

Khan, Mukaram Ali et al.

Article

Impact of entrepreneurial orientation dimensions on performance of small enterprises: Do entrepreneurial competencies matter?

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Corresponding author: Syed Sohaib Zubair, Department of Administrative Sciences, University of the Punjab-Jhelum, Pakistan
Email: Sohaib.iqtm@pu.edu.pk

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Iman Rahimi, Young Researchers and Elite Club, MALAYSIA

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MANAGEMENT | RESEARCH ARTICLE

Impact of Entrepreneurial Orientation Dimensions on Performance of Small Enterprises: Do Entrepreneurial Competencies Matter?

Mukaram Ali Khan¹, Syed Sohaib Zubair², Kashif Rathore¹, Maryam Ijaz³, Sumreen Khalil⁴ and Muhammad Khalil⁵

Abstract: The purpose of this study is to examine the role of entrepreneurial orientation (EO) in determining the enterprise performance (EP) during Covid-19. Moreover, in context of this relationship, the mediating role of entrepreneurial competencies (EC) has also been investigated in influencing the EO and EP connection. This quantitative study employs techniques for operationalizing and quantifying the variables under consideration followed by various statistical operations using SPSS and AMOS in order to test and explore the relationship as proposed in the conceptual framework, using data from 386 small enterprises as sample identified through Systematic random sampling. The analysis revealed that a positive relationship exists among all the constructs directly as well as through the mediator (EC). However, the strongest direct relation existed between risk taking propensity

ABOUT THE AUTHOR

Mr Khan is an Academic Specialist in Riphah International University and doing his PhD in Administrative Sciences (Management) from University of the Punjab, Pakistan. His areas of interest include governance, public administration, management, leadership and entrepreneurship.

Dr Zubair is an Assistant Professor in Administrative Sciences (Management). His areas of interest include governance, public administration, management, TQM, higher education and entrepreneurship.

Dr Rathore is PhD in International Development from University of Birmingham, UK and currently serving as Assistant Professor in IAS. His areas of interest is leadership, change management, and higher education.

Ms Ijaz is a higher research degree candidate at Macquarie University Business School. Her research areas include economic analysis, public policy development, labour market and organizational research.

Ms S.Khalil is a PhD Scholar (Total Quality Management) at IQTM (PU), with interest in Business Administration, Management, TQM and Marketing.

Dr Khalil is a PhD in Entrepreneurship from Malaysia. He has academic and corporate experience of over 3 decades.

PUBLIC INTEREST STATEMENT

Authors are interested in studying the idea of Entrepreneurship in the specific context of COVID-19 pandemic that has significantly affected the small and medium enterprise landscape. From a variety of factors and variables, authors selected the contextually more relevant issues of an entrepreneur's orientation and its competencies in predicting the business's performance. The research not just tests relationships among variables, rather it highlights key policy implications for stakeholders.

(RTP) and enterprise performance. Moreover, when EC is introduced as the mediator between the dependent and independent variables, again RTP path showed the strongest link. Several governments, particularly in the underdeveloped or developing countries try to support and boost the development of small businesses for the achievement of developmental objectives as well as to address the challenge of unemployment. This research explores both these key components in the context of Pakistan, testing the importance of EO and EC for small businesses. This study also provides the roadmap for policy makers to strengthen small enterprises for better performance.

Subjects: Business & Policy; South East Asian Business; Entrepreneurship and Small Business Management; Small Business Management

Keywords: Entrepreneurial orientation; entrepreneurial competencies; enterprise performance; small enterprises

Subject classification: L26; M00; O00

1. Introduction

Economies have witnessed severe effects due to COVID-19 pandemic globally. Majority of the economies in Asia particularly Pakistan being a struggling economy felt the effects at all levels of economy. SMEs faced a number of problems such as: demand reduction, shortage of raw materials, reduction/cancellation of export orders, and unavailability of work force due to lock down at national level (Shafi et al., 2020). Due to the unexpected COVID-19 crisis, businesses were not ready to face the challenges of operational disruptions as the crisis is expected to go longer for a number of years (Bartik et al., 2020). SMEs are the backbone of any economy as they provide healthy support in terms of employment opportunities the world over (Mpi, 2019). The crisis also created opportunities for new businesses. The demand of personal hygiene and safety products such as: hand sanitizers and face masks created a huge gap in the market as existing businesses were neither having capacity nor the resources to tap this huge market opportunity. This opportunity paved way for many new micro and small medium enterprises (MSMEs) while they reaped the benefits of the emerging market of such products. Existing MSMEs also took this an opportunity to tap new markets and while many entrepreneurs were upset because of the disruption of their business activities (UDENSA, 2020), they were motivated and used their knowledge and experience of doing business to convert their losses into positive returns by filling the gap for such products.

Small and medium enterprises (SMEs) are assumed to contribute significantly in the development of a country. Several governments, particularly in the underdeveloped or developing countries try to support and boost the development of SME sector for the achievement of developmental goals as well as to address the challenge of unemployment (Dar et al., 2017). SME sector is termed as “backbone of the economy”.

Zafar and Mustafa (2017) report that in high income economies, SME's contribution to GDP and total employment stands at 55% and 65%, respectively. They further add that SMEs share to GDP and total employment is even higher in low income economies with 60% and 70% respectively. The numbers are astounding in case of middle-income economies with SMEs' contributing over 70% and 95% to GDP and total employment, respectively. Small and medium businesses are also effective support during economic distress; examples include European economic depression (2000) and Euro-zone debt crisis (Hyder & Lussier, 2016).

In Pakistan, SMEs provide employment to over 3.2 million workforce and account for 40% of the GDP and 30% of the total exports (Zafar & Mustafa, 2017). As a matter of fact, approximately “99 percent of over 3.2 million businesses” are related to SMEs in Pakistan. They overwhelmingly

contribute to the employment in the country. Pakistan stands at “136th position out of 189 countries on the ease of doing index” (World Bank, 2018). SME sector is regarded as an “engine of economic growth”. As per the literature, no unified definitions of SMEs exist, not just in Pakistan, but also internationally. Various governmental institutions or governments across the globe define SMEs in their own perspectives (Cunningham & Rowley, 2008).

In the light of this study, researchers have operationalized small enterprises in the light of criteria defined by “Small and Medium Enterprise Development Authority” (SMEDA). SMEDA aims at empowering and encouraging the advancement and development of SMEs in Pakistan to support the economic activity in the country. For that matter, this study focuses on small enterprises only, where number of employees range from 10 to 35, and productive assets are no more than PKR 20 Million. Rational for taking small enterprises as the key focus for this study is the fact that small enterprises or projects usually revolve around one leader or executive whereas for medium or large scale ventures, a more structured managerial team is built that manages or runs a project (Peric et al., 2017). According to Main (1990), p. 60% of the entrepreneurial projects fail within six years of their launch, and one of the prime reasons for this collapse is the absence of finances or managerial competencies of the leaders or entrepreneurs. Vivarelli (2013) reports that 40% of the new enterprises do not see their third year due to lack of business-friendly policies, better infrastructure, favorable economic conditions and better entrepreneurial competencies and orientation and also for corruption and high cost of doing business (Abdullahi & Sulaiman, 2015).

Irrefutably, entrepreneurial competencies or abilities can assist small ventures or businesses with inadequate finances in such unpredictable circumstances due to Covid-19. Such skills are reflected as the basic ingredients necessary to accomplish the job by using assets that enhance small scale enterprises (Al Mamun et al., 2018). Moreover, entrepreneurial competencies (EC) are necessary and can display its critical role in gauging effectiveness of small and relatively new enterprises, where EC are referred to as basic features that include “*characteristics such as specific knowledge, motives, traits, self-images, social roles and skills*” (Mitchelmore & Rowley, 2010, p. 96) that may end in initiation or strengthening of an entrepreneurial project. Indeed, such capabilities as strategic, management entrepreneurial and conceptual competencies play crucial role in the effective performance and success of any business (Grimmer et al., 2017). It is an established fact that exposure and use of entrepreneurial competencies are the fundamental ingredients of any successful business venture (Ahmad et al., 2010).

