THE EFFECTS OF INTELLECTUAL CAPITAL AND INNOVATION ON SMEs EXPORT PERFORMANCE IN PAKISTAN: THE MEDIATING ROLE OF COMPETITIVE ADVANTAGES

SOHAIL AYAZ MUHAMMAD

UNIVERSITI SAINS MALAYSIA

2024

THE EFFECTS OF INTELLECTUAL CAPITAL AND INNOVATION ON SMEs EXPORT PERFORMANCE IN PAKISTAN: THE MEDIATING ROLE OF COMPETITIVE ADVANTAGES

by

SOHAIL AYAZ MUHAMMAD

Thesis submitted in fulfilment of the requirements
for the degree of
Doctor of Philosophy

September 2024

ACKNOWLEDGEMENT

In the name of Allah, the most merciful and the most grateful. All salutations are due to our noble Prophet Muhammad (SAW) and his family (Ahalilbaiti Rasulu), his companions and all those who followed his guidance and teachings. Firstly, I want to extend my profound gratitude to Almighty Allah whose mercy and grace made this achievement a reality. Delightedly, I would like to extend my sincere appreciation and gratitude to my supervisors in persons of Associate Prof Dr. Shankar Chelliah for their intellectual guidance, supervision and support in all kinds towards the success of this academic pursuit. Also, I would like to register my gratitude to my examiners and reviewers for their intellectual contributions and critical evaluation which further shaped the study. May Allah reward you all abundantly.

I would like to express my gratitude and appreciation to my parents my father Prof Dr Ayaz Muhammad Rana, my mother Nusrat Perveen, my dear wife Dr Zermina Tasleem, my lovely siblings and my inlaws for their love and frequent prayers throughout the period of this study which greatly helped in writing this thesis. May Allah continue to strengthen our relationship to collectively reap the fruit of our labour. Similarly, I must acknowledge with gratitude to all employers of University Sains Malaysia especially the Dean and other staff members of School of Management. I sincerely appreciate you all for your immense contribution towards the success of my educational fulfillment, may Allah reward you all abundantly, Ameen.

Sohail Ayaz Muhammad

TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

Page

LIST OF ABBREVIATIONS

CPEC	China-Pakistan Economic Corridor
DC	Dynamic Capabilities
DCV	Dynamic Capability View
GDP	Gross Domestic Product
HC	Human Capital
IC	Intellectual Capital
IMF	International Monetary Fund
MNEs	Multinational Enterprise
PEST	Political, Economic, Social, and Technological
RBV	resource-based view
R&D	Research and Development
RC	Relational Capital
SC	Structural Capital
SMEs	Small and Medium Enterprises
SMEDA	Small and Medium Enterprises Development Authority
SBA	Small Business Administration
SWOT	Strength, Weakness, Opportunities and Threats
TDAP	Development Authority of Pakistan
US	United States

LIST OF APPENDICES

KESAN MODAL INTELEKTUAL DAN INOVASI TERHADAP PRESTASI EKSPORT SMEs DI PAKISTAN: PERANAN PERANTARA KELEBIHAN PERSAINGAN

ABSTRAK

Prestasi eksport syarikat-syarikat kecil dan menengah (SME) telah muncul sebagai titik fokus penyelidikan dan pembentukan dasar, mengingat sumbangan yang besar kepada ekonomi negara-negara berkembang. Di antara mereka, Pakistan menonjol sebagai negara berkembang yang menghadapi penurunan prestasi eksport, satu trend yang berpotensi memberi kesan kepada kedua-dua keuntungan syarikat individu dan pertumbuhan ekonomi negara yang lebih luas. Ini memerlukan penyelidikan menyeluruh mengenai faktor-faktor yang boleh mengukuhkan prestasi eksport SME di Pakistan. Kajian ini memperkenalkan kajian yang komprehensif tentang faktor-faktor yang mempengaruhi pertumbuhan eksport SME di Pakistan, dengan tumpuan khusus kepada modal intelektual (kapital manusia, struktural, dan hubungan), inovasi organisasi, dan kelebihan kompetitif. Kaedah kajian ini melibatkan pengedaran kuesioner kepada usahawan SME untuk mengumpul data kuantitatif. Analisis data dilakukan menggunakan Statistical Package for the Social Sciences (SPSS) versi 25 dan parsial paling rendah persegi (PLS). Hasilnya menunjukkan bahawa inovasi organisasi dan modal intelektual mempunyai kesan positif pada prestasi eksport SME, baik secara langsung maupun tidak langsung melalui kesan perantara kelebiah persaingan. Di samping itu, kelebihan persaingan memainkan peranan penting dalam menguruskan hubungan antara inovasi organisasi, prestasi eksport SME, modal manusia, modal struktural, dan modal hubungan. Walaupun terhad, kajian ini berjaya mencapai matlamatnya. Temuan daripada kajian ini

menawarkan wawasan yang berharga mengenai faktor-faktor yang berpotensi boleh menghidupkan semula prestasi eksport SME di Pakistan. Maklumat ini bukan sahaja relevan untuk pemilik dan pengurus SME tetapi juga mempunyai implikasi yang signifikan bagi pembuat dasar yang berusaha untuk menggalakkan pertumbuhan ekonomi melalui pembangunan SME dan promosi eksport.

