454$, $p < 0.05$), whereas the indirect effect of innovativeness on SMEs performance is insignificant ($\beta = -0.019$, $p > 0.05$). This result tells that resource acquisition does not mediate the nexus between innovativeness and SMEs' performance. The indirect effect of risk-taking on SMEs is significant ($\beta = 0.082$, $p < 0.05$) while the direct effect also remained significant ($\beta = -0.548$, $p < 0.05$). This result shows that resource acquisition partially mediates the relationship between risk-taking and SMEs' performance. Similarly, the indirect effect of proactiveness on SMEs' performance is insignificant ($\beta = 0.006$, $p > 0.05$) while the direct effect is significant ($\beta = 0.713$, $p < 0.05$). This result shows that resource acquisition does not mediate the nexus between proactiveness and SMEs' performance. Overall this result partially supported hypothesis H_4.

4.6.9 Structural Model 9

$$FP_{i,t}=\beta_0+\beta_1(INV)_{i,t}+\beta_2(RTK)_{i,t}+\beta_3(PRO)_{i,t}+\beta_4(BMI))_{i,t}+\beta_5(F.Age)_{i,t}+\beta_6(F.Size)_{i,t}+\beta_7(NB)_{i,t}+\varepsilon t_{i,t}$$

In this structural model (see Figure 14), the effect of each dimension of EO on the SMEs' performance was estimated in the presence of BMI as a mediator. Table 7 shows the goodness of fit tests, which suggest a good model fitness for structural model 9.

The results (see Table 14) show that both the direct path (β = 0.414, p < 0.05) and indirect path (β = 0.035, p < 0.05) of innovativeness on SMEs performance are significant. This result reveals that BMI partially mediates the nexus between innovativeness and SMEs' performance. The indirect effect of risk-taking on SMEs performance is significant (β = -0.035, p < 0.05), similarly the direct effect also remained significant (β = -0.456, p < 0.05). This result shows that BMI partially mediates the relationship between risk-taking and SME performance. Similarly, the indirect path of proactiveness on SMEs performance is significant (β = 0.031, p < 0.05), whereas the direct path is also remained significant (β = 0.705, p < 0.05). This result shows that BMI partially mediates the nexus between proactiveness and SMEs' performance. Overall, these results partially substantiate the hypothesis H_{10}.

Table 6 Model fitness

Models	**Chisq**	**df**	**Chisq/df**	**GFI**	**AGFI**	**CFI**	**TLI**	**NFI**	**RMR**	**RMSEA**
Measurement Model			**2.10**	**0.81**	**0.80**	**0.87**	**0.89**	**0.90**	**0.039**	**0.07**
Structural Model- 1			2.145	0.82	0.81	0.89	0.90	0.91	0.041	0.07
Model- 2			2.087	0.837	0.82	0.845	0.91	0.90	0.05	0.06
Model- 3			2.491	0.827	0.869	0.919	0.906	0.90	0.05	0.07
Model- 4			2.31	0.818	0.80	0.81	0.89	0.88	0.05	0.07
Model- 5			2.06	0.832	0.867	0.921	0.901	0.89	0.03	0.06
Model -6			2.79	0.834	0.883	0.920	0.91	0.93	0.05	0.07
Model- 7			2.149	0.80	0.80	0.83	0.91	0.89	0.06	0.08
Model- 8			2.182	0.826	0.83	0.89	0.90	0.918	0.033	0.06
Model- 9			2.034	0.89	0.91	0.92	0.91	0.90	0.04	0.06
Threshold level			1-3	>.80	>.80	>.80	>.90	>.90	<.09	<.08

Table 7 Factor Loading, Validity and Reliability

Items	Estimates	AVE	√ AVE	Composite reliability
Entrepreneurial orientation		0.54	0.73	0.91
pr3	0.523***			
pr2	0.769***			
pr1	0.678***			
rtk3	0.785***			
rtk2	0.789***			
rtk1	0.870***			
in3	0.754***			
in2	0.646***			
in1	0.767***			
Business tie		0.72	0.84	0.88
bt3	0.806***			
bt2	0.893***			
bt1	0.846***			
Financial tie		0.70	0.84	0.87
ft3	0.846***			
ft2	0.802***			
ft1	0.876***			
Political tie		0.61	0.78	0.82
pt3	0.767***			
pt2	0.837***			
pt1	0.750***			
Resource acquisition		0.52	0.72	0.86
rsreq6	0.694***			
rsreq5	0.649***			
rsreq4	0.653***			
rsreq3	0.737***			
rsreq2	0.782***			
rsreq1	0.801***			
Firm’s performance		0.500888	0.70	0.88
perf8	0.550***			
perf7	0.554***			
perf6	0.901***			
perf5	0.685***			
perf4	0.801***			
perf3	0.593***			
perf2	0.663***			
perf1	0.829***			
Financial capabilities		0.62	0.78	0.86

fc.4	0.832***			
fc.3	0.869***			
fc.2	0.812***			
fc.1	0.61***			
Intellectual capital		0.55	0.74	0.87
ic.6	0.577***			
ic.5	0.869***			
ic.4	0.791***			
ic.3	0.696***			
ic2	0.869***			
Ic.1	0.599***			
Business model innovation		0.53	0.72	0.91
bmi9	0.874***			
bmi8	0.653***			
bmi7	0.657***			
bmi6	0.641***			
bmi5	0.762***			
bmi4	0.61***			
bmi3	0.884***			
bmi2	0.598***			
bmi1	0.842***			

Note: : EO=Entrepreneurial Orientation, BMI=Business Model Innovation,IC=Intelectual capital ,FC,PT=Politial tie ,FT=Financial tie, BT =bussiness tie,ResAcq=Resources acquisition : *** significant ($p < 0.001$).

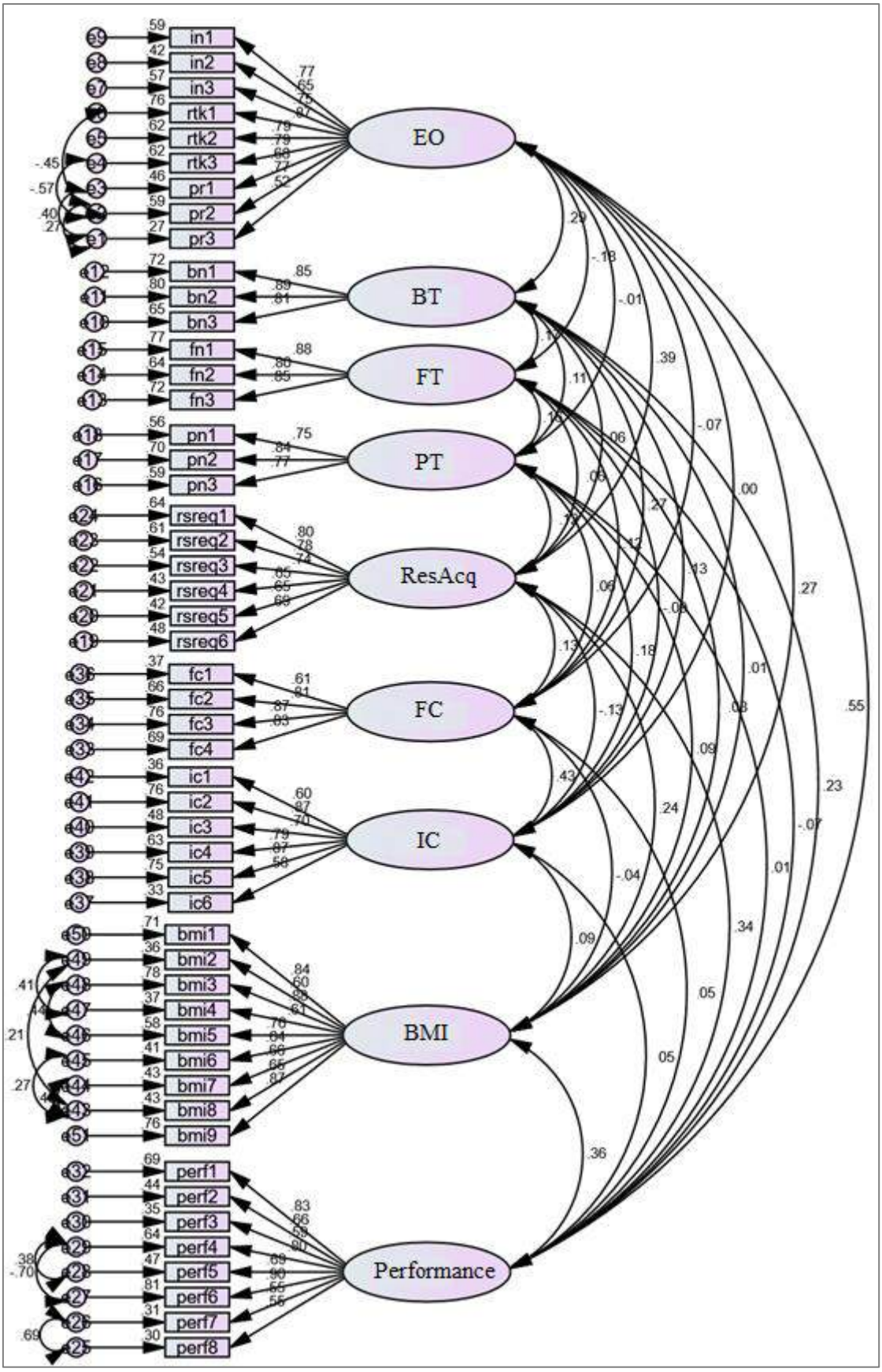

Figure 5 Measurement model. **Note: : EO=Entrepreneurial Orientation, BMI=Business Model Innovation,IC=Intelectual capital ,FC,PT=Politial tie ,FT=Financial tie, BT =bussiness tie,ResAcq=Resources acquistion**

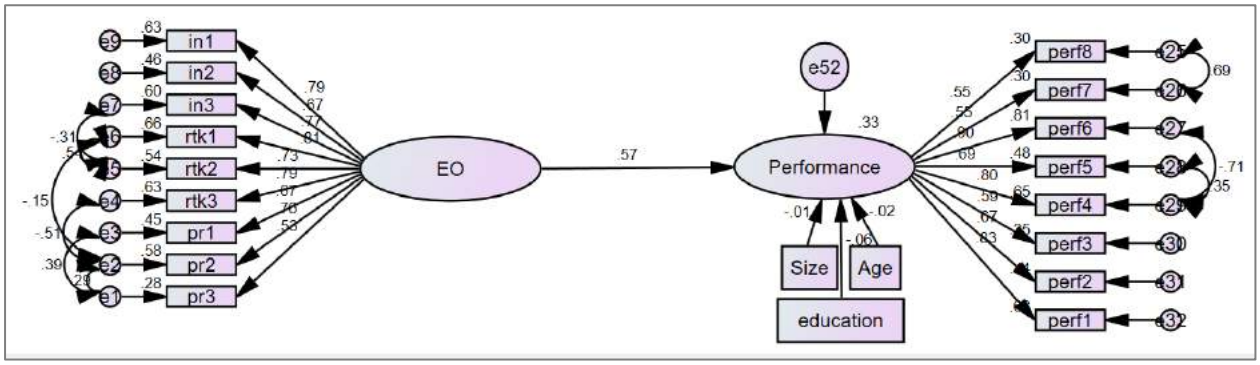

Figure 6 Structural Model 1.

