Entrepreneurial Orientation and Performance of Small and Medium Enterprises: Mediating Effect of Entrepreneurial Competencies

Mukaram Ali Khan
Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan
Email: mukaramali@ias.edu.pk

Kashif Rathore
Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan
Email: kashif.ias@pu.edu.pk

Muhammad Adnan Sial
Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan
Email: muhammad_adnansial@yahoo.com

Abstract

Small and Medium Enterprises (SMEs) play a vital role in the development of an economy. Looking at this perspective, it is imperative to develop the entrepreneurial orientation and to update the entrepreneurial competencies in order to perform in this competitive environment. This research study focuses specifically on these aspects and attempts to establish the need of identifying entrepreneurial orientation and entrepreneurial competencies in entrepreneurs in order to enhance enterprise performance. Researchers have collected the data from SMEs in Pakistan using simple random sampling technique. Partial least square based structural equation modeling is used in order to analyze the data and to test the hypotheses. Analysis revealed positive relationships between entrepreneurial orientation and entrepreneurial competencies, entrepreneurial competencies and entrepreneurial performance, entrepreneurial orientation and entrepreneurial performance. Moreover, entrepreneurial competency has proved to be a mediator between entrepreneurial orientation and entrepreneurial performance. Resource based view explains the importance of entrepreneurs as competent resources in playing vital role in escalating the performance level of SMEs. Lastly, this study can be used by different stakeholders to emphasize more on developing the competency level of entrepreneurs and determining the level of orientation towards better performance of enterprises.

Keywords: SMEs, entrepreneurial orientation, entrepreneurial competencies, enterprise performance, creativity, autonomy, risk taking propensity, innovativeness.

1. Introduction

Small and Medium Enterprises (SMEs) contribute significantly towards the development of an economy. They provide avenues to different stakeholders to contribute in economy (Saeed et al., 2014). Most of the developed countries understand the importance of SMEs in contribution to economic growth (Savlovschi, & Robu, 2011). However, the focus of practitioners and researchers on SMEs in developing countries like Pakistan is on the lower side as it has been observed that SMEs growth rate in developing countries still needs to be strengthened (Haider et al., 2017). Pakistan has a lot of potential in terms of SMEs growth and they are heavily contributing in "employment generation, poverty alleviation and decreasing economic disparity" (Kongolo, 2010). There are currently 3.2 million SMEs operating in Pakistan (Raza et al., 2018). Private sector share is majorly taken over by SMEs as 90% of the private market share is operated through SMEs (SMEDA, 2017). As far as economic growth is concerned, SMEs contribute 30% of GDP of Pakistan which is considered as healthy percentage (Asad et al., 2016).

There are number of initiatives taken by the Government of Pakistan (GOP) to counter economic growth disparities by promoting SMEs in the region (Sherazi et al., 2013). One of the measures taken by GOP is the development of "Small and Medium Enterprise Development Authority" (SMEDA) in the country whose key objectives are to develop such policies which encourage the growth of SMEs in the country and to facilitate the "Business Development Services". GOP has also developed microfinance banks with the aim to assist SMEs in the country. Commercial banks also developed specialized departments to deal with SMEs (Bhutta et al., 2008). The purpose to develop and promote SMEs is that small and medium enterprises use resources more efficiently and effectively in contrast to large enterprises (Dougherty, 1992). Moreover, entrepreneurs are considered to be backbone of SMEs (Volery et al., 2015; Man et al., 2008; Mulder et al., 2007; Man et al., 2002). The biggest hurdle in SMEs growth is market fluctuations and economic uncertainty, which if addressed or managed can contribute better to the economy (Aloulou, & Fayolle, 2005). SMEs are mostly considered to have better capital management skills as they are mostly managed by their owners (Haider et al., 2017).

Due to the prevailing unemployment issues, people are currently approaching for different start-ups (Faria et al., 2009). In this context, they might have an orientation to be an entrepreneur but they may lack in the competencies which entrepreneurs must possess to compete in the dynamic industry. Moreover, as per Hwan et al. (2020), competencies may not be easily replicated by competitors. Hence, such type of capabilities and skills may play important role in developing the economy (Altinay & Wang, 2011). In this context, it is imperative to understand and develop Entrepreneurial Orientation (EO) and to update Entrepreneurial Competencies (EC) in order to perform better in this competitive environment. Currently, there are very few studies done on EO and EC in Pakistan and there is a need of an hour to discuss these areas in order to provide better platform for SMEs to remain competitive in their respective sectors. There are also very limited studies done on EO on different parts of the country therefore, it is important to know why some of the entrepreneurs perform better in one region. The basic reason could be due to the proper understanding of EO and EC (Asad et al., 2016). The gap in

this line of study is the fewer number of intervening variables that better explain the connection between EO and performance of firms (Rezaei & Ortt, 2018). Moreover, most of the studies are done on increasing the financial performance of SMEs to date in Pakistan; however, very little attention has been given to EO and EC pertaining SME sector (Al mamum & Fazal, 2018; Wieneke & Gries, 2011). Furthermore, no study has been done by taking EO as second order latent variable to explore its relationship with EP taking EC as mediator. Therefore, this research can play a vital role in establishing the importance of EO and EC for becoming effective entrepreneurs in order to improve the Enterprise Performance (EP).

