Measuring the entrepreneurial performance of textile-based small-medium enterprises: a mediation moderation model

Alia Malik* and Bakhtiar Ali

Bahria University,
Shangrilla Rd, E-8/1 E 8/1 E-8, Islamabad,
Islamabad Capital Territory, Pakistan
Email: aliabuisb@hotmail.com
Email: bakhtiar.buic@bahria.edu.pk
*Corresponding author

Shakir Hafeez

COMSATS University Islamabad,
Abbottabad Campus,
University Road, Tobe Camp,
Postal Code 22060, Abbottabad, Pakistan
Email: shakir@cuiatd.edu.pk

Abstract: This paper aims to examine the effects of knowledge management practices and the dynamic capabilities of entrepreneurs on the entrepreneurial performance of small-medium enterprises (SMEs). This study also proposes a holistic approach to achieve entrepreneurial performance through dynamic capabilities. The sample data of 486 respondents from textile-based small-medium enterprises were collected through a self-administered survey and data was analysed by applying structural equation modelling. The empirical results show that knowledge management practices, such as knowledge sharing behaviour, innovative capacity, and absorptive capacity, are significantly correlated with the development of entrepreneurs' dynamic capability, thus improving their performance. At the same time, this study also confirms that opportunity recognition has a positive effect on the relationship of dynamic capability and entrepreneurial performance of SMEs. The findings of this study guide business practitioners and policymakers in strategy formulation envisioned to encourage entrepreneurs who contribute to the country's sustainable economic growth. In addition, this study contributes to the existing literature of knowledge management practices with knowledge sharing behaviour, innovative capacity, absorptive capacity, and more intended to involve the role of opportunity recognition. This study also offers practical implications for managers and policy makers to enhance entrepreneurial performance of firms.

Keywords: entrepreneurial performance; dynamic capabilities; opportunity recognition; knowledge sharing behaviour; innovative capacity; absorptive capacity.

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Biographical notes: Alia Malik is currently enrolled as a PhD Scholar at Bahria University, Islamabad Campus. She has a keen interest in research areas like intrapreneurship, entrepreneurship and SMEs.

Bakhtiar Ali is currently working as a Professor at the Department of Management Studies, Bahria Business School, Bahria University, Islamabad, Pakistan. He teaches mainly courses on research methodology, knowledge management and HRM. Apart from teaching, he is an avid researcher, especially in the area of knowledge management and organisational learning. He has a good number of publications in well reputed international journals.

Shakir Hafeez is currently serving as an Assistant Professor at COMSATS University, Islamabad, Abbottabad Campus, Pakistan. He has vast research experience and has already published many research papers in good impact factor journals. He is currently working on couple of projects as well as guiding the post graduate students to conduct useful high-level research. His core research areas are leadership, marketing management, branding, advertising, marketing communication, international marketing, and services marketing.

1 Introduction

The literature suggests that entrepreneurship is a critical means of poverty alleviation (Wu et al., 2020). Similarly, small-medium enterprises (SMEs) are imperative for the economic development of developing countries (Acs et al., 2018). Thus, the entrepreneurial performance (EP) of SMEs can make a substantial contribution to economic development. Moreover, organisational development requires several entrepreneurial capabilities to enhance EP (Ambrosini et al., 2009; De Massis et al., 2018). The EP does not only depend upon willingness and commitment to become an entrepreneur; however, their knowledge and capabilities are also important (De Clercq et al., 2013). The entrepreneurs get many opportunities to utilise available resources for higher profitability and to ensure sustainable organisational performance (Shane et al., 2003). Several studies have proven the potential role of SMEs in enhancing economic growth, avenues for wealth creation, and employment, particularly in emerging countries (Falahat et al., 2018; Saarani and Shahadan, 2013; Veronica et al., 2019; Khan et al., 2019a). Therefore, it is necessary to explore the integrated relationship of several entrepreneurial success factors, particularly in the context of developing countries such as Pakistan. The Pakistani SMEs contribute more than 30% to the gross domestic product (GDP) of the country. Furthermore, the SME sector of Pakistan is contributing 25% in the country export, 35% in manufacturing, 53% in hotels and restaurants, wholesalers, and retail traders. 20% of SMEs are active in the industrial sector, and 22% are active in the service sector (Ministry of Planning, Development & Special Initiatives, 2019).

EP is directly associated with knowledge management practices, both EP and knowledge management play a positive role in ensuring business growth (Durst and Edvardsson, 2012). Hasan and Almubarak (2016) suggested that improvement in EP

supports and sustains the market value of an organisation. However, there are several fundamentals, which are involved in EP, such as knowledge sharing behaviour (KSB), innovative capacity (IC), and absorptive capacity (AC) (Gebauer et al., 2012), which are directly related to the success of an entrepreneur. The behaviour of exchanging skills and experience within an organisation is known as KSB (Al-husseini and Elbeltagi, 2018; Li et al., 2019). The sharing of knowledge in an organisation depends on the organisational atmosphere and entrepreneurs' behaviour, which is beneficial for performance (Camps et al., 2016; Chang and Lee, 2007). When KSB is restricted, the gaps ascend, which creates hurdles in performances (Bock et al., 2005; Shao et al., 2012).

Moreover, the prior studies illustrated that innovation and IC are also related to EP (Hernández-Perlines et al., 2019; Hernández and Nieto, 2016). The linkage of inner capacity with abilities that comes with something new is known as IC – the IC is directly correlated to the nature of EP (Kato et al., 2015). The IC of an individual comes in the form of entrepreneurship. Furthermore, strategic planning, absorptive, and innovative capacities of the entrepreneurs enhance EP (Masa'deh et al., 2018; Szerb et al., 2019). Besides, the AC categorises abilities, assimilation, and utilisation of knowledge for SMEs' performance. Entrepreneurs with AC can absorb knowledge from competitors and apply knowledge within the organisation to enhance performance (Lane et al., 2001; Shafique and Kalyar, 2018; Rehman et al., 2020; Qalati et al., 2021). The researchers indicated that AC is the combination of three necessary abilities; peripheral knowledge, understanding of knowledge, and integrate innovative knowledge for EP (Jiang et al., 2018; Pratono et al., 2019; Volberda et al., 2010; Yang and Tsai, 2019). These practices may help to manage the knowledge that can be used for achieving organisational goals. Therefore, it is important to measure the impact of such knowledge management practices on the EP of SMEs.

Subsequently, the studies proved that the dynamic capability (DC) of an entrepreneur has a vital role in increasing performance; which can be further availed by using organisational resources to create, design, and modify organisation according to market condition, and challenges (Giniuniene and Jurksiene, 2015; Protogerou et al., 2012). The DC replicates valuable resources such as innovative and absorptive capacities for competitive advantages and performances (Teece, 2016). Moreover, the study of Pai and Chang (2013) proved that an increase in the level of AC and IC would lead to the development of DC and performance. It has also been proven that the KSB of an entrepreneur also significantly contributes to improving dynamic capacities (Pai and Chang, 2013; Obrenovic et al., 2020).

Although, the prior researchers have discussed the relationship between knowledge management practices and EP, however, the underlying mechanisms of this relationship need further empirical evidence. Moreover, the stated relationship is not yet studied in textile-based SMEs, which limits the scope of prior research. Because there are several SMEs related to textile activities such as weaving, ginning, knitting, power looms and manual dying units, significantly contributing to the overall textile sector and economic development, mainly in developing countries. Therefore, the exploration of mediating mechanisms between knowledge management practices and EP, and limited generalisability of prior research motivate the researchers to evaluate the EP of this sector through a holistic research model grounded on resource-based theory.

Furthermore, this study also focuses on the unmapped boundary conditions of this relationship. In doing so, this study proposed an integrated research framework ensuring the moderating role of entrepreneurial opportunity recognition (OR) to strengthen the

relationship of DC and EP. The concept of OR is to observe position, demand, and market value for a new product, and it affects deeply on EP (Clark and Ramachandran, 2019; Hanohov and Baldacchino, 2018). Ardichvili et al. (2003) claimed that "an opportunity may be the chance to meet a market need through a creative combination of resources to deliver superior value". The researcher argues that opportunity means recognising market need with the available capabilities of an organisation, which improves performance. Entrepreneurs conclude opportunity sources to discover, evaluate, and exploitation of opportunities (Eckhardt and Shane, 2003; Kloepfer and Castrogiovanni, 2018), which enhance the EP as well as the organisational performance by increasing the capabilities of an entrepreneur (Aminu and Mahmood, 2015). Conclusively, this paper aims to study the mediating mechanisms between the relationship of knowledge management practices and EP, and the moderating effect of OR on the mediated relationship. The rest of the paper is divided into several sections covering theoretical justification, hypotheses development, methodology, results, discussion, conclusion, and implications of the study.

2 Theoretical framework and development of hypotheses

The theoretical framework of this research is based on the resource-based theory, presented by Grant (1991), which emphasis on difficulties to imitate features of the company and entrepreneurs for higher performance with viable advantages, which concluded the direct link of AC and IC with EP. The resource-based theory is used to analyse, deduce internal possessions of the companies, and highlight resources, capabilities, and capacities in a framing strategy to obtain performance stability (Alvarez and Busenitz, 2001; Mata et al., 2006; Wiklund and Shepherd, 2003; Ardichvili et al., 2003; Schmitt et al., 2018). The prevailing idea of entrepreneurship is defined as the sole performance of an individual (Shane and Venkataraman, 2000), although this description does not consider the variants of quality opportunities, which results in the negligence of some opportunities by the researchers. Also, Shane and Venkataraman (2000) mentioned that entrepreneurial performance should be based on two dimensions, profitable entrepreneurial opportunities, and entrepreneurial individual's capabilities. Moreover, Stevenson et al. (1989) argued that successful entrepreneurs tend to identify the right opportunities for new ventures and so enhance entrepreneurial performance.