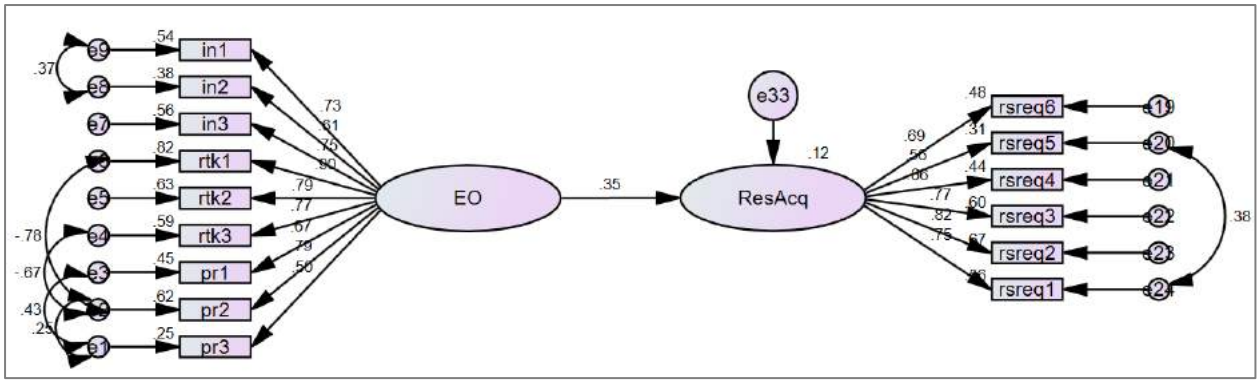

Figure 7 Structural Model 2

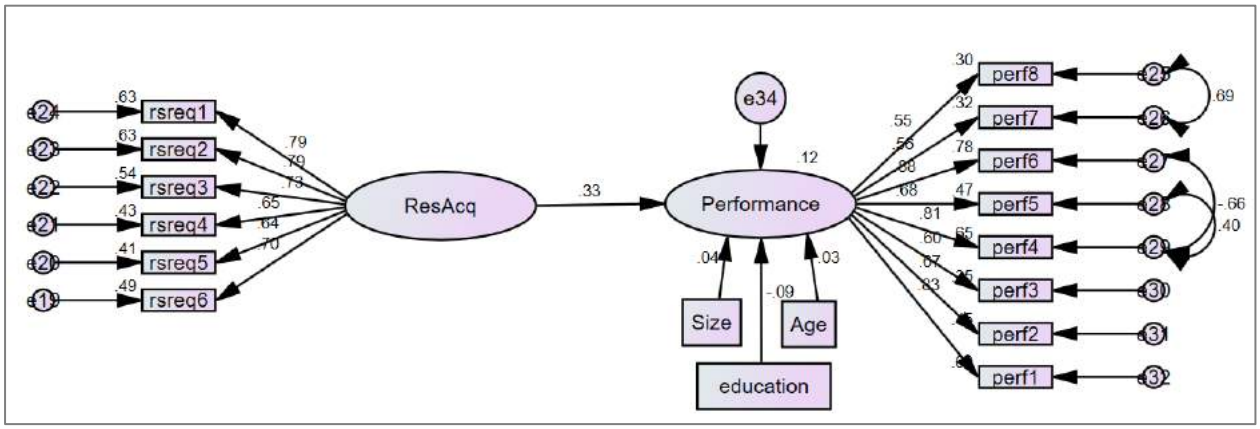

Figure 8 Structural Model 3

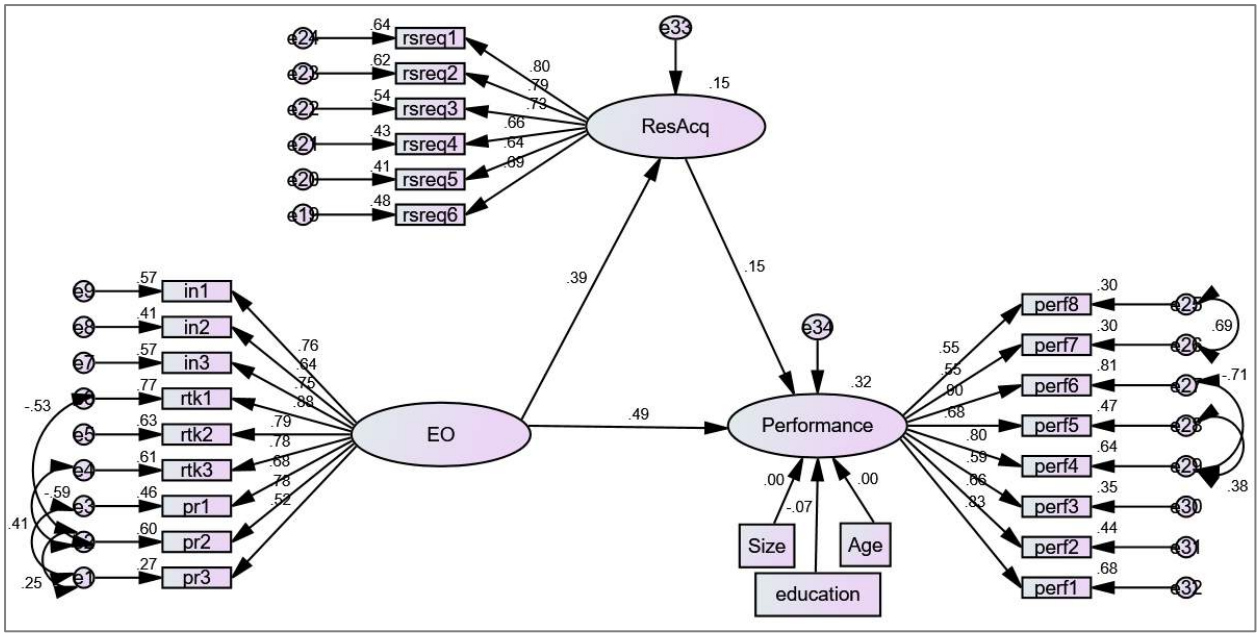

Figure 9 Structural Model 4

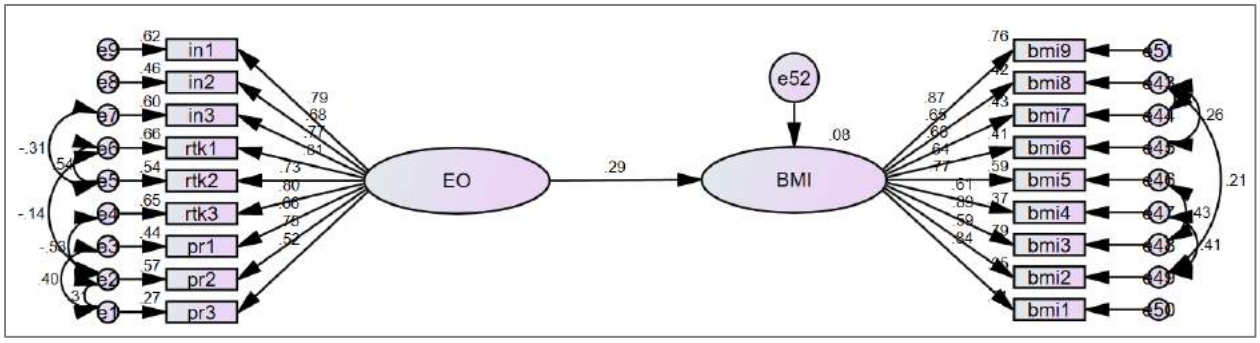

Figure 10 Structural Model 5

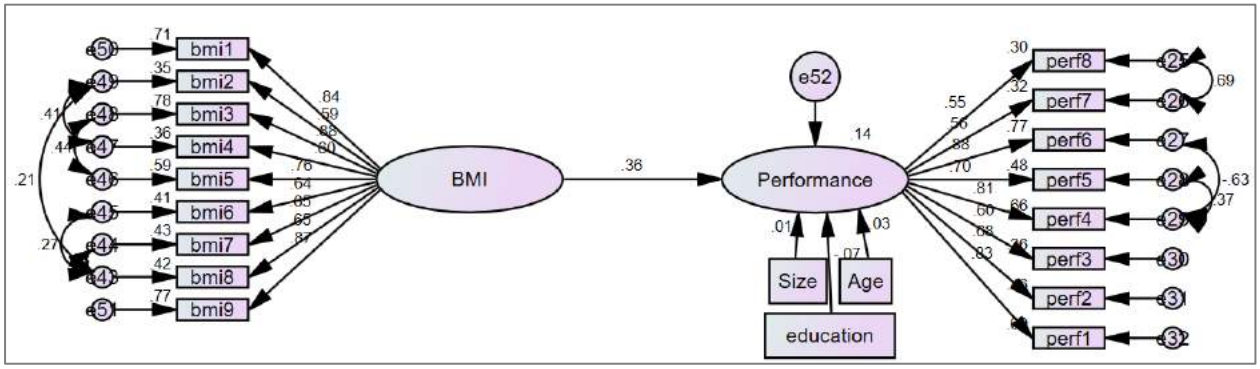

Figure 11 Structural Model 6

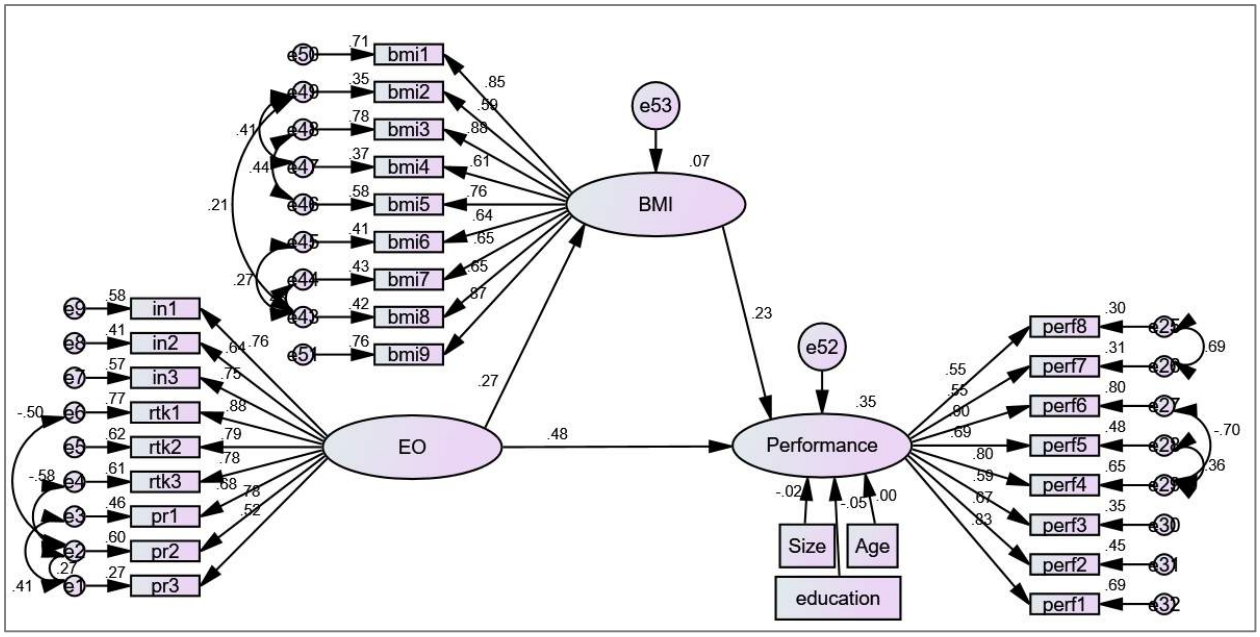

Figure 12 Structural Model

Structural Model robustiness

Robustness of resource acquisition

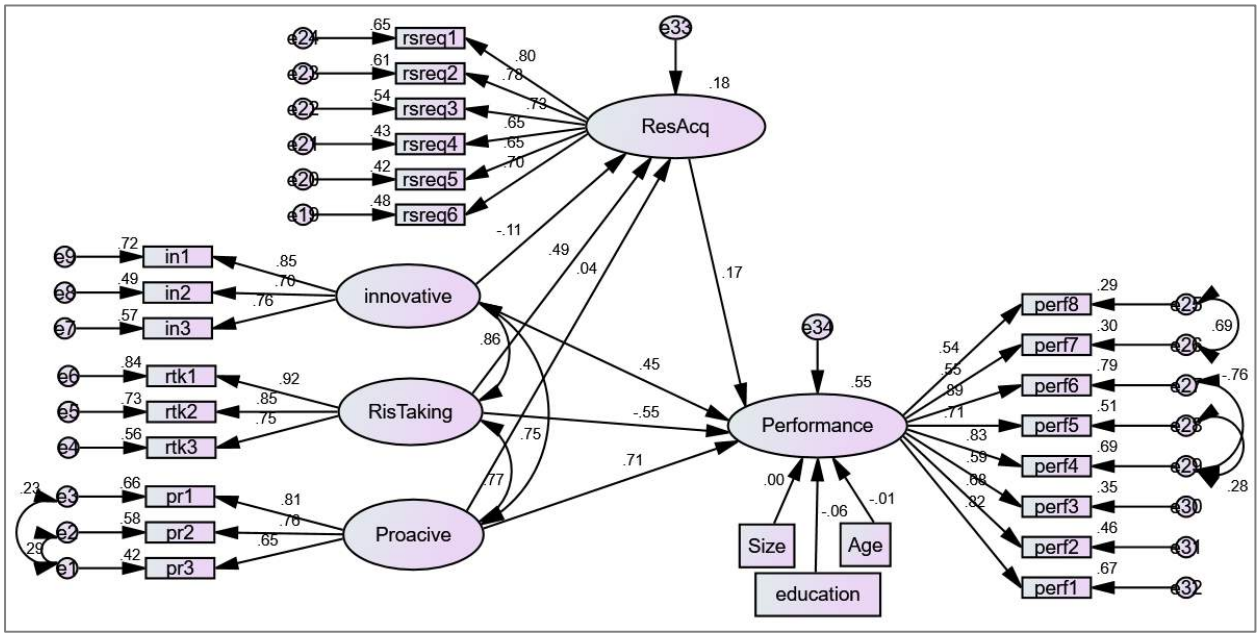

Figure 13 Structural Model 8

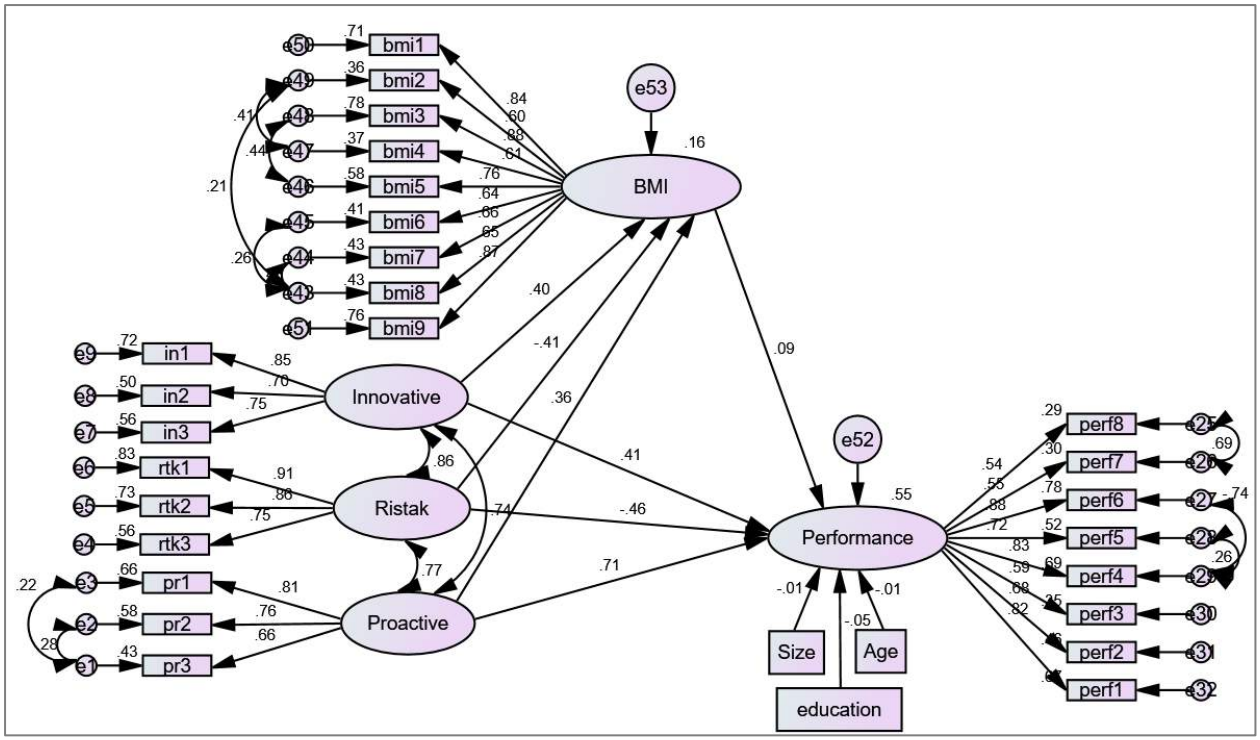

Figure 14 Structural Model 9

Table 8 Hypothesis testing (without mediation)

