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The Impact of Dimensions of Intellectual Capital on Small and Medium Enterprise (SMEs) Performance in Pakistan with a Mediating Role of Absorptive Capacity

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Abstract
Purpose – The ability to acquire and learn knowledge has been most important challenges faced by business around the word. Especially Small and Medium Enterprises (SMEs). SMEs is a backbone of any emerging economy. The purpose of this paper is to empirically examine the mediating role of absorptive capacity and how it affects Intellectual Capital (IC) and SME efficiency in Pakistan. It also investigates the direct impact of the components of IC on business performance.
Design/methodology/approach – Partial least square-structural equation modeling (PLS-SEM) was used to assess the effect of IC dimensions on performance of SMEs and to analyze the mediating role of absorptive capacity in this relationship. Data were collected from 486 SMEs owner/managers using a survey questionnaire with Likert scale items.
Findings – The findings of the study show that absorptive capacity, played a positive mediating role in the relationship between the dimensions of IC and those of performance of the Small and Medium Enterprises (SMEs). The dimensions of Intellectual Capital were a strong predictor of SMEs performance and had a profound positive influence.
Originality/value – This study contributes to the literature on Intellectual Capital (IC) by examining the role of absorptive capacity in the relationship between IC components and SMEs performance. This research also helps practitioners recognize the importance of transformation and the exploitation of knowledge for business performance.
Keywords: Human Capital, Social Capital, Relational Capital, Realized Absorptive Capacity, Potential Absorptive Capacity, Small and Medium Enterprise Development Authority (SMEDA)

Introduction

In a fast changing, with the rapid advancement in technology, new information tools and emerging resources have become critical issues in economic knowledge. Drawing on the Resource-based View in small and medium-sized enterprises (SMEs) and competitive dynamics perspectives, there has been a recent rise in the number of practitioners and

academics integrating the knowledge resources of SMEs, which are intellectual capital (IC) and absorptive capacity (ACAP) to achieve superior performance.

Scholars believe that intellectual capital is a driving force behind an important operation that helps SMEs progress in a variety of ways, including bootstrapping operations, competitiveness, and a work system. In the existing competitive world of business, the intangible assets are the most important source of success (Haskel and Westlake, 2017). Knowledge management and keeping a competitive relation with stakeholders of the firm leads to importance of dimension of IC in the mind of researchers (Jones et al., 2018).

Absorptive capacity appears to be among the possible instrumental factors in the relationship between the three dimensions of IC and performance. Cohen and Levinthal (1990) developed the idea of absorptive capacity and described it as the capability to gain, adapt, and incorporate knowledge and it has also been mentioned that keeping prior knowledge is essential for absorptive capacity. An absorbing capacity appears to be one of the factors that may be involved in the relationship between three factors of IC and organizational output (Hussinki et al., 2017).

Likewise, the majority of studies examining absorptive capacity took it as a single construct, irrespective of the differences between realized and potential absorptive capacity. Moreover, some researchers have claimed that absorptive capacity moderates the relationship between IC and performance, while others argue for its role as mediator. The inconclusive results of these studies indicate that more research is required to clarify the role of realized and potential absorptive capacity in the relationship between the components of IC and business performance (Han and Li, 2015; Obeidat et al., 2017).

The concept of absorptive capacity was introduced by Cohen and Levinthal in 1990, and they defined it as the capacity to acquire, adapt, and assimilate knowledge. The correlation between three IC parameters and organizational production appears to include a feature called an absorption capacity (Hussinki et al,2017). The majority of research that looked at absorptive capacity did the same, regardless of the distinctions between realized and potential absorptive capacity.

Additionally, whereas some researchers contend that absorptive ability plays a mediating function in the link between IC and performance, others disagree. These studies' conflicting findings suggest that additional investigation is necessary to define the part of absorptive capacity in the connection between the elements of IC and business performance (Obeidat et al., 2017). In addition, academics asserted that AC served as a mediator in the relationship between intellectual capital and organizational performance, despite the fact that few would support its role as a moderator (Mehralian et al., 2018).

Small and medium-sized businesses (SMEs) are thought of as the heart of every economy's growth and development. Large firms play a significant role in the long-term growth and success of the economy, but so do SMEs (Wilkinson et al., 2018). Small and medium-sized organizations, by nature, usually pass up opportunities to learn more about their surrounds and instead focus their resources and talents internally on product development (Teece, 2017).