Moreover, there is a debate on whether to use EO as "uni-dimensional or multi-dimensional" construct. There are few studies that support EO as uni-dimensional construct (Asad et al., 2016), however, there are number of studies that have used separate measures of EO to gauge the performance of SMEs as advocates of using different measures of EO believe that measuring EO is a complex process therefore, it is mandatory to operationalize EO through different dimensions (Lumpkin & Dess, 1996). There are number of dimensions of EO used by researchers but most cited are these four dimensions i.e. "creativity and innovativeness, risk taking propensity, pro-activeness and autonomy" (Al Mamun & Fazal, 2018). Lastly, previous studies have been conducted by using each dimension of EO to find the relationship with EP (Al Mamun & Fazal, 2018) however, this research will open avenues for SMEs by considering the extent of orientation while taking EO as second order latent construct so that they can focus more on developing orientation as well as competencies of entrepreneurs. Moreover, EC also plays vital role in smoothening the operations of SMEs in critical times (Al Mamun et al., 2018). Hence, the purpose of this study is to find the relationship between EO and EP with the mediatory role of EC in context of Pakistan.

Study of entrepreneurship has gained immense importance in past few decades and may scholars have tried to study its various aspects and dimensions in variety of ways. This study attempts to find relationship between the exogenous construct (EO) and endogenous construct (EP) and the importance of intervening variable as mediator (EC). To investigate the mediatory role of EC between EO and EP, this study further aims to find the relationship between EO and EC as well along with the relationship between EC and EP.

Although SMEs have played crucial role in contributing in the economic growth, there is still a long way to achieve the desired growth level. Lots of studies are pondering over financial performance of SMEs and established the need of better SMEs performance by emphasizing its need towards economy. However, little efforts are done on its prerequisites i.e. EO and EC. This study has focused specifically on these two aspects and tried to establish the need of identifying EO and EC required in entrepreneurs for their businesses to perform and contribute in systematic way. It must be noted that the trend of entrepreneurship is not much at the moment in Pakistan and job opportunities are also very limited due to the depressing economic conditions of the country therefore, this study is also an effort to make people realize the importance of entrepreneurship and to engage them in this activity to perform for betterment of the economy in productive way. Moreover, Resource Based View (RBV) theory plays vital role in understanding this

trend as competencies and orientations of people are specific to the context and in case of entrepreneurship, such skills can be effectively utilized in making the better performance of entrepreneurs.

In section 2, the review of literature, theoretical underpinnings and conceptual framework are discussed. Section 3 presents the methodology where research design, data collection technique and sampling approach are majorly discussed. Analysis and results are highlighted in section 4. Conclusions and managerial implications are drawn in section 5. Lastly, recommendations and limitations are discussed in section 6.

2. Literature Review and Theoretical Underpinnings

2.1 Theoretical Underpinnings

As far as theoretical underpinnings are concerned, there are number of theories which support this process. One is Resource Based View (RBV) model which states that resource should be Valuable, Rare, least Imitable, and Organizational (VRIO) (Barney, 1991). RBV stands on the ground that competitive edge can only be gained if an individual has such type of skills and competencies present in an individual i.e. entrepreneur in this case (Barney et al., 2001). As this study focuses on EO and EC, therefore, individuals possessing such skill may not be easily copied by the competitors, hence, can lead to higher competitive advantage. Hence, RBV can play vital role in accessing and enhancing the performance of entrepreneurs (Tehseen & Ramayah, 2015). Moreover, according to Baron (1987), roles of individuals are also critical on part of organizations and behavioral theory is best suited for this purpose which states that "an organization is any social structure or system consisting of two or more persons who are interdependent and work together in a coordinated manner to attain common goals" (p. 10). Individuals do not only pursue their self-interests rather take decision due to social and financial pressures as well. In other words, individuals cannot be fully rational beings rather they are prone to mistakes (Thaler, 2015). This is where one needs to observe the conflict of interest of entrepreneurs which may be following their own interests but eventually will nourish the economic sector as well.