Hypotheses	Model 1	Model 2	Model 3	Model 5	Model 6
H1. FP <--- EO	0.570***				
FP <--- Age	-0.019				
FP <--- Size	-0.004				
FP <--- education	-0.042				
H2. Resources acquisition<--- EO		0.350***			
H3.FP <--- Resources acquisition			0.330***		
FP<--- Age			0.025		
FP<--- Size			0.022		
FP<--- Education			-0.065		
H8.BMI <--- EO				0.290***	
H9.FP <--- BMI					0.360***
FP<--- Age					0.022
FP<--- Size					0.006
FP<--- education					-0.047

Note: Two tailed significant level=***p, 0.001, EO=Entrepreneurial orientation, BMI=business model innovation, FP=Firm's performance

Table 9 Mediating Role of Resources Acquisition

Hypothesis	Direct effect	P	Indirect effect	p	Total Effect	P
H4.FP < ---EO (via Resources acquisition)	0.488	0.001	0.056	0.011	0..545	0.001
Resources acquisition < --- EO.	0.386	0.001			0.386	0.001
FP < --- Resources acquisition	0.146	0.015			0..46	0.015
FP < --- Size	0.002	0.950			0.002	0.950
FP < --- Age	-0.002	0.951			-0.002	0.951
FP < --- Education	-0.068	0.109			-0.068	0.109

Note: EO=Entrepreneurial orientation, FP=Firm's performance

Table 10 Mediating Role of Business Model Innovation

Hypothesis	Direct effect	P	Indirect effect	p	Total Effect	P
H7.FP < ---EO (via BMI)	0.485	0.001	0.063	0.001	0.548	0.001
BMI < --- EO.	0..273	0.001			0..273	0.001
FP < --- BMI	0.230	0.001			0.230	0.001
FP < --- Size	-0.016	0.755			-0.016	0.755
FP < --- Age	0.000	0.958			0.000	0.958
FP < --- Education	-0.052	0.197			-0.052	0.197

Note: EO=Entrepreneurial orientation, BMI=business model innovation, FP=Firm's performance

Table 11 Mediation Analysis EO with Dimension

Hypothesis	Direct effect	P	Indirect effect	p	Total Effect	P
FP < ---INV (via Resources acquisition)	0.454	0.010	-0.019	0.379	0.435	0012
FP < ---RTK (via Resources acquisition)	-0.548	0.003	0.082	0.009	-0.466	0.003
FP < ---PRO (via Resources acquisition)	0.713	0.002	0.006	0.754	0.719	0.002
Resources acquisition < --- INV	-0.115	0.450			-0.115	0.450
Resources acquisition < --- RTK	0.494	0.006			0.494	0.006
Resources acquisition < --- PRO	0.036	0.809			0.036	0.809
FP < --- Resources acquisition	.166	0.006			0.144	0.024
FP < --- Size	0.000	0.992			0.000	0.992
FP < --- Age	-0.006	0.861			-0.006	0.861
FP < --- Education	-0.055	0.154			-0.055	0.154

Note :INV=Inovvativenss, RTK=Risk taking, PRO=proactivness, FP=Firm's performance.

Table 12 Mediation Analysis EO with Dimension

Hypothesis	Direct effect	P	Indirect effect	p	Total Effect	P
FP < ---INV (via BMI)	0.414	0.012	0.035	0.046	0.449	0.001
FP < ---RTK (via BMI)	-0.456	0.007	-0.035	0.033	-0.492	0.001
FP < ---PRO (via BMI)	0.705	0.002	0.031	0.029	0.736	0.001
BMI < --- INV	0.404	0.006			0.404	0.006
BMI < --- RTK	-0.410	0.007			-0.410	0.007
BMI < --- PRO	0.358	0.005			0.358	0.005
FP < --- BMI	0.086	0.047			0.086	0.047
FP < --- Size	-0.012	0.792			-0.012	0.792
FP < --- Age	-0.006	0.875			-0.006	0.875
FP < --- Education	-0.048					

Note :INV=Inovvativenss, RTK=Risk taking, PRO=proactivness, FP=Firm's performance,BMI=Bussiness model innovation.

4.7 **Mediation Analysis through Process as Robustness Checks**

To enhance the generalizability and validity of the results, the hypotheses were tested through PROCESS macros in SPSS (Hayes & Preacher, 2014). First, the mediating role of resource acquisition between EO and firm's performance was tested. Second, the mediating role of BMI between EO and firm's performance was tested. Hypothesis H_4 of this study hypothesized a mediating role of resource acquisition between EO and firm's performance. The model-4 of PROCESS macros was applied with a bootstrapping procedure of 2000 samples with a 95 percent confidence interval.. The results are provided in Table-23, which revealed that the direct linear path of EO on firm's performance ($\boldsymbol{\beta}$ =0.676, t=10.65, $p < 0.05$) was found significant, similarly the indirect linear path of EO via resources acquisition on firm's performance ($\boldsymbol{\beta}$ =0.103, $p < 0.05$) was also significant. These results showed that resource acquisition plays a partial mediating role between EO and firm's performance nexus. Moreover, the results of the *Sobel* test (β=0.103, z= 3.540, $p < 0.05$) and bootstrapping procedure (β=0.103, CIs [0.0465, 0.1797]) at a 95% level of confidence interval also confirmed the mediating role of resources acquisition between entrepreneurial orientation and firm's performance. These results partially supported the hypothesis H_4. R^2 indicates that EO explains 36.9% variation in firm's performance in the presence of resources acquisition.

Hypothesis H_{10} of this study hypothesized a mediating role of BMI between EO and firm's performance. The results are provided in Table-24, which show the mediating role of BMI between EO and the firm's performance. The results show that the direct linear effect of EO on firm's performance was significant ($\beta = 0.685$, $t=11.67$, $p < 0.05$), similarly the indirect linear effect of EO on firm's performance via BMI was also significant ($\beta = 0.094$, $p < 0.05$). These results show that BMI partially mediates the relationship between EO and firm's performance. Additionally, the results of the *Sobel* test ($\beta=0.094$, $z=4.058$, $p < 0.05$) and bootstrapping procedure ($\beta=0.094$, CIs [0.0467, 0.1711]) at a 95% level of confidence interval also confirmed the mediating role of BMI between EO and firm's performance. These results partially support the hypothesis H_{10}. R^2 shows that EO explains 39.5% variation in firm's performance in the presence of BMI.

From the above results of the process method, it is concluded that the results of the process method in SPSS were significantly consistent with the regression results of structural equation modeling in AMOS. However, there is a slight difference in the values of R^2.

4.8 Moderation Analysis

To examine the moderation analysis, the statistical analysis was conducted using PROCESS macros model-1 in SPSS (Hayes & Preacher, 2013). Separate models were tested for each moderating hypothesis to accomplish useful outcomes.

The results of moderation analysis are provided in Table-15 to Table-22. First, the moderating effect of managerial ties on the EO and resources acquisition relationship was estimated. Second, the moderating role of managerial ties on the EO and BMI relationship was checked. Third, the moderating role of financial capability on EO and firm's performance nexus was tested. Last, the moderating role of intellectual capital on EO and firm's performance nexus was tested. In addition to that, a separate moderation model was

tested for each managerial tie (financial tie, business tie, and political tie) to verify each hypothesis.

To see the moderating roles, changes in R^2 were examined; as such, change in each moderating model as compared to the main model is attributable to the interaction term (independent × moderator). Jaccard, Wan, and Turrisi (1990) suggested that the coefficient of interactive term and change in R^2 value must be significant in order to claim the significant moderation effect.

The moderating role of a financial tie on the nexus between EO and resources acquisition is depicted in figure 15 by using a slope test (Preacher & Hayes, 2008). The significant joint effect for higher and lower (mean +/-SD) value for the moderation effect was observed to claim the significant moderation.

As hypothesis H_5 of the study hypothesized that the association between EO and resource acquisition is stronger for those firms with strong financial ties than for those firms with weak financial ties. For this purpose, standardized variables of EO and financial ties were used in the regression analysis. In the first step of moderation analysis, independent (EO) was entered; in the second step, both independent (EO) and moderating (financial tie) were entered, in the third step the interaction term of standardized forms of EO and financial tie was entered. The result of third step (see Table 15) showed that the interaction term between EO and financial tie (EO× financial tie) is significant ($\boldsymbol{\beta} = 0.210$, $p < 0.05$, 95% CIs [0.0799, 0.3428]). Furthermore, as shown in Table- 15, there is a significant change in R^2 due to the interaction term of EO and political tie ($\Delta R^2 = 0.0194$, $p < 0.05$).

To see the moderation effect graphically, the plot of interaction effect (see figure 15) was drawn, which shows that the impact of EO on resources acquisition is weaker when the financial tie is lower ($\boldsymbol{\beta} = 0.381$, $p < 0.05$, 95% CIs [0.1986, 0.5636]). However, the same

impact gets strength at higher financial tie (**β** =0.766, p < 0.05, 95% CIs [0.6005, 0.9315]). Hence these results support hypothesis H_5.

Hypothesis H_6 hypothesized the moderating effect of business ties on the relationship between EO and resource acquisition. The results (see Table-16) show that the interaction term of EO and business tie (EO × business tie) is insignificant (**β**= .0698, *SE* =.077, *p* > 0.05, 95% CIs [-0.0823, 0.2219]). This result revealed that business tie does not moderate the effect of EO on resources acquisition. Additionally, the R^2 change value due to the interaction terms of EO and business tie was also insignificant (ΔR^2 =0.0019, p > 0.05).

Hypothesis H_7 hypothesized the moderating effect of political ties on the relationship between EO and resource acquisition. To estimate the moderation effect, in the first step, independent (EO) was entered; in the second step, both an independent variable (EO) and moderating variable (political tie) were entered, in the third step the interaction term of EO and political tie was entered. The result of step 3 are provided in Table-17, which shows that the interaction term between EO and political tie (EO × political tie) is significant (**β** =0.234, p < 0.05, 95% CIs [0.1222, 0.3460]). There was a significant increase in R^2 due to the interaction term of EO and political tie (ΔR^2 =0.032, p < 0.05).

To see the moderating effect graphically, the plots were drawn (see figure 16). The significant joint effect for higher and lower (mean +/-SD) value for moderation were calculated. The results show that the EO and resources acquisition relationship is strong (**β** =0.762, p < 0.05, 95% CIs [0.6145, 0.9105]) for a high political tie, while the relationship is weak (**β** =0.256, p < 0.05, CIs at 95% [0.0599, 0.4523]) for low political tie. Therefore, the results support hypothesis H_7 and suggest that firms with strong political ties may significantly contribute to resource acquisition in presence of EO.

The study predicts that the relationship between EO and BMI would be stronger for those firms with strong financial ties than those firms with weak financial ties. Following the same 3 steps procedure, as explained in the previous sections for the estimation of the moderation effect. The results of step 3 are provided in Table -18, which shows that the interaction term between EO and financial tie (EO× political tie) is significant (**β** =0.0976, $p < 0.05$, 95% CIs [0.0967, 0.2919]). Furthermore, as displayed in Table-18, the change in R^2 due to the interaction term of EO and financial tie is significant (ΔR^2 =0.002, $p < 0.05$). These results revealed that a financial tie strengthens the impact of EO on BMI.

The graphical representation of the moderation effect of the financial tie on the nexus between EO and BMI is shown in figure 17. The significant joint effect for higher and lower (mean +/-SD) score for moderation was calculated, and the results showed that the effect of EO on firm's performance is weak when financial ties are weak (**β** =0.4221, $p < 0.05$, 95% CIs [0.1543, 0.6899]). However, the same impact gets strengthened at higher financial ties (**β** =0.6007, $p < 0.05$, CIs at 95% [0.3579, 0.8435]). Hence the results support hypothesis H_{11}.

Hypothesis H_{12} of the study hypothesized the moderating effect of business ties on the relationship between EO and BMI. The results (see Table 19) indicate that the interaction term of EO and business tie (EO× business tie) is insignificant (**β** = .0698, $p > 0.05$, CIs at 95% [-0.0823, 0.2219]). This result revealed that the business tie does not moderate the effect of EO on BMI. Furthermore, the R^2 change value due to the interaction term of EO and business tie was also insignificant (ΔR^2 =0.0019, $p > 0.05$). Hence, the results failed to substantiate hypothesis H_{12}.

Hypothesis H_{13} of the study hypothesized the moderating effect of the political tie on the relationship between EO and BMI. The result of the moderation analysis are provided in Table-20, which show that the interaction term between EO and political tie (EO× political tie) is insignificant (**β** =0.1386, $p > 0.05$, 95% CIs [-0.0273, 0.3045]). Furthermore, the

change in R^2 in the interaction model is also insignificant ($\Delta R^2 = 0.006$, $p > 0.05$). Therefore, the results show that there is no moderating effect of political ties on the EO and BMI relationship; hence, hypothesis H_{13} is rejected.

Hypotheses H_{14} and H_{15} hypothesized the moderating role of intellectual capital and financial capabilities, respectively, on the relationship between EO and firm's performance. The results of the interaction effect of intellectual capital on the relationship between EO and firm's performance are provided in Table-21. The results show that the interactive term (EO × intellectual capital) was significant (**β** =0.3142, $p < 0.05$, CIs at 95% [0.1603, 0.4680]). Additionally, as displayed in the table, the change in R^2 in the interaction effect model was also significant (ΔR^2 =0.0255, $p < 0.05$). The moderating role of intellectual capital on the nexus between EO and firm's performance was also confirmed by using a slop test as suggested by Preacher and Hayes (2008). The significant joint effect for higher and lower (mean +/- SD) scores for the moderating role of intellectual capital was drawn. The results show that the EO and firm's performance relationship is strong ($\beta = 0.92$, $p < .05$, 95% CI [0.7934, 0.0611]) for high level of intellectual capital, whereas the relationship is weak ($\beta = 0.54$, $p < .05$, [0.3791, 0.7041]) for lower level of intellectual capital. This result support hypothesis H_{15} and confirmed that firms with a high EO capability coupled with intellectual capital tend to significantly contribute to firm's performance.

Table-22 provides the results of the moderation effect of the financial capabilities on the relationship between EO and firm's performance. The results show that the interaction term (EO × financial capabilities) was significant (**β** =0.1881, $p < 0.05$, CIs at 95% [0.0877, 0.2885]). Furthermore, as shown in Table 22, the change in R^2 is also significant which is due to the interaction term of EO and financial capabilities (ΔR^2 =0.0217, $p < 0.05$).