THE EFFECTS OF INTELLECTUAL CAPITAL AND INNOVATION ON SMES EXPORT PERFORMANCE IN PAKISTAN: THE MEDIATING ROLE OF COMPETITIVE ADVANTAGES

ABSTRACT

The export performance of Small and Medium Enterprises (SMEs) has emerged as a focal point of research and policymaking, given its substantial contribution to the economies of developing nations. Among these, Pakistan stands out as a developing country grappling with a decline in export performance, a trend with potential repercussions for both individual firm profitability and the broader economic growth of the nation. This necessitates a thorough investigation into the factors that can bolster the export performance of SMEs in Pakistan. This study presents a comprehensive examination of the factors influencing the export growth of SMEs in Pakistan, with a specific focus on intellectual capital (human, structural, and relational capital), organizational innovation, and competitive advantage. The study's methodology involved the distribution of questionnaires to SME entrepreneurs to gather quantitative data. Data analysis was performed using Statistical Package for the Social Sciences (SPSS) version 25 and Partial Least Squares (PLS). Results indicate that organizational innovation and IC positively impact the export performance of SMEs, both directly and indirectly, through the mediating effect of competitive advantage. Furthermore, competitive advantage is crucial in mediating the relationship between organizational innovation, SME export performance, human capital, structural capital, and relational capital. Despite certain limitations, this study successfully achieved its objectives. The findings from this study offer valuable insights into the factors that can potentially revitalize the export performance of SMEs

in Pakistan. These insights are pertinent for SME owners and managers and hold significant implications for policymakers seeking to foster economic growth through SME development and export promotion.

CHAPTER 1

INTRODUCTION

1.1 The Overview

This chapter presents the piece of research carried out by drawing the comprehensive image of that study overall and therefore, setting the stage for the next chapters. It begins with an outline of the research background, followed by a problem statement, research questions, research objectives, significance and scope of the study, and thesis overview. Theoretical and practical perspectives discuss the significance of this study. This chapter also highlights the study's scope and concludes with this dissertation's structure.

1.2 Background

The significance of small and medium enterprises (SMEs) in a country's exports cannot be underestimated. The export performance of any nation relies heavily on the involvement of both small and large firms in the export industry. Inclusive participation of SMEs has been identified as a key factor in enhancing a country's exports (M. A. Khan, 2022). SMEs are known for their ease of establishment, low capital requirements, easy management, and their ability to provide a source of innovation and risk-taking for new opportunities (Koirala, 2019; Nunes, Gonçalves, & Serrasqueiro, 2013).

SMEs significantly contribute to a country's economy (Dumitriu, Militaru, Deselnicu, Niculescu, & Popescu, 2019) and are often considered the backbone of an economy (Yusoff et al., 2018). They play a crucial role in poverty reduction and offer new business platforms for entrepreneurs (Neneh & Vanzyl, 2014). Furthermore, SMEs create job opportunities, generate income, and act as pioneers in innovation

(Nunes et al., 2013). They also serve as service providers and suppliers to larger firms, contributing to transforming small firms into larger ones (Sorama & Joensuu-Salo, 2022). Additionally, SMEs support the competitiveness of large companies in their respective marketplaces (Yusoff et al., 2018). The contributions of SMEs to the economic development and growth of numerous countries have been considerable (Epede & Wang, 2022), attracting the attention of other nations to develop and promote SMEs to enhance their export performance (Dubey & Das, 2022).

Pakistan has a diverse economy with various sectors contributing to its Gross Domestic Product (GDP). SMEs (Small and Medium-sized Enterprises) have historically played a significant role in the country's economy. (Zafar & Mustafa, 2017). According to Ullah (2019), “SMEs account for 99 per cent of over 3.2 million business enterprises in Pakistan and have 35 per cent share in value addition; Pakistan’s SMEs undoubtedly have the potential to contribute considerably more than their current share of about $86 billion towards GDP”. Additionally, as per the news in Pakistan Today (2018), “SMEs contributed 30 per cent to GDP, 25 per cent to exports and 78 per cent to industrial employment that showed their important role in the economic development of the country”. Hence, the progress of SMEs is directly proportional to the progressive economy. Enterprises that are working privately in the industrial sector and hire approximately 78% of the non-agriculture workers, and 25% of exports of manufactured products as well contribute to 35% of manufacturing value added (Imran, Raziq, Saleem, & Khaliq, 2020). The contribution of SMEs to the Pakistan economy is shown in Table 1.1.