Small and medium-sized enterprises (SMEs) play a significant role in the economic growth of the nation and significantly increase GDP. In emerging economies, SMEs play a key role in employment creation and national economic growth (Hughes et al., 2017). The importance of SMEs in the growth of the country's economy has been widely acknowledged, a sizable body of research has produced models that show the trajectory of SME growth (Chiang, 2018).

Due to a lack of skilled and knowledgeable workers, SMEs in Pakistan are experiencing a labour shortage. It is the main factor behind their subpar performance and business failures. To achieve a competitive edge based on the market in Pakistan, SMEs must also learn about intellectual capital and how to apply it to their operations. This paper investigates the effect of absorptive capacity as a mediator on relationship between Intellectual capital and Small and Medium Enterprise (SMEs) performance both financial and non-financial performance, it will enhance literature.

Review of Literature

Intellectual Capital and SMEs Performance

There are many definitions and ways to express intellectual capital. For the sake of this study, it has been divided into the three categories of human capital, structural capital, and relational capital (Inkinen, 2015).

Human Capital: Intangible assets have a significant part in gaining the competitive edge, according to Wernerfelt's explanation in 1984 when he introduced Resource-based theory and expanded on the theoretical foundation of the role of HC. It has been asserted that efficient use of human resources determines corporate success (Colombo, 2015). Increased market processes and creative output are influenced by human capital, which also leads to more consumers and better outcomes overall (Nosella, 2017).

Additionally, according to Mubarak et al (2018), the improvement of organisational capital results in the growth of social capital and success. It has been commonly argued that effective use of human capital is what largely drives business performance (Colombo and Grilli, 2005; Sullivan, 1999).

Structural Capital: "Everything remains inside the organisation after employee leaves for home" is the definition of SC (Malone, 1997). According to experts like Kamukama et al. (2011), structural capital is a pool of knowledge that the organisation has and consists of, among other things, clear information, process streamlining, the association's culture, item creation, data innovation, and advancement.

According to Sydler et al (2013), structural capital is identified with the company as a whole and is said to stay in the organisation even if the representative quits. As a result, "the information implanted inside the schedules of an association" is given more attention (Bontis, 2002, p 45). Ordónes (2014) analysed the strategic effects of HR designs and came to the conclusion that structural capital has a significant influence over both human capital and relational capital.

Relational capital: Relational capital is the third aspect of intellectual capital that this study has taken into account. Relational capital is characterised as integrated knowledge that governs how its members interact with one another (Ortiz et al., 2018). The evaluation of relationships inside organisations and among individuals is referred to as relational capital. According to Lavie (2006), in networked environments relationships are more crucial for businesses than resources. Relational capital makes it easier to create and acquire knowledge using both internal and external resources. Social capital gains can increase problem-solving, which boosts organisational performance (Youndt et al., 2004).

Absorptive Capacity

In their published paper, Cohen and Levinthal (1990) introduced organizational absorptive capacity as a novel idea that enhances organizational learning and innovation. They described organizational absorptive capacity as the capability to gather new

information, take it in, and use it to your advantage. The absorptive ability of an organization, which was inevitably a result of prior knowledge and background variety, was taken into account by Cohen and Levinthal's model. The three essential elements of absorption capacity, according to Cohen and Levinthal (1989), are the ability to recognize the value of new knowledge, adopt it, and use it for practical purposes.

Zahra and George (2002) distinguished between prospective absorptive capacity and realized potential capacity. By breaking this notion down into its component elements, this classification enabled researchers to expand their researches. Furthermore, rather than emphasizing created knowledge, Cohen and Levinthal emphasize the importance of information that has been gained. When it comes to comprehending, incorporating, and using fresh information from the outside world (Aribi, 2016).

Potential absorptive capacity: Here, potential absorptive capacity is initially examined. It has two parts, according to (Zahra and George, 2002). The first one is knowledge acquisition, which is defined as a business' capacity to locate and obtain crucial information from outside sources for its operations and processes. The second is information absorption, which describes an organization's ability to hold and manage new knowledge.