The moderating role of financial capabilities on the relationship between EO and firm's performance was also shown graphically in Figure 19 by using a slop test. The significant

joint effect for higher and lower (mean +/- SD) value for the moderating role of financial capabilities was drawn. Results of Table-22 show that EO and firm's performance relationship is strong ($\beta = 0.9381$, $p < 0.05$, 95% CI [0.7966, 0.0796]) for higher financial capabilities, whereas the relationship is weak ($\beta = 0.6101$, $p < .05$, 95% CI [0.4647, 0.7555]) for lower financial capabilities. These results suggest that EO capability and financial capabilities jointly enhance firm's performance. Therefore, the results support the hypothesis H_{14} and confirm that those firms that have higher financial capability can gain superior performance in the presence of EO. However, in contrast, firms with a lack of financial capability have a low level of performance even if they have high EO.

To summarize, figure 18 shows that intellectual capital (as a moderator) significantly strengthens the nexus between EO and firm's performance. For instance, firms with a high level of IC and EO exhibited a higher level of performance. In contrast, when firms have a low level of IC and have a lower EO, then they exhibited low level of performance. Overall, the moderating effect of IC shows a significant role between EO and firm's performance. Similarly, figure 19 shows that financial capabilities significantly strengthen the path between EO and firm's performance. For instance, figure 19 shows that firms with high financial capabilities and a higher level of EO exhibited a higher level of performance. In contrast, when firm has low level of FC and has a lower EO then its performance declines. Overall, the results confirm the moderating role of FC between EO and firm's performance.

Moderation analysis

Table 13 Moderating role of Financial tie Between EO and Resources acquisition

	Dependnet Resources acquistion				
Moderator: Financial tie	**Beta**	**SE**	**p-value**	**LLCI**	**ULCI**
Financial tie (FT)	0.0237	0.0335	0.4805	-0.0423	0.0896
EO	0.5736	0.0637	0.0000	0.4484	0.6987
EO× Financial tie	0.2103	0.0674	0.0019	0.0779	0.3428
Age	-0.0609	0.0297	0.0406	-0.1192	-0.0026
Size	-0.0189	0.0228	0.4084	-0.00636	0.0259
Education	0.0691	0.0300	0.0216	0.0102	0.1280
Change in R^2 due to interaction term	0.0194		0.0019		
F-statistic	9.7493				
Conditional effect of moderator (Financial tie) between EO and resources acquisition					
Moderator: Financial tie	**Beta**	**SE**	**p-value**	**LLCI**	**ULCI**
-1 SD	0.3811	0.0928	0.0000	0.1986	0.5636
Mean	0.5736	0.0637	0.0000	0.4484	0.6987
+1SD	0.7660	0.0842	0.0000	0.6005	0.9314

Table 14 Moderating role of business tie Between EO and Resources acquisition

	Dependent Resources acquistion				
Moderator: Business tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
Business tie (BT)	-0.0272	0.0355	0.4444	-0.0971	0.0427
EO	0.6419	0.0680	0.0000	0.5081	0.7757
EO× Business tie	0.0840	0.0532	0.1153	-0.0206	0.1886
Age	-0.0543	0.0296	0.0677	-0.1125	0.0040
Size	-0.0162	0.0229	0.4788	-0.0165	0.0288
Education	0.0758	0.0302	0.0124	-0.0613	0.1351
Change in R^2 due to interaction term	0.005		0.1153		
F-statistic	2.4912				
Conditional effect of moderator (Business tie) between EO and resources acquisition					
Moderator: Business tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
-1 SD	0.5611	0.0736	0.0000	0.4163	0.7058
Mean	0.6419	0.0680	0.0000	0.5081	0.7757
+1SD	0.7227	0.0953	0.0000	0.5353	0.9102

Table 15 Moderating role of political tie Between EO and Resources acquisition

	Dependent Resources acuistion				
Moderator: Political tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
political tie (PT)	-0.0653	0.0275	0.0181	-0.1193	-0.0112
EO	0.5093	0.0634	0.0000	0.3846	0.6339
EO× political tie	0.2341	0.0569	0.0000	0.1222	0.3460
Age	-0.0369	0.0292	0.2076	-0.0943	0.0206
Size	-0.0270	0.0225	0.2311	-0.0712	0.0173
Education	0.07449	0.0296	0.0118	0.0167	0.1331
Change in R^2 due to interaction term	0.0325		0.0000		
F-statistic	16.9096				
Conditional effect of moderator (Political tie) between EO and firm resources acquisition					
Moderator: political tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
-1 SD	0.2561	0.0998	0.0000	0.0599	0.4523
Mean	0.5093	0.0634	0.0000	0.3846	0.6339
+1SD	0.7625	0.0753	0.0000	0.6145	0.9105

Table 16 Moderating role of Financial tie Between EO and Business model innovation

	Dependent Business model innovation				
Moderator: Financial tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
Financial tie	0.0353	0.0492	0.4737	-0.1321	0.0615
EO	0.5114	0.0934	0.0000	0.3278	0.6951
EO× Financial tie	0.0976	0.0988	0.0241	0.0967	0.2919
Age	-0.0159	0.0435	0.9661	-0.0874	0.0837
Size	0.0505	0.0334	0.1317	-0.0152	0.1162
Education	0.0691	0.0444	0.7181	-0.1023	0.0705
Change in R^2 due to interaction term	0.0022		0.024		
F-statistic	0.9747				
Conditional effect of moderator (Financial tie) between EO and Business model innovation					
Moderator: Financial tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
-1 SD	0.4221	0.1362	0.0000	0.1543	0.6899
Mean	0.5114	0.0934	0.0000	0.3278	0.6951
+1SD	0.6007	0.1235	0.0000	0.3579	0.8435

Table 17 Moderating role of Business tie Between EO and Business model innovation

	Dependent Business model innovation				
Moderator: political tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
Bussiness tie (BT)	-0.0620	0.0517	0.2310	-0.1635	0.0396
EO	0.6064	0.0989	0.0000	0.4119	0.8008
EO× Bussiness tie	0.0698	0.0774	0.3675	-0.0823	0.2219
Age	-0.0024	0.0297	0.9564	-0.0870	0.0823
Size	0.0530	0.0333	0.1122	-0.0125	0.1185
Education	-0.0096	0.0439	0.8270	-0.0958	0.0766
Change in R^2 due to interaction term	0.002		0.3675		
F-statistic	0.8140				
Conditional effect of moderator (Business tie) between EO and Business model innovation					
Moderator: Bussiness tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
Bussiness tie					
-1 SD	0.5392	0.1070	0.0000	0.3289	0.5636
Mean	0.6064	0.0989	0.0000	0.4119	0.8008
+1SD	0.6735	0.1386	0.0000	0.4011	0.9460

Table 18 Moderating role of political tie Between EO and Business model innovation

	Dependent Business model innovation				
Moderator: political tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
political tie (PT)	0.0934	0.0408	0.0225	0.0133	0.1736
EO	0.4951	0.0940	0.0000	0.3103	0.6799
EO× political tie	0.1386	0.0844	0.1013	-0.0273	0.3045
Age	-0.0104	0.0433	0.8095	-0.0956	0.0747
Size	0.0463	0.0334	0.1661	-0.0193	0.1118
Education	0.0001	0.0439	0.9998	-0.0863	0.0862
Change in R^2 due to interaction term	0.006		0.1013		
F-statistic	2.6976				
Conditional effect of moderator (political tie) between EO and Business model innovation					
Moderator: political tie	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
-1 SD	0.3452	0.1479	0.0201	0.0544	0.6360
Mean	0.4951	0.0940	0.0000	0.3103	0.6799
+1SD	0.6450	0.1116	0.0000	0.4256	0.8643

Table 19 Moderating role of Intellectual capital Between EO and firm's performance

Dependent Firm's performance					
Moderator: intellectual capital	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
intellectual capital (IC)	0.0185	0.0488	0.7050	-0.0774	0.1143
EO	0.7344	0.0585	0.0000	0.6194	0.8495
EO× Intellectual capital	0.3142	0.0783	0.0001	0.1603	0.4680
Age	0.0589	0.0273	0.0313	0.0053	0.1125
Size	0.0451	0.0212	0.0339	0.0034	0.0867
Education	-0.0028	0.0278	0.9208	-0.0573	0.0518
Change in R^2 due to interaction term	0.0255		0.0001		
F-statistic	16.1136				
Conditional effect of moderator (Intellectual capital) between EO and firm's performance					
Moderator: Intellectual capital	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
-1 SD	0.5416	0.0826	0.0000	0.3791	0.7041
Mean	0.7344	0.0585	0.0000	0.6194	0.8495
+1SD	0.9273	0.0681	0.0000	0.7934	.0611

Table 20 Moderating Role of Financial Capabilities between EO and Firm's performance

Dependent Firm's performance					
Moderator: Financial Capability	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
Financial Capability (FC)	0.0220	0.0327	0.5014	-0.0422	0.0862
EO	0.7741	0.0578	0.0000	0.6604	0.8878
EO× Financial capability	0.1881	0.0510	0.0003	0.0877	0.2885
Age	0.0719	0.0275	0.0094	0.0177	0.1260
Size	0.0007	0.0278	0.0351	0.0032	0.0868
Education	0.0450	0.0213	0.9788	-0.0540	0.0554
Change in R^2 due to interaction term	0.0217		0.0003		
F-statistic	13.5789				
Conditional effect of moderator (Financial capability between EO and firm's performance					
Moderator: Financial capability	**βeta**	**SE**	**p-value**	**LLCI**	**ULCI**
-1 SD	0.6101	0.0740	0.0000	0.4647	0.7555
Mean	0.7741	0.0578	0.0000	0.6604	0.8878
+1SD	0.9381	0.0720	0.0000	0.7966	1.0796

Table 21 Results for main effect and mediation using Sobel test and bootstrapping

Direct and total effect					
Dependent: Firm's performance (Y), Independent: Entrepreneurial orientation (X), Mediator: Resources acquisition (M)					
Part 1: Outcome : Resources acquisition (Effect of X on M)	*Coeff*	*SE*	*p*	*t*	R^2
EO	*0.583*	*0.062*	*0.000*	*9.317*	*0.192*
Age	*-0.057*	*0.029*	*0.054*	*-1.931*	
Size	*-0.167*	*0.023*	*0.466*	*-0.728*	
Education	*0.0723*	*0.030*	*0.017*	*2.390*	
Part 2: Outcome :Firm's performance (Effect of M and X on Y)	*Coeff*	*SE*	*p*	*t*	R^2
Resources acquisition	0.177	0.046	0.000	3.849	0.369
EO	0.676	0.063	0.000	10.65	
Age	0.076	0.027	0.005	2.804	
Size	0.056	0.021	0.007	2.673	
Education	-0.012	0.027	0.664	-0.434	
Part 3: Outcome : Firm's performance (Total Effect of X on Y)	*Coeff*	*SE*	*p*	*t*	R^2
EO	0.780	0.058	0.000	13.33	0.346
Age	0.066	0.027	0.016	2.403	
Size	0.053	0.021	0.013	2.491	
Education	0.007	0.028	0.981	0.023	
Total effect , Direct effect and indirect effect					
Part 4: Total effect of X on Y					
Bootstrapping	Effect	p		t	
Firm's performance regressed on EO	0.780	0.000		13.33	
Part 5: Direct effect of X on Y.					
Bootstrapping	Effect	p		t	
Firm's performance regressed on EO (controlling for Resources acquisition)	0.676	0.000		10.65	
Part 6: Indirect effect of X on Y					
Bootstrapping	Effect	95%-LLCI		95%-ULCI	
EO→ Resources acquisition→ Firm performance	0.103	0.0465		0.1797	
Part 7: Normal theory distribution test for indirect effect					
Sobel test	*Effect*	*SE*	*P*	*z*	
EO→ Resources acquisition→ Firm performance	0.103	0.029	0.0004	3.540	

Note : N=403 , 2,000-bootstrapping sample size , LLCI = Lower Limit Confidence Interval confidence interval, ULCI=Upper Limit Confidence Interval, Y=Dependent variable, X=Independent variable, M=Mediator ,EO= Entrepreneurial orientation

Table 22 Results for main effect and mediation using Sobel test and bootstrapping

Direct and total effect					
Dependent: Firm's performance (Y), Independent: Entrepreneurial orientation (X), Mediator: Business model innovation (BMI) (M)					
Part 1: Outcome : BMI (Effect of X on M)	*Coeff*	*SE*	*p*	*t*	R^2
EO	*0.534*	*0.091*	*0.000*	*5.870*	*0.090*
Age	*-0.005*	*0.043*	*0.895*	*-0.132*	
Size	*0.0524*	*0.033*	*0.117*	*1.569*	
Education	*-0.013*	*0.043*	*0.760*	*-0.305*	
Part 2: Outcome :Firm's performance (Effect of M and X on Y)	*Coeff*	*SE*	*p*	*t*	R^2
BMI	0.176	0.031	0.000	5.696	0.395
EO	0.685	0.058	0.000	11.67	
Age	0.0676	0.026	0.011	2.533	
Size	0.044	0.020	0.033	2.133	
Education	0.003	0.027	0.911	0.111	
Part 3: Outcome : Firm's performance (Total Effect of X on Y)	*Coeff*	*SE*	*p*	*t*	R^2
EO	0.780	0.058	0.000	13.33	0.346
Age	0.066	0.027	0.016	2.403	
Size	0.053	0.021	0.013	2.491	
Education	0.007	0.028	0.981	0.023	
Total effect , Direct effect and indirect effect					
Part 4: Total effect of X on Y					
Bootstrapping	Effect	p		t	
Firm's performance regressed on EO	0.780	0.000		13.33	
Part 5: Direct effect of X on Y.					
Bootstrapping	Effect	p		t	
Firm's performance regressed on EO (controlling for BMI)	0.685	0.058		11.67	
Part 6: Indirect effect of X on Y					
Bootstrapping	Effect	95%-LLCI		95%-ULCI	
EO→ BMI→ Firm performance	0.094	0.0467		0.1711	
Part 7: Normal theory distribution test for indirect effect					
Sobel test	*Effect*	*SE*	*P*	*z*	
EO→ BMI→ Firm performance	0.094	0.023	0.0000	4.058	

Note : N=403 , 2,000-bootstrapping sample size , LLCI = Lower Limit Confidence Interval confidence interval, ULCI=Upper Limit Confidence Interval, Y=Dependent variable, X=Independent variable, M=Mediator ,EO= Entrepreneurial orientation, BMI=Business model innovation.