The knowledge management practices cover knowledge sharing behaviour, innovative capacity, and absorptive capacity. The knowledge-sharing behaviour increases the tendency and understanding of organisational domestic and economic challenges, which an entrepreneur faces in entrepreneurial performance (Ali et al., 2019). If the entrepreneur is not familiar with knowledge sharing behaviour, with time, the gained information becomes old or useless (Katz, 1964; Ohemeng and Kamga, 2019), further, the consistent presence of this behaviour negatively affects entrepreneurial performance (Ruggles, 1998). Similarly, if practices of knowledge sharing are not usual in an organisation then entrepreneurial performance is negatively affected (Bock and Kim, 2002; Davenport and Prusak, 1998; Kankanhalli et al., 2005).

Various researchers argue that the innovative capacity of an entrepreneur in an organisation enhances entrepreneurial performance through the innovation process, the innovation by the entrepreneur, and innovational knowledge of the market

(Martínez-Costa et al., 2019; Roberts and Amit, 2003). In Marques and Ferreira (2009) and Roberts and Amit (2003), a new distributing channels build a strong relationship between entrepreneurial performance and innovative capacity (Bougrain and Haudeville, 2002; Shin et al., 2018). The association and capability of an entrepreneur with an innovative capacity generate novelty for organisational and entrepreneurial performance in short and long-term financial benefits (Ashraf et al., 2017; Floyd and Wooldridge, 1999; Liang et al., 2017).

Absorptive capacity is a multidimensional concept, so it is difficult to define by a single discipline. Absorptive capacity, along with economic orientation, promotes business and also helps in finding a new strategy for entrepreneurial performance (Hernández and Nieto, 2016). The greater extent of economic orientation increases the absorptive capacity of the entrepreneur, which concludes higher growth in performances (Bronzo et al., 2013; Scuotto et al., 2017). The absorptive capacity allows firms to evaluate internal knowledge of the organisation, external knowledge of the market, and lack of organisational competencies, which affects entrepreneurial performance (Sciascia et al., 2014).

Moreover, it is argued that organisational performance and entrepreneurial performance move parallel, and the dynamic capability of an entrepreneur plays a crucial role in their performance (Pezeshkan et al., 2016). The operational capability assists in operating, processing, and surviving the business; dynamic entrepreneurial capability, however, helps in accepting and applying functional skills for competitive advantages, entrepreneurial performance, and revenue generation (Fainshmidt et al., 2016). However, it is concluded in the literature that the usage of dynamic capability creates riddles to distinguish the latent demand in the market for the new product. The researchers stated that successful entrepreneurs always prefer opportunities without considering what resources they have in their control in the organisation (Stevenson and Jarillo, 2007). Ardichvili et al. (2003) argued that "an inventive combination of resources leads an opportunity to meet the market demand, and with better organizational performance, achieves higher value" (p.108).

2.1 Knowledge sharing behaviour, dynamic capability, and entrepreneurial performance

The interaction in social culture, sharing, and exchanging of knowledge with technical skills in an organisation is known as KSB (Srivastava et al., 2006). KSB is always voluntary; it cannot be forced to share and explore any information in the organisation or with the entrepreneur (Käser and Miles, 2002). Bartol and Srivastava (2002) described KSB as the action of spreading significant information within the organisation, which becomes a valuable asset for performance (Tajeddini and Mueller, 2019). The KSB increases the tendency and understanding of organisational domestic and economic challenges, which an entrepreneur faces in performance (Ali et al., 2019). The employee starts the practice of sharing knowledge in an organisation with the entrepreneur, and believes in intrinsic benefits; monetary benefits, self-satisfaction, promotion, social recognition in the organisation from the entrepreneur (Bock and Kim, 2002; Kankanhalli et al., 2005), which cause a negative influence on EP (Tajeddini and Trueman, 2016). The external information shared in an organisation, through socialism or initialisation, becomes significant knowledge in performance (Becerra-Fernandez and Sabherwal, 2001; Ngah and Jusoff, 2009).

Moreover, it is argued that organisational and EP move parallel, and the DC of the entrepreneur plays a key role in both performances (Pezeshkan et al., 2016). Entrepreneurs' DC (Riana et al., 2019; Sabahi and Parast, 2020), consider KSB as a major asset in the organisation, as well as a major source for the enhancement of dynamic entrepreneurial capabilities in achieving maximum competitive advantage in EP (Mostafiz et al., 2019; Mudalige et al., 2019). The planning and DC of an entrepreneur enhance and assists in directing, acting, and decision-making for competitive organisational advantages and EP (Salvato and Vassolo, 2018).

H1a Knowledge-sharing behaviours positively affect the dynamic capability.

H1b Knowledge-sharing behaviours positively affect entrepreneurial performance.

H1c Dynamic capability mediates the relationship between knowledge sharing behaviours and entrepreneurial performance.

2.2 Innovative capacity, dynamic capability, and entrepreneurial performance

Villa (1990) introduced the concept of IC, which is used to examine the level of innovation and invention, including potential ideas for economic activities; meanwhile, the researcher also argued that 'borrowing' brings innovation rather than 'invention' (Hernández-Perlines et al., 2019). The combination of capabilities, power, and abilities of an entrepreneur, which create something different, is known as innovation (Okpara, 2007). The IC is directly associated with the nature of entrepreneurs, and it comes in the form of entrepreneurship (Friedman and Carmeli, 2018; Naranjo-Valencia et al., 2016). Several studies also focused that the IC of an entrepreneur plays a vital role in enhancing EP (Acs and Audretsch, 2010; Audretsch, 2001; Sunny and Shu, 2019). When entrepreneurs face certain uncertainties, IC assists in gaining, creating, and utilising inner qualities, enhance decision making power, leadership skills, help as a financial adviser in an organisation, vigilant for the organisation, awareness, and allocation of better opportunities with better substitutes, and become more beneficial for EP (Friedman and Carmeli, 2018; Lechner and Gudmundsson, 2014; McMullen and Shepherd, 2006).

The resource-based theory also considers the IC for competitive advantages, DC, and also contributes to the sustainability of business and EP (Amui et al., 2017; Teece, 2007; Wiklund and Shepherd, 2003). Moreover, the researchers argued that the absorption of external knowledge leads the entrepreneur to innovation and EP (Flatten et al., 2011; Kostopoulos et al., 2011; Lichtenthaler, 2016; Yang and Tsai, 2019). Furthermore, Saunila (2017) suggested that IC enhances the DC of an entrepreneur in developing a new product for the market and EP (Ferreira et al., 2020). Therefore, it can be concluded that the DC of an entrepreneur always creates a value chain with IC and performance.

H2a Innovative capacity positively affects the dynamic capability.

H2b Innovative capacity positively affects entrepreneurial performance.

H2c Dynamic capability mediates the relationship between innovative capacity and entrepreneurial performance.

2.3 Absorptive capacity, dynamic capability, and entrepreneurial performance

AC is defined as the ability to recognise and assimilate new and external knowledge, which is applied for the commercial end (Flatten et al., 2011). The AC of an entrepreneur is to absorb innovation for change and better performance (Kostopoulos et al., 2011). Entrepreneurial AC is to focus and absorb cognitive features in learning, evaluating, and formatting outside knowledge on a large scale for EP (Sciascia et al., 2014). Here, the researchers considered the AC as a potential mechanism for EP. Sulistyo (2016) stated that AC affects assimilating and acquisition, which brings a change in EP (Hernandez-Perlines, 2018). The role of AC supports strategic planning, creating, absorbing, building, and utilising available opportunities (Augier and Teece, 2009). Absorptive capacities potential realised, when the level of realised AC rises, the entrepreneur uses potential AC for EP (Albort-Morant et al., 2018; Lichtenthaler, 2016; Yeoh, 2009; Zahra and George, 2002).

The DC of entrepreneurs is to adapt, abandons, reconfigure, and increase the valuable resources, which helps in creating and developing new values for EP (Teece, 2016). The dynamic capabilities are of three types: possession, deployment and upgrading capabilities, which enhance through wisdom, creating, adapting, integrating, and developing of resources to obtain maximum competitive advantages (Sirmon et al., 2007). The AC contributes to understanding and utilisation of valuable information with dynamic capabilities, to generate maximum marketing strategies for long-term financial profit and EP (Fang and Zou, 2009; Song et al., 2008). The prior studies explained that AC enhances the process of evaluation and adaption in EP (Todorova and Durisin, 2007; Volberda et al., 2010; Zahra and George, 2002). The combination of AC and DC has a significant influence on EP in an organisation (Lane et al., 2001). The DC of an entrepreneur emphasises the mechanism of IC in developing (Peng and Lin, 2021), creating, and managing, which helps the entrepreneurs in performance (Rodríguez-Serrano and Martín-Armario, 2019). So, the AC and DC are necessary to gain ideas and implications for EP.

H3a Absorptive capacity positively affects the dynamic capability.

H3b Absorptive capacity positively affects entrepreneurial performance.

H3c Dynamic capability mediates the relationship between absorptive capacity and entrepreneurial performance.

2.4 Dynamic capability and entrepreneurial performance

Many economists denied the role of entrepreneurs as primary, while in real-world entrepreneurs are considered as the primary decision makers (Ambrosini and Bowman, 2009; Ashraf et al., 2019), and rulers of the economy (Ferreira et al., 2020). Entrepreneurs are recognised as the backbone for organisational and economic growth. The entrepreneurial capabilities implement for a sustainable business model, organisational change, and EP (Acs et al., 2018). According to resource-based theory, DC plays a vital role in EP (Teece, 2016). The DC is to peruse and observe opportunities at the right time and the right place to acquire the market with business strategies, available

resources, capacities, and capabilities for EP (Alvarez and Busenitz, 2001). The prior studies suggested that the DC of entrepreneurs are the major source for a rapid and better change in organisational culture and EP (Aminu and Mahmood, 2015; Bin Hashim et al., 2018; Flatten et al., 2011; Jiménez-Barrionuevo et al., 2019; Zahra et al., 2006).

The DC of entrepreneurs restructures and makes changes in the organisational environment, which is directly associated with EP (Ambrosini et al., 2009). The DC of entrepreneurs is the most reliable and sound source for taking competitive advantages and also plays a mediating role between entrepreneurial resources and EP (Aminu and Mahmood, 2015). As per the resource-based theory (Dubey et al., 2020), the DC of an entrepreneur contributed to accept, maintain, develop, and accomplish new challenges with opportunities in the market and EP (Augier and Teece, 2009). DC is to understand, investigate and analyse the entrepreneurial competencies level and enhances the resource capacity of an entrepreneur for EP in an organisation (Bin Hashim et al., 2018; Wu, 2007; Zahra et al., 2006).

