

Entrepreneurial self-efficacy and small business performance in Pakistan

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ABSTRACT

Entrepreneurial Self Efficacy (ESE) has gained immense importance in the past few years in the field of entrepreneurship. The focus of this study is to test the effect of each of the five dimensions of ESE and understand their importance in connection with firms' performance. This study was carried out among small businesses entrepreneurs in Pakistan and a valid sample of 353 entrepreneurs was selected for this purpose. A survey technique was used for data collection and AMOS was used for data analysis. In line with expectation, the analysis concluded a significant positive relationship between ESE dimensions and performance of small businesses. It was also concluded that the Risk dimension of ESE contributes majorly in the improvement of firms' performance whereas the financial control dimension of ESE contribution was least. It is also suggested that all five dimensions of ESE are important to achieve desirable performance outcomes.

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1. Introduction

Although entrepreneurship has a long history, Entrepreneurial Self-efficacy (ESE) has also gained tremendous attention from entrepreneurship researchers since the beginning of this century. It is an important concept when it comes to the research of various entrepreneurial functions. ESE has been defined in different perspectives by different researchers but its importance has been realized by all scholars when it comes to the study in entrepreneurial context. There have been a large number of studies which emphasized the role of entrepreneurs' self-efficacy and its importance in achieving and realizing the entrepreneurial goals. Bandura (1977) was the one who firstly introduced the concept of self-efficacy in his theory of social learning. It was defined as "an individual's belief in his or her personal ability to achieve a precise set of tasks". It is further described as an entrepreneur's cognitive assessment of his or her capacity to organize the motivation, conceptual abilities and action plans required to exercise control over the operational requirements (Bandura, 1990). Self-efficacy focuses on more than one dimension to predict achievements (Bandura, 1977). As per Cassar and Friedman (2009), the first dimension - specific context, refers to an individual's self confidence in successfully achieving a particular task, whereas, the second dimension – "activity domain", is defined as a person's self-confidence in his or her abilities needed for several other related domains (Cassar & Friedman, 2009). In continuation of recommendation by Bandura, ESE construct was proposed by a number of researchers. They defined ESE as to have the belief in oneself to attain entrepreneurial goals. In spite of extensive research on this concept,

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there is still not a plentiful explanation to prove the exact type of association between an ESE and firm's performance specifically in the context of small businesses (McGee et al., 2009).

This research contributes in many areas as self-efficacy has a large theoretical base and robust academic support to understand potential performance (Wood & Bandura, 1989; Luthans & Peterson, 2002; Bandura & Schunk, 1981; Bandura, 1982, 1986). According to Bandura (1977), building on the concepts of the Social Learning Theory (SLT), ESE may contribute to "task-specific" outcomes. In particular, individuals having strong faith in themselves to achieve entrepreneurial roles and activities that are said to have ESE (Lindsley et al., 1995; Bandura, 1986). These entrepreneurs set difficult yet attainable goals, exhibit perseverance, put in a great deal of efforts towards entrepreneurial tasks, and recuperate quickly from their failures (Trevelyan, 2011; Cervone & Peake, 1986). Many researchers contend that entrepreneurs having self-efficacy usually set challenging growth targets for their ventures and show perseverance towards achievement of their goals. Furthermore, due to these persistent efforts, a positive outcome is usually evident (Wood & Bandura, 1989). In other terms, their beliefs are converted into effort due to the positive role of ESE, which lead to improved venture performance.

Self-efficacy construct was developed using 22 items with the foremost work of Chen et al. (1998) and termed as ESE and helped anticipate the prospect of a person to become an entrepreneur, and composed of five dimensions termed as "marketing, innovation, management, risk taking, and financial control". This study has adopted the constructs used by Chen et al. (1998) in context of small businesses in Pakistan and these measures have been taken on the basis of few other researchers who used these dimensions later in their studies as well (Hmieleski & Baron, 2008; Torres et al., 2013; Cumberland et al., 2015; McGee & Peterson, 2019). Small businesses are taken for analyzing ESE because they play a crucial part in the economic growth of a country specifically in developing countries like Pakistan and as suggested by (Bonsu & Kuofie, 2019), although the survival rate of such businesses is low, their growth rates at times are huge.