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Table 23 Partial and full mediation

Hypotheses	Direct effect	Indirect effect	Total effect	Mediation type
EO → Resources acquisition → Firm performance	0.412(s)	0.007(s)	0.127(s)	Partial Mediation
EO → BMI → Firm's performance	0.09(s)	0.011(s)	0.10(s)	Partial Mediation

Note: s=significant, EO= Entrepreneurial orientation, BMI=Business model innovation

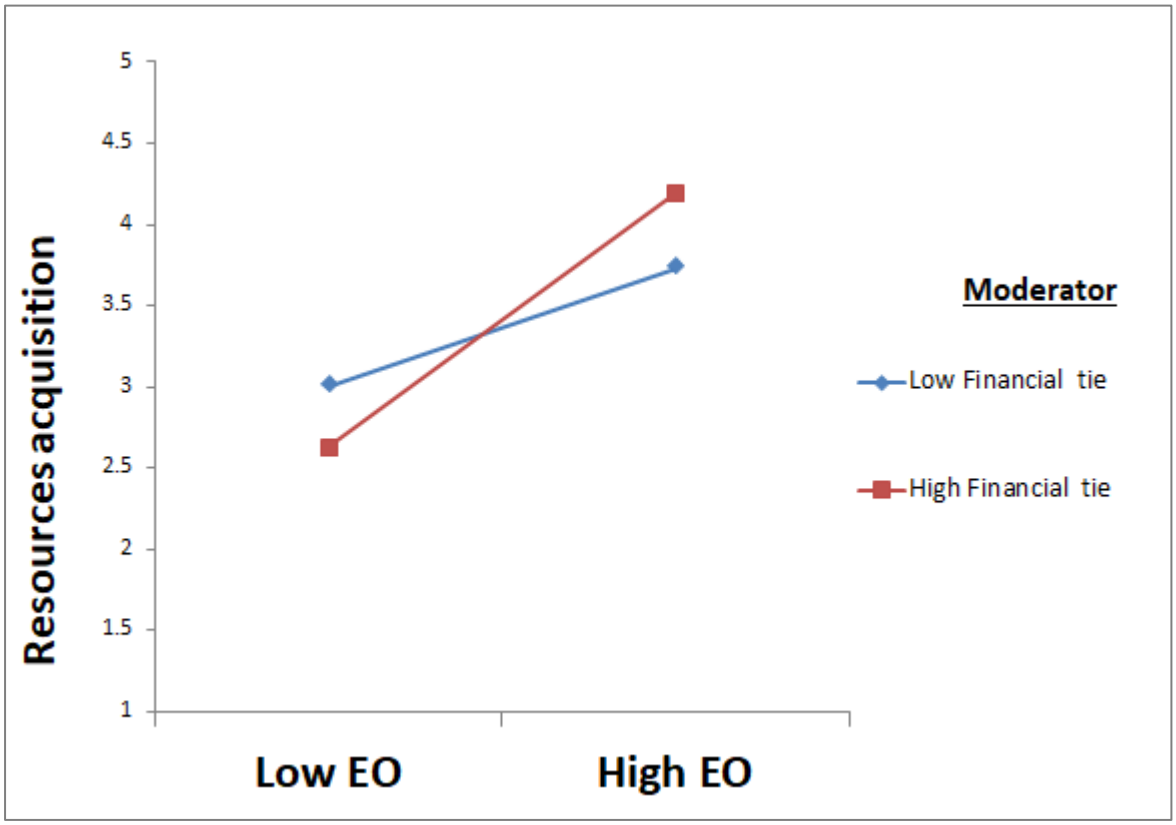

Figure 15 Interaction term for Financial Tie as a Moderator

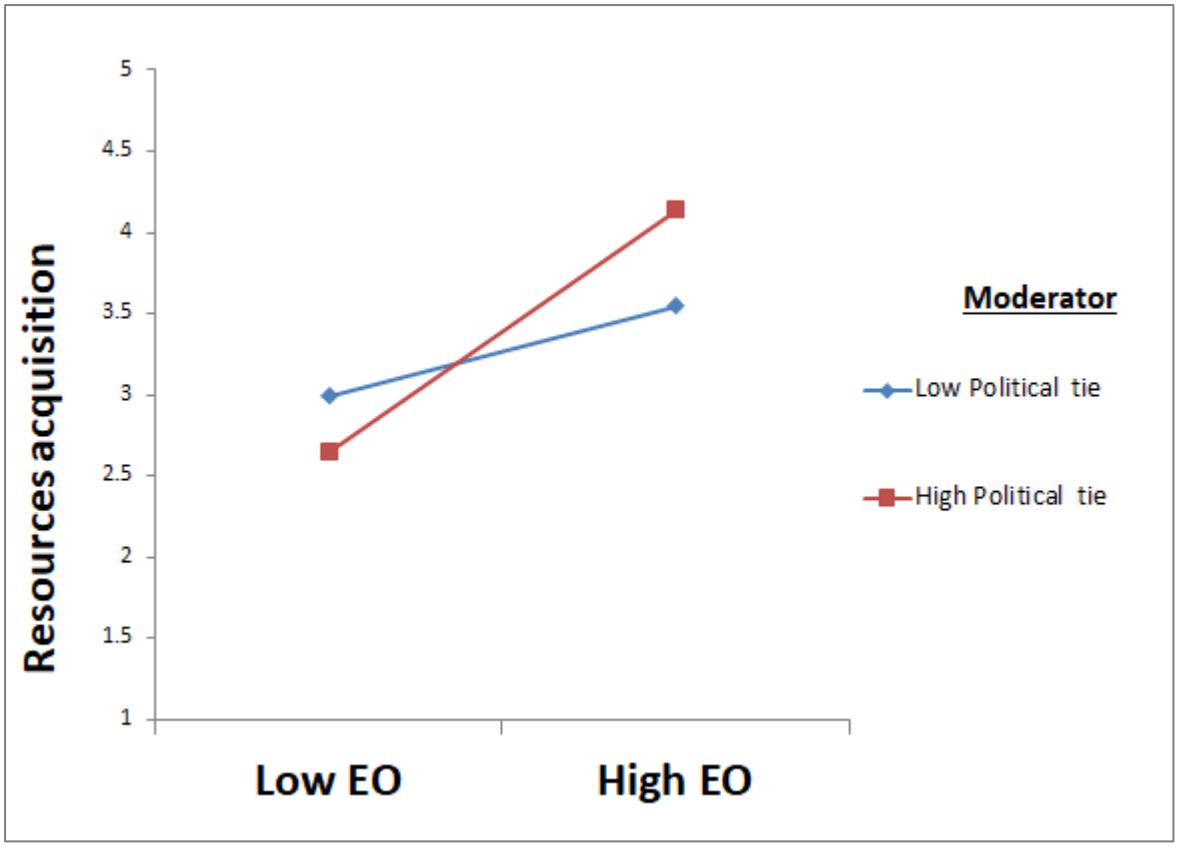

Figure 16 Interaction term for Political tie as a Moderator

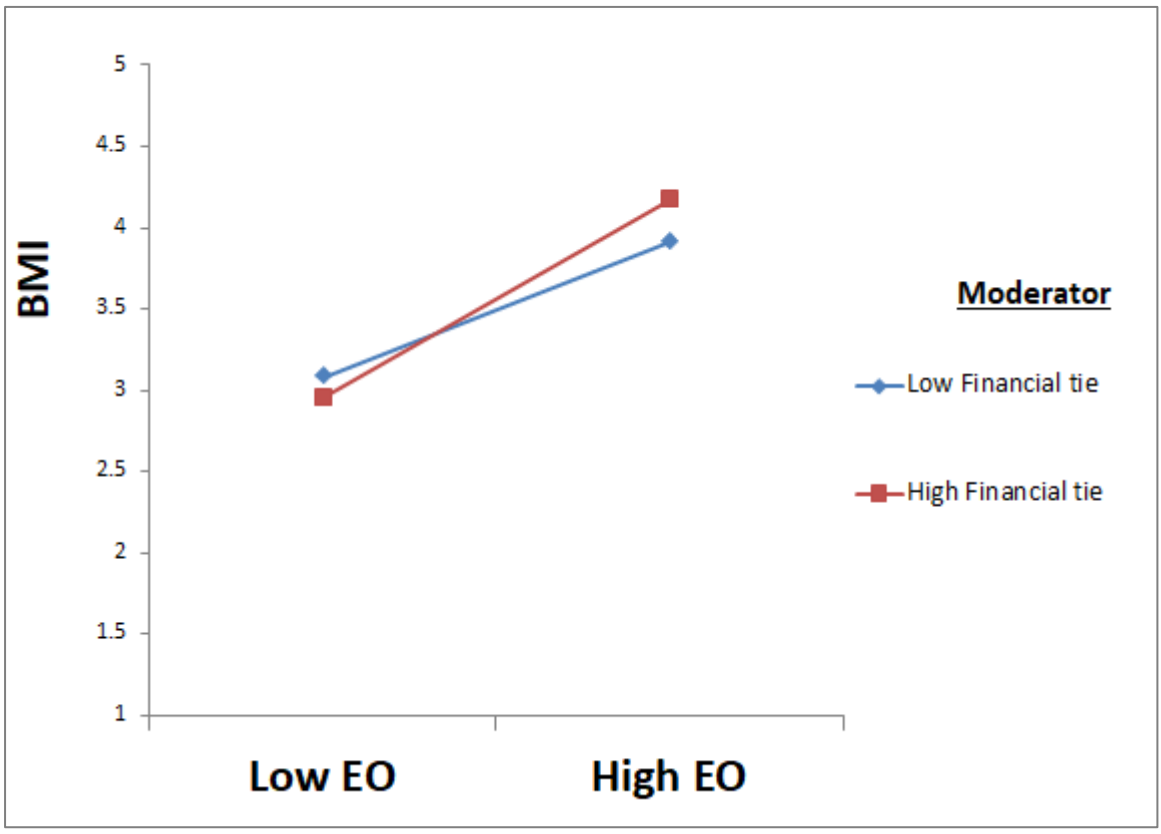

Figure 17 Interaction term for financial tie as a Moderator

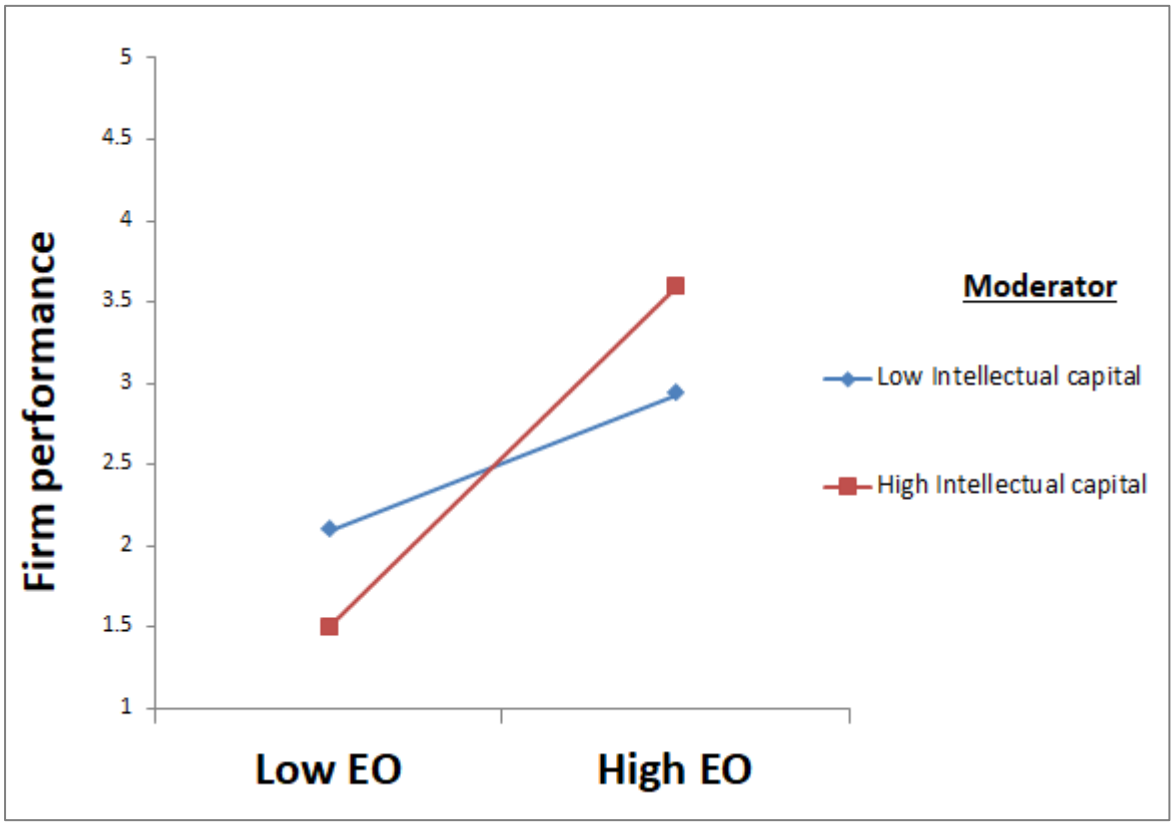

Figure 18 Figure 18 Interaction term for Intellectual Capital as a Moderator

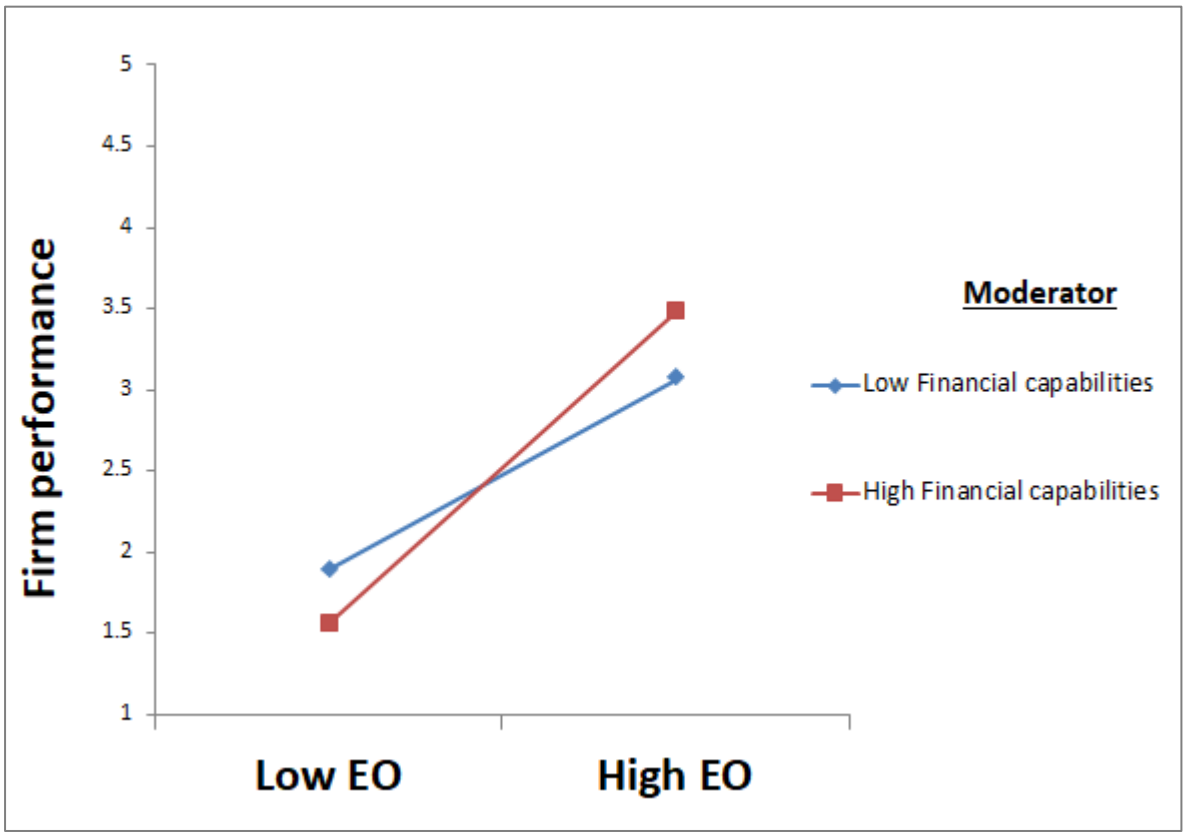

Figure 19 Interaction term for Financial Capabilities as a Moderator

Table 24 Remarks table

Hypotheses	Remarks
H1. Entrepreneurial orientation has a positive influence on SMEs' performance.	**Accepted**
H2. Entrepreneurial orientation has a positive influence on resource acquisition.	**Accepted**
H3. Resources acquisition has a significant influence on SMEs performance	**Accepted**
H4. Resources acquisition significantly mediates the relationship between entrepreneurial orientation and SMEs' performance.	**partially accepted**
H5. Financial tie significantly moderates the relationship between EO and resource acquisition.	**Accepted**
H6. Business tie significantly moderates the relationship between EO and resources acquisition	**Rejected**
H7. Political tie significantly moderates the relationship between EO and resources acquisition	**Accepted**
H8. Entrepreneurial orientation has a significant influence on BMI.	**Accepted**
H9. BMI has a significant influence on SMEs' performance.	**Accepted**
H10. BMI significantly mediates the relationship between EO and SME performance.	**Partially Accepted**
H11. Financial tie significantly moderates the relationship between EO and resource acquisition.	**Accepted**
H12. Business tie significantly moderates the relationship between EO and BMI	**Rejected**
H13. Political tie significantly moderates the relationship between EO and BMI	**Rejected**
H14. Intellectual capital significantly moderates the relationship between EO and SMEs performance	**Accepted**
H15. Financial capabilities significantly moderate the relationship between EO and SMEs performance	**Accepted**

4.9 Discussion

This research was conducted to examine the influence of EO on SMEs' performance with the mediating role of BMI and resource acquisition and the moderating role of managerial networking and financial and intellectual capital. Existing literature has sufficiently contributed to the knowledge of EO, SMEs success, BMI, resources acquisition, and networking both empirically (Adomako, 2018; Anwar & Shah, 2020; Jiang et al., 2018; Khan et al., 2019; Su et al., 2015) as well as theoretically (Huang, Wang, Tseng, & Wang, 2010; Laudien & Daxböck, 2017; Vătămănescu, Gorgos, Ghigiu, & Pătruț, 2019). However,

previous studies are suffering from several constraints, such as having mixed findings, poor theoretical arguments, and conceptualization. Moreover, less attention has been given to the moderated and mediated factors (especially BMI, resource acquisition, networking, and financial capital) between EO and SMEs performance. This study fills these gaps and advances our understandings of the RBV theory (Barney, 1991). Moreover, this study unleashes clarity about the nature of the association between EO and SMEs' performance and explores how BMI and resource acquisition affects this association and how managerial networking, financial and intellectual capital moderate the relationship. This study collected empirical evidence of Pakistani SMEs to test the hypothesized direct relationships between the EO and firms' performance, as well as the mediating and moderating mechanisms which affected this relationship. The results are briefly discussed in the following sections.

To find out the answer of research question no 1, one hypothesis, $H_{1,}$ was formulated and tested. The results revealed a significant direct relationship between EO and SMEs performance, which substantiated hypothesis H_1. In line with the study of Anwar et al. (2018), this study also demonstrated that EO has a significant influence on firm's performance. The outcomes are also parallel with prior studies where Khan et al. (2019) such that entrepreneurial-oriented strategy has a more significant impact on firm's performance as compared to traditional strategies. Additionally, (Shah & Ahmad, 2019) also exhibited that EO strategies have a significant positive impact on SMEs' performance. Consistent with the study of Galbreath, Lucianetti, Thomas, and Tisch (2020), who described that in small firms, entrepreneurial activity provides more advantages, which result in higher performance in a competitive environment. The findings of this study are consistent with the study of Isichei, Agbaeze, and Odiba (2020), who carried out the dimensional level analysis of EO and demonstrated significant positive effects on SMEs' performance.

To answer the research question no 2, hypothesis H_2 was developed and tested. The results show that EO significantly helps the firm in acquiring valuable resources; therefore, H_2 of the study was accepted. These results are consistent with the study of Jiang et al. (2018) who demonstrated that EO significantly contributed to resource acquisition. They further suggested that EO is a useful predictor of resource acquisition. Supporting the notion, Ishtiaq et al. (2020) also argued that SMEs should rely on entrepreneurial capabilities to acquire sufficient resources to smoothly run their business activities. Additionally, Yin et al. (2020) also pointed out that newly born ventures face resource deficiency; however, EO facilitates them to acquire external useful resources that are essential for superior performance in the turbulent markets and concluded that EO has a significant positive influence on resource acquisition.

To answer the research question 3, hypothesis H_3 was developed. The results showed that resource acquisition significantly enhances the SMEs' performance; therefore, H_3 was substantiated. To support this notion, Pulka, Ramli, and Bakar (2018) argued that a firm with useful and valuable resources is more efficient and competitive as compared to the firms with a resources shortage. The results of this study are in line with the study of Ying et al. (2019), who argued that in the long run, the performance of SMEs depends largely on sufficient resources. Moreover, the findings are supported by the study conducted by Khattak and Shah (2020b), who demonstrated that adequate resources enable firms to build effective strategies that are beneficial for the firm's efficiency. This research also favors the findings of Ishtiaq et al. (2020), who reported that adequate resources improve firm's performance and productivity while the shortage of resources deteriorates the performance.

Does resources acquisition mediate the relationship between EO and firm's performance? To answer the research question, no 4 hypothesis H_4 was formulated and tested. The results confirmed the partial mediating role of resource acquisition between EO and SMEs

performance—partially supporting the hypothesis H_4. The findings of this study are consistent with the study conducted by Ishtiaq et al. (2020) who reported that resource acquisition partially mediates the relationship between intangible capabilities and performance of SMEs. Additionally, as argued by (Nuscheler, Engelen, & Zahra, 2019), managers with innovative capabilities search new technology and new information and simultaneously configure their profitability. Similarly, the findings partially supported the study of (Jiang et al., 2018) who revealed that resource acquisition significantly mediates the nexus between the dimensions of EO such as risk-taking, proactiveness and innovativeness and firm's performance. To summarize, the findings of this study are partially different from previous studies but significantly advanced the understanding of theory and literature of EO, resources and SMEs' performance. For instance, Wang et al. (2019) also concluded that new enterprises experience shortage of resources but entrepreneurial strategies help them to access resources from the external environment, which are vital for their superior performance.