Large businesses can obtain strategic benefits like having successful information with efficient time and economical use of resources by expanding their potential for absorption (Chaudhary and Batra, 2018). As a result, when businesses increase and improve their prospective absorptive capacity, it positively affects their actual potential capacity and boosts corporate efficiency.

Realized absorptive capacity: Following that, realized absorptive capacity—defined as an organization's ability to transform and utilize knowledge—is the second type of absorptive capacity in this viewpoint. The ability to transform can be gauged by the quantity of fresh measures used. Realized absorptive capability is the capacity of an entity to transform and manipulate knowledge. The ability to transform can be measured by the number of innovative measures utilized (Schilke et al., 2018).

According to Flor et al (2018), relationships between organizations and commercial and governmental partners help organizations develop their competence. A number of studies have shown that several elements can have an impact on a company's performance. Researchers claim that an essential technique that supports SMEs in improving in a variety of areas, such as bootstrapping operations, competitiveness, and work processes, is driven by intellectual capital.

Intellectual Capital and Absorptive Capacity

To be able to assimilate new information, a firm must hire and select qualified human resources (Mubarik et al., 2018). According to Zahra and George (2002), absorptive ability can be improved by prior experience and connections to diverse types of knowledge. As employees acquire more knowledge and training, their capacity to absorb and apply new information grows (Minbaeva et al., 2014). Similar to this, leaders must take on a variety of responsibilities when gathering and managing fresh information (Shafique and Kalyar, 2018).

According to Cohen and Levinthal (1990), organisational structure is crucial for the acquisition and dissemination of knowledge. Storage and recordkeeping are directly linked to organisational capital in an organisation. According to Jansen et al (2005), organisational mechanisms and processes facilitate the acquisition and use of external knowledge. Furthermore, according to (Soo et al., 2017), a company's people resources directly affect its capacity to absorb and use outside information.

The ability of an organisation to apply knowledge, both prior and pertinent, is enhanced by having the proper amount of prior knowledge, which opens the door for innovation. Additionally, Soo et al (2017) assert that human capital is directly related to a company's ability to absorb and use outside knowledge. In particular, Lund Vinding's (2006) research focused on how human capital and absorptive capacity relate to innovative performance inside an organisation.

They asserted that their findings supported the idea that upgrading staff knowledge and abilities, particularly in high-tech companies, is essential. Shih et al (2010), in contrast, stated that human capital influences the other two intellectual components and plays a significant role in knowledge generation. According to Jansen et al (2005), social capital and realised absorptive ability are directly related. Employee interactions and networking inside firms enable knowledge exploitation, which improves performance over time.

Conceptual Framework and Hypothesis Development

This study's theoretical underpinnings are derived from Resource-Based, according to this perspective, a firm's competencies produce the continuing maintenance of competitive advantage (Barney et al., 2001). In order to focus a firm's innovation efforts, these resources and capabilities are therefore very important, which may partially reflect the resemblance between SMEs' and large companies' innovation strategies.

Similar to that, this study is using information about the significance and influence of intellectual capital on the performance of SMEs with an intermediary effect of absorptive capacity from (Zahra and George, 2002). Research sheds emphasis on the significance of small and medium-sized businesses in relation to IC's dimensions and absorptive ability. The links between the variables in the proposed model are shown in Figure 1:

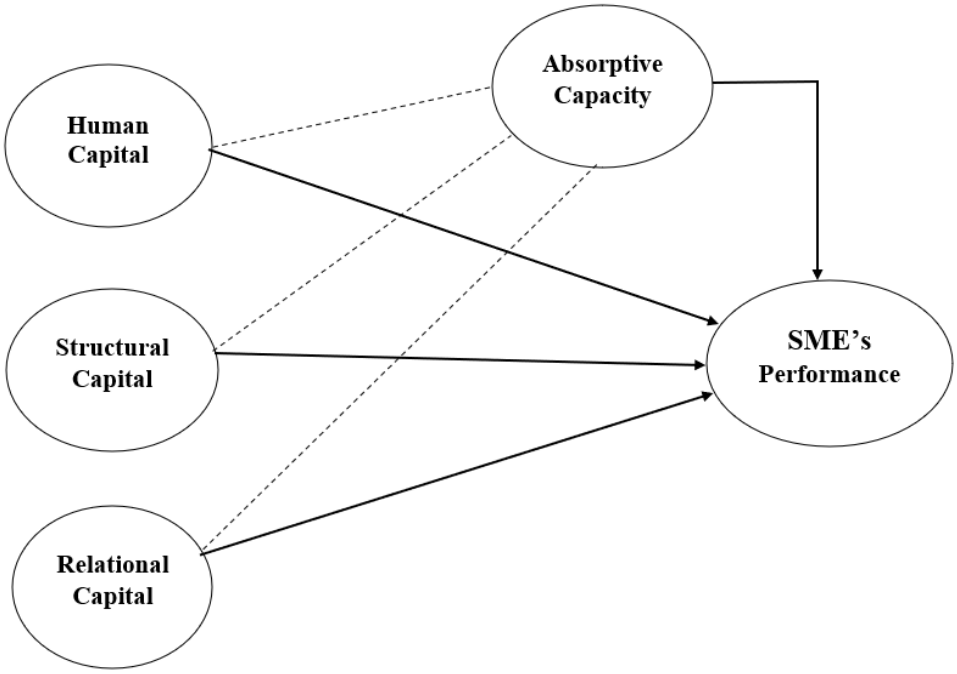

Figure 1. Conceptual Framework

H1. There is a positive relationship between intellectual capital and SMEs performance.

H1 a. High performance SMEs put more emphasis on human capital in SMEs

H1b. High performance SMEs put more emphasis on structural capital in SMEs

H1c. High performance SMEs put more emphasis on relational capital in SMEs

H2. Absorptive Capacity positively mediates the relationship between intellectual capital and SMEs performance.

H2a. Absorptive Capacity positively mediates the relationship between human capital and SMEs performance.

H2b. Absorptive Capacity positively mediates the relationship between structural capital and SMEs performance.

H2b. Absorptive Capacity positively mediates the relationship between relational capital and SMEs performance.

As was already noted, the resource-based view (RBV) (Wernerfelt, 1984) categorises four major functions as being crucial to the performance and success of a corporation, including VRIN. The intellectual capital of a business possesses essential components to become a competitive source (Mubarik et al., 2019).

The intellectual capital factor also improves the performance of SMEs. As a result, the research proposes that intellectual capital has both a direct and an indirect impact on SMEs' performance. Research concerns include whether absorptive capacity plays a mediating role in how measures of intellectual capital affect the performance of SMEs (Engelman et al., 2017).

Research Design and Methodology

In order to evaluate the function of absorptive capacity as a mediating element in the relationship between intellectual capital and SME performance, a number of hypotheses were developed. This study use the deductive technique to determine the causal relationships between the variables. A survey would be used to perform this research, enabling the statistical analysis of quantitative data from a group of participants (Saunders et al., 2009).

Measurement and sampling

Each variable will be assessed using Likert scales since the measurement scales are based on literary works. The three quantifiable types of intellectual capital are human, structural, and relational capital. These metrics were developed by (Bontis, 1998; Youndt and Snell, 2004; Isaac et al., 2010).

The metrics of intellectual capital used in this study were taken from (Isaac et al., 2010), which provides tools to assess the degree of intellectual capital in firms. The scale that was adjusted to measure absorptive capacity measures both the prospective and actual aspects of absorptive ability (Zahra and George, 2002). The prospective absorptive ability of an organisation will be used to assess how well it can identify, absorb, and use new knowledge from outside sources (Zahra and George, 2002).

In this study, the performance of SMEs is the primary third variable, also known as the dependent variable. Performance has been measured using a variety of financial and non-financial indicators, including profitability and employment growth (Solomon et al., 2013; Wood et al., 2015). For small and medium-sized businesses, achieving profitability and growth in volatile business environments has been a significant challenge (Heilmersson, 2014; Seo et al., 2015).

The ability of a company to efficiently and effectively change its internal resources in order to produce financial outcomes by increasing market share, profitability, sales, and cash flow as well as by encouraging employment growth by hiring more workers is what is meant by "firm performance" in this study. Market share, sales, cash flow, and profit margin will all

be used in this study to assess how well SMEs are doing financially (Solomon et al, 2013; Cillo et al., 2010). An rise or reduction in the number of workers for non-financial performance is referred to as "employability growth" (Wood et al., 2015).