Nonetheless, scholars argue that apart from competencies and supporting environment, entrepreneurial orientation (EO) is of critical significance as well (Darwis, 2017) which is usually tested to have an affirmative effect on organizational performance (Caseiro & Coelho, 2018). EO is defined in a number of ways, referring to Bolton and Lane (2012), Al Mamun and Fazal (2018) argue that a common definition used includes EO as being “*a set of behaviors including willingness to take risks, innovativeness, pro-activeness, autonomy and competitive aggressiveness*” (p. 381). As far as research gap is concerned, there are studies which have been done by taking EO as latent construct against determining the performance level of SMEs however, little work has been done on dimensions of EO for determining the performance of small businesses particularly in challenging time of Covid-19. Therefore, this study will be unique in this context.

The role of small enterprises in the development of economy is an established fact with particular reference to developing countries. Even most developed economies also seem heavily dependent on SMEs’ performance for their economic development (Hallam et al., 2018). Such ventures help in expanding the economy as well as creating employment opportunities. However, entrepreneur attributes, managerial abilities and firm characteristics play a vital role in the effectiveness of such small businesses (Rodríguez-Gutiérrez et al., 2015). With this increasing significance and criticality of the SMEs, there is a serious need to explore the determinants responsible for the success of small businesses. Academicians and practitioners therefore, always

remain keen on exploring factors that are critical to any enterprise especially SMEs to perform better for organization and national economic development (Leonidou et al., 2017).

It is pertinent to mention here that it is challenging for small set-ups to survive for the longer period of time due to the lack of availability of skill-set required running the entrepreneurial ventures. They are therefore, equally interested in knowing the factors responsible for failures of the small businesses. For that matter, in terms of practical implications, studying EO and EC in connection with performance is of prime importance. EO and EC both help in determining performance of an organization; this study explores both these key components in the context of Pakistan. It is important to address issues associated with success of SMEs, as they have been regarded in literature as drivers or building blocks for economic growth, they contribute around 40% to GDP of Pakistan, on the other hand, 63% of the employment in OECD countries is linked to SMEs and micro firms (World Trade Organization, 2016).

Moreover, the study informs the literature on SMEs as well as entrepreneurship, not just limited to developed world but also the developing countries. The study tests the EO and EC model empirically where EO is being measured through four dimensions and EC is being measured using five elements. This study will also be useful for the start-ups to understand and learn relevant vital tools and skills that could help improve and drive their performance (Wahga et al., 2015). The research also provides insights on the use of covariance-based structural equation modeling for developing and testing the model derived from the objectives of the study.

By considering the importance of EO, EC and EP, the study intends to:

- (i) Find out the relationship between EO and small enterprises performance
- (ii) Explore the effect of EC on small enterprises performance
- (iii) Test the mediating role of EC on the relationship between EO and small enterprises performance

The two key elements in this regard are EO and EC, literature that follows this section highlights the scholarly work in this context.

2. Literature review

Entrepreneurship is one of the key areas of interest in business and development research. As this study examines the association between enterprise performance (EP) and entrepreneurial orientation (EO) with the mediating role of entrepreneurial competencies (EC), therefore, it is observed that closest fit to this study is “Resource-Based View” (RBV). RBV has introduced the model namely VRIO i.e. resource whether tangible or intangible should be “valuable, rare, inimitable and organization” (Barney, 1991). According to Barney et al. (2001), RBV considers impalpable assets as human capital attributes, specifically skills. As per Tehseen and Ramayah (2015), EO and EC are individuals’ specific concepts which competitors cannot easily mimic. RBV can be applied in this specific context as well as entrepreneurial orientations and competencies are such skill sets which can lead enterprise to the higher performance level.

2.1. Entrepreneurial orientation dimensions

There have been number of dimensions of EO that are provided in literature. According to Bolton and Lane (2012), EO has different dimensions including “willingness to take risks, innovativeness, pro-activeness, autonomy and competitive aggressiveness”. As per Beattie (2016), five dimensions have been used of EO. In recent study, Al Mamun and Fazal (2018) have used four dimensions i.e. “creativity and innovativeness, risk taking propensity, pro-activeness and autonomy”, this study also uses the aforementioned dimensions to measure entrepreneurial orientation on the basis of current literature.

2.2. Creativity, innovativeness, entrepreneurial competencies and enterprise performance

Creativity is defined as “development of individuals’ ideas that are novel and potentially useful to the organization. It can range from suggestions for incremental adaptations to radical breakthroughs, and may be generated by employees in any job” (Liu et al., 2016, p. 242) whereas as cited in Grosser et al. (2018), innovation is defined as “any idea, practice, or material artifact perceived to be new by the relevant unit of adoption” (Zaltman et al., 1973, p. 10).

According to Hendarman and Cantner (2018), skills based on competencies are highly positively correlated with innovativeness. It is noted that entrepreneurs with specific skill sets based on competencies are considered to be innovative and can work better for their small level ventures. Sánchez (2013) posits that creativity and innovativeness are significantly related with entrepreneurial competencies. Moreover, as it has already been established that enterprise performance can be operationalized in different ways as it is a broad concept that can cater to both perceived and financial outcomes however, entrepreneurial performance is mostly measured in perceptual way in the literature (Peri_c et al., 2017).

Creativity and innovativeness can play vital role in determining enterprise performance. In view of RBV, valuable, rare and inimitable resources are mostly creative and innovative and can play significant role in determining the enterprise’s performance (Grant, 1991). Liu and Atuahene-Gima (2018) conducted study on product innovation and concluded that creativity can predict better performance in terms of product innovation. Similar study was done in IT industry by Michinov et al. (2015) where researchers found positive relation of competency with the performance in e-brainstorming session. Based on this discussion, following hypotheses have been formulated;

H1: Creativity and Innovativeness positively affects EC

H2: Creativity and Innovativeness positively affects EP

2.3. Risk taking propensity, entrepreneurial competencies and enterprise performance

Risk taking propensity (RTP) is referred to the selection of unusual way of doing thing or to leave the established imprints to follow some sort of unknown outcomes (Wales et al., 2016). According to Abdul et al. (2018), risk taking propensity has a positive and direct relation with EC and helps in survival of the SMEs as well. In another study conducted by Sánchez (2013), it has been concluded that risk taking propensity is one of the most viable predictors of the entrepreneurial behavior and is directly related with the competencies.

As far as risk taking propensity’s relation with enterprise performance is concerned, a study was conducted in China on 157 youth entrepreneurs by Xi and Liren (2017), they concluded the study with positive relationship between firm’s performance and risk-oriented attitude. However, Olaniran and Muturi (2017) conducted study on Nigeria’s 60 stock exchange firms and tested the relationship between RTP and EP. Study concluded that there was a less significant association between both variables. In another research, Glaser et al. (2016) conducted study on 383 middle level managers which were operating in 34 different business departments. Their results also showed less significant outcomes of risk taking propensity with the firm’s performance. Furthermore, as per Danso et al. (2016), entrepreneurs with high-risk taking propensity leads to better SMEs performance in developing economies. Similar study was done on 381 SMEs in Nigeria using SEM model by Lawal et al. (2018) to determine the relation between risk taking propensity and SMEs performance and study concluded with high positive relationship between said variables. Aforementioned discussion leads to the formulation of following hypotheses;

H3: Risk Taking Propensity significantly affects EC

H4: Risk Taking Propensity significantly affects EP

2.4. Pro-activeness, entrepreneurial competencies and enterprise performance

According to Lumpkin and Dess (1996, p. 146), pro-activeness is defined as “*acting in anticipation of future problems, needs or changes*”. As per current study, RBV ensures inimitable approach as proactive behavior to affect explicit capacities (competencies) in order to achieve relatively upper hand against competitors (Barney, 1991). Sánchez (2013) explored the relationship between pro-activeness and entrepreneurial competencies and concluded that pro-active approach of individuals exhibits certain type of competencies in entrepreneurs that help them in achieving success in their businesses.