H4 Dynamic capability positively affects entrepreneurial performance.

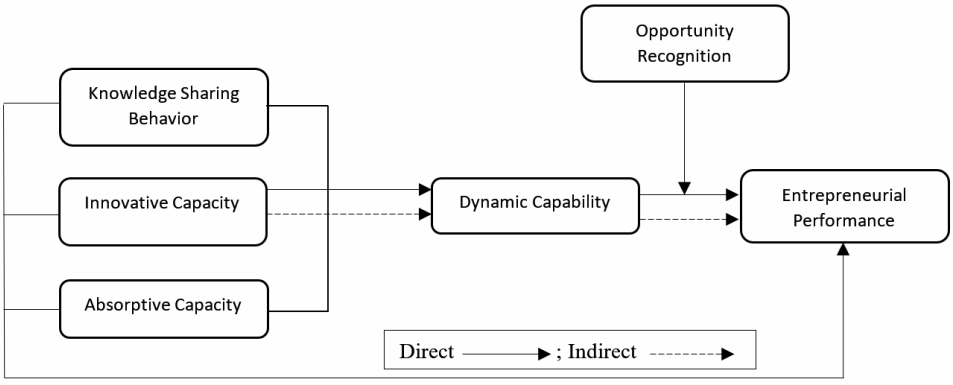
2.5 Opportunity recognition, dynamic capability, and entrepreneurial performance

The concept of opportunity recognition (OR) is tightly related to entrepreneurship. Entrepreneurial opportunities are recognised through conditions that new goods, services, raw materials, and arranging procedures could be presented and commercialised at a higher value than the production cost (Asante and Affum-Osei, 2019; Hasan and Almubarak, 2016). Even though the identification of the entrepreneurial opportunity is a subjective issue, the opportunity itself is an objective phenomenon that is recognised by a particular individual at a specific time (Shane et al., 2003). In developing countries, there are formal and informal entrepreneurial opportunities. Rapid evolution countries usually practice remarkable transfer in the local market, generating opportunities for new participants (Hasan and Almubarak, 2016).

In prior researches, different researchers argued that there is a difference in entrepreneurs while perceiving OR (Asante and Affum-Osei, 2019; Eckhardt and Shane, 2003; Gaglio and Katz, 2001). The theory of OR also proposes that the cognition of different entrepreneurs results in differences in the entrepreneurial process and performance (Hmieleski and Baron, 2008; George et al., 2016). Meanwhile, the study of Hasan and Almubarak (2016) also discussed the mediating role of OR in association with entrepreneurial performance and found it as a key factor in enhancing the EP. Furthermore, a large number of scholars suggested that the self-made strategies of an entrepreneur, play a significant role in the process of OR (Bryant, 2007; Hasan and Almubarak, 2016). However, due to less focus by researchers on this key factor, we incorporate OR in this study to measure its impact on the relationship between DC and EP (Hernández-Linares et al., 2021).

H5 Opportunity recognition moderates the relationship between dynamic capability and entrepreneurial performance in such a way that a higher level of opportunity recognition will strengthen the relationship.

Figure 1 Conceptual framework



3 Research

3.1 Respondents

Table 1 describes the sample statistic frequency distribution of targeted respondents. The sample statistics include region, age, qualification, the business sector of an entrepreneur, and business tenure. The results show that 24.48% of the sample belongs to Faisalabad, and 23.66% belong to Lahore, which is mostly big-cities of Punjab province, Pakistan, and also considered as the industrial hub for textile. The rest of the respondents belong to other cities. The questionnaires were sent through email and social media platforms. Two soft reminders were sent with a gap of seven days to allow respondents to answer the questionnaire. The questions regarded questionnaire from the respondents were quickly answered (e.g., via email or social media) to assist the correct data collection. Most of the respondents fall in the age group of 33–39 years old (31.48%). While 16.25% of the respondents belong to the age group 26–32 and only 9.87% are most young entrepreneurs below the age of 25 years. 17.9% of respondents are in the age group of 40–46, and the rest of the 24.48% is senior entrepreneurs above the age of 47 years. Most of the respondents are highly qualified and only 25.92% have attained the middle school certificate. During the data collection phase, we analysed that most of the senior entrepreneur does not get their higher education and they are running a successful enterprise. It may happen because of their leadership abilities, financial support, or many other reasons. The textile industry in Pakistan has consisted of several sub-units called knitting, weaving, seizing, power looms, and manual drying units. Therefore, we considered all these units for data collection and the percentage is given in Table 1. Furthermore, a question related to their experience was also described in the same table. The data were collected from SMEs working in different cities of Pakistan, and the target respondents were only entrepreneurs. We received a total of 500 responses, out of which 486 responses were found properly filled, and the rest of the responses were excluded during primary analysis. Only male respondents participated in the survey because the trend of women-entrepreneurship in Pakistan is now growing but not fully developed (Khan et al., 2019b).

The current study used partial least square (PLS) structured equation modelling to assess the proposed model. This study used path modelling die to its vast implication in management sciences and related researches. This study's aim is to predict the dependent construct, thus, PLS was considered a viable method for this study (Hair et al., 2012). Literature suggests PLS as the 'most fully developed and general system' (McDonald, 1996), concerning the 'variance-based structure equation modelling' approach. Thus, the data were further assessed using Smart-PLS to study the proposed model (Min et al., 2020; Tian et al., 2021).

Table 1 The sample statistic of respondents

Particulars	*Description*	*Frequency*	*Percentage*
Region	Faisalabad	119	24.48%
	Lahore	115	23.66%
	Sheikhupura	79	16.25%
	Jhang	93	19.13%
	Sialkot	31	6.37%
	Multan	49	10.08%
Age (in year)	18–25	48	9.87%
	26–32	79	16.25%
	33–39	153	31.48%
	40–46	87	17.90%
	47 above	119	24.48%
Educational qualification	Middle school	126	25.92%
	High school	159	32.71%
	Graduation level	117	24.07%
	University level	67	13.78%
	Professional education	17	3.49%
Business sector	Knitting	147	30.25%
	Weaving	84	17.28%
	Seizing	79	16.26%
	Power looms	93	19.14%
	Manual drying units	83	17.08%
Business tenure	1–5 years	74	15.22%
	6–10 years	127	26.13%
	11–15 years	126	25.92%
	16–20 years	87	17.90%
	21–25 years	34	6.99%
	25 years above	38	7.81%

3.2 Measurements

The conducted study includes existing scales, which are identified through different kinds of literature and research. The constructs were quantified from 1 to 5-point Likert scale (1 = 'strongly disagree' to 5 = 'strongly agree'), for statistical incorporation. The scale was adapted to measure the KSB, with five items, and was developed by Davenport and Prusak (1998). The scale developed by Hurley and Hult (1998) for IC was adopted. The scale for AC was adopted from Liu (2018). The scale for DC was adopted from Wang et al. (2007). The measurement items for OR were taken from the study of Schindehutte and Morris (2001). In measuring the EP, a scale developed by Colbert et al. (2008) was adopted with eleven items.

4 Results

To test the hypotheses, we applied PLS-SEM in the current study by using Smart-PLS. Smart-PLS is considered a powerful tool used to test the mediation-moderation models and also work with multivariate and normal distributions at once (Liebana-Cabanillas and Alonso-Dos-Santos, 2017; Silaparasetti et al., 2017). Also, helpful for measuring the validity and reliability of the study (Tian et al., 2020). Figure 2 showed the results of path analysis, which are also described in Tables 4 and 5. The value of the adjusted R-square of the dependent variable is 0.402, showing that these selected variables explain a total of 40% variation. Meanwhile, this study considered DC as a mediator showing a 26.5% variation. The consistent bootstrapping test has been applied for confirming the significance of the structural model (Rodríguez-Entrena et al., 2018).

Figure 2 Results of path analysis (see online version for colours)

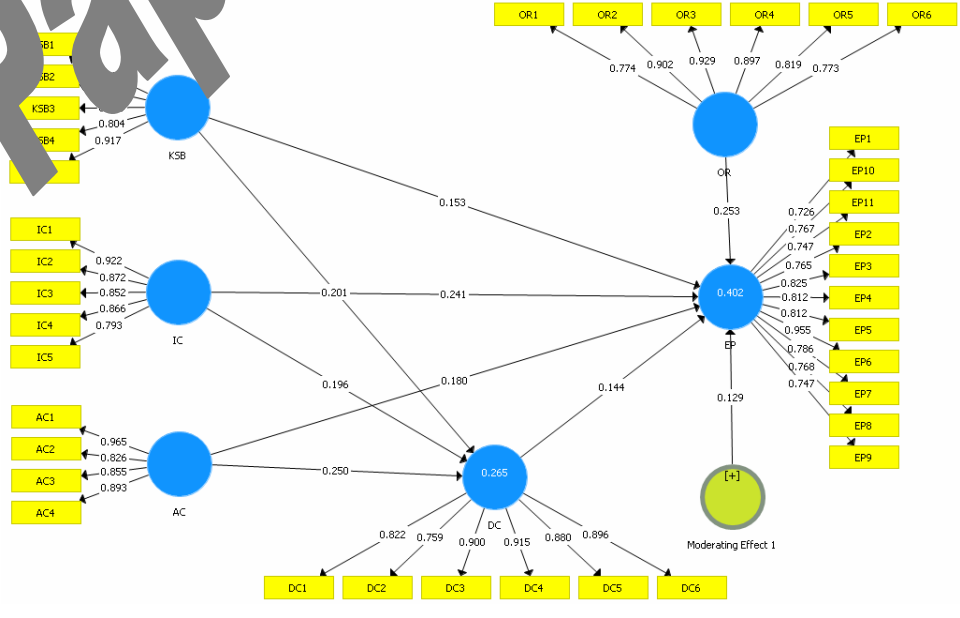


Table 2 showed the results of convergent validity and reliability analysis of the data collected from the respondents. Therefore, we applied the confirmatory factor analysis (CFA), composite reliability (CR) which should be above 0.70 (Hair et al., 2012), and average variance extracted (AVE) using Smart-PLS3 to confirm the convergent validity, which should be higher than 0.50 (Hair et al., 2012). We also check the values of Cronbach's alpha to test the reliability, which should be at least 0.70 (Iqbal et al., 2021). Table 2 describes that the overall values of Cronbach's alpha are ranging from 0.936 to 0.953, which is higher than the threshold value. Also, the values of CR and AVE are above the suggested values confirming the reliability and convergent validity of the study (Hair et al., 2011, 2014).