Table 1.1 Contribution of SMEs to the Pakistan Economy

Total numbers of business enterprises	3.3 million
Total number of SMEs	99% of all enterprises
Average no. of employees in 99% of SMEs	1-10 persons
Total % of non-agricultural workforce (in SMEs)	78%
Contribution to employment (along with agriculture)	90%
Share in the manufacturing industry	35%
Share in GDP	30%
Share in Export Earning	25%

Source: Author

In Pakistan, SMEs contribute approximately 30% of the GDP and 25% of exports (Qurashi et al., 2020). The SME sector has developed into a pillar of the industrial sector in Pakistan. However, compared with the neighbouring states, specifically China and India, it is far from contributing to the country's GDP. The SME sector has significantly contributed to an outstanding 40% in India and more than 60% in China (See Figure 1.1).

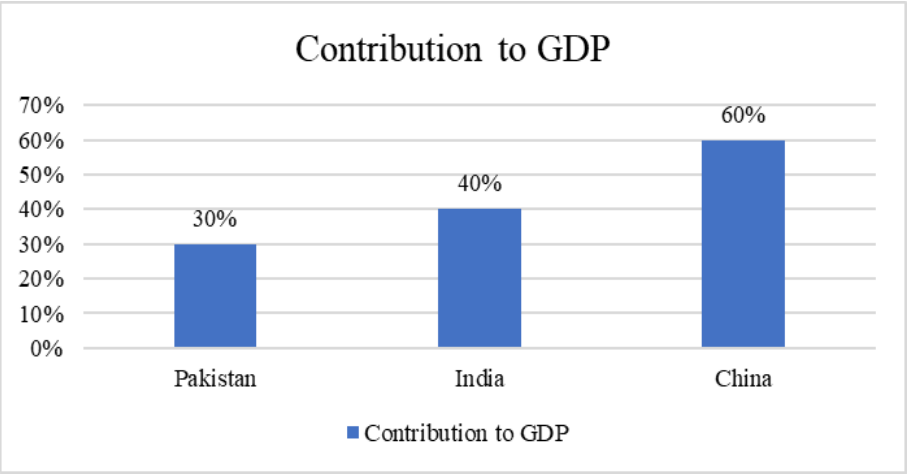

Figure 1.1 Role Of Sme On Economic Growth
Source: World Bank (2019)

The share of Pakistan's SMEs has been estimated between 30% to 40% of total exports for the past 15 years (Zafar & Mustafa, 2017). In 2018, SMEs collectively

contributed an estimated 25% to exports. Pakistani SMEs' contribution to exports is believed to be low when compared to their neighbor competitors such as China, Japan, and India. India's SMEs' export contribution is 37.5 per cent, behind Japan and China, which are 55 per cent and 60 per cent, respectively (Imran, Hamid, & Aziz, 2018). Data from the World Bank (2019) also reported the same low export contribution of Pakistani firms compared to neighboring countries, as shown in Table 1.2. This indicated that China is the most export-oriented firm, which contributed US$ 2655.61 billion, India (US$ 536.97 billion), Bangladesh (US$ 40.56 billion), and Pakistan (US$ 23.2 billion) of the total share in export performance.

Table 1.2 Export values of China, India, Bangladesh, and Pakistan

Country	China	India	Bangladesh	Pakistan
Exports value in USD Billions				
2009	1249.72	273.75	17.36	17.7
2010	1602.48	375.35	18.47	19.3
2011	2006.3	447.38	25.63	24.8
2012	2175	448.4	26.89	23.6
2013	2354	472.18	29.3	24.5
2014	2462.84	468.35	32.83	25.1
2015	2362.09	416.79	33.82	23.7
2016	2003.41	439.64	36.86	20.8
2017	2424.2	498.17	37.55	20.4
2018	2655.61	536.97	40.56	23.2
2019	2630	529.25	45.99	30.14
2020	2730	499.73	39.05	27.94
2021	3550	677.77	44.39	31.55
2022	3720	778.02	59.28	39.52
2023	3510.2	777.14	57.55	35.15

Source: World Bank (2024)

Despite the strong potential to grow globally, the major challenges faced by local SMEs concerning resource constraints have slowly done exports in previous years (Imran et al., 2018).

Some of the big issues Pakistani SMEs face are a lack of skilled force, innovation and technology adoption, limited financial ability, lack of human and structural capital, and lack of product and market knowledge (Qurashi et al., 2020). M. S. Dar, Ahmed, and Raziq (2017) also highlighted that Pakistani SMEs continue to face a multitude of challenges, including inadequate financial resources, low capability levels, unskilled employees, a complex taxation system, poor transportation infrastructure, a shortage of entrepreneurial skills, outdated manufacturing facilities, and difficulties in securing loans from financial institutions. Perhaps most critically, there is significant mismanagement of intangible resources. (Hanif, 2023; Muhammad & Chelliah, 2024).