Moving on, pro-activeness has shown positive relationships with enterprise’s performance as well. As per the study done in 263 manufacturing firms of Portugal by Lisboa et al. (2016), pro-activeness has shown positive significant relationship with the enterprise’s performance. According to Yang and Meyer (2019), study concluded that Alienation pro-activeness can play vital role in improving the enterprise’s performance provided that internal and external factors are controlled. A similar study was done by Lee et al. (2017) on banks director’s proactive behavior and findings suggest that directors with proactive attitude can escalate the performance of banks. This discussion leads to formulation of following hypotheses;

H5: Pro-activeness positively affects EC

H6: Pro-activeness positively affects EP

2.5. Autonomy, entrepreneurial competencies and enterprise performance

Autonomy is defined as “*individuals’ independent action of conveying a vision or an idea, which allows them to demonstrate their competencies required for smoothing the path to a successful entrepreneurship*” (Al Mamun & Fazal, 2018, p. 384). Autonomy can enable particular “entrepreneurial competencies” among auxiliaries of worldwide organizations (Dimitratos et al., 2014). A study was done in Indonesia by Musa and Ramli (2017) where researchers collected data from 93 SMEs owners by using convenient sampling technique and found that high job autonomy exhibits better competency level in entrepreneurs, this study also highlighted that high job autonomy will lead to better firm’s performance. According to Hodari et al. (2017), managers with goal congruency can lead to higher hotel’s performance whereas this relationship was found to be mediated by job autonomy. Moreover, a study done in Shenzhen and Shanghai stock exchange listed firms in China from 2012–2015 showed positive relationship between operational autonomy and listed firms performance (Zhijun & Li, 2016). In the light of the above discussion, following hypotheses have been formulated;

H7: Autonomy positively affects EC

H8: Autonomy positively affects EP

2.6. Mediating effect of entrepreneurial competencies

As this research proposes to test the relationship between entrepreneurial orientation dimensions and EP having mediating effect of EC, similar study was done by Mohamad and Sidek (2013), where researchers reported a mediated association of EC with growth of microfinance sector and small businesses. Suhaimi et al. (2016) studied 197 informal micro-entrepreneurs using cross sectional research design in Malaysia and concluded that entrepreneurial competencies had significantly

positive relationship with entrepreneurial performance. A similar study was conducted by Khan et al. (2020) where positive relationship was found between entrepreneurial competencies and SMEs performance. These studies propose hypotheses as stated below;

H9: EC positively affects EP

HM1: EC significantly mediates the connection between CI and EP

HM2: EC significantly mediates the relationship between RTP and EP

HM3: EC significantly mediates the association between PR and EP

HM4: EC significantly mediates the relationship between AU and EP

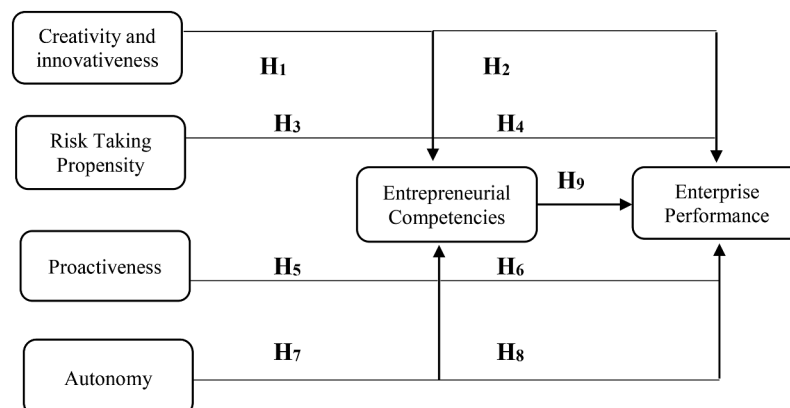
2.7. Conceptual framework

As discussed in literature, entrepreneurial orientation has four dimensions including CI, RTP, PR and AU, whereas EP has been operationalized through perceptual measures. The variable that is being tested as a mediator is EC. The research tests a model based on literature that proposes the relationship between EO and EC along with EO and EP, moreover, the part of EC as a potential mediator of EO and EP relationship has been tested in the context of SMEs in Pakistan, precisely small enterprises. Nine hypotheses have been developed pertaining EO dimensions to test relationships with EC and EP as discussed in literature whereas four hypotheses have been developed to test the mediating effects of EC with each dimension of EO and EP.

3. Materials and methods

Taking lead from the literature cited (including Lisboa et al., 2016; Al Mamun & Fazal, 2018; Suhaimi et al., 2016) in the earlier sections and in the light of the research objectives, this study follows a quantitative research methodology and a “cross-sectional research design” for developing the model, collection of data and testing of the model. As shown in Figure 1, the study revolves around three latent variables i.e. EO, EC and EP. The first variable EO has operationalized in four dimensions such as CI (seven items), RTP (five items), PR (six items) and AU (five items) (Al Mamun & Fazal, 2018), whereas enterprise performance has been operationalized through perceptual measures using five items (Chandler & Hanks, 1993; Morgan & Strong, 2003). The third variable that is being tested as a mediator i.e. EC is being measured using five items (Al Mamun & Fazal, 2018; Man et al., 2008). All the items have been measured on 5-points’ likert scale.

Figure 1. Research model.



Moving on, there are 3.2 million SMEs currently operating in Pakistan. For sake of this study, researchers have collected the data from list of SMEs in Lahore obtained from SMEDA. Currently, approximately 110,000 SMEs are registered with SMEDA nationwide, of which about approximately 21,330 SMEs are registered in Lahore zone from which about 11,440 are particularly the small enterprises. As focus of the study or population of interest is small enterprises emerged during times of Covid-19, therefore, researchers have taken the sample of 386 using formula provided by Yamane (1967) from various segments such as health and safety products, stitching, cooking/baking, education services and software/information technology-related industry. Sample is taken from Lahore region as major portion of SMEs (20%) fall in Lahore and many new start-ups have been developed in Lahore. Systematic random sampling is used in order to collect the data from the list of 11,440 small enterprises from Lahore. Data were collected from the owner of each small business. Systematic random sampling involves allocation of a random number to all the members in the sampling frame, followed the method of a random start and random interval, where the random number is generated through a random number generator (Peregrine, 2018). Following the reliability and validity testing, analysis involving model and hypotheses testing is conducted using AMOS. There are several tools that can be used for conducting the said analysis, however, according to various studies, particularly in the field of entrepreneurship as cited in literature, CB-SEM (AMOS) has been widely used by the researchers. It is also iterated that CB-SEM (AMOS) is a relatively better tool as compared to its alternatives owing to the fact that this technique is better for a larger sample size and normal data (Hair et al., 2011, 2012). However, one of the key studies by Rigdon et al. (2017) emphasizes that researchers should focus more on the research design and its fundamentals because at times, the analysis tool whichever you use can be misleading if the research design fundamentals or protocols are not in place. Hence, this study has taken into account both these factors while designing and conducting the research.

4. Data analysis

Data analysis starts with descriptive using means and standard deviations of latent constructs. It further leads to the use of confirmatory factor analysis (CFA) using structural equation modelling (SEM). The purpose of CFA is to calculate the composite reliability and convergent and discriminant validity along with model fitness indices. After conducting CFA, structural model is developed to test the direct and indirect hypotheses of the study.

Table 1 shows the values of the means and standard deviations of all the latent constructs. Mean values range from 3.17 to 3.67 which shows that participants of the study score slightly more than the average of the values which shows the positive tendency of the participants towards EO dimensions and EC and EP. Moreover, standard deviations range from 0.55 to 0.81 which shows the dispersion from mean is between these values.