To answer research question no 5, three hypotheses, H_5, $H_{6,}$ and $H_{7,}$ were formulated and tested. Findings of this study indicate that financial tie significantly moderates the relationship between EO and resource acquisition. Financial tie enables entrepreneurially oriented firms to obtain adequate resources and strengthens the nexus between EO and resource acquisition; thus, H_5 was supported. The similar outcomes were reported by Jiang et al. (2018) who revealed that financial tie assists top managers to acquire resources effectively. Furthermore, it is also argued that financial ties enable firms to acquire external and internal resources that are crucial for the survival of new enterprises (Anwar & Shah, 2020). A financial tie has both a direct as well as a moderating effect on the SMEs' resource acquisition capabilities. This study supports the notion of Alcalde-Heras et al. (2019) that SMEs should strengthen their network with the financial institution to obtain valuable resources that are crucial for the growth and effectiveness of the firm.

Regarding the hypothesis, H_6, the business tie does not significantly moderate the relationship between EO and resource acquisition; therefore, H_6 was rejected. The findings of this study contradict with the studies of Wang and Chung (2013) and Zhang and Li (2008), who revealed that managers and owners use their business networks to gain valuable resources. However, the findings of this study are in line with the findings of Lee et al. (2019), who demonstrated that despite having satisfactory social capital and network, managers are still unable to access resources in rural and deprived regions as businesses do not access desirable resources. Similarly, the findings also support the results of Zhang (2010) who showed that entrepreneurs face problems in acquiring resources. Hence, most of the entrepreneurs (despite having high entrepreneurial skills) fail to significantly focus on building business network to access resources. Another reason behind the insignificant result is the study context, i.e., in Pakistan, most of the entrepreneurs have a weak tie with suppliers, buyers and other peers—resulting low access to the external resources.

The results of this study pointed out that political tie directly enhances resource acquisition. Furthermore, the results of this study confirmed that political tie significantly moderates the relationship between EO and resources acquisition. This result substantiates hypothesis H_7 of the study. The findings support the view of (Anwar & Shah, 2020) who claimed that SMEs should strengthen their ties with government bodies to gain adequate resources that are essential for the long-term survival of the firm. Anwar et al. (2020) pointed out that in developing economies, to acquire government-controlled useful resources, the firm's management should have strong political ties with the ruling parties. The results of this study also validate the findings of Zhang et al. (2011), who described that political tie is key in accessing entrepreneurial resource acquisition. Besides, (Luo, 2003) also shed light on the political tie and demonstrated that entrepreneurs need a strong government tie to access valuable resources for their operational activities in China. It is argued that in addition to EO,

a political tie should be gained for accessing useful resources. Furthermore, result support the notion of Jiang et al. (2018) who claimed that firms with high EO may capitalize on their resources acquisition by establishing strong ties with government agencies.

Hypothesis H_8 was developed to hypothesize the effect of EO on BMI. The results showed a significant positive link between EO and BMI; therefore, H_8 was substantiated. These results support the notion of Bouncken et al. (2016), who argued that EO promotes BMI in a turbulent market. Similarly, Asemokha et al. (2019) also argued that EO strategies are necessary for the development of a business model innovation. Futterer et al. (2018) also claimed that entrepreneurial behaviors have a direct positive impact on BMI. Hence, the findings indicate that SMEs with high EO build more effective BMI.

To address the research question 7, hypothesis H_9 was formulated and tested. The results suggest that BMI significantly influences SMEs' performance; therefore, hypothesis H_9 of the study was substantiated. These results are in conformity with the previous studies, as Guo et al. (2017) and Wang and Zhou (2020) reported that BMI-oriented SMEs play a significant role to generate superior performance in the dynamic and competitive market. Similarly, Anwar (2018) claimed that business model innovation plays a dominant role in the performance of SMEs operating in a developing economy like Pakistan.

Does BMI mediate the relationship between internal capabilities and firm's performance?

To address this research question, $H_{10}$was formulated and tested. The results showed that BMI partially mediates the relationship between EO and SMEs' performance and thus partially supported hypothesis H_{10} of the study. It is argued that EO is strongly linked to SMEs' performance as well as to BMI. However, BMI plays a partial mediating role between EO and the performance of SMEs. Unlike the results of Futterer et al. (2018) who argued that BMI is a significant mediator between corporate entrepreneurship and venture performance, our results show a partial mediating role of BMI. In line with Gatautis et al. (2019) who

found that BMI has a significant positive influence on SMEs' performance. In addition to that, Clauss et al. (2019) further argued that BMI is a significant mediator between strategic agility and firm's performance.

Three different hypotheses H_{11}, H_{12} and H_{13} were developed to answer this question. To substantiate the hypothesis, H_{11} moderation analysis was conducted. The results show that financial tie significantly moderates the nexus between EO and BMI in the emerging economy. Thus H_{11} of the study was substantiated. These findings are aligned with a prior study of Anwar and Shah (2020) who showed that only those firms that have strong financial ties can survive and get competitive status in a turbulent market. They further argued that financial networking significantly and positively contributes to BMI. This study is also in line with Boso et al. (2013) who found that firms with EO along with strong network ties can attain a superior position in the markets as compared to those firms having weak network ties. This study shows that business networking does not strengthen the relationship between EO and BMI; therefore, there is no evidence to support hypothesis H_{12} of the study. Therefore hypothesis H_{12} of the study is rejected. Our findings are inversely related to Chung et al. (2020), who conducted a study in Asian immigrant firms in Europe and revealed that business ties significantly strengthened the path between EO and enterprise innovation. However, our results are in conformity with the results of Zhang, Wang, and Wei (2019), who empirically demonstrated that intra industrial ties did not have a significant influence on the innovation and productivity of firms. Similarly, our results partially support Wang and Chung (2013), who argued that business ties negatively moderate the association between competitor orientation and firm innovation. In general, Pakistani firms are not so innovative and creative; hence, entrepreneurs do not intend to build their ties with other partners for the purpose of enhancing their BMI.