2.2 Entrepreneurial Orientation (EO) and Dimensions

EO is one of the key constituents in success of any firm (Rauch et al., 2009; Lumpkin & Dess, 1996; Semrau et al., 2016; Wales et al., 2013). EO seems to be in top trend in field of strategic management and entrepreneurship from over past few years (Shane & Venkataraman, 2000; Morris & Kuratko, 2002). According to Knight (2003), EO is mostly considered as a "cultural construct" with number of dimensions including pro-activeness, risk-taking and innovativeness (Miller, 1983; Covin & Slevin, 1989). As per George and Marino (2011), these dimensions give a bird's eye view of EO, though there have been number of researches which have used or diminished other dimensions as well (Merz & Sauber, 1995; Lumpkin & Dess, 1996). However, most recent literature on EO has cited four dimensions i.e. "risk taking propensity, pro-activeness, creativity and innovativeness, and autonomy" (Al Mamun & Fazal, 2018). Based on recently and widely cited dimensions, researchers have used these dimensions for conducting this study.

511

Risk Taking Propensity (RTP) is the degree to take the risk or to adapt to the uncertain situations. This situation is more prevalent in different level of businesses and more prominent in case of entrepreneurs (Wales et al., 2016). Similarly, pro-activeness measures the conditions well in advance and anticipate outcomes in a systematic way in order to avoid any uncertain situation (Lumpkin & Dess, 1996). For becoming an effective entrepreneur, one needs to be proactive instead of reactive in order to deal with complexities and uncertainties present in the market arena. Moving on, creativity and innovativeness is also important in gauging EO. It is defined as "development of individuals' ideas that are novel and potentially useful to the organization. It can range from suggestions for incremental adaptions to radical breakthroughs, and may be generated by employees in any job" (Liu et al., 2016). Similarly, as per Zaltman et al. (1973), innovation is defined as "any idea, practice, or material artifact perceived to be new by the relevant unit of adoption" as cited by Grosser et al. (2018). Lastly, autonomy is also the key dimension of EO and is referred to the discretion in taking decisions without considering of taking directions. It is defined by Al Mamun and Fazal (2018) 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". As per Kuratko (2014), "The entrepreneur is one who undertakes to organize, manage, and assume the risks of a business. Today, an entrepreneur is an innovator or developer who recognizes and seizes opportunities; converts those opportunities into workable/marketable ideas; adds value through time, effort, money or skills; assumes the risks of the competitive marketplace to implement these ideas; and realizes the rewards from these efforts".

2.3 Entrepreneurial Competencies and Performance

As far as competencies are concerned, these are referred to specific set of knowledge, skill and abilities. Competencies can be attained and learned through knowledge and experience (Man et al., 2002; Volery et al., 2015; Wagener et al., 2010) and can be enhanced using technology (Lekovic et al., 2020). There are various scholars who have identified number of competencies for entrepreneurs in order to be successful (Karlsson & Honig, 2007; Chwolka & Raith, 2012; Markman & Baron, 2003). Entrepreneurial competencies, as per Bird (1995) are defined as "underlying characteristics such as specific knowledge, motives, traits, self-images, social roles and skills which result in venture birth, survival and/or growth". Enterprise performance, on the other hand, is also important in this regard and is taken as endogenous construct in this study. Performance basically reflects the revenues and growth of the firm (Morgan & Strong, 2003).

2.4. Conceptual Framework and Hypotheses Development

There are number of studies that have used separate dimensions of EO to test the relationship with EP (Wu et al., 2013) or have added the mediating variable to establish the link (Al Mamun & Fazal, 2018; Li et al., 2010). Few studies are done by taking EO as an imputed construct to examine the relationship with EP (Zahra et al., 2006). Less studies have examined the relationships between EO and EP. A study conducted on EO and firm's performance in cross cultural context and concluded that though there is positive relationship between EO and EP, it also varies along with contexts (Lomberg et

al., 2017). In another study, EO was taken as a single construct by using Fuzzy-set technique out of three dimensions i.e. "innovativeness, proactiveness, and risk-taking". Results concluded that EP increases with the increase in EO (Lisboa et al., 2016). In a study conducted in US and UK, SMEs on international entrepreneurship, results revealed that SMEs performance increases with escalation in EO (Brouthers et al., 2015). A similar study was conducted on 723 CEOs of small firms, and concluded that firm's performance increases with the increase in EO if psychological traits are taken into account in an effective way (Palmer et al., 2019). In a study conducted in Singapore's SMEs, entrepreneurial orientation found to be positively related with entrepreneurial performance (Keh et al., 2007). Similar study was conducted on 144 owners of embroidery firms in Indonesia and results revealed the direct relationship between EO and firm's performance (Yeni, 2015). Lastly, a study was conducted on family business firms which concluded a positive relationship between EO and firms performance (Lee & Chu, 2017). Hence, a major consensus has been observed in the findings of the relationship between these two constructs in literature which shows a positive significant relationship between these two variables. The reason for having this consensus in different studies could be due to the fact that people around the world is understanding the importance of developing EO which eventually leads to the better performance in their organizations. Consequently, this discussion leads to the development of following hypothesis for this study;