4.1. Confirmatory factor analysis

Conducting the confirmatory factor analysis in order to test the measurement model and its fitness is the first step in SEM. It is important to determine the model's contextual reliability,

Table 1. Mean and standard deviation

Latent Constructs	Mean	Standard Deviation
CI	3.44	0.68
RTP	3.67	0.78
PR	3.21	0.61
AU	3.35	0.55
EC	3.17	0.81
EP	3.29	0.79

validity and fitness indices. To begin with the measurement model depicted in Figure 2, several statistics calculated using AMOS aid in confirmation of the fitness of the measurement model. Starting with CMIN/DF (2.150), which is very much within the advised range as suggested by Kline (1998) confirming that the model is appropriate. The second statistic used for further confirming model fitness is the Comparative Fit Index (CFI), who's minimum value is required to be 0.940 (Hooper et al., 2008) and as per the Figure 2, this model has a CFI of Table 2, CFI is 0.944.

Figure 2. Measurement model.

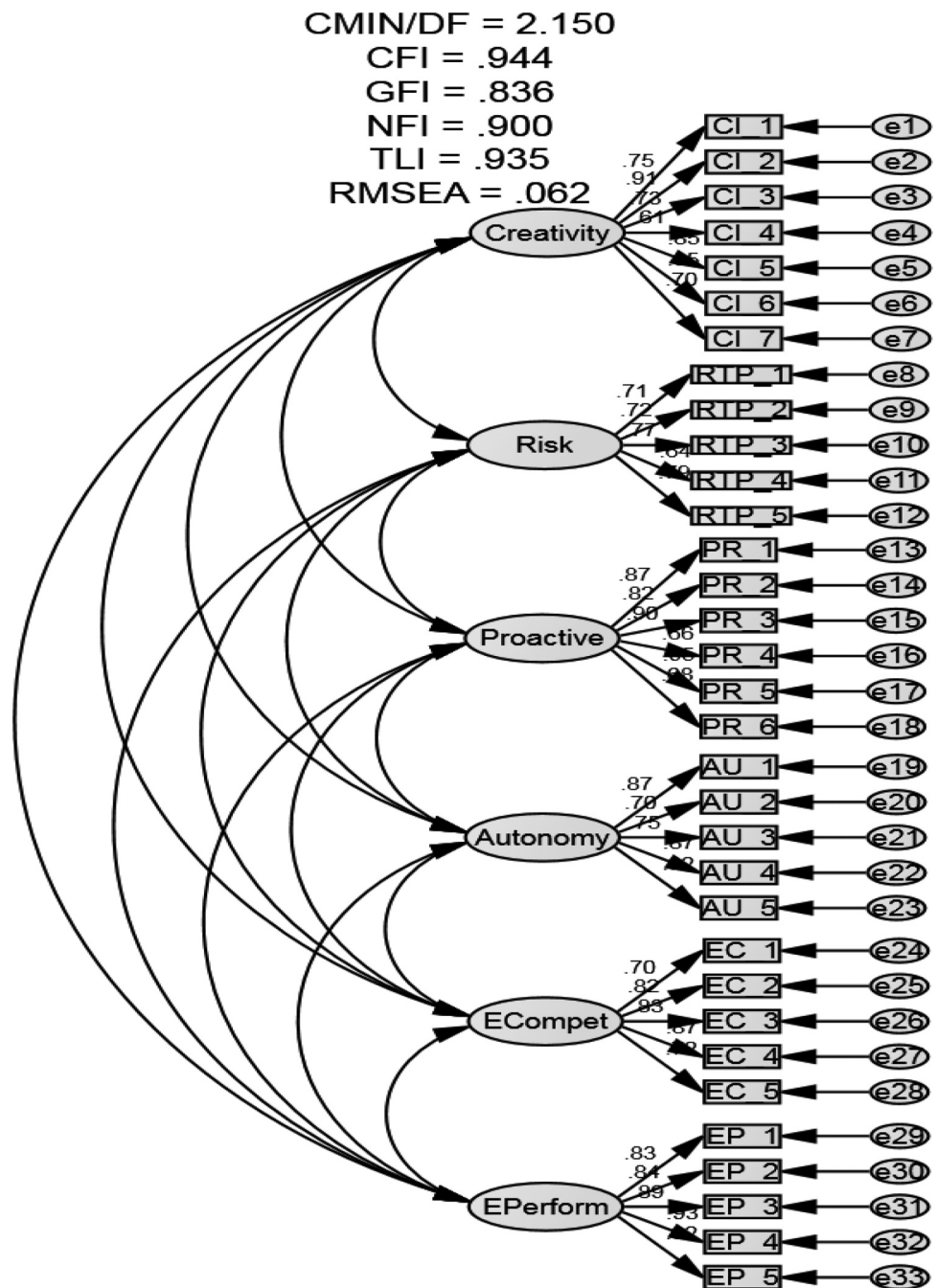
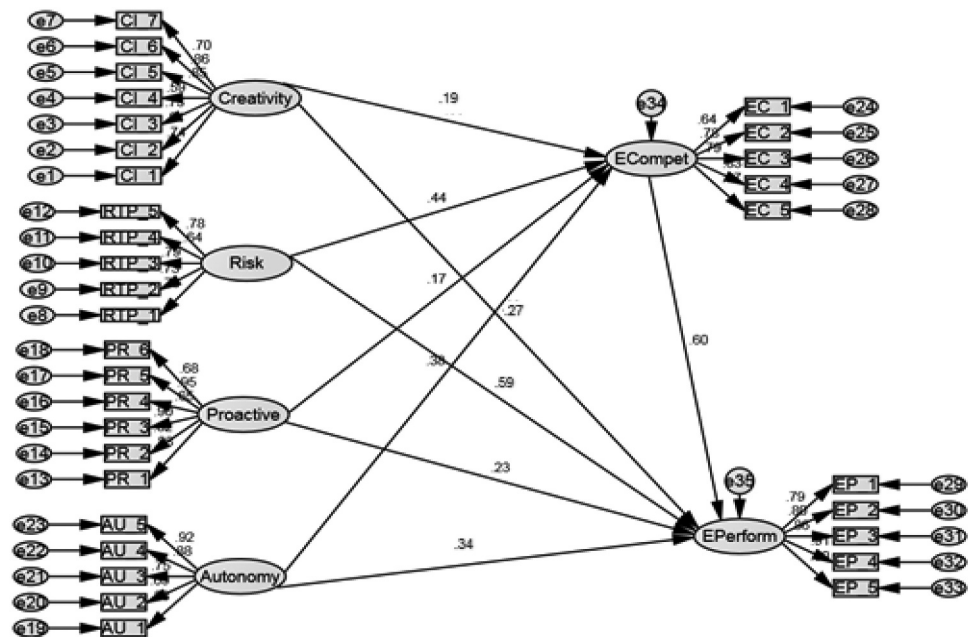


Figure 3. Structural model.



Moving on to the third reflector, the GFI value which in this model is 0.836 is slightly less than the advised threshold of 0.90 (Tanaka & Huba, 1985). Some of the experts argue that this goodness index is not very reliable owing to its sensitive nature (Hooper et al., 2008) and may or may not be used (Sharma et al., 2005).

Referring to the fourth key measure, i.e. normed fitness index abbreviated as (NFI) for this model is exactly 0.90, this value suggests that the normed fitness has marginally been achieved by this model (Hair Jr. et al., 2017). Bentler and Bonett (1980) argue that minimum acceptable value for TLI is 0.90, which as per Figure 2 is 0.935.

Among these 6 model fitness measurement indicators, finally comes the RMSEA. RMSEA for the model developed in this study is 0.062, which is very much less than the value of 0.080 as suggested in the literature by Browne and Cudeck (1993).