The results of this study reveal that political tie does not moderate the relationship between EO and BMI and thus does not support the hypothesis H_{13} of the study. Consequently, hypothesis H_{13} of the study was rejected. However, the findings are slightly aligned with Wang and Chung (2013), who showed a negative moderating effect of a political tie between market orientation and firm innovation. Similarly, Hou, Hu, and Yuan (2017) and H. Lin, Zeng, Ma, Qi, and Tam (2014) also argued that the benefits accrued from the firm's political connection largely depends on the situation and the strength of the ties and it does not always enhance firm innovation. Therefore, it is acknowledged that political tie helps firms in acquiring resources but does not significantly facilitate them in boosting their innovation.

Does intellectual capital moderate the relationship between EO and SMEs' performance? To answer this research question, hypothesis H_{14} was formulated and tested. The result of the moderation analysis showed that intellectual capital significantly strengthens the association between EO and the performance of SMEs. Therefore, H_{14} of the study was accepted. These results of this study are consistent with the findings of Adomako (2018), who suggested that intellectual capability strengthens the association of EO and firm's performance. The results of this study are also is consistent with the findings of Li et al. (2020), who claimed that intellectual capital helps firms to gain a sustainable competitive position and facilitates superior performance. Moreover, Khan, Yang, and Waheed (2019) also showed that investment in intangible resources such as intellectual capital helps firms to attain high profitability.

Do financial capabilities moderate the relationship between each EO and SMEs' performance? To answer this research question, hypothesis H_{15} was developed and tested. The results of moderation analysis showed that financial capabilities significantly strengthen the path between EO and SMEs' performance. Thus hypothesis H_{15} of the study was substantiated. The findings of this moderation analysis support the notion of Khattak and

Shah (2020), who demonstrated that financial incentives support the SMEs in proactively recognizing new opportunities and taking the risk for bettering the firms' performance. It is argued that due to their small sizes and limited resources, SMEs cannot afford to take risks; however, it is also argued that when they have sufficient financial capabilities, they intend to take the risk, which results in a high level of firm's performance. For instance, Li et al. (2020) claimed that SMEs fail to grab the valuable opportunities available in the market due to the limitation of financial resources. They further concluded that financial resources strengthened the nexus of internal capabilities and SMEs' efficiency. Indeed, sufficient finances are imperative for the firm to take proactive actions in the turbulent market (Memon et al., 2020). Our findings further support the arguments of Songling et al. (2018), who pointed out that financial resources' availability is essential for a sustainable competitive position in emerging markets such as Pakistan. These results are also supported by RBV theory (Barney, 1991). For instance, the findings of this study showed that the financial capabilities are very important for the performance of SMEs. The findings regarding the effects of financial capabilities in the SMEs' performance further extended the scope of the RBV theory that has been rarely touched in the context of the emerging economies.

Table 25 Summary of Main Findings

Research Objective	Study hypothesis	Main findings	Acceptance or rejection of the study Hypothesis
To find out the influence of EO on SMEs performance	H1.EO has a positive influence on SMEs performance	The results of the study demonstrate that EO has a significant direct influence on SMEs performance. The findings are in line with prior studies where Khan, et al. (2019) such that entrepreneurial oriented strategy provides more advantages, which result in higher performance in a competitive environment. Shah & Ahmad (2019) also exhibited that EO strategies have a significant positive impact on SMEs' performance.	H1: Accepted
To examine the impact of EO on resources acquisition and BMI	H2.EO has a positive influence on resource acquisition H8. EO has a positive influence on BMI	The results show that EO significant positive influence on resources acquisition and BMI. Supporting the notion, Ishtiaq et al. (2020) and Yin et al. (2020) who pointed out SMEs should rely on entrepreneurial capabilities to acquire sufficient resources to smoothly run their business activities. Asemokha et al. (2019) also argued that EO strategies are necessary for the development of a business model innovation. Futterer et al. (2018) also claimed that entrepreneurial behaviors have a direct positive impact on BMI. Hence, the findings indicate that SMEs with high EO build more effective BMI.	H2: Accepted H8: Accepted
To examine the influence of resources acquisition and BMI on SMEs' performance	H3.Resources acquisition has a significant influence on SMEs performance H9.BMI has a significant influence on SMEs performance	The results suggest that resource acquistion and BMI significantly influence SMEs' performance. These findings are supported by the study conducted by Ying et al. (2019) and Ishtiaq et al. (2020), who demonstrated that adequate resources enable firms to build effective strategies that are beneficial for the firm's long term survival and improve firm's performance the findings are also in line with Guo et al. (2017) and Wang and Zhou (2020) who reported that BMI-oriented SMEs play a significant role in generating superior performance in the turbulent market. Anwar (2018) claimed that business model	H3: Accepted H9: Accepted

		innovation plays a dominant role in the performance of SMEs operating in a developing economy like Pakistan.	
To empirically investigate the mediating role of resources acquisition and BMI between EO and SMEs' performance	H4.Resources acquisition significantly mediates the relationship between entrepreneurial orientation and SMEs' performance H10.BMI significantly mediates the relationship between entrepreneurial orientation and SMEs' performance	The results suggest that the resource acquisition And BMI partial mediating the nexus of EO and SMEs performance These findings are consistent with Wang et al. (2019) who concluded that entrepreneurial strategies help them to access resources from the external environment, which in turns enhance firm performance. According to RBV theory, enterprises 'entrepreneurial ability enables them to acquire the resources more effectively to improve firm performance. Anwar and Shah (2018) claimed that BMI did not generate itself, but it requires internal capabilities and resources to spur a firm's performance	H4: Accepted H10: Accepted
To investigate the moderating role of managerial ties between EO and resources acquisition	H5. Financial tie significantly moderates the relationship between EO and resource acquisition. H6. Business tie significantly moderates the relationship between EO and resources acquisition. H7. Political tie significantly moderates the relationship between EO and resource acquisition	The Findings of this study indicate that financial tie and political significantly moderates the relationship between EO and resource acquisition. These findings are in line with Jiang et al. (2018) who revealed that financial tie assists top managers to acquire resources effectively. financial ties enable firms to acquire external and internal resources that are crucial for the survival of new enterprises (Anwar & Ali Shah, 2020). SMEs should strengthen their ties with government bodies to gain adequate resources that are essential for the long-term survival the firm This study's findings contradict with the studies of Wang and Chung (2013) and Zhang and Li (2008), who revealed that managers and owners use their business networks to gain valuable resources.	H5: Accepted H6: Rejected H7: Accepted
To investigate the moderating role of managerial ties between EO and BMI	H11. Financial tie significantly moderates the relationship between EO and BMI. H12. Business tie significantly moderates the relationship between EO and BMI.	The results demonstrate that financial tie significantly moderates the nexus between EO and BMI. These findings align with a prior study of Anwar and Ali Shah (2020) who showed that only those firms with strong financial ties could survive and get competitive status in a turbulent market. They further argued that financial networking significantly and positively contributes to BMI	H11: Accepted H12: Rejected H13: Rejected

	H13. Political tie significantly moderates the relationship between EO and BMI.	The results show that business tie and political tie does not moderate the relationship between EO and BMI These findings are consistent with the research by Zhang, Wang, and Wei (2019). They empirically demonstrated that intra industrial ties did not significantly influence the innovation and productivity of firms. Hou, Hu, and Yuan (2017) also argued that the benefits accrued from the firm's political connection largely depend on the situation and the ties' strength and it does not always enhance firm innovation.	
To scrutinize the moderating role of IC and FC between EO and SMEs' performance	H14. Intellectual capital significantly moderates the relationship between EO and SME's performance. H15. Financial capabilities significantly moderate the relationship between EO and SMEs performance.	The results demonstrate that IC and FC significantly strengthen the path between EO and SMEs' performance Our findings are consistent with the findings of Adomako (2018), Khan, Yang, and Waheed (2019), Songling et al. (2018), (Memon et al., 2020), who pointed out that investment in intangible resources helps firms to gain a sustainable competitive position and attain superior performance.	H14: Accepted H15: Accepted

Chapter 5

CONCLUSION AND IMPLICATION

This chapter demonstrates the theoretical contributions, identifies the limitations of the study, and provides directions for future research with policy implications and conclusion.

5.1 Theoretical Contribution

The contributions of previous research studies cannot be undervalued in terms of EO and the performance of SMEs because a significant advancement has been made. However, there are few major constraints in the previous studies that motivated this study. For instance, literature has reported mixed relationships between EO and SMEs performance (Aloulou, 2018; Anwar et al., 2018; Musa et al., 2014; Rezaei & Ortt, 2018). The direct paths between the EO and firm's performance are not always significant, but mediators and moderators affect the relationships (Adomako, 2018; Jiang et al., 2018; Karami & Tang, 2019; Kim et al., 2019; Shah & Ahmad, 2019; Sok et al., 2017). Despite examining several mediators and moderators, the extant research neglected the importance of resource acquisition and BMI as mediators between EO and emerging SMEs' performance in Pakistan.

Similarly, the importance of intellectual capital and financial capabilities as moderators between EO and emerging SMEs' performance has also been neglected. Motivated by the fact that managerial ties are essential for the gaining of valuable resources and innovation, I investigated the moderating role of managerial ties on the relationship between EO and resource acquisition, as well as between EO and BMI in the SME sector of the emerging market, i.e., Pakistan. Additionally, literature is limited, which examined the role of EO in SMEs performance in Pakistan. Hence, this research adds new evidence to the existing body of knowledge and the theory and extends its scope.

This study analyzes the relationship between EO, resources acquisition, BMI, internal capabilities, external capabilities, and firm's performance, first time, in the context of the RBV Theory. Therefore, we examined how EO and resources acquisition collectively affects SMEs' performance and how external capabilities (managerial ties) contingently affect the relationship between EO and resources acquisition from the perspectives of RBV theory (Barney, 1991) in SMEs working in the emerging market of Pakistan. Second, we explain how EO and BMI collectively affect the SMEs' performance and how external capabilities (managerial ties) contingently impact the relationship between EO and BMI from the perspectives of RBV theory in the SMEs sector of Pakistan. Third, we explain how EO affects SMEs' performance and how internal capabilities (intellectual capital and financial capabilities) contingently affect the relationship between EO and SMEs performance from the perspectives of RBV theory in the SMEs sector of Pakistan.

This study empirically contributes and extends the RBV theory by exhibiting the importance of the important antecedents of the SMEs' performance in the context of the RBV theory. Firstly, this research advances our knowledge of the RBV (Barney, 1991), which claims that a firm with unique, rare, and inimitable tangible and intangible resources and capabilities enjoys superior performance and competitive position in the market viz-a-viz its competitors. Both tangible (financial capital and resource acquisition) and intangible (EO, intellectual capital and resources acquisition) were used to recognize how these factors facilitate enterprises in gaining profitability and superior performance. The findings revealed that both types of resources are crucial for SMEs' performance, hereby confirming the claim of the RBV theory. Though, studies have extensively tested the RBV theory in Asian and European markets (Alegre & Chiva, 2013; Anwar et al., 2018; Arzubiaga, Iturralde, Maseda, & Kotlar, 2018; Khan, Yang, & Waheed, 2019), however, the role of intangible resources in BMI and resource acquisition and how intellectual capital and financial capital influence the paths is

missed in the literature of the RBV theory. The findings of this study showed that both tangible and intangible resources were very vital for SMEs' performance and profitability. Therefore, it extends the scope of the RBV theory and facilitates researchers in advancing their knowledge.

Secondly, given the managers' idiosyncratic capabilities regarding developing social networks in the business context, this study sheds light on the importance of social networking and the relationship of top managers, CEOs, and executives with external partners that benefit in acquiring useful information, new ideas and sales growth (Anwar et al., 2018; Chow, 2012; Shafi, Sarker, & Junrong, 2019). The existing research has neglected the importance of financial networking, business networking and political networking capabilities of small business owners and managers in acquiring tangible and intangible resources that can benefit their performance. Therefore, this study extends the literature by examining the moderating role of financial networking, business networking, and political networking in between EO and BMI as well as between EO and resources acquisition. The findings suggest that the financial networking of top managers is more vital as compared to political and business networks in SMEs. The findings open a new theoretical zone for researchers and scholars to assess how different ties and relationships help business industries in other regions that can be a part of the RBV theory.

Thirdly, this study also contributes in disambiguating the relationships between the BMI and networking with external actors by examining how organizations configure their BMI through social relationships with external partners such as businesses, government, public companies, customers and suppliers (Rogers, 1983). Despite having an extensive debate on the relationship between social networking and innovation, the emerging SMEs sector has been given little attention in the context of networking and BMI. This study advances our

understanding in terms of social networking and the social relationship of top managers of SMEs with external bodies and has explained potential benefits.

To summarize the theoretical contributions, this study empirically contributes to understanding the RBV theory in the context of the SME's sector of Pakistan by extending the theory using empirical evidence and incorporating new dimensions of superior performance that can be gained through BMI, social networking and financial resources.

5.2 Practical Implications

In addition to the theoretical contributions, this study has manifold practical implications for practicing managers, owners, and top managers of enterprises and CEOs and helps them in forming strategies for their firms' performance. The following sections discuss the specific implications for the SMEs and policy implications for policymakers.

5.3.1 Managerial Implications for SMEs

Based on the results of this study, managerial implications for the SMEs are provided below:

1. The finding suggests that EO significantly contributes to the performance of SMEs (manufacturing, trading and services). Therefore, top management of SMEs need to promote and encourage entrepreneurial posture and entrepreneurial culture in the workplace, so they can capitalize on the entrepreneurial capabilities of the managers to increase their sales growth and profitability.
2. EO is a significant positive predictor of resource acquisition in SMEs. It thereby provides a vital implication for top managers of SMEs to emphasize EO to avoid the threat of resource constraints. In general, SMEs face the problems of limited financial as well as non-financial resources that hinder their progress and survival in a competitive market.