The prevalent method to measure business performance in terms of growth has been income, employment, and profitability, and as far as profitability is concerned, many researchers cited its difficulty to measure because of varying technical issues of accounting practices. Many researchers emphasize the importance of performance measurement in small business in order to gauge its success or failure (Coad, 2007). Despite the fact that growth can be of various types, venture performance as per (Venkatraman & Ramanujan, 1986) can be measured in different numbers of ways. Self-efficiency, being the belief of people to achieve desired outcome (Bandura, 2000) has been reported as a strong predictor of entrepreneurial performance (Markman et al., 2005). Moreover, performance has been evaluated on basis of two specific yet subjective measures which have been cited by a number of studies earlier i.e., growth of revenues and employment (Baum & Locke, 2004; Ensley et al., 2006; Cumberland et al., 2015). As per Carland et al. (1988), a distinguishing feature between an entrepreneur and other businesses is that the pursuit of high growth is more visible in entrepreneurs along with other growth tendencies.

Some studies have established that entrepreneurs usually display higher self-efficacy than other individuals. For instance, there is a higher level of self-efficacy present in the patent inventors who are mostly actively involved in creation of ventures as compared to those patent inventors who never started a new venture (Markman et al., 2002). Some researchers have argued that due to the robust nature of ESE theory, it is still considered as not properly developed, and it has not adequately established itself in multiple dimensions (McGee et al., 2009). The contribution of this study is to validate the Chen et al. (1998) dimensions of ESE in context of small businesses operating in Pakistan and to identify the relationship between ESE and small businesses performance. It must be noted that no such study has been conducted to date in context of small businesses (only) operating in Pakistan hence; this study will contribute in terms of identifying ESE dimensions in small businesses and their effect on performance of the small businesses. Small businesses play a vital role in the development of the economy and in this context, the prime objective of this study is to identify the role of each dimension of ESE and their impact on firms' performance.

Pakistan being a developing country is going through an economic crisis and the importance of small businesses cannot be neglected in such circumstances where unemployment level is already on rise. Such firms play a vital role in the development of the economy and analyzing ESE can add well for entrepreneurs operating in small businesses. Improving ESE can contribute well for entrepreneurs to operate better eventually leads to better performance. Moreover, this study can provide better understanding to other stakeholders, specifically governments who can come up with better policies to facilitate small businesses in improving ESE in order to compete in this dynamic industry. Lastly, the government can facilitate small businesses in screening entrepreneurs with high ESE across all dimensions so that they can improve the performance level of their firms.

2. Hypotheses Development and Research Framework

As per Hmieleski and Baron (2008), recent studies to assess the role of ESE on performance of firms have shown different results, reporting both strong and weak relationships (e.g., Amatucci & Crawley, 2011; Chandler & Jansen, 1997; Prajapati & Biswas, 2011). Many studies were unable to provide justifications for the disparity of the relationships in their literature however majority of the studies have shown a positive association between ESE and firms performance. A study to assess work-related performance, a meta-analysis of 114 research studies reported a strong relationship between self-efficiency and performance (Stajkovic & Luthans, 1998). Numerous other empirical studies have found a positive relationship between performance and entrepreneurial self-efficacy (Torres & Watson, 2013; Cumberland et al., 2015; Miao et al., 2017; McGee & Peterson, 2019; Kale, 2020). Despite the majority of research studies showing a positive ESE – performance relationship,