SMEs from the South Punjab Sector in Pakistan make up the study's population. The SMEDA (Small and Medium Enterprises Development Authority) provides the list of SMEs (SMEDA, 2019). According to the Small Medium Development Authority, there are 2108 small and medium-sized businesses that are registered in Pakistan's South Punjab Area (SMEDA). The sampling technique used in this study, known as probability sampling or representative sampling, is frequently used in survey-based research designs. In this type of sampling, the probability of selection is equal for all units of the population, and each unit has an equal chance of being chosen. (2010) Sekaran and Bougie.

According to Krejcie and Morgan (1970), a sample size of 327 is needed to accurately represent the population. Owners, CEOs/Managing Directors, and Senior Managers of the randomly chosen SMEs are among the respondents. A total of 981 SMEs received the questionnaire, and 486 of them returned the completed forms. In Table I, the respondents' demographic breakdown is shown.

Table 1
Demographic distribution of the respondent SME

Designation	
CEO	13.3 %
Owner	26.3 %
Managing Director	16.6 %
Manager	29.4 %
Others	14.5 %
Age of SME in Years	
1 to 5 years	22.2 %
6 to 10 years	19.3 %
11 to 15 years	15.7 %
16 to 20 years	42.8 %
Total number of Employees	
Less than 10	31.4 %
11 - 50	34.9 %
51 - 100	22.4 %
101 - Above	11.3 %
Industry or Sector	
Manufacturing	29.6 %
Services	24.8 %
Logistics	03.4 %
Retailing	09.7 %
Education	14.8 %
Others	17.7 %
Note: n =486	

Analytical technique

In this study's analysis, PLS-SEM, or structural equation modelling using partial least squares, will be employed. SEM is a popular multivariate technique for analysing structural relationships (Hair et al., 2016). According to (Akter et al., 2017), it assures the estimation of a model with a small sample size and a large number of latent variables. This is a crucial reason for its use in this investigation. PLS was chosen over alternative methods because to the small

sample size and non-parametric nature of the data. Using PLS-SEM, calculations may be performed with a small sample size. Data with unequal dispersion can be analysed using this technique (Hair et al., 2016).

Data Analysis and Results

Validity and Reliability

Table II below shows the findings of the validity and reliability checks. The figures for composite reliability (CR) and Cronbach's alpha were examined in order to assess the internal consistency. Table II's findings show that the constructs are internally consistent because the values for CR and Cronbach's alpha are both higher than 0.70.

Likewise, factor-loading values were examined in order to assess indicator reliability. To determine indication reliability, factor loading should be more than 0.70, according to (Hair et al., 2016). In our scenario, all of the indicator readings are higher than 0.70. This demonstrates that every indication achieves its loading objectives within each construct.

Additionally, by examining the values for average variance retrieved from the constructs, the convergent validity of the constructs was validated (AVE). All constructs were convergently valid as evidenced by the AVE values for all of them being higher than the suggested threshold level of 0.50. As demonstrated in Table III, the Fornell-Larcker criteria were utilised to determine discriminant validity.

Table 2
Confirmatory Factory Analysis with Reliability and Validity Statistics

Construct	Items	Loading	AVE	CR	α
Human capital	HC1	0.844	0.635	0.924	0.904
	HC2	0.780			
	HC3	0.795			
	HC5	0.783			
	HC6	0.798			
	HC7	0.765			
	HC8	0.812			
Structural capital	SC1	0.839	0.640	0.898	0.859
	SC2	0.716			
	SC3	0.805			
	SC4	0.817			
	SC5	0.817			
Relational capital	RC2	0.856	0.646	0.901	0.862
	RC5	0.747			
	RC6	0.861			
	RC8	0.800			
	RC9	0.748			
Absorptive capacity	PAC1	0.804	0.585	0.952	0.945
	PAC6	0.760			
	PAC7	0.747			
	PAC8	0.785			
	RAC2	0.791			
	RAC3	0.795			
	RAC5	0.735			
	RAC6	0.763			
	RAC7	0.801			
	RAC8	0.742			
	RAC9	0.752			
	RAC10	0.753			
	RAC11	0.766			
	RAC12	0.709			
SME's performance	FP1	0.738	0.603	0.943	0.934
	FP2	0.779			
	FP3	0.727			
	FP5	0.795			
	FP6	0.762			
	FP7	0.778			
	NFP1	0.821			
	NFP3	0.790			
	NFP4	0.806			
	NFP5	0.780			
	NFP6	0.760			

The square root of the AVE must be greater than the correlations between the constructs in order to comply with these requirements. In this case, the square root values of the AVE were greater than the correlation between the inter-constructs, validating the discriminant validity.