Table 2 Convergent validity and reliability

Constructs		*Factor loading*	*Alpha*	*CR*	*AVE*
Knowledge sharing behaviour			0.953	0.953	0.804
I planned to share knowledge with my colleague	KSB1	0.942			
I try to share knowledge with my colleague	KSB2	0.914			
I make an effort to share knowledge with my colleague	KSB3	0.899			
I make an effort to share knowledge with my colleague	KSB4	0.804			
I intend to share knowledge with my colleague, if they ask	KSB5	0.917			
Innovative capacity			0.936	0.935	0.743
Technical innovation, based on research results, is readily accepted	IC1	0.922			
Management actively seeks innovative ideas	IC2	0.872			
Innovation is readily accepted in program/project management	IC3	0.852			
People are penalised for new ideas that don't work	IC4	0.866			
Innovation is perceived as too risky and is resisted	IC5	0.793			
Absorptive capacity			0.936	0.936	0.785
Our firm regularly considers the consequences of changing market demands in terms of new ways to provide services	AC1	0.965			
Our firm quickly recognises the usefulness of new external knowledge for existing knowledge.	AC2	0.826			
Our firm periodically meets to discuss the consequences of market trends and new services development	AC3	0.855			
Our employees record and store newly acquired knowledge for future reference	AC4	0.893			

Table 2 Convergent validity and reliability (continued)

Constructs		*Factor loading*	*Alpha*	*CR*	*AVE*
Dynamic capability			0.945	0.946	0.746
Absorb new knowledge from external/market sources	DC1	0.822			
Absorb new knowledge from suppliers, competitors and customers	DC2	0.759			
Absorb new knowledge from educational/research establishments	DC3	0.9			
Absorb new knowledge from patents	DC4	0.915			
Absorb new knowledge from personnel mobility	DC5	0.88			
Employee rotation across areas	DC6	0.896			
Opportunity recognition			0.942	0.94	0.725
Software for local area networks	OR1	0.774			
Direct consumer marketing	OR2	0.902			
Environmental testing service	OR3	0.929			
Data acquisition hardware	OR4	0.897			
Innovative use of global positioning system	OR5	0.819			
Software for logistics management	OR6	0.773			
Entrepreneurial performance			0.95	0.949	0.63
Access to new channels and markets	EP1	0.726			
Cost savings through partner's economies of scale	EP2	0.765			
Shorter lead times for product development	EP3	0.825			
Technology and process innovations	EP4	0.812			
Consistent high-quality results	EP5	0.812			
Extra effort in a crisis	EP6	0.955			
Market feedback	EP7	0.786			
Financial resources (e.g., extended payment terms)	EP8	0.768			
primary economic exchange	EP9	0.747			
exchange of routine know-how	EP10	0.767			
Technology, product, process collaboration	EP11	0.747			

This study also tested the discriminant validity, which refers to the extent to which factors are empirically differenced from each other's (Hair et al., 2014). Table 3 shows the Fornell- Larcker Criterion for discriminant validity analysis, and the result showed that discriminant validity has no issue because the diagonal values (square root of AVE) are higher than the inter-construct correlations, as recommended (Fornell and Larcker, 1981).

Table 3 Discriminant validity Fornell-Larcker criterion

	AC	*DC*	*EP*	*IC*	*KSB*	*OR*
AC	*0.886*					
DC	0.427	*0.864*				
EP	0.435	0.415	*0.794*			
IC	0.339	0.371	0.447	*0.862*		
KSB	0.553	0.427	0.453	0.453	*0.897*	
OR	0.237	0.366	0.379	0.186	0.247	*0.851*

Notes: Diagonal values are the square-root of the average variance extracted from each construct. Pearson correlations are shown below the diagonal. $p < 0.05$.

Furthermore, Heterotrait-Monotrait ratios (HTMT) analysis for discriminant validity was also applied. The value of the HTMT ratio, which is closer to one, indicates a lack of discriminant validity in the path analysis and it should be less than 0.90 (Fornell and Larcker, 1981). To clearly distinguish the two factors, HTMT should be less than one (Henseler et al., 2014, 2016). The current study results shown in Table 4 described that the values are according to the threshold values. Therefore, we can conclude that there is no issue of discriminant validity at all.

Table 4 Table heterotrait-monotrait ratios (HTMT)

	AC	*DC*	*EP*	*IC*	*KSB*
DC	0.428				
EP	0.432	0.410			
IC	0.337	0.370	0.446		
KSB	0.551	0.427	0.453	0.450	
OR	0.233	0.366	0.378	0.186	0.245

4.1 Structural measures

Table 5 represents the results for direct relations of KSB, IC, and AC on EP. Table 5 supported the direct relation of H1a, which showed the impact of KSB on DC ($\beta = 0.201$; $t = 4.194$; $p < 0.000$) and indicated positive and significant results of KSB on DC. The impact of KSB on EP is also supported by the results (H1b: $\beta = 0.153$; $t = 2.541$; $p < 0.011$), and the results indicated a positive and significant impact of KSB on EP. Confirming from results, H2a and H2b are also found significant showing the positive and significant relationship with the values ($\beta = 0.196$; $t = 4.378$; $p < 0.000$) and ($\beta = 0.241$; $t = 4.925$; $p < 0.000$) respectively. The H3a explored positive impact of AC on DC ($\beta = 0.250$; $t = 4.696$; $p < 0.000$). While H3b is also found significant ($\beta = 0.180$; $t = 3.339$; $p < 0.001$), showing the positive impact of AC on EP. The H4 ($\beta = 0.144$; $t = 2.814$; $p < 0.005$), showed that DC has a positive and significant impact on EP.

Table 5 SEM results with bootstrapping (total direct effect)

Hypothesis	*Relationship*	*β*	*S.D*	*T value*	*P values*	*Decision*
H1a	KSB → DC	0.201	0.048	4.194	0.000	Supported
H1b	KSB → EP	0.153	0.060	2.541	0.011	Supported
H2a	IC → DC	0.196	0.045	4.378	0.000	Supported
H2b	IC → EP	0.241	0.049	4.925	0.000	Supported
H3a	AC→ DC	0.250	0.053	4.696	0.000	Supported
H3b	AC→ EP	0.180	0.054	3.339	0.001	Supported
H4	DC→ EP	0.144	0.051	2.814	0.005	Supported

The indirect effects of KSB, IC and AC on entrepreneurial behaviour through DC and the moderating effect of OR on the relationship between DC and EP. The partial least square (SEM) is used to assess the value of R2 and is called the coefficient of determination (Hair et al., 2012; Henseler et al., 2016). The value for R^2 is acceptable at 0.10 (Falk and Miller, 1992). Chin (1998) commented that the value for R^2 is significant at 0.60, for moderate at 07.33, and weak at 0.19 in PLS-SEM. The value for R^2 is 0.265 of dynamic capability with entrepreneurial performance.

Figure 3 SEM t-values (see online version for colours)

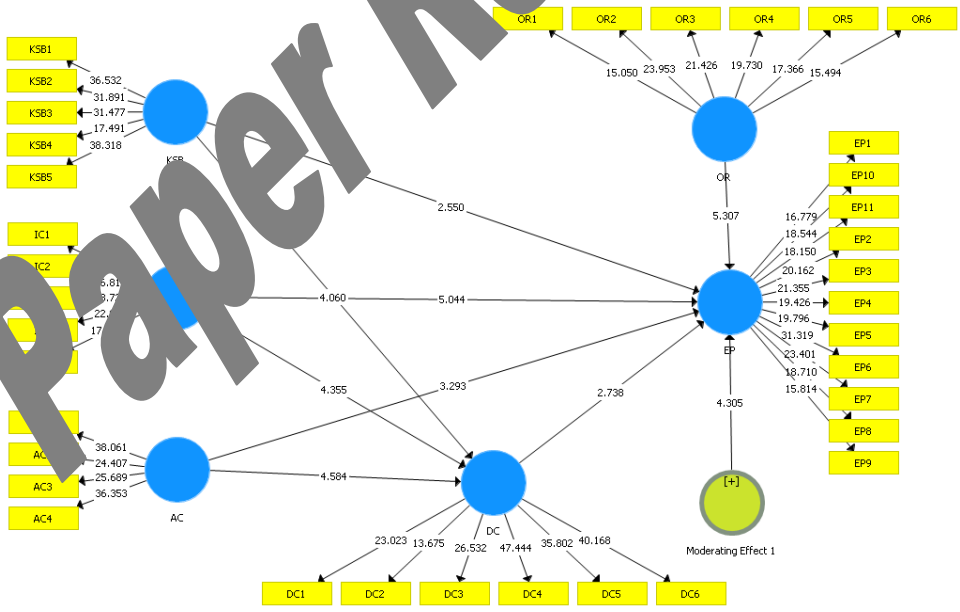
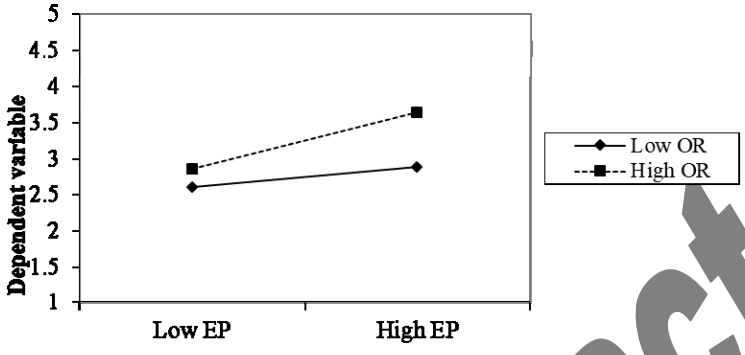


Figure 3 showed the indirect effects of KSB, IC, and AC on entrepreneurial behaviour through DC and the moderating effect of OR on the relationship between DC and EP. This study also measured the mediating and moderating role of DC and OR respectively. Table 5 represents the values of SEM results for the specific indirect effects. The results for H1c, H2c, and H3c confirmed the partial mediation because the relationship among the DC and EP are also found significant while DC is playing a mediating role between

the relationships of KSB and EP (β = 0.029; t = 2.204; p < 0.028), IC and EP (β = 0.028; t = 2.270; p < 0.023), and AC and EP (β = 0.036; t = 2.395; p < 0.017).