some studies like Hmieleski and Baron (2008) have reported that in particular times, ESE has an indirect effect on entrepreneurs and their ventures. Various studies report both negative and positive effects as entrepreneurial self-efficacy may exert under different circumstances. Recently, some researchers have suggested that high rates of confidence can cause excessive arrogance or envy amongst entrepreneurs which in turn may weaken their ability to effectively lead their ventures (Hayward et al., 2006). This issue, however, has not been potentially taken up in the literature of entrepreneurship. However, the debates of the potential adverse consequences of high self-efficacy have raised interest in the literature in other management fields, including strategic management and organizational behavior and theory (Vancouver et al., 2002). Before moving on to the discussion on the association between the five key dimensions of entrepreneurial self-efficacy, it is pertinent to mention that limited work has been done on further exploring and testing the relationships between the five dimensions and firm performance (Bakr et al, 2017). This study by testing the model in a different way intends to bridge this gap in literature. The idea of innovation and creativity is being highly discussed particularly in connection with entrepreneurship and is considered to be one of the key “drivers” that help entrepreneurs in succeeding (Wei et al., 2020). The two ideas are very much connected, scholars such as Chen and Zhou, (2017) and others argue that people with high ESE bring in more innovation in their ventures and set higher goals. Similarly, Cooper and Lucas (2007) also emphasize that innovation, self-efficacy and business success (owing to other various reasons as well) is very much related and influences one another. When it comes to innovation as being a dimension of self-efficacy, Cumberland et al. (2015) emphasize that among other features of entrepreneurial self-efficacy, innovation is one of the important factors that positively affects a firm's performance. Similarly, Herath and Mahmood (2014) also studied this dimension of ESE in connection with the organizational performance and found a positive and significant relationship.

Talking about the second dimension of self-efficacy, marketing self-efficacy is about expertise and skills in the field of marketing. Chen et al. (1998) argue that marketing self-efficacy is an important dimension that varies with entrepreneurs and can affect the businesses performance. Antoncic et al. (2016) explain it as expertise in “strategic marketing decision making, sales performance, marketing communications, and marketing calculations” (p.91). They also emphasize that efficacy in marketing can evidently influence a company’s financial performance. On the other hand, Bakar et al. (2017) testing the dimensions of self-efficacy in the higher education sector found out that marketing self-efficacy has a relatively insignificant effect on institutional performance. Moreover, the third dimension is about management ESE which talks about the role of planning and reducing uncertainty in connection with self-efficacy (Bakar et al., 2017). According to Cumberland et al. (2015), it was found to be a positive and significant relationship between the management dimension of ESE and franchise performance. Similarly, a study was conducted by Herath and Mahmood (2014) on the relationship between dimensions of ESE and firms’ performance and it was found to have a positive relationship between defining purpose as a management dimension of ESE and performance. In another study, the similar study was conducted in Nigeria and it reported an insignificant effect of management dimension of ESE with the performance (Bakar et al., 2017). Moving on to the dimension of risk-taking ESE, as per Cumberland et al. (2015), this dimension is associated with working under high pressure in connection with self-efficacy and it is also believed that calculative risk-taking habits of entrepreneurs can lead to better performance, hence, it was revealed that risk taking ESE and franchise performance was found to be positively and significantly related. As per the most recent study by Bakr et al. (2017), risk taking dimension of ESE also reported to be positively related with organizational performance. Lastly, the financial control dimension of ESE is related to the regular conduction of financial analysis and controlling of costs. As far as its relationship with performance if concerned, it also plays a significant role towards betterment of organizational performance. Cumberland et al. (2015) highlights a positive and significant relationship between financial control ESE and franchise performance and a similar relationship was observed between these two variables in the study conducted by Bakar et al. (2017).