Table 3
Fornell–Larcker criteria

	(1)	(2)	(3)	(4)	(5)
Human capital (1)	*0.79*				
Structural capital (2)	0.90	*0.80*			
Relational capital (3)	0.89	0.86	*0.80*		
Absorptive capacity (4)	0.90	0.92	0.91	*0.76*	
SME's Performance (5)	0.95	0.95	0.91	0.94	*0.77*

The construct of human capital has seven items whereas structural and relational capital have five items each. The construct of the absorptive capacity has 14 items and the construct of SME's performance has eleven items which includes six items of financial performance and five items for non-financial performance.

The structural model in this study was subjected to a systematic model analysis in order to offer a clear image of the outcomes and test the hypotheses effectively. Analyzing the direct links between the independent factors and the dependent variable is the first step in evaluating the inner model. In SmartPLS 3.0, the PLS-SEM algorithm was used to analyze the magnitude of the path coefficients, and the PLS-SEM bootstrapping technique was used to analyze the significance of the association.

The original number of cases was used as the number of cases, and 5,000 was used as bootstrapping samples (Hair et al., 2011; Hair, *et al.*, 2012; Hair Jr. *et al.*, 2013; Henseler *et al.*, 2009). All exogenous variables show positive coefficients with the endogenous variable, according to the PLS-SEM method and bootstrapping technique. According to table 4 bootstrapping results, the link between the independent and dependent variables is significant at p <0.05. The t-statistics, p-values, and conclusions on these findings are shown in Table 4.