➢ **H₁:** Entrepreneurial orientation positively affects entrepreneurial performance

As far as the relationship between EO and EC is concerned, there is limited literature available on relationship between these two constructs. In one of the studies on relationship between EO and EC, it was identified that there is a significant relationship between EO and EC with the moderating effect of firm age and size (Weerakoon & Kodithuwakku, 2018). In a similar study conducted in Srilanka on 109 tea manufacturers using EO and EC, results revealed positive relationship between both constructs (Wickramaratne et al., 2014). As per the study by Al Mamun and Fazal (2018), a study was conducted on micro-enterprises in Malaysia and a positive relationship between EO dimensions and EC was found. Looking into this context and limited literature available, a consensus can be developed on the basis of similar findings across different regions and context. Although there are limited studies done on this relationship, a reason for this consensus could be due to the fact that there are countries which are working on the development of competencies of entrepreneurs to make sure that they possess better competencies along with orientation. Aforementioned discussion leads to the following hypothesis;

➢ **H₂:** Entrepreneurial orientation positively affects entrepreneurial competencies

Moving on to the relation between EC and EP, there are number of studies which are conducted on relation between these two constructs. In a study conducted on Spanish entrepreneurs, it was concluded that EC plays an important role in escalating the entrepreneurial performance (Sánchez, 2012). Similarly, 153 owners were selected from SMEs to conduct the study on EC and EP and there found to be the significant

relationship between EC and EP (Man et al., 2008). In a study conducted on 197 micro-entrepreneurs in Malaysia, PLS-SEM was used to explore the relationship between EC and EP. Results showed a significant relationship between EC and EP (Al Mamun et al., 2016). Similarly, a study was conducted to find the direct relationship between EC and competitive advantage and indirect relationships through innovation capability. Study results revealed that the indirect relationships were stronger than the direct effects (Hwang et al., 2020). Few other studies have also resulted in positive relationship between EC and EP (Ahmad et al., 2018; Aliyu, 2017; Barazandeh et al., 2015; Zizile & Tendai, 2018). A significant number of studies have shown a positive relationship between EC and EP and this shows more work can be done on enhancing the skill set of entrepreneurs to perform better in the dynamic industry. Moving onto the indirect effects of EC on EO and EP, only a single study has been conducted so far by taking EC as mediator between EO and EP however, that study had taken the dimensions of EO and tested each dimension separately with EC and EO and proved EC as mediator with majority of the dimensions of EO and EP (Al Mamun & Fazal, 2018).. On the basis of aforementioned discussion, following hypotheses have been developed;

➢ **H₃:** Entrepreneurial competencies positively influences entrepreneurial performance

➢ **H₄:** Entrepreneurial competencies mediates the relationship between entrepreneurial orientation and entrepreneurial performance
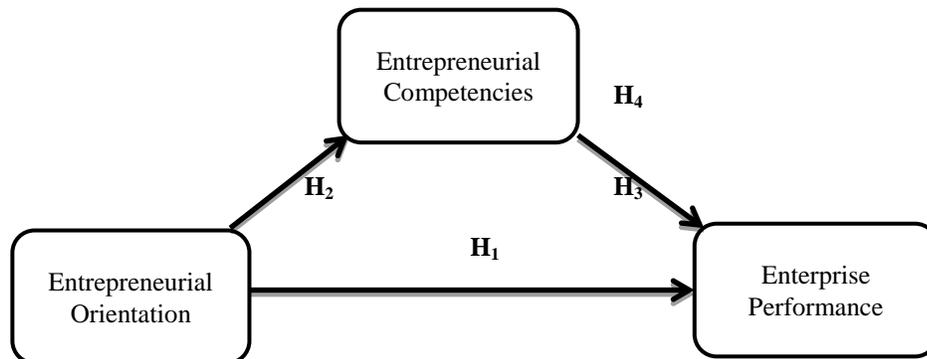

Figure 1: Research Model

As discussed earlier, EO has four dimensions including "creativity and innovativeness, risk taking propensity, pro-activeness and autonomy", whereas EP has been operationalized through perceptual measures. The third 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 role of EC as a potential mediator of the EO and EP relationship has been tested in the context of SMEs in Pakistan.