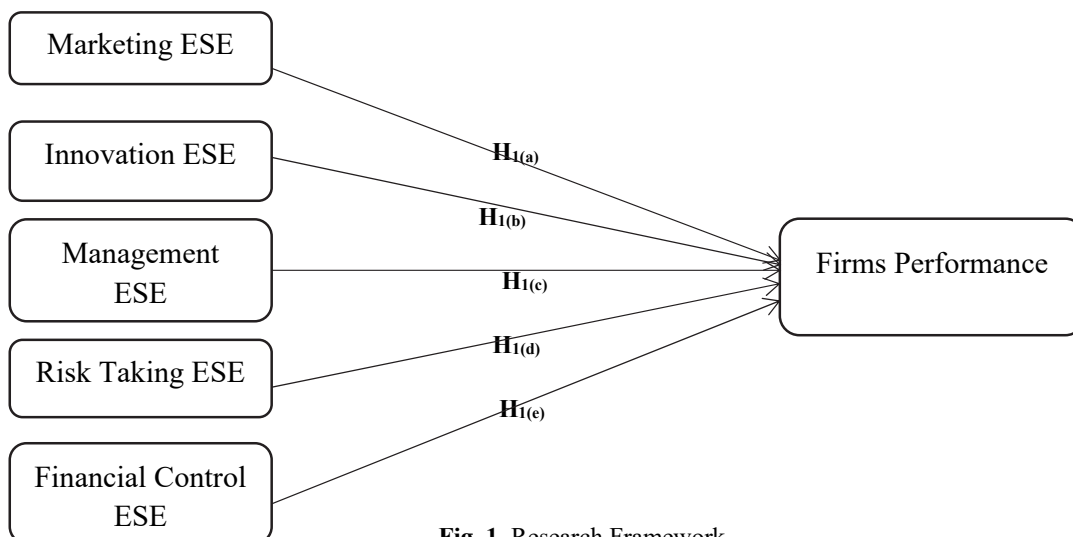


Fig. 1. Research Framework

As per research framework, there have been five exogenous variables namely Innovation ESE, Marketing ESE, Risk Taking ESE, Management ESE, and Financial Control ESE and one endogenous variable termed as Firms Performance. Moreover, following are the five hypotheses which have been drafted as shown in the framework with the help of discussion in the literature review and hypotheses development section;

- H_{1(a)}: Marketing ESE positively affects the firms' performance.
 H_{1(b)}: Innovation ESE positively affects firms' performance.
 H_{1(c)}: Management ESE positively affects firms' performance.
 H_{1(d)}: Risk Taking ESE positively affects firms' performance.
 H_{1(e)}: Financial Control ESE positively affects firms' performance.

2. Methodology

Quantitative research has been carried out to fulfill the purpose of this study using survey research design. This research design helps in testing the hypotheses of the study. For the purpose of this study, different scales have been adopted. For measuring marketing ESE, six items have been used for innovation ESE four items have been adopted. For measuring management ESE, four items have been used. Moreover, five items have been used for measuring management ESE. For risk taking ESE, four items have been adopted. Moreover, three items have been used to measure financial control ESE. Lastly, firms' performance has been measured through four items (Chen et al., 1998; Cumberland et al., 2015). There are a total 3.2 million SMEs present in Pakistan and researchers could not find any guide where they could find a cumulative number of registered small businesses present out of 3.2 million. Moreover, researchers have focused on the central Punjab region for sake of data collection due to relatively a greater number of registered and active small businesses with chambers of commerce including Lahore, Sialkot, Gujrat and Gujranwala. Currently, approximately 33,500 small businesses are active and registered in aforementioned cities i.e., 14,000 from Lahore, 8,800 from Sialkot, 7,200 from Gujrat and 3,500 from Gujranwala. Formula by Yamane (1967) has been used in order to identify the sample size i.e., 395 where the sample has been selected using stratified random sampling. This technique is used to gain the proportionate sample from each city. For this matter, 395 questionnaires were distributed during the period of October 2019 and January 2020 and received 353 questionnaires which were fully filled with a response rate of 89.4%. It must be noted that this period of data collection was without the effect of Covid-19 pandemic, therefore it does not affect the findings of the study. As far as data analysis is concerned, Analysis of Moment Square (AMOS) has been used in order to analyze the data. Before analyzing the data, a measurement model was constructed for testing composite reliability and construct validity such as convergent and discriminant validity. After the measurement model, the structural model was tested to test the developed hypotheses of this study along with model fitness indices.

3. Data Analysis

Data analysis started with the descriptive statistics of all the latent constructs comprising means and standard deviations. Mean values show that all the values are laying near the average i.e., 3. Highest mean value reported is 3.11 which is of risk-taking dimension of ESE and shows that respondents have highest tendency of risk taking whereas lowest mean reported is of performance which shows the tendency of respondents towards performance is relatively low. Moreover, the dispersed around mean is from 0.64 to 0.91.

Table 1
Descriptive Statistics

	Mean	Std. Deviation
MKT ESE	2.83	0.69
INN ESE	2.98	0.68
MGT ESE	3.03	0.78
RT ESE	3.11	0.64
FC ESE	2.52	0.81
PERF	2.57	0.91

4.1 Confirmatory Factor Analysis

The first step in the analysis part is Confirmatory Factor Analysis (CFA) and is also called measurement model. The purpose of CFA is to identify the reliability and validity of the model along with the model fitness indices. In the first model, all standardize factor loadings were beyond threshold value of 0.60 except first item of Marketing ESE which was 0.488 and was removed from the model. The CFA was then conducted again and found all the Standardized Factor Loadings (SFL) beyond the set criteria.