Moreover, this study takes into consideration the moderating effect of OR on the relationship between the DC and EP of textile-based SMEs in Pakistan. The results are OR significantly and positively moderates the relationship between DC and EP (β = 0.129; t = 4. and 269; p < 0.000). Figure 3 represents the moderation effect of OR on EP, showing that OR is significantly strengthened the positive relationship of DC and EP.

Figure 4 Moderation result



5 Discussion

Based on the overall statistical results of our study, H1a, it was proposed that KSB positively and significantly predicts DC, and KSB has a significant and positive impact on EP. The results are consistent with the studies of (Dangelico et al., 2017; Jiang et al., 2018). The result for H1b offers the possibility that KSB has a positive relationship with EP, which is previously commented on by (Srivastava et al., 2006; Wiklund and Shepherd, 2003). KSB of entrepreneurs will lead towards the development of their capabilities, which require to boost their EP. This study also proved the significant positive influence of IC on DC and IC on EP, which are consistent with the studies of (Bougrain and Haudeville, 2002; Falahat et al., 2018; Lawson and Samson, 2001; Zhai et al., 2018). H2a and H2b are accepted. Therefore, it is concluded that IC is a key factor required to develop the DC of entrepreneurs which leads to enhance their EP, particularly in the current study context. This study offers deep insights into the chosen variables and the relationships were less studies in the past. Therefore, this study has immense practical implications for entrepreneurs, policy makers, which were limited in past studies.

Furthermore, AC also has a positive and significant impact on DC and EP as proved in the SEM analysis; therefore, we also accepted the H3a and H3b, consistent with studies of (Daspit et al., 2019; Flatten et al., 2011; Jiménez-Barrionuevo et al., 2019). Until unless entrepreneurs do not have the AC, they may face issues in the positive development of their enterprise. Our study hypothesis number four represents that DC also significantly and positively affects the EP showing that an increase in DC of entrepreneurs will help to increase their EP. Moreover, this study also described the mediating effect of DC between the relationship of KSB, IC, and AC with EP. The

hypotheses H1c, H2c, and H3c are representing the indirect impact of these variables, which are also accepted based on empirical analysis. Moreover, OR is an important factor that positively impacts the relationship between DC and EP, proving H5, which stated that OR has a significant positive moderation effect on the relationship between DC and OP.

6 Conclusions

The study developed a conceptual model and explored the effect of KSB, IC, and AC in generating the DC of an entrepreneur, which leads towards an increase in the EP of textile-based SMEs in Pakistan. Moreover, this study also examined the moderating role of OR in the relationship between DC and EP. Based on the results of the study, it is concluded that KSB, IC, and AC positively and significantly influence the DC of an entrepreneur and also have a positive impact on EP. Also, the results explore the positive role of OR as a moderator to strengthen the relationship between DC and EP. Overall, the study assisted in reducing ambiguities concern to the mediating and moderating mechanism of DC and OR with KSB, IC, and AC with DC and EP.

This study emphasised several implications concerning these research variables. The foremost and important implication will assist in enhancing SME performances by developing a knowledge-sharing environment in an organisation with entrepreneurs. The study concluded that if the information related to business priorities, entrepreneurial goals, and product development is widely shared, it will increase the EP. The study also suggested that the environment of sharing knowledge in an organisation will help in setting and accomplishing entrepreneurial goals. This practice will enhance the innovation and AC of an entrepreneur and also contribute to the existing knowledge of entrepreneurial success factors, particularly in terms of SMEs in developing countries.

Our findings suggested that a DC also affects the trend of sharing knowledge for EP. Therefore, to manage the innovative and absorptive capacities must be placed DC in an organisation to develop EP in the SME market. The SMEs need to establish a more effective way to transfer knowledge in an organisation to develop a strong environment for achieving organisational goals against competitors. It is important for the organisational operation and emerging economies because the organisation faces a shortage of internal and external information, which affects the SME's innovative and AC performance. For instance, the invention with the DC of SMEs will develop entrepreneurial quality and will assist in reducing many problems. The enhancement in the AC of an entrepreneur will always be favourable for SME EP. The OR will help the entrepreneur recognise performance opportunities.

The study has few limitations, which need to be acknowledged. The data was collected from one source or the same source. The limitation for the cross-sectional nature of data exists and for future research recommended longitudinal data. For future research direction, this model assists in expanding the research domain (focus more types of businesses), to analyse the EP in Pakistan. The precise and better conclusion for researchers may consider demographics, government policies, and regulation for SMEs as control variables. Here, another limitation related to the study, the sample population was bound to the gender and included 100% of males due to the selected region. The business was mostly based on male category businesses. This research finding may be affected due to gender discrimination. So, for future research replication to the current

study should consider gender composition. However, for future recommendations, the research may consider different industries including big-size sample data with male and female entrepreneurs. This research may replicate and increase the research model for applicability to find.

References

Acs, Z.J. and Audretsch, D.B. (2010) *Handbook of Entrepreneurship Research*, Springer, New York.

Acs, Z.J., Estrin, S., Mickiewicz, T. and Szerb, L. (2018) 'Entrepreneurship, institutional economics, and economic growth: an ecosystem perspective', *Small Business Economics*, Vol. 51, No. 2, pp.501–514.

Albort-Morant, G., Henseler, J., Cepeda-Carrión, G. and Leal-Rodríguez, A.L. (2018) 'Potential and realized absorptive capacity as complementary drivers of green product and process innovation performance', *Sustainability (Switzerland)*, Vol. 10, No. 2, p.381.

Al-husseini, S. and Elbeltagi, I. (2018) 'Evaluating the effect of transformational leadership on knowledge sharing using structural equation modelling: the case of Iraqi higher education', *International Journal of Leadership in Education*, Vol. 21, No. 4, pp.506–517.

Ali, A.A., Selvam, D.D.D.P., Paris, L. and Gunasekaran, A. (2019) 'Key factors influencing knowledge sharing practices and its relationship with organizational performance within the oil and gas industry', *Journal of Knowledge Management*, Vol. 23, No. 9, pp.1806–1837.

Alvarez, S.A. and Busenitz, L.W. (2001) 'The entrepreneurship of resource-based theory', *Journal of Management*, Vol. 27, No. 6, pp.755–775.

Ambrosini, V. and Bowman, C. (2009) 'What are dynamic capabilities and are they a useful construct in strategic management?', *International Journal of Management Reviews*, Vol. 11, No. 1, pp.29–49.

Ambrosini, V., Bowman, C. and Collier, N. (2009) 'Dynamic capabilities: an exploration of how firms renew their resource base', *British Journal of Management*, Vol. 20, No. S1, pp.9–24.

Aminu, M.I. and Mahmood, R. (2015) 'Mediating role of dynamic capabilities on the relationship between intellectual capital and performance: a hierarchical component model perspective in PLS-SEM path modeling', *Research Journal of Business Management*, Vol. 9, No. 3, pp.443–456.

Amui, L.B.L., Jabbour, C.J.C., de Sousa Jabbour, A.B.L. and Kannan, D. (2017) 'Sustainability as a dynamic organizational capability: a systematic review and a future agenda toward a sustainable transition', *Journal of Cleaner Production*, Vol. 142, No. 1, pp.308–322.

Ardichvili, A., Cardozo, R. and Ray, S. (2003) 'A theory of entrepreneurial opportunity identification and development', *Journal of Business Venturing*, Vol. 18, No. 1, pp.105–123.

Asante, E.A. and Affum-Osei, E. (2019) 'Entrepreneurship as a career choice: the impact of locus of control on aspiring entrepreneurs' opportunity recognition', *Journal of Business Research*, May, Vol. 98, No. 5, pp.227–235.

Ashraf, M.M., Razzaque, M.A., Liaw, S.T., Ray, P.K. and Hasan, M.R. (2019) 'Social business as an entrepreneurship model in emerging economy: Systematic review and case study', *Management Decision*, Vol. 57, No. 5, pp.1145–1161.

Ashraf, S.F., Li, C. and Mehmood, B. (2017) 'A study of premium price brands with special reference to willingness of customer to pay', *International Journal of Academic Research in Business and Social Sciences*, Vol. 7, No. 7, pp.619–639.

Audretsch, D.B. (2001) 'What's new about the new economy? Sources of growth in the managed and entrepreneurial economies', *Industrial and Corporate Change*, Vol. 10, No. 1, pp.267–315.

Augier, M. and Teece, D.J. (2009) 'Dynamic capabilities and the role of managers in business strategy and economic performance', *Organization Science*, Vol. 20, No. 2, pp.410–421.

Bartol, K.M. and Srivastava, A. (2002) 'Encouraging knowledge sharing: the role of organizational reward systems', *Journal of Leadership and Organizational Studies*, Vol. 9, No. 1, pp.64–76.

Becerra-Fernandez, I. and Sabherwal, R. (2001) 'Organizational knowledge management: a contingency perspective', *Journal of Management Information Systems*, Vol. 18, No. 1, pp.23–55.

Bin Hashim, N.A., Raza, S. and Minai, M.S. (2018) 'Relationship between entrepreneurial competencies and small firm performance: are dynamic capabilities the missing link?', *Academy of Strategic Management Journal*, Vol. 17, No. 2, pp.1–10.

Bock, G,W. and Kim, Y.G. (2002) 'Breaking the myths of rewards: an exploratory study of attitudes about knowledge sharing', *Information Resources Management Journal (IRMJ)*, Vol. 15, No. 2, pp.14–21.