3. Methodology

Quantitative research strategy is used for this study in order to test the hypotheses. Cross sectional research design is opted in order to carry out the study. According to the research model, the research is based on three latent constructs i.e. "Entrepreneurial

Orientation, Entrepreneurial Competency and Enterprise Performance". According to the Al Mamun and Fazal, (2018), the independent variable (EO) is operationalized into four second order latent factors including "creativity and innovativeness (seven items), risk taking propensity (five items), pro-activeness (six items) and autonomy (five items)" on five-points likert scale, however, the dependent variable (EP) is operationalized using "perceptual measures using five items" on five-points likert scale (Chandler & Hanks, 1993). Moving on, as per Al Mamun and Fazal (2018), the mediator (EC) is operationalized through five items on five-point likert scale.

As far as the population is concerned, currently there are 3.2 million SMEs are operating in the country. Researchers have collected the list of SMEs from Lahore chamber which has 0.11 million registered SMEs as per the data of SMEDA out of which 21,330 SMEs are registered in Lahore. For calculating sample size, Yamane (1967) is used. Using this formula, the sample size obtained was 393. Researchers have used simple random technique in order to collect the data from SMEs list of Lahore chamber. 393 structured questionnaires were forwarded to SMEs and out of them 337 were received making the response rate to be 85.7%. Lastly, PLS-SEM is used in order to analyze the data.

4. Data Analysis

On the basis of the aforementioned literature and conceptual framework, researchers have used various multivariate analysis tests. Initially, measurement model is developed using PLS-SEM to test the consistency and accuracy of scale items. After the measurement model, structural model is developed to test the hypotheses and model fitness. Lastly, mediation analysis is done to find the indirect effects based on the structural model results.

4.1 Analysis of Measurement Model

Measurement model is developed using PLS-SEM and on the basis of the factor loadings, researchers have conducted the reliability of the scale using composite reliability. Later, researchers have tested the construct validity i.e. convergent and discriminant validity. Moreover, EO is used as first order latent construct for analysis in this study.

515

Table 1: Composite Reliability and Construct Validity

Latent Variables	Items	Loadings	AVE	CR
Creativity and Innovativeness	CI_1	0.858		
	CI_2	0.817		
	CI_3	0.505		
	CI_4	0.716	0.502	0.878
	CI_5	0.786		
	CI_6	0.661		
	CI_7	0.535		
Risk Taking Propensity	RT_1	0.589		
	RT_2	0.728		
	RT_3	0.871	0.501	0.824
	RT_4	0.525		
	RT_5	0.740		
Proactiveness	PR_1	0.724		
	PR_2	0.811		
	PR_3	0.842	0.579	0.890
	PR_4	0.778		
	PR_5	0.831		
	PR_6	0.537		
Autonomy	AU_1	0.600		
	AU_2	0.770		
	AU_3	0.788	0.563	0.865
	AU_4	0.789		
	AU_5	0.789		
Entrepreneurial Competency	EC_1	0.790		
	EC_2	0.705		
	EC_3	0.789		
	EC_4	0.722	0.560	0.864
	EC_5	0.734		
Enterprise Performance	EP_1	0.630		
	EP_2	0.889		
	EP_3	0.892	0.715	0.925
	EP_4	0.922		
	EP_5	0.863		

Composite Reliability (CR) shows the internal consistency of the scale items (Netemeyer, 2003) whose threshold value should be at least 0.70 and up to 1 (Nunnally & Bernstein, 1994). As per table 1, all the CR values of latent constructs fall within the desired range of threshold values. It further shows that the tool which has been adapted for this study maintains internal consistency among scale items.

As far as construct validity is concerned, firstly the condition of factor loadings is to be fulfilled as value of all loadings should be beyond the threshold value i.e. 050 (Chin, 1998). Secondly, CR should be more than 0.70. Lastly, the value of AVE should be more than 0.50 (Hair et al., 2006). In this case, first assumption of construct validity is fulfilled as value of all loadings is beyond the threshold value i.e. 050.

Secondly, CR is beyond threshold value of 0.70 for all the latent variables as depicted in table 1. Therefore, it is concluded that the construct validity assumption of composite reliability is achieved. As per table 1, AVE values of all the latent variables are also beyond the threshold value of 0.50 and fulfill yet another assumption of construct validity. Fulfilling all the assumptions for convergent validity in this regard shows that the all the latent constructs including EO dimensions, EC and EP which are supposed to be theoretically related are in fact related. It further shows that the tool is valid for further hypotheses testing.