Before moving on to the reliability and validity of the model, measurement model fitness indices were compared for the initial measurement model and the final measurement model. Following table shows the comparison of both models.

Table 2
Comparison of measurement model fitness indices

Fit Index	Threshold Value	First Measurement Model	Final Measurement Model
(χ^2/df)	< 3	2.517	2.192
GFI	> 0.90	0.886	0.905
NFI	> 0.90	0.877	0.901
TLI	> 0.90	0.908	0.932
CFI	> 0.94	0.921	0.943
RMSEA	< 0.08	0.061	0.054

Covariance based SEM involves few common fitness indices which are used in both measurement model and structural model. Starting from relative chi-square, it is obtained by dividing minimum discrepancy with “degrees of freedom” with the threshold value of up to 3 (McIver & Carmines, 1981). Table 2 shows that the final measurement model relative chi-square is well within the range having value of 2.192. The second index is named as Goodness of Fit Index (GFI) whose threshold value is minimum of 0.90 (Tanaka & Huba, 1985) and in this case, final measurement model GFI meets the minimum threshold with the value of 0.905. Moving on, Normed Fit Index (NFI) possesses the same threshold as of GFI (Hair et al., 2017) and has a value of 0.901 just meeting the minimum criteria. In addition, Tucker Lewis index (TLI) has also the same criteria of at least 0.90 (Bentler & Bonett, 1980) and meets the threshold in this case with a value of 0.932. However, Comparative Fit Index (CFI) minimum threshold is little rigid i.e., 0.940 as compared to other fitness indices (Hooper et al., 2008) and as per table 2, CFI is 0.943. Lastly, RMSEA minimum threshold is up to 0.080 and in this case, it is 0.054 meeting the minimum threshold (Hair et al., 2006).