Bock, G.W., Zmud, R.W., Kim, Y.G. and Lee, J.N. (2005) 'Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological forces, and organizational climate', *MIS Quarterly: Management Information Systems*, Vol. 29, No. 1, pp.87–111.

Bougrain, F. and Haudeville, B. (2002) 'Innovation, collaboration and SMEs internai research capacities', *Research Policy*, Vol. 31, No. 5, pp.735–747.

Bronzo, M., de Resende, P.T.V., de Oliveira, M.P.V., McCormack, K.P., de Sousa, P.R. and Ferreira, R.L. (2013) 'Improving performance aligning business analytics with process orientation', *International Journal of Information Management*, Vol. 33, No. 2, pp.300–307.

Bryant, P. (2007) 'Self-regulation and decision heuristics in entrepreneurial opportunity evaluation and exploitation', *Management Decision*, Vol. 45, No. 4, pp.732–748.

Camps, J., Oltra, V., Aldás-Manzano, J., Buenaventura-Vera, G. and Torres-Carballo, F. (2016) 'Individual performance in turbulent environments: the role of organizational learning capability and employee flexibility', *Human Resource Management*, Vol. 55, No. 3, pp.363–383.

Chang, S.C. and Lee, M.S. (2007) 'A study on relationship among leadership, organizational culture, the operation of learning organization and employees' job satisfaction', *Learning Organization*, Vol. 14, No. 2, pp.155–185.

Chin, W.W. (1998) 'The partial least squares approach to structural equation modeling', *Modern Methods for Business Research*, Vol. 295, No. 2, pp.295–336.

Clark, K. and Ramachandran, J. (2019) 'Subsidiary entrepreneurship and entrepreneurial opportunity: an institutional perspective', *Journal of International Management*, Vol. 25, No. 1, pp.37–50.

Colbert, A.E., Kristof-Brown, A.L., Bradley, B.H. and Barrick, M.R. (2008) 'CEO transformational leadership: the role of goal importance congruence in top management teams', *Academy of Management Journal*, Vol. 51, No. 1, pp.81–96.

Dangelico, R.M., Pujari, D. and Pontrandolfo, P. (2017) 'Green product innovation in manufacturing firms: a sustainability-oriented dynamic capability perspective', *Business Strategy and the Environment*, Vol. 26, No. 4, pp.490–506.

Daspit, J.J., Long, R.G. and Pearson, A.W. (2019) 'How familiness affects innovation outcomes via absorptive capacity: a dynamic capability perspective of the family firm', *Journal of Family Business Strategy*, Vol. 10, No. 2, pp.133–143.

Davenport, T.H. and Prusak, L. (1998) 'Working knowledge: how organizations manage what they know', *Choice Reviews Online*, Vol. 35, No. 9, pp.35–5167.

De Clercq, D., Honig, B. and Martin, B. (2013) 'The roles of learning orientation and passion for work in the formation of entrepreneurial intention', *International Small Business Journal*, Vol. 31, No. 6, pp.652–676.

De Massis, A., Kotlar, J., Wright, M. and Kellermanns, F.W. (2018) 'Sector-based entrepreneurial capabilities and the promise of sector studies in entrepreneurship', *Entrepreneurship: Theory and Practice*, Vol. 42, No. 1, pp.3–23.

Dubey, R., Gunasekaran, A., Childe, S.J., Bryde, D.J., Giannakis, M., Foropon, C., … Hazen, B.T. (2020) 'Big data analytics and artificial intelligence pathway to operational performance under the effects of entrepreneurial orientation and environmental dynamism: a study of manufacturing organisations', *International Journal of Production Economics*, August, Vol. 226, No. 8, p.107599.

Durst, S. and Edvardsson, I.R. (2012) 'Knowledge management in SMEs: a literature review', *Journal of Knowledge Management*, Vol. 16, No. 6, pp.879–903.

Eckhardt, J.T. and Shane, S.A. (2003) 'Opportunities and entrepreneurship', *Journal of Management*, Vol. 29, No. 3, pp.333–349.

Fainshmidt, S., Pezeshkan, A., Lance Frazier, M., Nair, A. and Markowski, E. (2016) 'Dynamic capabilities and organizational performance: a meta-analytic evaluation and extension', *Journal of Management Studies*, Vol. 53, No. 8, pp.1348–1380.

Falahat, M., Tehseen, S. and Van Horne, C. (2018) 'Entrepreneurial innovativeness and its' impact on smes' performances', *International Journal of Entrepreneurship*, Vol. 22, No. 3, pp.1–9.

Falk, R.F. and Miller, N.B. (1992) *A primer for Soft Modeling*, University of Akron Press.

Fang, E. and Zou, S. (2009) 'Antecedents and consequences of marketing dynamic capabilities in international joint ventures', *Journal of International Business Studies*, Vol. 40, No. 5, pp.742–761.

Ferreira, J., Coelho, A. and Moutinho, L. (2020) 'Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: the moderating role of entrepreneurial orientation', *Technovation*, April–May, Vol. 92, No. 3, p.102061.

Flatten, T.C., Engelen, A., Zahra, S.A. and Brettel, M. (2011a) 'A measure of absorptive capacity: scale development and validation', *European Management Journal*, Vol. 29, No. 2, pp.98–116.

Flatten, T.C., Greve, G.I. and Brettel, M. (2011b) 'Absorptive capacity and firm performance in SMEs: the mediating influence of strategic alliances', *European Management Review*, Vol. 8, No. 3, pp.137–152.

Floyd, S.W. and Wooldridge, B. (1999) 'Knowledge creation and social networks in corporate entrepreneurship: the renewal of organizational capability', *Entrepreneurship Theory and Practice*, Vol. 23, No. 3, pp.123–144.

Fornell, C. and Larcker, D.F. (1981) 'Structural equation models with unobservable variables and measurement error: algebra and statistics', *Journal of Marketing Research*, Vol. 18, No. 3, p.382.

Friedman, Y. and Carmeli, A. (2018) 'The influence of decision comprehensiveness on innovative behaviors in small entrepreneurial firms: the power of connectivity', *Innovation: Management, Policy and Practice*, Vol. 20, No. 1, pp.61–83.

Gaglio, C.M. and Katz, J.A. (2001) 'The psychological basis of opportunity identification: entrepreneurial alertness', *Small Business Economics*, Vol. 16, No. 2, pp.95–111.

Gebauer, H., Worch, H. and Truffer, B. (2012) 'Absorptive capacity, learning processes and combinative capabilities as determinants of strategic innovation', *European Management Journal*, Vol. 30, No. 1, pp.57–273.

George, N., Parida, V., Lahti, T. and Wincent, J. (2016) 'A systematic literature review of entrepreneurial opportunity recognition: insights on influencing factors', *International Entrepreneurship and Management Journal*, Vol. 12, No. 2, pp.309–350.

Giniuniene, J. and Jurksiene, L. (2015) 'Dynamic capabilities, innovation and organizational learning: interrelations and impact on firm performance', *Procedia – Social and Behavioral Sciences*, *20th International Scientific Conference Economics and Management 2015 (ICEM-2015)*, December, Vol. 213, No. 1, pp.985–991.

Grant, R.M. (1991) 'The resource-based theory of competitive advantage: implications for strategy formulation', *California Management Review*, Vol. 33, No. 3, pp.114–135.

Hair Jr., J.F., Sarstedt, M., Hopkins, L. and Kuppelwieser, V.G. (2014) 'Partial least squares structural equation modeling (PLS-SEM): an emerging tool in business research', *European Business Review*, Vol. 26, No. 2, pp.106–121.

Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011) 'PLS-SEM: indeed a silver bullet', *Journal of Marketing Theory and Practice*, Vol. 19, No. 2, pp.139–151.

Hair, J.F., Sarstedt, M., Pieper, T.M. and Ringle, C.M. (2012) 'The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications', *Long Range Planning*, Vol. 45, Nos. 5–6, pp.320–340.

Hanohov, R. and Baldacchino, L. (2018) 'Opportunity recognition in sustainable entrepreneurship: an exploratory study', *International Journal of Entrepreneurial Behaviour and Research*, Vol. 24, No. 2, pp.333–358.

Hasan, F.S.M. and Almubarak, M.M.S. (2016) 'Factors influencing women entrepreneurs' performance in SMEs', *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 12, No. 2, pp.82–101.

Henseler, J., Hubona, G. and Ray, P.A. (2016) 'Using PLS path modeling in new technology research: updated guidelines', *Industrial Management and Data Systems*, Vol. 116, No. 1, pp.2–20.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2014) 'A new criterion for assessing discriminant validity in variance-based structural equation modeling', *Journal of the Academy of Marketing Science*, Vol. 43, No. 1, pp.115–135.

Hernández, V. and Nieto, M.J. (2016) 'Inward-outward connections and their impact on firm growth', *International Business Review*, Vol. 25, No. 1, pp.296–306.

Hernández-Linares, R., Kellermanns, F.W. and López-Fernández, M. (2021) 'Dynamic capabilities and SME performance: the moderating effect of market orientation', *Journal of Small Business Management*, Vol. 59, No. 1, pp.162–195.

Hernandez-Perlines, F. (2018) 'Moderating effect of absorptive capacity on the entrepreneurial orientation of international performance of family businesses', *Journal of Family Business Management*, Vol. 8, No. 1, pp.58–74, doi:10.1108/JFBM-10-2017-0035.

Hernández-Perlines, F., Ariza-Montes, A., Han, H. and Law, R. (2019) 'Innovative capacity, quality certification and performance in the hotel sector', *International Journal of Hospitality Management*, Vol. 82, No. 1, pp.220–230.

Hmieleski, K.M. and Baron, R.A. (2008) 'When does entrepreneurial self-efficacy enhance versus reduce firm performance?', *Strategic Entrepreneurship Journal*, Vol. 2, No. 1, pp.57–72.

Hurley, R.F. and Hult, G.T.M. (1998) 'Innovation, market orientation, and organizational learning: an integration and empirical examination', *Journal of Marketing*, Vol. 62, No. 3, pp.42–54.