Table 2: Divergent Validity

`	AU_EO	CI_EO	EC	EP	PR_EO	RT_EO
AU_EO	0.751*					
CI_EO	0.788	0.741*				
EC	0.694	0.782	0.749*			
EP	0.823	0.825	0.804	0.846*		
PR_EO	0.717	0.825	0.817	0.896	0.761*	
RT_EO	0.846	0.799	0.688	0.811	0.759	0.708*

*√AVE

Moving on, criteria of Fornell-Larcker is used for testing discriminant validity and it illustrates that "all of the construct items are distinct" (Hair *et al*., 2013). As per the criteria to determine discriminant validity, values of all √AVE should be higher than its correlational values. Table 2 highlights that √AVE are less than the correlations of latent variables. Hence, it shows that discriminant validity does not exist in the data which shows that respondents somehow couldn't distinguish between latent constructs. It could lead to overestimation of the desired results as well (Farrell, 2010). After reliability and validity, "significance of path coefficient" and the "strength of the relationship" between constructs are determined.

4.2 Analysis of Structural Model

Structural model is used to evaluate five tests including path coefficient determination for hypothesis testing, analyzing R-Square, and determining effect size, predictive relevance and goodness of fit. Each hypothesis's significance was accessed through path coefficient. Table 3 highlights that path coefficients for EO → EC, EC→ EP, and EO → EP are 0.831, 0.114 and 0.830 respectively with T-values more than 1.96 in each case with p-value less than 0.05 that shows all the values are having significant

relationships (Hair *et al.*, 2013). Hence, it is concluded that the null hypotheses have been rejected in each case and all alternate hypotheses have been supported. These significant path coefficients show that there is a positive and significant relationship exists between EO and EC which means that with the increase of EO, EC also increases. Moreover, similar relationship is found between EC and EP which shows a direct relationship between both latent constructs and lastly, EO and EP has also shown a positive relationship which highlights that with increase of EO, EP also increases.
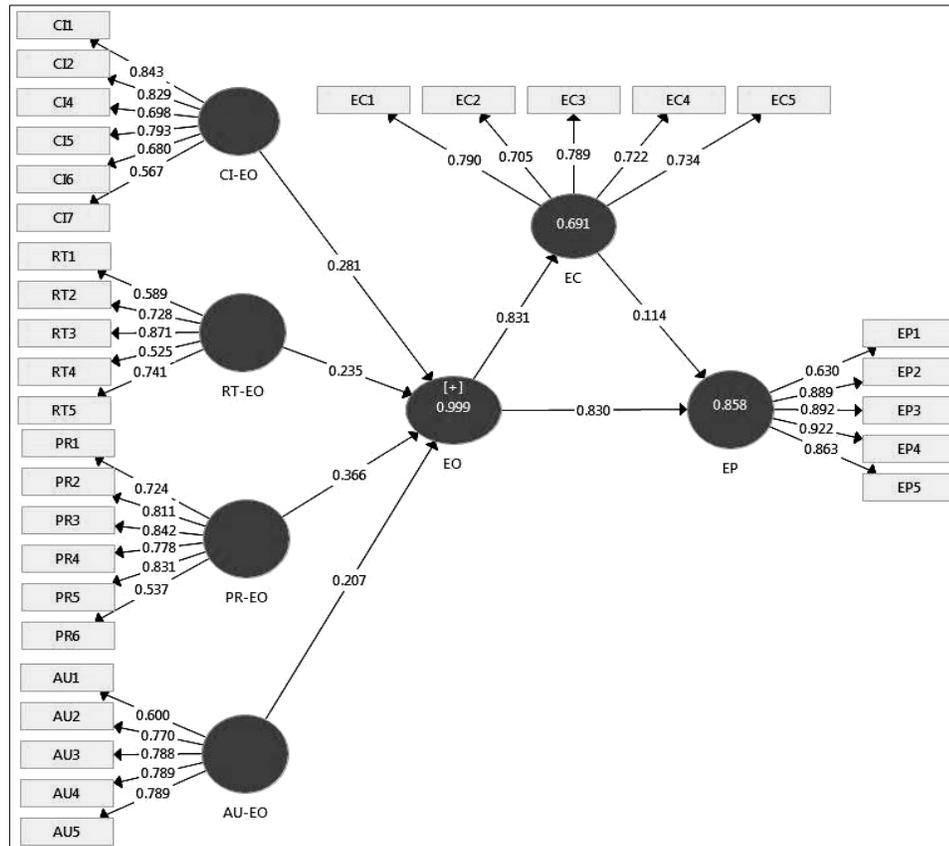

Figure 2: Structural Model

Moreover, R-Square is assessed through PLS-Algorithm. It shows how much the variance of the latent variable is being explained by the other latent variable*s* (Kumar & Baradiya, 2019). The threshold value of R^2 should be higher than 0.10 for the acceptance of model's predictive relevance (Falk & Miller, 1992). Figure 2 and table 3 indicates that EO predicts 69.1% of EC ($R^2 = 0.691$) and 85.8% of EP ($R^2 = 0.858$) which concludes R^2 to be significant and valid for "model fitness measurements. Moving on, Variance Inflation factor (VIF) is determined, as per table 3, VIF for paths EO → EC, EC → EP, and EO→EP is having the values within the range i.e. VIF<5 (Ringle *et al.*, 2015), and it

indicates a correlation exists among latent variables on weak to moderate level only. VIF beyond 5 could be dangerous as it starts showing multicollinearity which shows a moderate to strong relationship among predictors. Plenty of studies have used VIF to deal with multicollinearity issues. In present study, correlation among the dimensions of EO is weak to moderate which may not affect the results of the study (Kalnins, 2018).