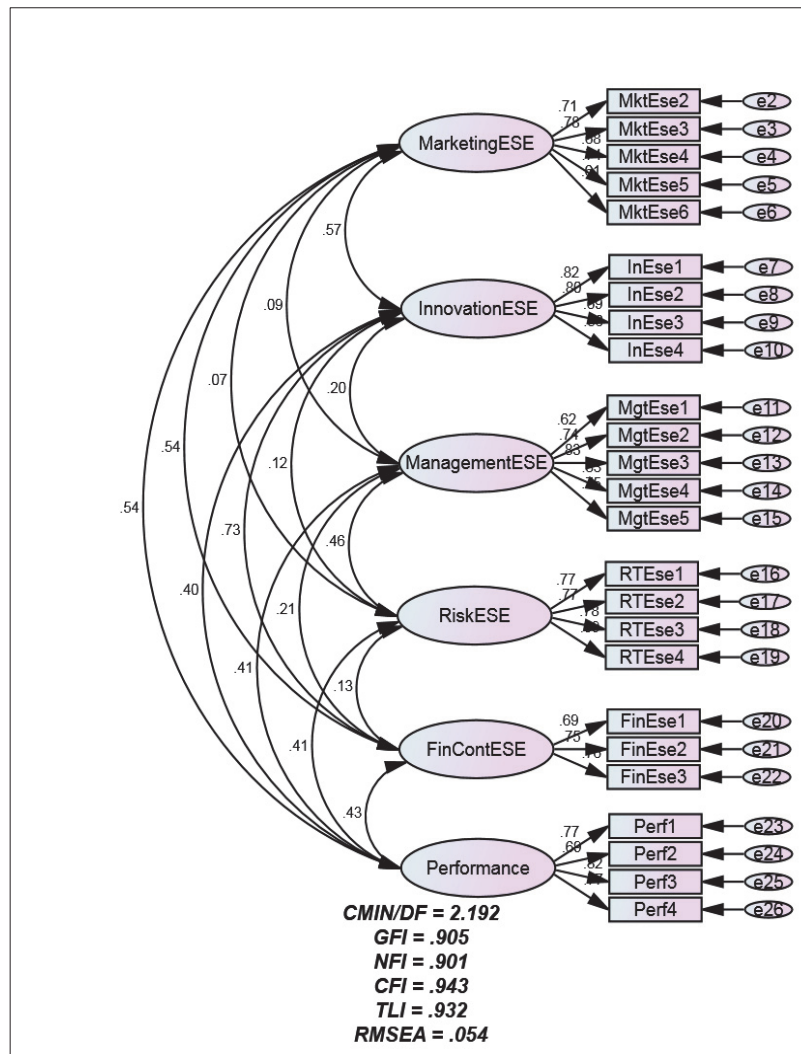


Fig. 2. Measurement Model

Table 3 shows the computation of composite reliability and convergent validity. In case of composite reliability, it measures the internal consistency of the items in the measurement model (Straub, 1989). The minimum threshold for composite reliability is 0.70 (Nunnally & Bernstein, 1994). Moreover, in case of convergent validity, it refers to “the extent to which the items measuring the same construct are correlated among each other and that they measure the same thing” (Gefen & Straub, 2005). There are three criteria to achieve for proving the convergent validity in the measurement model. First, the condition of composite reliability with its minimum threshold should be achieved. Second, SFL should be at least 0.60 and third, Average Variance Extracted (AVE) should be minimum of 0.50 (Hair et al., 2006).

Table 3
Reliability and Convergent Validity

Latent Construct	Items	SFL	CR	AVE
Marketing ESE	MKTESE_2	.713	.833	.501
	MKTESE_3	.780		
	MKTESE_4	.683		
	MKTESE_5	.737		
	MKTESE_6	.614		
	Innovation ESE	INNESE_1		
INNESE_2	.799			
INNESE_3	.695			
INNESE_4	.755			
Management ESE	MGTESE_1	.622	.869	.572
	MGTESE_2	.735		
	MGTESE_3	.830		
	MGTESE_4	.826		
	MGTESE_5	.750		
Risk Taking ESE	RTESE_1	.774	.840	.569
	RTESE_2	.767		
	RTESE_3	.778		
	RTESE_4	.694		
Financial Control ESE	FCESE_1	.691	.779	.541
	FCESE_2	.751		
	FCESE_3	.762		
Performance	Perf_1	.765	.847	.582
	Perf_2	.693		
	Perf_3	.822		
	Perf_4	.765		

As per Table 3, the composite reliability of all the latent constructs have met the minimum threshold of 0.70 as the value ranges from 0.779 to 0.869. Moreover, as far as convergent validity is concerned, CR has achieved its minimum criteria as already discussed. SFL is also beyond the minimum threshold value of 0.60 and lastly AVE also meets the minimum threshold of 0.50 as it ranges from 0.501 to 0.593. In nutshell, it is concluded that convergent validity has been achieved for this model and the model is to be tested for hypothesis testing.

As far as discriminant validity is concerned, it refers to the “extent that items measuring one construct are distinct from the items measuring other constructs” (Hair et al., 2006). Discriminant validity can be achieved when all the correlations among the latent constructs are less than the square roots of AVE (Fornell & Larcker, 1981).

Table 4
Discriminant Validity

Latent Constructs	MKT ESE	INN ESE	MGT ESE	RT ESE	FC ESE	PERF
MKT ESE	.708*					
INN ESE	.57	.770*				
MGT ESE	.40	.20	.756*			
RT ESE	.56	.43	.46	.754*		
FC ESE	.51	.37	.10	.13	.735*	
PERF	.12	.34	.41	.52	.10	.763*

* $\sqrt{\text{AVE}}$

As per the Table 4, it can be seen that the correlations of all the constructs are less than the square root of AVE. As the minimum square root of AVE is 0.708 and maximum correlation is 0.57 and this difference shows the presence of discriminant validity in the model as well.