As highlighted in a 2010 survey by McKinsey and the International Finance Corporation, a global perspective reveals that there are approximately 420 to 510 million SMEs worldwide, with around 360 to 440 million of them located in developing countries (Batrancea, 2022). In developed countries such as the European Union, SMEs contribute 66.9 percent to employment creation, 57.8 percent to the bloc's annual GDP, and 33.3 percent to total exports (Batrancea, 2022). In the United States of America, SMEs contribute 52.4 percent to employment, 44.4 percent to annual GDP, and 34 percent to overall domestic export earnings (Pietrovito & Pozzolo, 2021). In upper-middle-income countries like China, SMEs contribute 64.7 percent to employment, 60 percent to annual GDP, and 41.5 percent to total exports. On the other hand, in lower-income countries such as India, SMEs contribute 37.5 percent to annual

GDP, 42.4 percent to total exports, and 57.28 percent to employment creation (Egger & Kesina, 2013). With its extensive participation of SMEs in the export industry, China has emerged as a prominent player in world exports and currently holds the position of the top country in export trade (Smallbone, Saridakis, & Abubakar, 2022). Additionally, SMEs contribute to the GDP of various Asian countries, including Japan at 50 percent, South Korea at 49.4 percent, Indonesia at 57.8 percent, Taiwan at 85 percent, and Singapore at 50 percent, respectively (Aghazadeh & Zandi, 2023).

Export activity is progressively gaining significance from organizational and national standpoints due to its substantial contribution to economic development. The export sector is pivotal in influencing foreign exchange reserves and maintaining a balanced trade level (Bertrand, Betschinger, & Brea-Solís, 2022). Additionally, exports contribute to societal prosperity by fostering the growth of national industries, boosting productivity, and creating new employment opportunities. Moreover, exports provide customers with increased access to diverse goods and services, enhancing their quality of life (Ghag, Acharya, & Khanapuri, 2022).

At the firm level, engaging in market diversification and exporting activities reduces dependency on the domestic market. By exploring new markets abroad, companies gain access to a broader customer base, leveraging economies of scale, achieving cost efficiencies, and enhancing production effectiveness. According to (Ortigueira-Sánchez et al., 2022), exporting is a crucial economic endeavor that significantly impacts the success of firms. It is the primary avenue for entering international markets, expanding sales, and increasing profitability.

However, Pakistan's export performance has witnessed a decline from $25.1 billion in 2013-14 to $22 billion in 2016-17. Similarly, the trade deficit has risen from

$16.59 billion in 2013-14 to $30.5 billion in 2016-17. Although there was a slight increase in exports in the fiscal year 2017-18 (reaching $24.7 billion), there was a subsequent decline in the fiscal year 2018-19 (dropping to $24.2 billion) (Ministry of Finance, 2019). The trade deficit has expanded to $31.45 billion in 2017-18 and $28.4 billion in 2018-19. With mounting debt obligations to the IMF, CPEC, and other creditors, Pakistan must ensure a continuous inflow of foreign exchange to meet its financial commitments. However, as imports continue to rise and exports decline, the trade deficit has widened. Moreover, achieving Pakistan's Vision 2025 goal of becoming one of the top 20 economies in the world is unattainable without robust export growth and a reduction in the trade deficit (L. Ali, Mi, Shah, Shah, & BiBi, 2017).

Pakistan has experienced relatively slower growth in exports compared to its regional counterparts like India and Bangladesh. While Pakistan achieved a fourfold increase in exports, India and Bangladesh witnessed increases of 17-fold and 10-fold, respectively. Despite facing similar socio-economic challenges, India and Bangladesh outperformed Pakistan in terms of export growth.

In Pakistan, SMEs comprise 90 percent of enterprises (A. Bhatti, Rehman, & Rumman, 2020). They contribute 78 percent to the non-agricultural labor force, 30 percent to GDP, and 25 percent to export earnings (Ahmad et al., 2021). When compared to neighboring countries, Pakistan's SMEs contribute a higher percentage to the GDP than India (37.5 percent) but less than China (60 percent) and Iran (50 percent) (Imran, Aziz, & Hamid, 2017). However, Pakistan's SMEs have been reported to underperform compared to other developing countries like Malaysia, Thailand, China, Taiwan, and Indonesia (Imran & Khaliq, 2019).

SMEs play a significant role in innovation, regional development, social cohesion, and overall economic growth, which, in turn, contribute to GDP, employment, and exports (M. S. Dar et al., 2017; Imran et al., 2018; Khalique, Bontis, Bin Shaari, & Isa, 2015). The Government of Pakistan has set a Vision 2025 for economic growth, with SMEs playing a vital role in achieving this vision (Malik & Majeed, 2018; Manzoor, Wei, & Siraj, 2021). Various government departments and organizations have been established to support SME growth and their contribution to exports, such as SMEDA, SME Bank, PSIC, MOIP, Ministry of Commerce of Pakistan, FPCCI, TDAP, and Small Industries Corporations (Shamim, Jawaid, & Kamal, 2017). However, despite these initiatives, the contribution of SMEs to exports in Pakistan remains a significant challenge.

SMEs contribute approximately 25 percent to Pakistan's exports (M. S. Dar et al., 2017), which is lower than neighboring countries like India (42.4 percent) and China (41.5 percent) (Imran et al., 2018). Pakistan's exports heavily rely on the manufacturing sector, which accounts for around 80 percent of the country's exports, with 85 percent of SMEs operating in this sector (M. Khan & Abasyn, 2017). Despite the significant number of SMEs in the manufacturing sector, their contribution to total exports is only 25 percent, which raises concerns about their effectiveness. Exporting activities are known to enhance organizational capabilities, leading to additional resources and improved survival and performance (Zafar & Mustafa, 2017).