Further, effect size helps in determining the effect of the exogenous construct on endogenous construct if it gets removed from the model (Wong, 2016). Effect sizes of "0.02, 0.15, and 0.35" are recommended as "small, medium and large effects" (Cohen, 1988). It leads to the F-square values below 0.15 as small effect, between 0.15 and 0.35 as medium effect and above 0.35 as large effect. The effect size of EO on EC is 2.235 with p-value of 0.000 that concludes that it has a "large and statistically significant effect". This means that if EO is deleted from the model then there will be large and significant effect of this on EC. As per figure 2 and table 3, the effect size of EC on EP is 0.128 with P-value 0.000, which implies that it has a small but empirically significant effect. This shows that removing EC from the model will have weak yet significant effect on EP. Similarly, the high significant effect size of EO on EP i.e. 1.504 exists (Hair *et al.*, 2013). It concludes that removing EO from the model will also have large and significant effect on endogenous construct i.e. EP. In nutshell, it is concluded that both EO and EC have significant effects on EP.

Moreover, "Sample reuse technique Q^2" is used for the prediction regarding "predictive relevance of path model". Q-square value higher than zero shows the predictive relevance whereas Q-square value less than zero depict otherwise (Fornell & Cha, 1993). Table 3 identifies that Q^2 values for EC and EP are 0.359 and 0.573 respectively which are greater than zero and shows the predictive relevance of the model (Hair *et al.*, 2017).

Table 3: Structural Analysis of Model

Hypothesis	Paths	Path Coefficient	T-Value	P-Value	Results	VIF	F^2	R^2		Q^2
H_1	EO→EC	0.831	50.27	0.000*	Supported	1.000	2.235*	EC	0.691	0.359
H_2	EC→EP	0.114	2.28	0.023*	Supported	3.235	0.128*	EP	0.858	0.573
H_3	EO→EP	0.830	19.05	0.000*	Supported	3.235	1.504*			

*P<0.05

According to Hair et al. (2019), CB-SEM mostly relies upon chi-square type of model fit, which is not the case with PLS-SEM. Goodness of Fit (GOF) index in PLS-SEM encompasses a "square root of value obtained from multiplying average scores of AVE into average score of R-square" which is widely used in PLS-SEM (Tenenhaus et al., 2005). GOF values indicate as follows i.e. "GOF_{small} = 0.1, GOF_{medium} =0.25, GOF_{large}= 0.36" which is the acceptable range in arena of research (Wetzels et al., 2009). In table 3, GOF formula i.e. (GOF= $\sqrt{AVE * R^2}$) yielded a GOF value of 0.684, which is more than "GOF_{large}= 0.36". Hence, it is concluded that the goodness of model fit exists against aforementioned GOF values.

Table 4: Goodness of Fit

Variables	AVE	R-Square
EO	0.540	
EC	0.560	0.691
EP	0.720	0.858
Average Scores	0.606	0.774
AVE * R^2	0.469	
(GOF= $\sqrt{\text{AVE} * R^2}$)	0.684	

4.3 Mediation Analysis

Mediation is conducted through "bootstrapping the indirect effect which states P-value must be less than 0.05 in such a way that the relationship between IV and DV through mediator must be significant" (Preacher & Hayes, 2008). Bootstrapping with 500 subsamples is used to test the mediation effect of EC on EO and EP.

Table 5: Direct Effects and Total Effects

Path	Original Value	T-Value	P-Value
Direct Effects			
EO →EC	0.831	50.27	0.000
EC →EP	0.114	2.28	0.023
EO → EP	0.830	19.05	0.000
Total Effects			
EO → EC	0.831	50.27	0.000
EC → EP	0.114	2.28	0.023
EO → EP	0.924	77.870	0.000

Table 6: Indirect Effects

Path A (IV-Med-DV)	Indirect Effect	T-Value	P-Value
EO → EC → EP	0.095	2.284	0.023

Table 5 highlights the direct effects which have been discussed before as well in table 3. However, the use of direct effects here helps in determining the type of mediation. Direct effects are significant at (β=0.830, p=0.000) between EO and EP. Moreover, the total effect of EO→ EP has increased to β=0.924 with p=0.000 and the difference between direct and total effects is due to the indirect effect which is explained further.