Reliability and validity of the measurement constructs is an important step in conducting analysis to ensure the appropriateness of the measurement constructs. The numbers mentioned in the Table 2 very much fulfil the two requirements. Firstly, the CR value is comfortably above the very much commonly known value of 0.70 (J.F. Hair et al., 1998; Nunnally & Bernstein, 1994). Creativity and innovativeness has a CR of 0.913, Risk Taking Propensity has 0.850, proactiveness CR is at 0.925, autonomy has a CR of 0.915, the mediating variable i.e. entrepreneurial competencies has CR of 0.892 and finally the dependent variable i.e. enterprise performance has CR of 0.946.

Average variance extracted (AVE) is also used as an important indicator of convergent validity. In this study, the AVE for all constructs is greater than 0.50, which confirms the convergent validity of the measurement instrument (J.F. Hair et al., 2006). Fornell and Larcker (1981) prescribe that for confirming convergent validity, the factor loading should be greater than 0.50 for all items, and this can be observed from Table 1 that all SFLs are fairly above 0.50, with minimum value being 0.609.

Confirmation of convergent validity is followed by the verification of discriminant validity which confirms the distinctiveness of all items of one construct from the others (J.F. Hair et al., 2006) and for that again, Fornell and Larcker (1981) advise that all correlations (see Table 3) amongst the

Table 2. Convergent validity and reliability

Latent Construct	Items	SFL	CR	AVE
Creativity and Innovativeness	CI_1	.753	0.913	0.605
	CI_2	.913		
	CI_3	.734		
	CI_4	.609		
	CI_5	.847		
	CI_6	.846		
	CI_7	.701		
Risk Taking Propensity	RTP_1	.705	0.850	0.532
	RTP_2	.724		
	RTP_3	.774		
	RTP_4	.644		
	RTP_5	.791		
Proactiveness	PR_1	.874	0.925	0.676
	PR_2	.821		
	PR_3	.902		
	PR_4	.658		
	PR_5	.950		
	PR_6	.684		
Autonomy	AU_1	.872	0.915	0.685
	AU_2	.696		
	AU_3	.753		
	AU_4	.871		
	AU_5	.925		
Entrepreneurial Competencies	EC_1	.697	0.892	0.624
	EC_2	.822		
	EC_3	.830		
	EC_4	.866		
	EC_5	.722		
Enterprise Performance	EP_1	.830	0.946	0.777
	EP_2	.837		
	EP_3	.886		
	EP_4	.929		
	EP_5	.921		

latent constructs must be less than the \sqrt{AVE} s. It concludes that participants were able to distinguish among the latent constructs.

“As far as common method bias (CMB) is concerned, Harman single factor test (HSFT) is used to check whether change in single factor affects all the variables in the data and that variance should be less than 0.5 to avoid CMB and in this study, HSFT’s value is 0.33, hence it can be concluded that data are free from CMB (Podsakoff & Organ, 1986). However, this technique has few limitations as well (Podsakoff et al., 2003), therefore, researchers have used common latent factor (CLF) test through SEM by comparing standardized regression weights (SRWs) with and without CLF and

Table 3. Discriminant validity

	CI	RTP	PR	AU	EC	EP
CI	0.777*					
RTP	0.41	0.730*				
PR	0.37	0.41	0.822*			
AU	0.25	0.09	0.11	0.828*		
EC	0.19	0.44	0.17	0.38	0.790*	
EP	0.27	0.59	0.23	0.34	0.60	0.882*

*√AVE

found that SRWs without CLF were higher than SRWs with CLF with the difference of less than 0.05, hence concluding that data are free from CMB (Gaskin, 2012).”

4.2. Hypotheses testing using structural model

Now, moving on to the final step in analysis i.e. testing of the hypotheses developed in line with the research objectives as highlighted in Figure 3, this part of the study elaborates the statistical findings of the CB-SEM.

The first two of the 13 hypotheses confirm the relationship between CI and EC (CIEC = 0.19) and between CI and the EP (CIEP = 0.27). It shows that with the increase of CI, both EC and EP will also escalate in small enterprises. The H₃ and H₄ refer to the direct and positive relationships between RTP and EC and RTP and EP respectively. The analysis reveal that both the hypotheses H₃ (RTPEC = 0.44) and H₄ (RTPEP = 0.59) are supported on the basis of data collected for this research. It reveals that with the increase of RTP, both EC and EP will also significantly increase in small enterprises. The third reflection of EO is the idea of PR, structural model confirms it is associated with EC (H₅: PREC = 0.17) and the EP (H₆: PREP = 0.23). The direct relationships conclude that with the increase in PR, both EC and EP will also significantly improve. Referring to H₇ and H₈, the statistics reveal that autonomy is positively associated with EC (AU EC = 0.38) as well as the EP significantly (AU EP = 0.34). Results show the positive change in relation in EC and EP with increase

Table 4. Results

Path	Beta Coefficient	P-value	Results
Direct Effects			
H ₁ : CIEC	0.19	0.000	Supported
H ₂ : CIEP	0.27	0.000	Supported
H ₃ : RTPEC	0.44	0.000	Supported
H ₄ : RTPEP	0.59	0.000	Supported
H ₅ : PREC	0.17	0.000	Supported
H ₆ : PREP	0.23	0.000	Supported
H ₇ : AU EC	0.38	0.000	Supported
H ₈ : AU EP	0.34	0.000	Supported
H ₉ : ECEP	0.60	0.000	Supported
Indirect Effects			
H _{M1} : CIEC EP	0.19	0.000	Supported
H _{M2} : RTPEC EP	0.11	0.000	Supported
H _{M3} : PREC EP	0.15	0.000	Supported
H _{M4} : AU EC EP	0.16	0.000	Supported

in AU. Prior the testing of mediation hypothesis, the H_9 is also found to be supported i.e. the mediator (EC) and the dependent variable (EP) are positively related to one another ($ECEP = 0.60$). This relationship was found to be the most significant one in whole model which reveals that with increase in EC, EP significantly increase.

As reflected in the title of the article, role of EC was the key point of this research and the four mediation hypotheses from H_{M1} to H_{M4} tested this phenomenon and the results have been shown in Table 4. The indirect effects of H_{M1} confirm the mediating effect of EC on the relationship of CI and EP ($CIEC EP = 0.19$). Similarly, H_{M2} analysis also confirm the mediating effect of competency of an entrepreneur and the relationship between ones RTP and the performance of the small enterprise ($RTPEC EP = 0.11$). The next hypothesis (H_{M3}) tested the mediating effect of EC on the positive association of PR and EP and the statistical results confirm that a partial mediation effect exists in this path ($PREC EP = 0.15$). The final of the all hypotheses H_{M4} which was about mediating effect of an EC on the relationship of AU and EP, was also found to be significant ($AUEC EP = 0.16$). In nutshell, it can be observed that all the developed hypotheses have been proved may it be direct or indirect.

5. Discussion & conclusions

Significance of entrepreneurship has immensely increased from last few years in specific context of Pakistan due to less job opportunities available and people have started to believe in building their own ventures may it be on small scale. In this scenario, importance of EO dimensions along with EC cannot be undermined. Pakistan being developing country is going through hard economic times and Covid-19 has further worsened the conditions. However, Pakistan being emerging economy took it as challenge and many new start-ups have emerged in current scenario and in this case, performance of small businesses can contribute greatly in the economic development of the county. In this context, results have shown that all the hypotheses have been accepted and therefore, positive significant relationships have been found between the dimensions of EO with EC and EP. Moreover, significant mediation exists between all EO dimensions and EP through EC. As far as EO dimensions relation is concerned with EC, RTP has found to be the most significant EO dimension that is associated with EC with $\beta = 0.44$. This finding is supported with the literature section as well that RTP has significant relationship with EC (Abdul et al., 2018; Sánchez, 2013). Similarly, CI relationship with EC was also found to be positive with $\beta = 0.19$ and is supported from other studies as well (Sánchez, 2013). Likewise, positive relationship between PR and EC is observed at $\beta = 0.17$. Lastly, AU is found to be positively related with EC with $\beta = 0.38$ (Ibidunni et al., 2018). These relationships show the importance in context of Pakistan as well where developing EO in all forms of dimensions can play vital role in developing EC in small business owners. Moreover, small businesses have relatively more tendency towards risk taking propensity which has caused the most significant relationship with EC. Such set-ups also need to be more creative and have more autonomy in order to be competent and able to survive in the dynamic environment.