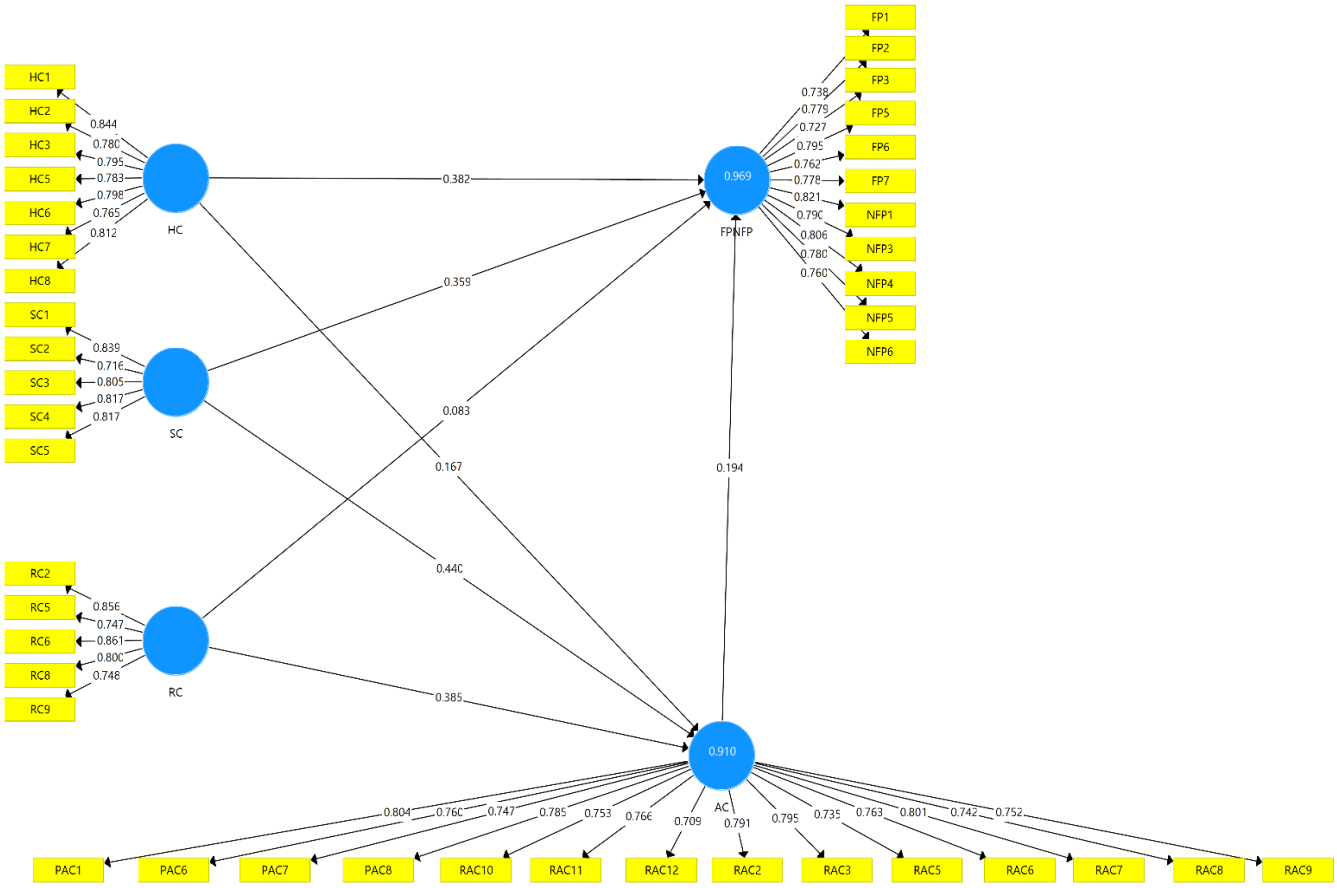

Figure 2: Estimated Model

Table 4
Results of Direct Relationship

Hypotheses	T Statistic	P Values	Decision
Human capital → SME's Performance	10.511	0.000*	Supported
Human capital → Absorptive Capacity	2.742	0.006*	Supported
Structural capital → SME's Performance	9.577	0.000*	Supported
Structural capital → Absorptive capacity	8.107	0.000*	Supported
Relational capital → SME's Performance	2.364	0.018*	Supported
Relational capital → Absorptive capacity	5.653	0.000*	Supported
Absorptive capacity → Performance	5.517	0.000*	Supported

Note: *Significant at 0.05, respectively

The result indicates that the direct relationship between independent variables and dependent variable is positively significant at p value 0.05 and t value is greater than 0.196. They showed that human capital (t=10.511, p<0.005), structural capital (t=9.577, p<0.005) and relational capital (t=2.364, p<0.005) all had a positive and significant influence on SMEs performance. Moreover, all the IVs also had a positive significant effect on Absorptive capacity. Hence all the direct relationships are significant and supported the hypothesis.

The indirect impact of the independent variable on the dependent variable through an intermediary variable is evaluated using mediation analysis. However, the bootstrapping technique, which creates an empirical representation of the distribution of the sample of the indirect impact, is the most current method for mediation analysis (Hayes, 2009; Rucker et al., 2011).

The path coefficients between the independent variables and the mediator variable are positive, as can be shown in Figure 4.3 below. Additionally, there is a positive route coefficient between the mediator and the dependent variable. The bootstrapping result found in table 5 shows all the relationship are significant including the variable with p<.05.

Table 5
Results of Indirect Relationship

Hypotheses	Value	Decision
Human capital → Absorptive capacity → SME Performance	0.010*	Supported
Structural capital → Absorptive capacity → SME Performance	0.000*	Supported
Relational capital → Absorptive capacity → SME Performance	0.000*	Supported

Note: *Significant at 0.05, respectively

After including the mediator construct, It is therefore clear from Table 5 that The role of absorptive capacity appears to be significantly mediate in the relationship of human capital to SMEs performance (t=2.590; p<.05); structural capital to SMEs performance (t=4.753; p<.05); and relational capital to SMEs performance (t=3.656; p<.05).

Discussion

Research on intellectual capital, SMEs' performance, and related topics is substantial. This study looked at the dynamic impact of absorptive capacity in the performance factors for

IC and SMEs. The results provide credence to the claim that the elements of intellectual capital play a significant role in influencing absorptive ability. This indicates that knowledge acquisition, absorption, transformation, and exploitation are made easier by a competent staff, effective organizational processes, and positive stakeholder interactions.