Tables 6 illustrates bootstrapping process in which indirect effect β=0.095 (0.831*0.114) seems to be significant with "T value" of 2.284 with p-value 0.023 i.e. less than 0.05.

Introducing EC has increased the direct effects from 0.830 to total effects of 0.924 with increase of 0.095. This concludes that partial mediation between EO and EP exists due to the significant direct effects which lead to the acceptance of H_4.

5. Discussion and Conclusion

EO and EC are crucial in determining the EP. This study has also observed the significant relationships among EO, EC and EP whereas EC has played a mediatory role between EO and EP. This can be seen in several studies conducted on SMEs and other financial institutions. This study is concluded with the positive relationship between EO and EP with path coefficient of 0.830. The reason for such strong relationship can be due to the fact that entrepreneurs need to have proper EO to improve the SMEs performance. As per the findings, financial institutions are found to have better EO, which eventually leads in enhancing EP (Brouthers *et al*., 2015; Keh *et al*., 2007; Lisboa *et al*., 2016; Palmer *et al*., 2019; Yeni, 2015). As far as the relationship between EO and EC is concerned, study is concluded with positive relationship between both latent constructs i.e. 0.831. This relationship means a lot for SMEs to develop EO as improving EO also strongly lead in enhancement of EC which can be used by entrepreneurs in achieving complex tasks under the dynamic/competitive conditions (Weerakoon & Kodithuwakku, 2018; Wickramaratne et al., 2014). Moving on to the relation between EC and EP, a positive relationship of 0.114 was found in this study. Although the relationship seems weak as compared to other latent construct relationships, importance of competencies in increasing performance levels of SMEs cannot be undermined. Entrepreneurs need to be equipped with competencies so that they can help them improving the EP due to uncertainties prevailing in the market. Moreover, the reason for such relationship is that EC plays vital role in escalating the performance of entrepreneurs as competencies are supposed to be key factor in determining the performance (Al Mamun et al., 2016; Sánchez, 2012). Also, mediatory role of EC between EO and EP is significant in this study. As per this relationship, although a direct relationship between EO and EP exists, indirect relationship has also been established with the introduction of EC in the model. It turns out that the role of EO on EP in context of Pakistan SMEs has also been indirectly established through the use of EC.

As far as theoretical implications are concerned, RBV argues that businesses can have a competitive edge if they have certain skills and competencies present. The focus of this study is on EO and EC implies that individuals possessing such competencies may not be used by other competitors due to the possession of VRIO model; hence, RBV can determine the effective performance of entrepreneurs (Barney et al., 2001; Tehseen & Ramayah, 2015). Furthermore, behavioral theory discusses the important role in determining the entrepreneurial performance as different individuals uses different behaviors in order to increase the performance of their firms (Baron, 1987). This can be reflected in the performance of entrepreneurs as well. According to Baskerville (2013), entrepreneurs think by actions which means that they believe in the available tangible or intangible means before starting a business. Tangible means include available capital and investment whereas intangible means include skills and competencies. Risk taking

behavior is also dominant in most of the entrepreneurs as they try to take risks in certain and complex situations.

5.1 Managerial Implications

There is an increasing trend of entrepreneurship observed across the globe and Pakistan is of no exception. Due to limited access to jobs for youth, people are currently approaching for different start-ups at the moment to overcome the unemployment menace prevailing in the country. In light of this, this study provides various insights to entrepreneurs to develop the importance of EO and EC. For SMEs managers and owners, it is a clear indication to develop the EC in order to increase the performance of their organizations. Along with this, they need to work on EO as well to provide better prospects for the entrepreneurs. However, the responsibility lies with the government as well for ensuring the sufficient resources for increasing the opportunities for better EO and EC. Lastly, the focus should be to solve the problem or provide best services to customers through start-ups for making entrepreneurial businesses more effective and long lasting.

5.2 Recommendations and Limitations

Several people want to initiate the start-ups but could not due to lack of capital availability. Therefore, government should provide start up loans with easy conditions and zero or least mark-up in order to start the businesses. Friendly climate for entrepreneurs should be provided to increase the trend of entrepreneurship in Pakistan. Lastly, Government (SMEDA) should take initiatives in providing trainings to entrepreneurs in order to develop required competencies for developing the businesses. While this paper has a number of contributions, this study is not without the limitation. For instance, the EP scale includes self-reported measures derived from a well-established study, but utilizing objective measures instead of self-reported measures to assess results may be more helpful. The key problem for achieving objective performance measures in this analysis was the scarcity of evidence accessible in few SMEs. Future researchers can select only those SMEs where objective measures pertaining performance can easily be assessed.

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