In addition, as far as EO dimensions relation is concerned with EP, RTP has found to be strongly related and most significant EO dimension in relation with EP i.e. $\beta = 0.59$. This finding is also supported with other studies (Moustaghfir et al., 2020; Shah & Ahmad, 2019). Moreover, CI has also shown positive relationship with EP ($\beta = 0.27$) and this result has also been supported by many studies (Ferreira et al., 2020). Similarly, PR has also found to be positively related with EP ($\beta = 0.23$) (Shah & Ahmad, 2019; Yang & Meyer, 2019). As far as AU relationship with EP is concerned, it also found to be positively related with EP ($\beta = 0.34$) (Covin et al., 2019; Yu et al., 2019). These findings are important in context of Pakistan where small businesses are more prone to risk taking behaviours which eventually lead to better performance. However, it is assumed that risk taking is more of moderate level instead of high risk taking as more risk taking may lead to collapse of such set ups as well. Similarly, creativity, proactiveness and autonomy also enhances the performance of such set-ups as these elements become prerequisite for entrepreneurs to exist in the volatile environment.

Similarly, EC has found to be strongly related with EP with $\beta = 0.60$. This finding is supported with various studies (Al Mamun et al., 2019; Khattak & Mustafa, 2019). This finding shows that small business owners need to develop competencies in order to perform better. This can be backed in times of Covid-19 as well where entrepreneurs with competencies have performed well. Lastly, EC has mediated all the EO dimensions and EP. The most significant mediation is found with CI with significant indirect effect of 0.19. In a nutshell, it can be concluded that all the dimensions contribute in determining EP, also EC has major mediatory role in determining EP.

Towards the end, it is critically significant that even in Covid-19, small businesses performance has improved due to presence of EO and EC and based on the conclusions, it is strongly recommended that stakeholders should emphasize on strengthening of mechanisms associated with fundamentals of entrepreneurship as it would further help in curtailing increasing unemployment and would also contribute to the economic development of the country. Moreover, policy makers also can work on providing favourable environment in this regard. Covid-19 has made entrepreneurship more challenging than ever. As far as academicians or academia is concerned, it has given new dimensions to the idea of entrepreneurship as Covid-19 has changed the land scape of business education and this study reiterates the need for contextualizing and revisiting the knowledge and skills being imparted by the higher education institutions. Lastly, this study has also opened the ground for small business ventures to tackle with the unanticipated challenging conditions for the long term survival.

6. Managerial implications

The study confirms that the performance of small businesses is significantly influenced by an individual's orientation towards entrepreneurship. As analysed earlier, having orientation of one thing does not necessarily result in success, rather competencies of the individual matter a lot which has been seen in challenging times of Covid-19. An entrepreneur having right orientation can make the business successful but if an entrepreneur possess the required competencies, the performance results of the business can be better. Therefore, it is important for stakeholders to understand that entrepreneurship is not about taking risk or going for a hit and trial, rather having the right set of knowledge, skills and abilities is vital.

Keeping in view the findings of the study, authors suggest that policy makers and educational institutions should not just encourage young entrepreneurs by providing grants and funding, rather they should also develop mechanism for training individuals that have an orientation towards entrepreneurship as we know that a successful entrepreneurial venture, particularly in the small enterprise sector can have positive implications for several individuals and businesses associated with it at the local scale.

On the other hand, referring to entrepreneurs themselves, having a vision and confidence can serve as a beneficial prerequisite for developing and running a business, but a good entrepreneur needs to have good competencies as well, and there is no harm in hiring skilled or qualified individuals if an entrepreneur lacks certain skills. Lastly, in this context, learning and training have no limits, one can always strive for improved and new knowledge for getting better results whether for managing one's self or one's business.

Nonetheless, there is no single recipe or set of skills or competencies that can ensure success of a small business, but certain things highlighted in this study and extant literature on the subject, can surely help entrepreneurs or potential entrepreneurs with entrepreneurial orientation in managing or overcoming certain operational or strategic hurdles. Towards the end, this study contributes to the stream of literature suggesting that small enterprises need to have a proper entrepreneurial set up by incorporating entrepreneurial orientation and competencies for the better performance of entrepreneurial ventures.

7. Limitations

Though this study finds to be a good fit for enhancing the enterprise performance through entrepreneurial orientation and entrepreneurial competencies, there are few limitations of the study as well. The study does not highlight strategies for enhancing EO or ECs, moreover, the dimensions reflecting EO are not exhaustive despite of being relatively highly cited in the literature.

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Author details

Mukaram Ali Khan¹
ORCID ID: <http://orcid.org/0000-0002-5092-0142>
Syed Sohaib Zubair²
E-mail: Sohaib.iqtm@pu.edu.pk
ORCID ID: <http://orcid.org/0000-0001-7988-3018>
Kashif Rathore¹
ORCID ID: <http://orcid.org/0000-0003-2866-4696>
Maryam Ijaz³
Sumreen Khalil⁴
ORCID ID: <http://orcid.org/0000-0003-3839-2110>
Muhammad Khalil⁵

¹ Institute of Administrative Sciences, University of the Punjab-Lahore, Lahore, Pakistan.

² Department of Administrative Sciences, University of the Punjab-Jhelum, Pakistan.

³ Masters in Commerce and Economics, Macquarie University, Macquarie Park, Australia.

⁴ Institute of Quality and Technology Management, University of the Punjab, Lahore, Pakistan.

⁵ Riphah Center for External Programs, Riphah International University, Lahore, Pakistan.