Researchers and policymakers have identified several challenges SMEs face in Pakistan, negatively affecting their performance in domestic and international markets. These challenges include a shortage of skilled labor, lack of finance, bribery, corruption, knowledge, government interference, low-quality raw materials,

entrepreneurial skills, and inadequate training programs (Mubarik, Devadason, & Govindaraju, 2020). Other factors contributing to the non-competitiveness of Pakistani SMEs include low productivity, weak positioning in international markets, low product differentiation and innovation, limited international experience, poor technology, lack of management skills, language barriers, cultural barriers, and firm size (Lopez Rodriguez & Serrano Orellana, 2020). The high death rate of SMEs in Pakistan, with 95 percent of them closing their businesses within the first year, reflects the severity of these challenges (Imran & Khaliq, 2019).

Furthermore, the decline in exports of SMEs in Pakistan has been attributed to factors such as a lack of innovation and IC (Mubarik et al., 2020). Insufficient attention to innovation and the enhancement of human, structural, and relational capital has hindered the full potential of SMEs in sectors like leather, sports, surgical goods, cutlery, furniture, and ceramics (Imran et al., 2018). The relationship between intellectual capital enhancement and export performance has also been under-researched (Kamath, 2017). Factors such as innovation, human capital, structural capital, and relational capital have been highlighted as key considerations for policymakers and the government in improving SME performance.

1.3 Problem Statement

The trade deficit and declining exports in Pakistan have negatively impacted the economy, leading to a decrease in foreign exchange reserves, currency devaluation, and rising inflation (Mubarik et al., 2020). As a result, the country's dependence on bail-out packages from international financial institutions and other countries has increased. To address this severe problem, increasing exports is considered a sustainable solution.

Increasing exports can have both microeconomic and macroeconomic impacts on the Pakistani economy (Imran & Khaliq, 2019). Businesses and individuals benefit from increased sales and business levels at the microeconomic level. Unutilized capacity is utilized, leading to reduced costs for businesses. Additionally, firms become more competitive and efficient through their presence in international markets. At the macroeconomic level, exports contribute to improving employment levels, economic growth, and the balance of payments. Therefore, exports are considered crucial for the overall health of the economy.

Pakistan's export trend has yet to be aligned with the global trend of total international trade, which has experienced significant growth in previous decades. Factors such as improved communication, infrastructure, and liberal trade policies have increased international trade volume globally (Pietrovito & Pozzolo, 2021). However, Pakistani exports have yet to follow this increasing trend, highlighting the need to focus on improving export performance.

Pakistani SMEs, which are major contributors to economic development, have a concerning record of low export performance. SMEs' exports in the manufacturing sector have been declining in recent years, with decreasing figures year after year (Imran & Khaliq, 2019). Despite this, more research is needed to investigate the factors influencing export performance in SMEs, particularly in the manufacturing sector, which constitutes a significant portion of Pakistan's exports.

Resource-based view (RBV) theory suggests that intangible resources play a crucial role in firms' abilities to overcome deficiencies in export performance (Bharadwaj, 2000). Intangible resources are often rare and socially complex, making them difficult to imitate and more likely to produce a competitive advantage (Dhanaraj

& Beamish, 2003). Strengthening a firm's resources and capabilities is essential for better export performance. Thus, identifying the critical antecedents of SMEs' export performance and understanding their positive effects is necessary to improve the situation.

In the context of SMEs in Pakistan, export performance has declined, raising concerns about the country's economic sustainability (Arshad et al., 2024). Despite the importance of exports for economic growth, the manufacturing sector, particularly SMEs, faces challenges such as outdated infrastructure, limited technological support, and a lack of innovation. While various factors contribute to this decline, intellectual capital (IC) and innovation are crucial resources that enhance a firm's competitive edge.

In the context of SMEs in Pakistan, export performance has declined, raising concerns about the country's economic sustainability (Arshad et al., 2024). Despite the importance of exports for economic growth, the manufacturing sector, particularly SMEs, faces challenges such as outdated infrastructure, limited technological support, and a lack of innovation. While various factors contribute to this decline, intellectual capital (IC) and innovation are crucial resources that enhance a firm's competitive edge.

The resource-based view (RBV) suggests that intangible resources like IC comprising human, structural, and relational capital and innovation are crucial to gaining a sustainable competitive advantage (CA) (Muhammad & Chelliah, 2024). CA, in turn, enables firms to achieve superior export performance by differentiating themselves in international markets (Lee & Wang, 2023). However, existing research

has not fully explored the combined impact of IC and innovation on export performance, nor the role of CA as a mediating variable in this relationship.