This study demonstrates that, in line with earlier research findings from Soo et al., all aspects of intellectual capital have a favorable impact on SMEs' performance and absorptive capacity 2017. However, it is clear from earlier research that the capability and aptitude of human resources have a major impact on business performance. However, businesses are reluctant to make investments in their employees. This may be for a variety of reasons, some of which have been long recognized by economists, such as the fact that people cannot be fully owned by their organizations.

Therefore, it may be inferred that employees' ability to absorb and use knowledge connected to stakeholders has a favorable impact on corporate performance. The results also showed that realized absorptive capacity, which is significant at the 0.05 level, acts as a mediator between the elements of IC and company performance. One could claim that competent staff members within a polished organizational structure and its procedures can apply fresh information to boost corporate performance.

According to Krishna et al (2012), information and communication technology plays a critical part in knowledge management procedures that assist firms in achieving their objectives.

Conclusion

This study's goal was to investigate how realized and potential absorptive capacity interact with IC to affect performance. Data from 486 SMEs was used to examine the study hypotheses. The relationships that were hypothesized were estimated using PLS-SEM. All of the characteristics of intellectual capital had favorable and significant effects on the performance of the SME, according to the study. Further research revealed that the links between human capital, structural capital, and relational capital and performance are strongly and favorably mediated by absorptive capacity.

In a nutshell, our results clearly show a mediating role for absorptive capacity in the relationship between IC components and SMEs performance. Nevertheless, the magnitude of the impact may differ according to the individual dimensions of the IC. The findings of this study enhance the understanding of IC in the context of the developing country of Pakistan. The majority of the literature on IC, ambidexterity and performance paradox focuses on developed countries and may have less applicability to developing economies.

Additionally, Pakistan also offers a number of aspects common with other developing countries: weak enforcement of law, underdeveloped institutions and rapid change. This study offers useful managerial implications for firms in similar settings by guiding organizations to develop the right tools, systems, and cultures to exploit the outside knowledge that leads to better business performance.

Theoretical Contributions

This study provides empirical evidence for the theoretical relationships hypothesized in the research framework. Specifically, it highlights the mediating role of absorptive capacity on the relationship between HC, SC and RC and performance of SMEs in Pakistan. This study offers two main contributions towards research regarding strategic management and the field of intellectual capital in the context of SMEs.

The first contribution has to do with the direct effects of intellectual capital, which have been discussed in previous management research. Another contribution, this study has come up with is the indirect effects of intellectual capital through absorptive capacity as a mediator variable between intellectual capital and firm performance in a dynamic business environment.

Even though current and prior research acknowledges that resources of SMEs can be limited, SMEs can still achieve successful performance, (Nooteboom, 1994). The small size enables SMEs to move faster and adapt quickly to fast changing environments, (Crick and Spence, 2005). The flexible structure of SMEs does not slow down the application of new ideas (Herremans et al., 2011).

The main contribution of this study was that of examining the impact of intellectual capital on SMEs performance in a high intensity dynamic environment. Hence, this research contributes to the existing literature on intellectual capital, precisely concerning intellectual capital and firm performance literature, by providing evidence regarding the effect of intellectual capital on enhancing market share, sales, profitability, cash flow, and employability.

Along with the main contribution, this study contributes to the field strategic management by utilizing a context having clear metrics for intellectual capital and absorptive capacity, two dominant concepts that can be difficult to capture empirically, (Bendickson and Chandler, 2017). This offers the ability to demonstrate how SMEs performance has been enhanced through the integration between intellectual capital and absorptive capacity, also how firms use external knowledge and ultimately enhance financial performance.

Limitations and future research directions

Future research may focus on in-depth investigation of absorptive capacity and look into more specialized elements of both realized and potential absorptive ability. Since absorptive ability is taken into account at the company, the group and organization have typically been the unit of analysis in previous studies. Future research may take this down to the individual level and incorporate attitude and personality factors.

This study had some drawbacks, namely how cross-sectional it was. Future studies could look at these concepts throughout time to assess how intangible assets function in connection to the capacity for knowledge acquisition, absorption, transformation, and exploitation.

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