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References

- Abdul, R. O., Mukulu, E., & Odhiambo, R. O. (2018). Effect of risk-taking competency on the survival of small and medium enterprises in Kenya. *European Journals of Business Management*, 6(4), 1–18.
- Abdullahi, I. I., & Sulaiman, C. (2015). The determinants of small and medium-sized enterprises performance in Nigeria. *Advances in Economics and Business*, 3(5), 184–189. <https://doi.org/10.13189/aeb.2015.030504>
- Ahmad, N. H., Ramayah, T., Wilson, C., & Kummerow, L. (2010). Is entrepreneurial competency and business success relationship contingent upon business environment? A study of Malaysian SMEs. *International Journal of Entrepreneurial Behaviour & Research*, 16(3), 182–203. <https://doi.org/10.1108/13552551011042780>
- Al Mamun, A., & Fazal, S. A. (2018). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 379–398. <https://doi.org/10.1108/APJIE-05-2018-0033>
- Al Mamun, A., Fazal, S. A. & Muniady, R. (2019). Entrepreneurial knowledge, skills, competencies and performance: A study of micro-enterprises in Kelantan, Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(1), 29–48. <https://doi.org/10.1108/APJIE-11-2018-0067>
- Al Mamun, A., Ibrahim, M. A. H., Nawi, N. C., & Muniady, R. (2018). Effect of economic vulnerability on entrepreneurial competencies among Malaysian micro-entrepreneurs. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(2), 222–237. <https://doi.org/10.1108/APJIE-03-2018-0013>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barney, J., Wright, M., & Ketchen, D. (2001). The resource-based view of the firm: Ten years after. *Journal of Management*, 27(6), 625–641. <https://doi.org/10.1177/014920630102700601>
- Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). How are small businesses adjusting to covid-19? *Early evidence from a survey* (No. w26989). National Bureau of Economic Research.
- Beattie, S. (2016). Which entrepreneurial traits are the most critical in determining success? *Otago Management Graduate Review*, 14(1), 13–20.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606. <https://doi.org/10.1037/0033-2909.88.3.588>
- Bolton, D. L., & Lane, M. D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education & Training*, 54(2/3), 219–233. <https://doi.org/10.1108/00400911211210314>
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Sage.
- Caseiro, N., & Coelho, A. (2018). Business intelligence and competitiveness: The mediating role of entrepreneurial orientation, competitiveness review. *An International Business Journal*, 28(2), 213–226. <https://doi.org/10.1108/CR-09-2016-0054>
- Chandler, G. N., & Hanks, S. H. (1993). Measuring the performance of emerging businesses: A validation study. *Journal of Business Venturing*, 8(5), 391–408. [https://doi.org/10.1016/0883-9026\(93\)90021-V](https://doi.org/10.1016/0883-9026(93)90021-V)
- Covin, J. G., Garrett, R. P., Kuratko, D. F., & Bolinger, M. (2019). Internal corporate venture planning autonomy, strategic evolution, and venture performance. *Small Business Economics*, 56, 293–310. <https://doi.org/10.1007/s11187-019-00220-2>
- Cunningham, L. X., & Rowley, C. (2008). The development of Chinese small and medium enterprises and human resource management: A review. *Asia Pacific Journal of Human Resources*, 46(3), 353–379. <https://doi.org/10.1177/103841108095763>
- Danso, A., Adomako, S., Damoah, J. O., & Uddin, M. (2016). Risk-taking propensity, managerial network ties and firm performance in an emerging economy. *The Journal of Entrepreneurship*, 25(2), 155–183. <https://doi.org/10.1177/0971355516650367>
- Dar, M. S., Ahmed, S., & Raziq, A. (2017). Small and medium-size enterprises in Pakistan: Definition and critical issues. *Pakistan Business Review*, 19(1), 46–70. <http://dx.doi.org/10.22555/pbr.v19i1.1245>
- Darwis, G. (2017). Accelerated transformation of Indonesian SME's: Embracing entrepreneurial orientation and innovation on achieving dynamic capability to increase competitiveness, *3rd International Indonesian Forum for Asian Studies: Borderless communities and nations with borders, Challenges of Globalizationx*.

- Dimitratos, P., Liouka, I., & Young, S. (2014). A missing operationalization: Entrepreneurial competencies in multinational enterprise subsidiaries. *Long Range Planning*, 47(1/2), 64–75. <https://doi.org/10.1016/j.lrp.2013.10.004>
- Ferreira, J., Coelho, A., & 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*, 92–93, 1–18. <https://doi.org/10.1016/j.technovation.2018.11.004>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 8(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Gaskin, J. (2012). Common method bias (CMB). Gaskination's StatWiki. Retrieved from <http://statwiki.kolobkreations.com>
- Glaser, L., Stam, W., & Takeuchi, R. (2016). Managing the risks of proactivity: A multilevel study of initiative and performance in the middle management context. *Academy of Management Journal*, 59(4), 1339–1360. <https://doi.org/10.5465/amj.2014.0177>
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114–135. <https://doi.org/10.2307/41166664>
- Grimmer, L., Miles, M. P., Byrom, J., & Grimmer, M. (2017). The impact of resources and strategic orientation on small retail firm performance. *Journal of Small Business Management*, 55(S1), 7–26. <https://doi.org/10.1111/jsbm.12368>
- Grosser, T. J., Obstfeld, D., Choi, E. W., Woehler, M., Lopez-Kidwell, V., Labianca, G., & Borgatti, S. P. (2018). A sociopolitical perspective on employee innovativeness and job performance: The role of political skill and network structure. *Organization Science*, 29(4), 612–632.
- Hair, J., Jr, Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123. <https://doi.org/10.1504/IJMDA.2017.10008574>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. Prentice Hall.
- Hair, J. F., Jr, Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Prentice-Hall International, NJ.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J. F., Sarstedt, M., Pieper, T. M., & 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*, 45(5–6), 320–340. <https://doi.org/10.1016/j.lrp.2012.09.008>
- Hallam, C., Dorantes Dosamantes, C. A., & Zanella, G. (2018). Culture and social capital network effects on the survival and performance of high-tech micro and small firms. *Journal of Small Business and Enterprise Development* 25(1), 81–106. <https://doi.org/10.1108/JSBED-05-2017-0161>
- Hendarman, A. F., & Cantner, U. (2018). Soft skills, hard skills, and individual innovativeness. *Eurasian Business Review*, 8(2), 139–169. <https://doi.org/10.1007/s40821-017-0076-6>
- Hodari, D., Turner, M. J., & Sturman, M. C. (2017). How hotel owner-operator goal congruency and GM autonomy influence hotel performance. *International Journal of Hospitality Management*, 61, 119–128. <https://doi.org/10.1016/j.ijhm.2016.11.008>
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60. doi: 10.21427/D7CF7R
- Hyder, S., & Lussier, R. N. (2016). Why businesses succeed or fail: A study on small businesses in Pakistan. *Journal of Entrepreneurship in Emerging Economies*, 8(1), 82–100. <https://doi.org/10.1108/JEEE-03-2015-0020>
- Ibidunni, A. S., Atolagbe, T. M., OBI, J. N., Olokundun, A. M., Oke, A. O., Amahian, A. B., ... & Obaoye, D. (2018). Moderating effect of entrepreneurial orientation on entrepreneurial competencies and performance of agro-based SMEs. *International Journal of Entrepreneurship*, 22(2).
- Khan, M. A., Rathore, K., & Sial, M. A. (2020). Entrepreneurial orientation and performance of small and medium enterprises: Mediating effect of entrepreneurial competencies. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 14(2), 508–528.
- Khattak, M.S. & Mustafa, U. (2019). Management competencies, complexities and performance in engineering infrastructure projects of Pakistan. *Engineering, Construction and Architectural Management*, 26 (7), 1321–1347. <https://doi.org/10.1108/ECAM-05-2017-0079>
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. NY: Guilford Press.
- Lawal, F. A., Adegbuyi, O. A., Iyiola, O. O., Ayoado, O. E., & Taiwo, A. A. (2018). Nexus between informal networks and risk-taking: Implications for improving the performance of small and medium enterprises (Smes) in Nigeria. *Academy of Strategic Management Journal*, 17(2), 1–13.
- Lee, E., Cho, K., Baek, H., & Choi, W. (2017). Effect of proactive and reactive outside directors' behavior on banks' financial performance. *Productive Review*, 31(4), 309–329. <https://www.earticle.net/Article/A320499>
- Leonidou, L. C., Christodoulides, P., Kyrgidou, L. P., & Paliawadana, D. (2017). Internal drivers and performance consequences of small firm green business strategy: The moderating role of external forces. *Journal of Business Ethics*, 140(3), 585–606. <https://doi.org/10.1007/s10551-015-2670-9>
- Lisboa, A., Skarmeas, D., & Saridakis, C. (2016). Entrepreneurial orientation pathways to performance: A fuzzy-set analysis. *Journal of Business Research*, 69(4), 1319–1324. <https://doi.org/10.1016/j.jbusres.2015.10.099>
- Liu, D., Jiang, K., Shalley, C. E., Keem, S., & Zhou, J. (2016). Motivational mechanisms of employee creativity: A meta-analytic examination and theoretical extension of the creativity literature. *Organizational Behavior and Human Decision Processes*, 137, 236–263. <https://doi.org/10.1016/j.obhdp.2016.08.001>
- Liu, W., & Atuahene-Gima, K. (2018). Enhancing product innovation performance in a dysfunctional competitive environment: The roles of competitive strategies and market-based assets. *Industrial Marketing Management*, 73, 7–20. <https://doi.org/10.1016/j.indmarman.2018.01.006>
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172. <https://doi.org/10.5465/amr.1996.9602161568>
- Main, J. (1990). A golden-age for entrepreneurs. *Fortune*, 121(4), 120.