The deficiencies identified in Pakistan's SMEs, including the lack of innovation, human capital, management skills, technological support, infrastructure, buyer-supplier relationships, outdated production facilities, and new product development, are likely the primary causes of the declining trend in exports (Ahmad et al., 2021; Khattak et al., 2011; Zafar & Mustafa, 2017). Previous studies have emphasized the importance of intellectual capital in improving a firm's export performance, particularly in SMEs where tangible resources may be limited. The resource-based view (RBV) theory suggests that intangible resources, such as IC, can give SMEs a competitive advantage (Bharadwaj, 2000). However, in the context of Pakistani SMEs, there needs to be more understanding and research on IC and the importance of innovation. The deficiencies identified in Pakistan's SMEs, including the lack of innovation, human capital, management skills, technological support, infrastructure, buyer-supplier relationships, outdated production facilities, and new product development, are likely the primary causes of the declining trend in exports (Ahmad et al., 2021; Khattak, Arslan, & Umair, 2011; Zafar & Mustafa, 2017). Previous studies have emphasised the importance of intellectual capital in improving a firm's export performance, particularly in SMEs where tangible resources may be limited. The resource-based view (RBV) theory suggests that intangible resources, such as IC, can provide SMEs with a competitive advantage (Bharadwaj, 2000). However, in Pakistani SMEs, there needs to be more understanding and research on IC and the importance of innovation.

The decision to focus on Intellectual Capital (IC) and Innovation in this study is driven by several key considerations, particularly in the context of Small and Medium-sized Enterprises (SMEs) in Pakistan, where export performance has been on the decline:

Buenechea-Elberdin, Sáenz, and Kianto (2023) explained that innovation, in turn, is essential for developing new products, processes, and business models that enable firms to differentiate themselves in global markets. IC and innovation are the core assets that drive competitive advantage, which is crucial for SMEs operating in resource-constrained environments like Pakistan. The interplay between IC and innovation is crucial for firms and tiny and medium-sized enterprises (SMEs) in resource-constrained environments like Pakistan. Despite their potential, many SMEs struggle to differentiate themselves in global markets due to a lack of competitive advantage. This deficiency limits the effectiveness of IC and innovation in driving export performance.

The problem lies in identifying and utilizing competitive advantage as a mediating factor. Without this mediating role, the benefits that IC and innovation could bring to export success may not materialize, leaving SMEs vulnerable in the face of international competition. Additionally, many SMEs need to fully leverage their IC or innovative capabilities, resulting in missed opportunities for growth and market presence.

Understanding the mediation effect of competitive advantage is essential, as it connects the dots between IC, innovation, and export performance. By fostering unique capabilities and innovative strategies, SMEs can enhance their competitiveness and effectively navigate the challenges of international trade. This awareness and

strategic positioning are critical for addressing the obstacles SMEs face in the current economic landscape, ultimately leading to improved export outcomes.

Addressing Gaps in Existing Literature, many factors can influence export performance; previous studies have often focused on tangible resources or considered IC and innovation in isolation. This study aims to fill a gap in the literature by exploring the combined impact of these intangible assets on export performance, particularly within the context of SMEs in developing countries. The research further examines the role of competitive advantage as a mediating variable in this relationship.

IC and innovation are vital sources of sustainable competitive advantage, as these intangible assets are often complex for competitors to reproduce (Buenechea-Elberdin et al., 2023; Obeidat et al., 2021). For Small and Medium Enterprises (SMEs), which typically operate with limited tangible resources, leveraging the power of IC and innovation offers a more enduring and impactful strategy to enhance export performance. By focusing on these distinctive capabilities, SMEs can foster long-term competitiveness and resilience, equipping them to navigate the complexities of international markets effectively. This strategic emphasis not only improves their operational efficiency but also establishes them as formidable players on the global stage, ultimately contributing to their sustained growth and success.

Furthermore, previous studies have reported inconsistent results, highlighting the need to consider mediating variables to understand the effects on export performance better. Competitive advantage, as a dynamic capability, can serve as a mediating variable to enhance the relationship between innovation, intellectual capital, and SMEs' export performance (Bayraktar et al., 2017; Distanont & Khongmalai, 2020; Ling-yee & Ogunmokun 2001).

The literature on export performance has primarily focused on developed countries, while research on developing countries, including Pakistan, is limited. Most studies have also focused on large firms, with fewer observations made regarding SMEs. Given the declining export performance of SMEs in Pakistan, this study aims to provide unique perspectives on the relationships between innovation, intellectual capital, competitive advantage, and SMEs' export performance in the country.

1.4 Research Questions

From the previous discussion, this study has the following research questions.

1. Does IC (Human capital, structural capital, and relational capital) influence the export performance of SMEs in Pakistan?

2. Does organizational innovation influence the export performance of the SMEs in Pakistan?

3. Does intellectual capital (Human capital, structural capital, and relational capital) create a competitive advantage among the SMEs in Pakistan?