Iqbal, S., Martins, J.M., Mata, M.N., Naz, S., Akhtar, S. and Abreu, A. (2021) 'Linking entrepreneurial orientation with innovation performance in SMEs; the role of organizational commitment and transformational leadership using smart PLS-SEM', *Sustainability*, Vol. 13, No. 8, p.4361.

Jiang, W., Chai, H., Shao, J. and Feng, T. (2018) 'Green entrepreneurial orientation for enhancing firm performance: a dynamic capability perspective', *Journal of Cleaner Production*, October, Vol. 198, No. 10, pp.1311–1323.

Jiménez-Barrionuevo, M.A.M., Molina, L.M. and García-Morales, V.J. (2019) 'Combined influence of absorptive capacity and corporate entrepreneurship on performance', *Sustainability (Switzerland)*, Vol. 11, No. 11, p.3034.

Kankanhalli, A., Tan, B.C.Y. and Wei, K.K. (2005) 'Contributing knowledge to electronic knowledge repositories: an empirical investigation', *MIS Quarterly: Management Information Systems*, Vol. 29, No. 1, pp.113–143.

Käser, P.A.W. and Miles, R.E. (2002) 'Understanding knowledge activists' successes and failures', *Long Range Planning*, Vol. 35, No. 1, pp.9–28.

Kato, M., Okamuro, H. and Honjo, Y. (2015) 'Does founders' human capital matter for innovation? Evidence from Japanese start-ups', *Journal of Small Business Management*, Vol. 53, No. 1, pp.114–128.

Katz, D. (1964) 'The motivational basis of organizational behavior', *Behavioral Science*, Vol. 9, No. 2, pp.131–146.

Khan, I., Xitong, G., Ahmad, Z. and Shahzad, F. (2019a) 'Investigating factors impelling the adoption of e-health: a perspective of African expats in China', *SAGE Open*, Vol. 9, No. 3, pp.1–12.

Khan, M.A.S., Jianguo, A.M.D., Saleem, S., Boamah, K.B., Javed, U. and Usman, M. (2019b) 'Rejuvenating the concept of work alienation through job demands-resources model and examining its relationship with emotional exhaustion and explorative and exploitative learning', *Psychology Research Behavior Management*, Vol. 12, No. 1, p.931, https://doi.org/10.2147/PRBM.S204193.

Kloepfer, K. and Castrogiovanni, G.J. (2018) 'Entrepreneurship: venture creation subprocesses, subdomains, and interfaces', *International Entrepreneurship and Management Journal*, Vol. 14, No. 3, pp.681–696.

Kostopoulos, K., Papalexandris, A., Papachroni, M. and Ioannou, G. (2011) 'Absorptive capacity, innovation, and financial performance', *Journal of Business Research*, Vol. 64, No. 12, pp.1335–1343.

Lane, P.J., Salk, J.E. and Lyles, M.A. (2001) 'Absorptive capacity, learning, and performance in international joint ventures', *Strategic Management Journal*, Vol. 22, No. 12, pp.1139–1161.

Lawson, B. and Samson, D. (2001) 'Developing innovation capability in organisations: a dynamic capabilities approach', *International Journal of Innovation Management*, Vol. 05, No. 03, pp.377–400.

Lechner, C. and Gudmundsson, S.V. (2014) 'Entrepreneurial orientation, firm strategy and small firm performance', *International Small Business Journal*, Vol. 32, No. 1, pp.36–60.

Li, C., Naz, S., Khan, M.A.S., Kusi, B. and Murad, M.T. (2019) 'An empirical investigation on the relationship between a high-performance work system and employee performance: measuring a mediation model through partial least squares–structural equation modeling', *Psychology Research Behavior Management*, Vol. 12, No. 1, pp.397—416, DOI: https://doi.org /10.2147/PRBM.S195533.

Liang, C., Chang, C.-C., Liang, C.-T. and Liu, Y.-C. (2017) 'Imagining future success: Imaginative capacity on the perceived performance of potential agrisocio entrepreneurs', *Thinking Skills and Creativity*, Vol. 23, pp.161–174.

Lichtenthaler, U. (2016) 'Absorptive capacity and firm performance: an integrative framework of benefits and downsides', *Technology Analysis and Strategic Management*, Vol. 28, No. 6, pp.664–676.

Liebana-Cabanillas, F. and Alonso-Dos-Santos, M. (2017) 'Factors that determine the adoption of Facebook commerce: the moderating effect of age', *Journal of Engineering and Technology Management – JET-M*, Vol. 44, No. 2016, pp.1–18.

Liu, C.H.S. (2018) 'Examining social capital, organizational learning and knowledge transfer in cultural and creative industries of practice', *Tourism Management*, February, Vol. 64 No. 1, pp.258–270.

Marques, C.S. and Ferreira, J. (2009) 'SME innovative capacity, competitive advantage and performance in a'traditional'industrial region of Portugal', *Journal of Technology Management and Innovation*, Vol. 4, No. 4, pp.53–68.

Martínez-Costa, M., Jiménez-Jiménez, D. and Dine Rabeh, H.A. (2019) 'The effect of organisational learning on interorganisational collaborations in innovation: an empirical study in SMEs', *Knowledge Management Research and Practice*, Vol. 17, No. 2, pp.137–150.

Masa'deh, R., Al-Henzab, J., Tarhini, A. and Obeidat, B.Y. (2018) 'The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance', *Benchmarking*, Vol. 25, No. 8, pp.3117–3142.

Mata, F.J., Fuerst, W.L. and Barney, J.B. (2006) 'Information Technology and Sustained Competitive Advantage: A Resource-Based Analysis', *MIS Quarterly*, Vol. 19, No. 4, p.487.

McDonald, R.P. (1996) 'Path analysis with composite variables', *Multivariate Behavioral Research*, Vol. 31, No. 2, pp.239–270.

McMullen, J.S. and Shepherd, D.A. (2006) 'Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur', *Academy of Management Review*, Vol. 31, No. 1, pp.132–152.

Min, J., Iqbal, S., Khan, M.A.S., Akhtar, S., Anwar, F. and Qalati, S.A. (2020) 'Impact of supervisory behavior on sustainable employee performance: mediation of conflict management strategies using PLS-SEM', *PloS One*, Vol. 15, No. 9, p.e0236650.

Ministry of Planning, Development and Special Initiatives (2019) *SMEs in Pakistan* [online] https://www.pc.gov.pk/ (accessed 7 May 2020).

Mostafiz, M.I., Sambasivan, M. and Goh, S.K. (2019) 'Impacts of dynamic managerial capability and international opportunity identification on firm performance', *Multinational Business Review*, Vol. 27, No. 4, pp.339–363.

Mudalige, D., Ismail, N.A. and Malek, M.A. (2019) 'Exploring the role of individual level and firm level dynamic capabilities in SMEs' internationalization', *Journal of International Entrepreneurship*, Vol. 17, No. 1, pp.41–74.

Naranjo-Valencia, J.C., Jiménez-Jiménez, D. and Sanz-Valle, R. (2016) 'Studying the links between organizational culture, innovation, and performance in Spanish companies', *Revista Latinoamericana de Psicologia*, Vol. 48, No. 1, pp.30–41.

Ngah, R. and Jusoff, K. (2009) 'Tacit knowledge sharing and SMEs' organizational performance', *International Journal of Economics and Finance*, Vol. 1, No. 1, pp.216–220.

Obrenovic, B., Jianguo, D., Tsoy, D., Obrenovic, S., Khan, M.A.S. and Anwar, F. (2020) 'The enjoyment of knowledge sharing: Impact of altruism on tacit knowledge-sharing behavior', *Frontiers in Psychology*, Vol. 11, No. 1, p.1496, https://doi.org /10.3389/fpsyg.2020.01496.

Ohemeng, F.L. and Kamga, O. (2019) 'Administrative leaders as institutional entrepreneurs in developing countries: a study of the development and institutionalization of performance management in Ghana's public service', *Public Administration and Development*, Vol. 40, No. 1.

Okpara, F. (2007) 'The value of creativity and innovation in entrepreneurship', *Journal of Asia Entrepreneurship and Sustainability*, Vol. 3, No. 2, p.17.

Pai, F.Y. and Chang, H.F. (2013) 'The effects of knowledge sharing and absorption on organizational innovation performance – a dynamic capabilities perspective', *Interdisciplinary Journal of Information, Knowledge, and Management*, Vol. 8, No. 1, pp.83–97.

Peng, M.Y-P. and Lin, K-H. (2021) 'International networking in dynamic internationalization capability: the moderating role of absorptive capacity', *Total Quality Management Business Excellence*, Vol. 32, Nos. 9–10, pp.1065–1084.

Pezeshkan, A., Fainshmidt, S., Nair, A., Frazier, M.L. and Markowski, E. (2016) 'An empirical assessment of the dynamic capabilities–performance relationship', *Journal of Business Research*, Vol. 69, No. 8, pp.2950–2956.

Pratono, A.H., Darmasetiawan, N.K., Yudiarso, A. and Jeong, B.G. (2019) 'Achieving sustainable competitive advantage through green entrepreneurial orientation and market orientation: the role of inter-organizational learning', *Bottom Line*, Vol. 32, No. 1, pp.2–15.

Protogerou, A., Caloghirou, Y. and Lioukas, S. (2012) 'Dynamic capabilities and their indirect impact on firm performance', *Industrial and Corporate Change*, Vol. 21, No. 3, pp.615–647.

Qalati, S.A., Yuan, L.W., Khan, M.A.S. and Anwar, F. (2021) 'A mediated model on the adoption of social media and SMEs' performance in developing countries', *Technology in Society*, Vol. 64, p.101513.

Rehman, N., Razaq, S., Farooq, A., Zohaib, N.M. and Nazri, M. (2020) 'Information technology and firm performance: mediation role of absorptive capacity and corporate entrepreneurship in manufacturing SMEs. *Technology Analysis Strategic Management*, Vol. 32, No. 9, pp.1049–1065.

Riana, I.G., Rihayana, I.G. and Kumala Ratih, I.A.D. (2019) 'Creating innovation through knowledge sharing and absorptive capacity', *Polish Journal of Management Studies*, Vol. 19, No. 1, pp.338–352, DOI: 10.17512/pjms.2019.19.1.26.