- Man, T. W., Lau, T., & Snape, E. (2008). Entrepreneurial competencies and the performance of small and medium enterprises: An investigation through a framework of competitiveness. *Journal of Small Business and Entrepreneurship*, 21(3), 257–276. <https://doi.org/10.1080/08276331.2008.10593424>
- Michinov, N., Jamet, E., Métayer, N., & Le Hénaff, B. (2015). The eyes of creativity: Impact of social comparison and individual creativity on performance and attention to others' ideas during electronic brainstorming. *Computers in Human Behavior*, 42, 57–67. <https://doi.org/10.1016/j.chb.2014.04.037>
- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behavior and Research*, 16(2), 92–111. <https://doi.org/10.1108/13552551011026995>
- Mohamad, R. M., & Sidek, S. (2013). The role of entrepreneurial competencies as mediator in the relationship between micro finance and small business growth. *Journal of Entrepreneurship and Business*, 1(1), 21–31. <https://jeb.umk.edu.my/JEB.0101.03.pdf>
- Morgan, R. E., & Strong, C. A. (2003). Business performance and dimensions of strategic orientation. *Journal of Business Research*, 56(3), 163–176. [https://doi.org/10.1016/S0148-2963\(01\)00218-1](https://doi.org/10.1016/S0148-2963(01)00218-1)
- Moustaghfir, K., El Fatihi, S., & Benouarrek, M. (2020). Human resource management practices, entrepreneurial orientation and firm performance: what is the link?, *Measuring Business Excellence*, 24(2), 267–283. <https://doi.org/10.1108/MBE-12-2019-0119>
- Mpi, D. L. (2019). Encouraging Micro, Small and Medium Enterprises (MSMES) for economic growth and development in Nigeria and other developing economies: The role of 'the Igbo apprenticeship system'. *The Strategic Journal of Business & Change Management*, 6(1), 535–543. <https://strategicjournals.com/index.php/journal/article/view/1078>
- Musa, C. I., & Ramli, A. (2017). Effect of characteristics and entrepreneurial orientation towards entrepreneurship competence and crafts and arts small and medium enterprises business performance in Makassar. *International Review of Management and Marketing*, 7(2), 166–173. <https://ideas.repec.org/a/eco/journ3/2017-02-24.html>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Olaniran, M. O., & Muturi, D. W. (2017). The role of risk-taking on performance of firms on Nigerian stock exchange. *International Journal of Research in Business Studies and Management*, 3(3), 36–44. <http://hdl.handle.net/123456789/2748>
- Peregrine, P. N. (2018). *Sampling Theory*. The Encyclopedia of Archaeological Sciences, 1–3.
- Perić, I., Grladinović, T., Kropivšek, J., & Greger, K. (2017). Relationship between entrepreneurial competencies and firm performance: A study on furniture manufacturing SMEs in Croatia, In *28th International Conference on Wood Science and Technology: Implementation of Wood Science In Woodworking Sector*, Zagreb, pp. 59–64.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management*, 12(1), 531–544. <https://doi.org/10.1177/014920638601200408>
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Rigdon, E., Sarstedt, M., & Ringle, C. (2017). On comparing results from CB-SEM and PLS-SEM: Five perspectives and five recommendations. *Marketing: ZFP – Journal of Research and Management*, 39(3), 4–16. <https://doi.org/10.15358/0344-1369-2017-3-4>
- Rodríguez-Gutiérrez, M. J., Moreno, P., & Tejada, P. (2015). Entrepreneurial orientation and performance of SMEs in the services industry. *Journal of Organizational Change Management*, 28(2), 194–212. <https://doi.org/10.1108/JOCM-01-2015-0020>
- Sánchez, J. C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of Small Business Management*, 51(3), 447–465. <https://doi.org/10.1111/jsbm.12025>
- Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 pandemic on micro, small, and medium-sized enterprises operating in Pakistan. *Research in Globalization*, 2(1), 100018. <https://doi.org/10.1016/j.resglo.2020.100018>
- Shah, S. Z. A., and Ahmad, M. (2019). Entrepreneurial orientation and performance of small and medium-sized enterprises: Mediating effects of differentiation strategy. *Competitiveness Review*, 29(5), 551–572. <https://doi.org/10.1108/CR-06-2018-0038>
- Sharma, S., Mukherjee, S., Kumar, A., & Dillon, W. R. (2005). A simulation study to investigate the use of cutoff values for assessing model fit in covariance structure models. *Journal of Business Research*, 58(1), 935–943. <https://doi.org/10.1016/j.jbusres.2003.10.007>
- Suhaimi, N. H. B. M., Al Mamun, A., Zainol, N. R., Nawi, N. C., Permerupan, Y., & Malarvizhi, C. A. (2016). Characteristics of informal micro-entrepreneurs in Malaysia. *Mediterranean Journal of Social Sciences*, 7(2), 128–136. <https://doi.org/10.5901/mjss.2016.v7n2p128>
- Tanaka, J. S., & Huba, G. J. (1985). A fit index for covariance structure models under arbitrary GLS estimation. *British Journal of Mathematical and Statistical Psychology*, 38(2), 197–201. <https://doi.org/10.1111/j.2044-8317.1985.tb00834.x>
- Tehseen, S., & Ramayah, T. (2015). Entrepreneurial competencies and SMEs business success: The contingent role of external integration. *Mediterranean Journal of Social Sciences*, 6(1), 50–61. <https://doi.org/10.5901/mjss.2016.v7n2p128>
- UDENSA (2020). Micro and small Medium Enterprises (MSMEs) and their role in achieving sustainable development goals.
- Vivarelli, M. (2013). Is entrepreneurship necessarily good? Microeconomic evidence from developed and developing countries. *Industrial and Corporate Change*, 22(6), 1453–1495. <https://doi.org/10.1093/icc/dtt005>
- Wahga, A., Blundel, R., & Schaefer, A. (2015). Human capital and environmental engagement of SMEs in Pakistan: A comparative analysis of the leather industry. In: *ISBE Annual Conference 2015*, 11 to 12 Nov, Glasgow.
- Wales, W., Shirokova, G., Sokolova, S., & Stein, C. (2016). Entrepreneurial orientation in the emerging Russian regulatory context: The criticality of interpersonal relationships. *European Journal of International Management*, 10(3), 359–382. <https://doi.org/10.1504/EJIM.2016.076256>
- World Bank. (2018). *The World Bank Annual Report*. The World Bank.
- World Trade Organization. (2016). World trade report 2016–levelling the trading field for SMEs.
- Xi, F. A. N. G., & Liren, A. N. (2017). A study of effects of entrepreneurial passion and risk appetite on entrepreneurial performance. *Revista De Cercetare Si*

- Interventie Sociala*, 56, 102-113. <https://www.rcis.ro/ro/section1/144-volumul-562017martie/2338-a-study-of-effects-of-entrepreneurial-passion-and-risk-appetite-on-entrepreneurial-performance.html>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.
- Yang, W., & Meyer, K. E. (2019). *Alliance proactiveness and firm performance in an emerging economy*. *Industrial Marketing Management*.N.A.
- Yu, A., Lumpkin, G. T., Praveen Parboteeah, K., & Stambaugh, J. E. (2019). Autonomy and family business performance: The joint effect of environmental dynamism and national culture. *International Small Business Journal*, 37(2), 153–185. <https://doi.org/10.1177/0266242618811893>
- Zafar, A., & Mustafa, S. (2017). SMEs and its role in economic and socio-economic development of Pakistan. *International Journal of Academic Research in Economics and Management Sciences*, 6(4), 2226–3624. <https://ideas.repec.org/a/hur/ijaraf/v7y2017i4p195-205.html>
- Zaltman, G., Duncan, R., & Holbek, J. (1973). *Innovations and organizations*. John Wiley and Sons.
- Zhijun, C., & Li, Z. (2016). How does subsidiary autonomy contribute to corporate performance under uncertainty. *Nankai Business Review*, 19(6), 91-100.



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