3. The findings show that EO significantly influences BMI in SMEs and thus suggesting an important area to focus for SMEs. Asemokha et al. (2019) claimed that most SMEs in developing markets failed in the initial stages of their business cycle because of a poor BMI. It recognizes that BMI is a very important factor in the competitive market; therefore, it is suggested that SMEs should emphasize on EO in order to build an effective BMI.
4. The results showed that resource acquisition partially mediated the relationship between EO and SME's performance. In this context, acquiring external resources is very important for business performance and operational activities; therefore, it is recommended that owners and managers of SMEs focus on EO to facilitate them in acquiring resources, thereby resulting in high performance.
5. The findings confirmed that financial and political ties significantly strengthened the path between EO and resource acquisition, while business tie did not moderate the relationship. Therefore, it is recommended that SMEs should build favorable relationships with banks, financial initiations and investors in order to acquire sufficient external finance. Additionally, they need to build a strong relationship with political bodies because, in emerging economies such as China and Pakistan, the government has control over valuable resources that can be gained through a good relationship with political bodies (Anwar et al., 2018; Zhu, Su, & Shou, 2017).
6. The findings show that BMI is also a partial mediator between EO and SME performance and confirm that EO is equally beneficial for BMI and SMEs' performance. Therefore, SMEs need to focus on EO in order to create a formal BMI that in turn, significantly improves the profitability and performance of SMEs.
7. We found that only financial tie significantly moderates the path between EO and BMI while business and political ties do not play a significant role. It suggests

managers to capitalize on the financial tie when the major goal is to build an effective BMI through EO. Meanwhile, they are also advised to investigate the insignificant role of other ties, political and business, if they can help create a useful BMI.

8. As intellectual capital significantly moderates the relationship between EO and SMEs performance. Therefore, SMEs should to hire and focus on intellectual managers to configure their profitability. For instance, Ying et al. (2019) also argued that intellectual managers enjoy superior performance and profitability in emerging markets compared to other managers who lack intellectual skills.
9. This research also confirmed that financial capital significantly moderates the link between EO and SME's performance. Therefore SMEs are recommended to use their finances efficiently to enjoy high performance in the competitive market.
10. The findings of this research are also beneficial for listed firms which are engaged in the enhancement of profitability in the turbulent markets.

Finally, SMEs in other markets such as Asian and Europe can be benefitted from this research by considering the suggested recommendations.

5.3.2 Policy Implications for Policy Makers

Our research has suggested several worthy policy implications for the policymakers as enlisted below:

1. This research suggests policymakers to initiate EO programs in the form of seminars, workshops, and internships to spur entrepreneurial activities in the industrial sector, particularly the SME sector. In particular, these programs should focus on small businesses to create entrepreneurial culture as it contributes to the enterprises' success and performance.
2. Considering the importance of financial resources in business success, it is recommended that governments and public institutions need to provide financial

resources and loans at a lower interest rate, enabling small businesses to borrow the loan easily.

3. In addition to financial resources, the government needs to provide non-financial assistance to the industrial sector to enable the SMEs to gain valuable information and expertise.
4. As pointed out in the research, government officials need to build a favorable network through outreach programs with business industries and entrepreneurs and facilitate them to achieve their goals through the provision of requisite resources, information, and ideas.
5. With respect to specific implications for manufacturing firms, we recommend the government and SMEDA to assist them in intellectuality, finance, and advance technology. So they will able to perform their operational activities efficiently.
6. For trading firms, we recommend the government and SMEDA to build a favorable relationship and support their export activities.
7. For services firms, we recommend the government and SMEDA to promote their entrepreneurial skills and assist them in building effective BMI.

SMEDA may play a vital role in this context by initiating special programs for small businesses in terms of providing tangible and intangible support for their operational activities. One such initiative could be to establish a national incubation center with its regional branches with extended facilities for the SME sector of Pakistan. In this way, the SME sector will gain satisfactory performance and profitability and contribute to the overall economy.

5.3 Limitations and Future Research

Despite having several significant theoretical as well as practical contributions and like any other research, the present study has a few limitations which provide opportunities for future researchers to acknowledge it. The limitations are described below:

1. The first limitation of this research is regarding the nature of the data, i.e., cross-sectional data. Cross-sectional data are criticized for social desirability and common method bias in the literature Khan, Yang, and Waheed (2019). To avoid biases, in-depth interviews and open-ended surveys can be conducted among top managers and owners of SMEs to corroborate the results of this study and to provide comprehensive insights about the role of EO, managerial networking and financial capabilities in BMI, resources acquisition, and SMEs performance.
2. The second limitation of this research is based on the target population. In this study, only the SME sector was used as a target population while excluding listed and large firms. However, Anwar et al. (2018) claimed that networking and entrepreneurial strategies are very vital for innovative activities and BMI in listed and large organizations. Similarly, non-profit organizations can be considered in future studies to unleash how they benefitted from EO, social ties, intellectual and financial capital.
3. Third, this study examined the role of EO in resource acquisition and BMI. However, it will be beneficial to examine how each dimension of EO such as innovativeness, proactiveness, and risk-taking benefit enterprises in acquiring external, tangible resources (machinery, finance, technology and raw material etc.) and intangible resources (information, support, advice and strategy etc.).
4. Fourth, this study examined the influence of EO on SMEs' performance with several moderators and mediators. However, it can be beneficial to check other factors that are recently reported vital in the SME’s sector. For instance, future researchers can

examine the role of psychological factors in acquiring external resources (tangible and intangible). For instance, Anwar et al. (2019) claimed that top manager's personality traits affect knowledge management and information acquisition, thereby opening a new zone of research to check how these traits influence the acquisition of tangible and intangible resources.

5. Fifth, there is a need to conduct a comparative study, preferably inter-continental such as SMEs of Asia with SMEs of Europe to examine the role of government connections in predicting the performance of the SME sector.
6. Finally Sixth, future researchers are recommended to conduct a study on the family-owned and non-family business by using the same variables.

5.5 Conclusion

A plethora of research work has been conducted to examine the direct and indirect relationship between entrepreneurial orientation (EO) and SMEs' performance, but the results are fragmented. Moreover, studies have missed how BMI and resource acquisition affected the path between EO and SMEs' performance and how managerial networking, intellectual and financial capital moderated the relationships. This research has tested certain hitherto neglected zones to enhance the understanding of the readers.

Drawing on the RBV theory, this research examined the influence of EO on SME's performance with the mediating role of resource acquisition and BMI and moderating role of managerial networking, intellectual and financial capital. A Structured questionnaire was used to collect the data from 403 top managers/owners of Pakistani SMEs. SPSS and AMOS were used for screening tests and structural equation modeling, respectively. The results revealed that EO significantly influences resource acquisition, BMI, and SMEs' performance. Similarly, BMI and resource acquisition significantly contribute to SMEs' performance. Both

BMI and resource acquisition partially mediate the relationship between EO and SME performance. This study finding confirmed that EO helps in the acquisition of useful, rare, and imitable external resources, which in turn significantly enhance SMEs' performance. In other words, EO and internal and external capabilities are essential for acquiring external resources and BMI that are necessary for the firm's efficiency. Financial and political ties significantly moderate the relationship between EO and resource acquisition, while business tie does not significantly moderate the path between EO and resource acquisition. However, only financial tie significantly moderates the relationship between EO and BMI, while political and business ties have no moderation effect on the path between EO and BMI.

It is recommended that SMEs should create an entrepreneurial environment to promote EO in various departments. SMEs are encouraged to promote EO as it helps in acquiring resources and BMI, thereby resulting in high performance. Top management and owners are advised to build strong ties with external partners such as suppliers, customers, businesses, government and financial institutions to gain valuable resources. Moreover, SMEs should focus on the intellectual skills of managers and the management of financial resources in order to enjoy desirable profitability. This study contributes to the RBV theory, which states the role of unique resources and capabilities in business success and superior performance.

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APPENDIX

Questionnaire

INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
FACULTY OF MANAGEMENT SCIENCES

Dear Respondent,

I am PhD scholar at International Islamic University Islamabad conducting a research on the topic: "Entrepreneurial Orientation and SMEs Performance: Mediating role of Resources Acquisition and Business Model Innovation; Moderating Role of Internal and External capabilities". For this I need your valuable input. The data will be used for academic purposes and used only for research purpose and will be part of my PhD. Your name and company information will not appear in any document and not be shared with any one for any other purposes. Thank you for your kind cooperation in the conduct of this study. Your responses will contribute to this academic research.

Scale: Responses to each item are measured on a five-point scale: Given as below

(1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree,

SECTION A: Entrepreneurial Orientation

To measure Entrepreneurial Orientation we adopted 9 items from the previous study (Convin and Slevin, 1989).

Please insert a check mark (√) in the appropriate column to indicate whether you agree or disagree with each of the following statements:

Entrepreneurial Orientation		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
	Innovativeness					
IN1	In general, the top managers of my firm favour a strong emphasis on R&D, tech. leadership, and innovations					
IN2	My firm has marketed many new lines of products or services in the past 5 years					
IN3	Changes in product or service lines have usually been quite dramatic					
	Pro-activeness					
PA1	In dealing with its competitors, my firm typically initiates actions which competitors then respond to.					
PA2	In dealing with its competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.					
PA3	In dealing with its competitors, my firm typically adopts a very competitive, undo-the-competitors' posture					
	Risk taking					
RT1	In general, the top managers have a strong proclivity for high-risk projects (with chances of very high returns).					
RT2	In general, the top managers of my firm believe that owning to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives					

RT3	When confronted with decision-making situations involving uncertainty, my firm typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities					

SECTION B: Business Model Innovation

To measure Business Model Innovation we adopted 9 items from the previous studies (Guo, Zhao, and Tang, 2013; Anwar &shah, 2018).
Please insert a check mark (√) in the appropriate column to indicate whether you agree or disagree with each of the following statements:

Business Model Innovation		**1** **Strongly Disagree**	**2** **Disagree**	**3** **Neutral**	**4** **Agree**	**5** **Strongly Agree**
BMI1	Our business model offers new combinations of products, services and information					
BMI2	Our business model attracts a lot of new customers					
BMI3	Our business model attracts a lot of new suppliers and partners					
BMI4	Our business model bonds participants together in novel ways					
BMI5	Our business model links participants to transactions in novel ways					
BMI6	We frequently introduce new ideas and innovations into our business model					
BMI7	We frequently introduce new operational processes, routines, and norms into our BM					
BMI8	We are pioneers of the business model					
BMI9	Overall, our business model is novel					

SECTION C: Resources Acquisition

To measure Resources Acquisition we adopted 5 items from the previous studies (Ying et al., 2019)**.** Please assess the extent to which your company has acquired such resources from your network actors
Please insert a check mark (√) in the appropriate column to indicate whether you agree or disagree with each of the following statements:

Resources Acquisition		1 **Strongly Disagree**	2 **Disagree**	3 **Neutral**	4 **Agree**	5 **Strongly Agree**
RA1	Physical resources (technologies & equipment etc)					
RA2	Financial support					
RA3	Advisory support related to Business strategy and policies					
RA4	Social capital					
RA5	Industry information					

RA6	Corporate social responsibilty					

SECTION D: Managerial networking/ties

To measure Managerial networking/ties we adopted 9 items from the previous study (Su, Xie, and Wang, 2015)

Please insert a check mark **(√)** in the appropriate column to indicate whether you agree or disagree with each of the following statements:

Managerial networking/ties		**1** **Strongly Disagree**	**2** **Disagree**	**3** **Neutal**	**4** **Agree**	**5** **Strongly Agree**
	Financial networking/tie					
FN1	Spent much effort on cultivating connections with financial institutions					
FN2	Maintained good relationships with financial institutions					
FN3	Devoted substantial resources to maintain good relationships with financial institutions					
	Business networking/tie					
BN1	Spent much effort on cultivating connections with buyers.					
BN2	Spent much effort on cultivating connections with suppliers					
BN3	Spent much effort on cultivating connections with competitors					
	Political networking/tie					
PN1	Spent much effort on cultivating connections with officials of governments and their agencies					
PN2	Maintained good relationships with officials of governments and their agencies					
PN3	Devoted substantial resources to maintain good relationships with officials of governments and their agencies					

SECTION E: Financial Capabilities

To measure Financial capabilities we adopted 4 items from the previous study (Boso et al., 2016)

Please insert a check mark **(√)** in the appropriate column to indicate whether you agree or disagree with each of the following statements:

Financial Capabilities		**1** **Strongly Disagree**	**2** **Disagree**	**3** **Not Sure**	**4** **Agree**	**5** **Strongly Agree**
FC1	The firm managers are satisfied with the financial capital available to them for operational activities					
FC2	Financial constraints do not impede our business activities					
FC3	Our business operations are better financed than our key competitors' operations					

FC4	Our firm has a capability to efficiently manage funds through Internal sources of financing					

SECTION F: intellectual capital

To measure intellectual capital we adopted 6 items from the previous studies (Khan,Yang & Waheed, 2018; Kianto et al., 2013).

Please insert a check mark **(√)** in the appropriate column to indicate whether you agree or disagree with each of the following statements:

intellectual capital		**1** **Strongly Disagree**	**2** **Disagree**	**3** **Neutral**	**4** **Agree**	**5** **Strongly Agree**
IC1	Our firm has a clear view of our current core knowledge					
IC2	Our firm has a clear view of what knowledge and competences are the most relevant for the objectives					
IC3	Our firm knowledge and competences are evaluated systematically					
IC4	Our firm benchmarks our strategic knowledge against that of our competitors					
IC5	Our firm explicitly recognizes knowledge as a key element in the strategic planning exercises					
IC6	Our firm has a clear strategy for developing knowledge and competences					

SECTION G: Firm Performance

Scale: Responses to Firm Performance items are measured on a five-point scale since last three years as compared with industry rivals and major competitors. Given as below

(1) Extremely Declined (2) declined (3) Average (4) Improved (5) Extremely improved,

To measure firm performance we adopted 10 items from the previous studies (Danso et al., 2016; Prieto & Revilla, 2006)

Firm Performance		**1** **Extremely Declined**	**2** **declined**	**3** **Average**	**4** **Improved**	**5** **Extremely improved**
	Financial performance					
FP1	proft as percentage of sales					
FP2	Return on assets					
FP3	Sale growth					
FP4	Return on equity					
	Non-Financial performance					
FP5	Customer satisfaction					
FP6	Employees satisfaction					
FP7	Employee loyalty					
FP8	Product/service quality					

SECTION H: Demographics and Control variables

Gender

1	2
Male	Female

Qualification/Education

1	2	3	4	5
Matric	Bachelor	Master	MS/M.Phil.	PhD

Location/city

1	2	3	4
Islamabad	Rawalpindi	Lahore	Peshawar

Age of the Firm
Commencement of business

1	2	3
10 years or less	11-20 years	21 years and above

Size of the firm
Numbers of employees
In our company

1	2	3	4	5
10-50 employees	50-100 employees	100-150 employees	150-200 employees	200 -250 employees

Industry

We deal in Business of:

1	2	3
Manufacturing	Trading	Services

Thank you for taking the time to answer, the questions to the best of your ability. Your assistance is appreciated.