Roberts, P.W. and Amit, R. (2003) 'The dynamics of innovative activity and competitive advantage: the case of Australian retail banking, 1981 to 1995', *Organization Science*, Vol. 14, No. 2, pp.107–122.

Rodríguez-Entrena, M., Schuberth, F. and Gelhard, C. (2018) 'Assessing statistical differences between parameters estimates in partial least squares path modeling', *Quality and Quantity*, Vol. 52, No. 1, pp.57–69.

Rodríguez-Serrano, M.Á. and Martín-Armario, E. (2019) 'Born-global SMEs, performance, and dynamic absorptive capacity: evidence from Spanish firms', *Journal of Small Business Management*, Vol. 57, No. 2, pp.298–326.

Ruggles, R. (1998) 'The state of the notion: knowledge management in practice', *California Management Review*, Vol. 40, No. 3, pp.80–89.

Saarani, A.N. and Shahadan, F. (2013) 'The determinant of capital structure of SMEs in Malaysia: evidence from enterprise 50 (E50) SMEs', *Asian Social Science*, Vol. 9, No. 6, pp.64–73.

Sabahi, S. and Parast, M.M. (2020) 'Firm innovation and supply chain resilience: a dynamic capability perspective', *International Journal of Logistics Research Applications*, Vol. 23, No. 3, pp.254–269.

Salvato, C. and Vassolo, R. (2018) 'The sources of dynamism in dynamic capabilities', *Strategic Management Journal*, Vol. 39, No. 6, pp.1728–1752.

Saunila, M. (2017) 'Understanding innovation performance measurement in SMEs', *Measuring Business Excellence*, Vol. 21, No. 1, pp.1–16.

Schindehutte, M. and Morris, M.H. (2001) 'Understanding strategic adaptation in small firms', *International Journal of Entrepreneurial Behaviour and Research*, Vol. 7, No. 3, pp.84–107.

Schmitt, A., Rosing, K., Zhang, S.X. and Leatherbee, M. (2018) 'A dynamic model of entrepreneurial uncertainty and business opportunity identification: exploration as a mediator and entrepreneurial self-efficacy as a moderator', *Entrepreneurship: Theory and Practice*, Vol. 42, No. 6, pp.835–859.

Sciascia, S., D'oria, L., Bruni, M. and Larrañeta, B. (2014) 'Entrepreneurial orientation in low-and medium-tech industries: the need for absorptive capacity to increase performance', *European Management Journal*, Vol. 32, No. 5, pp.761–769.

Scuotto, V., Del Giudice, M. and Carayannis, E.G. (2017) 'The effect of social networking sites and absorptive capacity on SMES'innovation performance', *The Journal of Technology Transfer*, Vol. 42, No. 2, pp.409–424.

Shafique, I. and Kalyar, M. (2018) 'Linking transformational leadership, absorptive capacity, and corporate entrepreneurship', *Administrative Sciences*, Vol. 8, No. 2, p.9.

Shane, S. and Venkataraman, S. (2000) 'The promise of entrepreneurship as a field of research', *Academy of Management Review*, Vol. 25, No. 1, pp.217–226.

Shane, S., Locke, E.A. and Collins, C.J. (2003) 'Entrepreneurial motivation', *Human Resource Management Review*, Vol. 13, No. 2, pp.257–279.

Shao, Z., Feng, Y. and Liu, L. (2012) 'The mediating effect of organizational culture and knowledge sharing on transformational leadership and enterprise resource planning systems success: an empirical study in China', *Computers in Human Behavior*, Vol. 28, No. 6, pp.2400–2413.

Shin, K., Kim, E. and Jeong, E. (2018) 'Structural relationship and influence between open innovation capacities and performances', *Sustainability*, Vol. 10, No. 8, p.2787.

Silaparasetti, V., Srinivasarao, G.V.R. and Khan, F.R. (2017) 'Structural equation modeling analysis using smart PLS to assess the occupational health and safety (OHS) factors on workers' behavior', *Humanities and Social Sciences Reviews*, Vol. 5, No. 2, p.88.

Sirmon, D.G., Hitt, M.A. and Ireland, R.D. (2007) 'Managing firm resources in dynamic environments to create value: looking inside the black box', *Academy of Management Review*, Vol. 32, No. 1, pp.273–292.

Song, M., Nason, R.W. and Di Benedetto, C.A. (2008) 'Distinctive marketing and information technology capabilities and strategic types: a cross-national investigation', *Journal of International Marketing*, Vol. 16, No. 1, pp.4–38.

Srivastava, A., Bartol, K.M. and Locke, E.A. (2006) 'Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance', *Academy of Management Journal*, Vol. 49, No. 6, pp.1239–1251.

Stevenson, H.H. and Jarillo, J.C. (2007) 'A paradigm of entrepreneurship: entrepreneurial management', *Entrepreneurship*, pp.155–170, Springer, Berlin, Heidelberg.

Stevenson, H.H., Roberts, M.J., Grousbeck, H.I. and Liles, P.R. (1989) *New Business Ventures and the Entrepreneur*, Irwin Homewood, IL.

Sulistyo, H. (2016) 'Innovation capability of SMEs through entrepreneurship, marketing capability, relational capital and empowerment', *Asia Pacific Management Review*, Vol. 21, No. 4, pp.196–203.

Sunny, S.A. and Shu, C. (2019) 'Investments, incentives, and innovation: geographical clustering dynamics as drivers of sustainable entrepreneurship', *Small Business Economics*, Vol. 52, No. 4, pp.905–927.

Szerb, L., Lafuente, E., Horváth, K. and Páger, B. (2019) 'The relevance of quantity and quality entrepreneurship for regional performance: the moderating role of the entrepreneurial ecosystem', *Regional Studies*, Vol. 53, No. 9, pp.1308–1320.

Tajeddini, K. and Mueller, S. (2019) 'Moderating effect of environmental dynamism on the relationship between a firm's entrepreneurial orientation and financial performance', *Entrepreneurship Research Journal*, Vol. 9, No. 4, pp.1–13.

Tajeddini, K. and Trueman, M. (2016) 'Environment-strategy and alignment in a restricted, transitional economy: empirical research on its application to Iranian state-owned enterprises. *Long Range Planning*, Vol. 49, No. 5, pp.570–583.

Teece, D.J. (2007) 'Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance', *Strategic Management Journal*, Vol. 28, No. 13, pp.1319–1350.

Teece, D.J. (2016) 'Dynamic capabilities and entrepreneurial management in large organizations: toward a theory of the (entrepreneurial) firm', *European Economic Review*, July, Vol. 86, No. 7, pp.202–216.

Tian, H., Iqbal, S., Akhtar, S., Qalati, S.A., Anwar, F. and Khan, M.A.S. (2020) 'The impact of transformational leadership on employee retention: mediation and moderation through organizational citizenship behavior and communication', *Frontiers in Psychology*, Vol. 11, No. 1, p.314.

Tian, H., Iqbal, S., Anwar, F., Akhtar, S., Khan, M.A.S. and Wang, W. (2021) 'Network embeddedness and innovation performance: a mediation moderation analysis using PLS-SEM', *Business Process Management Journal*, Vol. 27, No. 5, pp.1590–1609.

Todorova, G. and Durisin, B. (2007) 'Absorptive capacity: valuing a reconceptualization', *Academy of Management Review*, Vol. 32, No. 3, pp.774–786.

Veronica, S., Manlio, D.G., Shlomo, T., Antonio, M.P. and Victor, C. (2019) 'International social SMEs in emerging countries: Do governments support their international growth?', *Journal of World Business*, in press.

Villa, L.S. (1990) 'Invention, inventive learning, and innovative capacity', *Behavioral Science*, Vol. 35, No. 4, pp.290–310.

Volberda, H.W., Foss, N.J. and Lyles, M.A. (2010) 'Absorbing the concept of absorptive capacity: how to realize its potential in the organization field', *Organization Science*, Vol. 21, No. 4, pp.931–951.

Wang, E., Klein, G. and Jiang, J.J. (2007) 'IT support in manufacturing firms for a knowledge management dynamic capability link to performance', *International Journal of Production Research*, Vol. 45, No. 11, pp.2419–2434.

Wiklund, J. and Shepherd, D. (2003) 'Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses', *Strategic Management Journal*, Vol. 24, No. 13, pp.1307–1314.

Wu, A., Song, D. and Yang, Y. (2020) 'Untangling the effects of entrepreneurial opportunity on the performance of peasant entrepreneurship: the moderating roles of entrepreneurial effort and regional poverty level', *Entrepreneurship and Regional Development*, Vol. 32, Nos. 1–2, pp.112–133,

Wu, L.Y. (2007) 'Entrepreneurial resources, dynamic capabilities and start-up performance of Taiwan's high-tech firms', *Journal of Business Research*, Vol. 60, No. 5, pp.549–555.

Yang, S.Y. and Tsai, K.H. (2019) 'Lifting the veil on the link between absorptive capacity and innovation: the roles of cross-functional integration and customer orientation', *Industrial Marketing Management*, October, Vol. 82, No. 5, pp.117–130.

Yeoh, P.L. (2009) 'Realized and potential absorptive capacity: Understanding their antecedents and performance in the sourcing context', *Journal of Marketing Theory and Practice*, Vol. 17, No. 1, pp.21–36.

Zahra, S.A. and George, G. (2002) 'Absorptive capacity: a review, reconceptualization, and extension', *Academy of Management Review*, Vol. 27, No. 2, pp.185–203.

Zahra, S.A., Sapienza, H.J. and Davidsson, P. (2006) 'Entrepreneurship and dynamic capabilities: a review, model and research agenda', *Journal of Management Studies*, Vol. 43, No. 4, pp.917–955.

Zhai, Y.M., Sun, W.Q., Tsai, S.B., Wang, Z., Zhao, Y. and Chen, Q. (2018) 'An empirical study on entrepreneurial orientation, absorptive capacity, and SMEs' innovation performance: a sustainable perspective', *Sustainability (Switzerland)*, Vol. 10, No. 2, p.314.