4. Does organizational innovation create a competitive advantage among the SMEs in Pakistan?

5. Does competitive advantage influence the export performance of the SMEs in Pakistan?

6. Can competitive advantage mediate the relationship between IC and export performance among SMEs in Pakistan?

7. Can competitive advantage mediate the relationship between innovation and export performance among SMEs in Pakistan?

1.5 Research Objectives

1. To determine the impact of intellectual capital (Human capital, structural capital, and relational capital), organizational innovation and competitive advantage on the export performance of SMEs in Pakistan.

2. To examine the association of (Human capital, structural capital, and relational capital) and innovation with competitive advantage.

3. To assess the competitive advantage and in what manner it mediates the relationship between intellectual capital (Human capital, structural capital, and relational capital) and export performance among SMEs in Pakistan.

4. To examine the competitive advantage and in what manner it mediates the relationship between innovation and export performance among SMEs in Pakistan.

5. To identify that competitive advantage influences the export performance of the SMEs in Pakistan.

1.6 Significance of the Study

This study is significance can be specified by its theoretical and practical significance. The theoretical significance of this thesis is associated with the numerous remaining black boxes and the blind spots in the emerging subject areas of IC, innovation, export performance studies, and competitive advantage from the perspective of a developing country such as Pakistan.

Theoretical Significance

This research aims to examine the relationship between intellectual capital and export performance, along with the impact of innovation on export performance, considering the mediating effect of competitive advantage. Despite all the contributions of present studies, this study highlights the best aspects that enable SMEs to compete in the export market and boost the Pakistani economy. This study provides interrelated ideas for expanding export activities for the three measures' positive practical implications and antecedents. The unexplained puzzle of IC, competitive advantage, and innovation can be solved by expediting these significant measures in SMEs' export performance. As mentioned above, SMEs are the main contributors to total exports, so by comprehending the interrelated measures of export performance, this study will merge the literature and illuminate the association of intellectual capital and innovation towards export performance with the mediating effect of competitive advantage.

Furthermore, this study is expected to examine the missing link between intellectual capital, innovation, competitive advantage, and SME export performance that would add value to the Resource-Based View theory (J. Barney, 1991b) and Dynamic capabilities theory, which is highly related to the organizations to transform or improve their competitive edge with appropriate management and effective utilization of resources and capabilities (Chelliah, Sulaiman, & Yusoff, 2010). Hence, this study is intended to contribute theoretically to the resource-based view along with dynamic capabilities literature about intellectual capital and innovation while a) considering various resources and capabilities that could lead to competitive advantage and b) exploring how intellectual capital and innovation are able to support the

development and sustainability of competitive advantage in SMEs in such a manner as to improve the export performance. Consequently, this study makes numerous contributions to the resource-based view and dynamic capabilities literature, and the possible implications of this study are visible in extending the literature by examining SMEs' internationalization from the perspective of export performance.

1.6.1 Practical Significance

In the current globalized world, the increasing demand for exports is expected to increase with strong competition among neighboring countries. As the current research exposes the challenging issues related to the export performance of SMEs, this understanding will provide knowledge to the SME practitioner about various influential elements of export performance. As a result, the SMEs in Pakistan will understand the Resource-Based View theory, which provides an excellent context to investigate, the significance of resources and capabilities that these sectors should acquire to surge the export performance. The model of RBV depicted the relationship between ‘resources-capabilities-performance’ (J. Barney, 1991b), which will further lead to achieving a competitive advantage. According to this perspective, the knowledge about the relationship between intellectual capital, innovation, competitive advantage and export performance can be utilized for practical implications of export growth of SMEs. It would also provide a bridge to help decision-makers and managers of SMEs to be intertwined about intangible and invaluable resources that they already have. Therefore, this piece of research helps them get guidance regarding enhancing and strengthening the firm's competitive position in the global market.

Through this study, the policymakers will get ideas for developing growth programs that will uplift the manufacturing goods in the international market. Numerous policy initiatives such as the Pakistan Economic Corridor (CPEC), Vision 2025, and other government measures directly contribute to creating SME growth that will enable SMEs to effectively organize and plan government exports to accelerate globally. This will further contribute to the country's economic growth and ultimately unleash the industrial potential to drive the Pakistani industry to be a developed nation.

1.7 Scope of the Study

The present piece of study is vivid with the significance of intellectual capital (human capital, structural capital, relational capital) and innovation (process innovation, product innovation, technological innovation) with the effect on export performance. This study additionally examines the role of competitive advantage as a mediator of the IC-export performance and innovation-export performance relationship. Overall, this study is considered as an answer to the question “Do intellectual capital and innovation impact the export performance with a mediating effect of competitive advantage?

Additionally, industrial cities involved in this present study are Faisalabad, Hyderabad Karachi, Lahore, Sialkot, Multan, Peshawar, Gujranwala, and Chiniot. These cities were selected because of their high export-oriented manufacturing SMEs. Furthermore, the current study focuses on five sub-sectors of manufacturing SMEs' export-oriented sectors, namely, textile, surgical, sports goods, leather, pharmaceutical, and furniture. This study covers all of Pakistan's manufacturing export-oriented registered SMEs. A total of 6994 expo1t-oriented manufacturing SMEs were identified using a list from the Trade Development Authority of Pakistan

(TDAP)'s exporter directory. Furthermore, the current study is underpinned by the resource base view (RBV) theory and the dynamic capability view (DCV) theory.

1.8 Motivation of study

The motivation for this study stems from the critical need to address the declining export performance of SMEs in Pakistan. This sector plays a pivotal role in the country's economic development. Despite the well-documented importance of exports for economic growth, the export performance of Pakistani SMEs has been steadily decreasing, contributing to trade deficits and economic instability (Adnan & Fatima, 2018; Afzal, Memon, & Khatri, 2024; Saleem, Sial, & Cheema, 2023). This decline is further exacerbated by the need for more comprehensive research on the factors that could enhance the export success of SMEs, particularly within the context of developing economies.

This study contributes to the existing body of literature by exploring the underexamined relationship between intellectual capital, innovation, and export performance within Pakistan's SME sector. While intellectual capital and innovation are critical drivers of competitive advantage and business success, their combined effect on export outcomes needs to be sufficiently investigated. This research aims to bridge this gap by providing SMEs with actionable insights that enable them to leverage their intangible assets effectively, ultimately enhancing their export performance. Additionally, this study highlights the mediating role of competitive advantage in this relationship, demonstrating how it influences the impact of intellectual capital and innovation on export success.

Furthermore, the study seeks to inform the development of sustainable strategies that improve the export capabilities of SMEs and bolster Pakistan's

economic resilience as a whole. Proposed strategies include implementing tailored training programs to enhance human capital, establishing effective networks to foster relational capital, and investing in innovative processes that facilitate structural improvements. By addressing these critical areas and emphasizing the importance of competitive advantage, SMEs can create a robust framework that aligns their intellectual resources with innovative practices, thereby increasing their competitiveness in global markets.

1.9 Definition of key terms

Below are the definitions of intellectual capital, innovation, competitive advantage, and export performance.

1.9.1 Intellectual Capital

IC has been defined as "the stored knowledge possessed by a firm and employees, which is explicit and implicit knowledge, personal and systematic knowledge possessed by employees and firms that are available to network relationships through interaction, composed of human, structural, and relational capital" (Isaac et al., 2010).

1.9.1(a) Human capital

Human capital is the "firm collective capability to extract the best solution from the knowledge of its individuals, which is in the mind of individuals" (Isaac et al., 2010).

1.9.1(b) Structural capital

An ongoing business needs structural capital as it provides infrastructure and a platform for its employees and facilitates them to perform their duties (Khalique, Bontis, Bin Shaari et al., 2015). "The knowledge embedded within the routines of an organization" (Bontis, 2001).

1.9.1(c) Relational capital

Relational capital can be defined as "the valuable relationships of a firm within society and the people or entities surrounding it, or which exist in the same environment" Kale et al, (2000).

1.9.2 Innovation

O'Cass and Weerawardena (2009) defined organizational innovation as "the application of ideas that are new to the firm, which create added value either directly for the enterprise or indirectly for its customers, whether the newness and added value are embodied in products, processes, services, or work organization, the management or marketing systems".

1.9.3 Competitive Advantage

Beal and Yasai-Ardekani (2000) defined competitive advantage "as the element of innovation differentiation, marketing differentiation, low cast differentiation, quality differentiation, and service differentiation. Having such condition or circumstance puts a company in a favorable or superior business position".

1.9.4 Export performance

Export performance reflects “the overall outcomes of the firm activities in its export market that include financial, strategic and satisfaction” (Zou, Taylor, & Osland, 1998).

1.9.5 Small and Medium Enterprises (SMEs)

SMEs are enterprises whose annual sales turnover is at most two hundred and fifty million PKR and which have a staff strength of less than two hundred fifty employees (Small and Medium Enterprises Development Authority, 2016a).

1.10 Structure of the thesis

Chapter 1: This opening chapter introduces the study's background, setting the research stage. It outlines the research purpose and objectives, providing a clear direction for the study. The chapter concludes by highlighting the significance of the research and motivation and emphasizing its relevance and potential contributions.

Chapter 2: Literature review reviews the literature conducted for this study. First, the chapter presents the relevant research supporting the role of IC, innovation, competitive advantage, and export performance in small and medium-sized enterprises.

Chapter 3: This chapter discusses the research design and methodology adopted for the study. It begins by outlining the research's philosophical stance and establishing the foundational approach to the inquiry. The chapter then details the research design, including the methods and strategies used to gather and analyze data.

Chapter 4 presents the data analysis and the empirical results derived from testing the study's hypotheses. The chapter systematically breaks down the findings, providing a detailed examination of the data. This analysis forms the basis for understanding the relationships between the variables under investigation.

Chapter 5: The final chapter offers a discussion of the data analysis results, interpreting the findings within the context of the research questions. It also provides the implications of the study for theory and practice, suggesting how the results could influence future research and business strategies. The chapter concludes by addressing the limitations of the study, acknowledging areas where further research is needed.