Moreover, Common Method Bias (CMB) is used to test the “Harman Single Factor Test” (HSFT) which is referred to observe 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 present research, value of HSFT is found to be 0.39, therefore it is reported that data is not suffering from CMB (Podsakoff & Organ, 1986). However, there are few limitations associated with technique (Podsakoff et al., 2003), hence, “Common Latent Factor” (CLF) test is used through SEM by “comparing standardized regression weights (SRWs) with and without CLF and found that SRWs without CLF were higher than SRWs with CLF with the difference of less than 0.05”, ultimately concludes that data is not having CMB (Gaskin, 2012).

4.2 Structural Model

The purpose of the structural model is to check the model fitness indices after giving latent constructs the direction set in the research framework and then testing of the set hypotheses. As per the model fitness indices, it can be seen that the relative chi-square value is 2.136, GFI value is 0.908, NFI value is 0.903, CFI value is 0.946, TLI is 0.935 and RMSEA is 0.053 as all the model fitness indices are well within the threshold values as discussed in the portion of CFA.

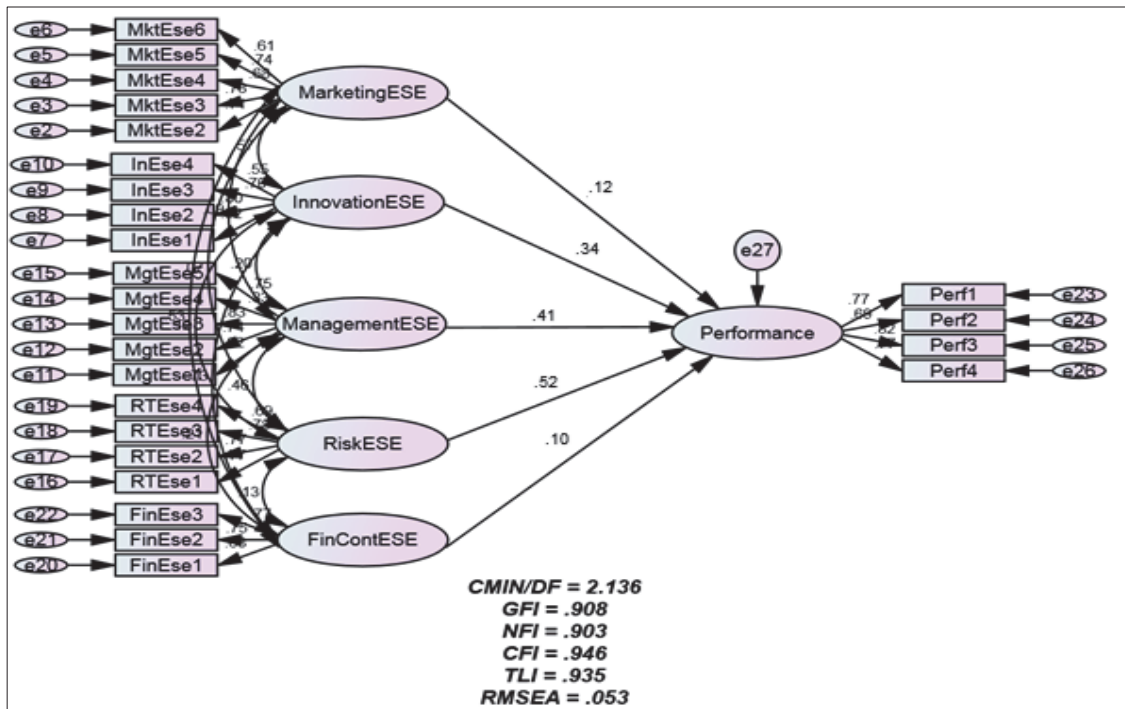


Fig. 3. Structural Model

As far as hypothesis testing is concerned, the aforementioned structural model shows the acceptance of first sub-hypothesis with a very weak positive relationship of 0.12 ($p=0.027$) between marketing ESE and small business performance. Moving on to the second sub-hypothesis which states that a positive significant relationship exists between innovation ESE and small business performance, which has been accepted as well as there exists a positive relationship between both latent constructs with path coefficient of 0.34 ($p=0.000$). Moreover, as far as third sub-hypothesis is concerned, the structural model shows the acceptance of a third hypothesis with positive and significant relationship of 0.41 ($p=0.000$) between management ESE and small business performance. Moving on to the fourth sub-hypothesis that states a relationship between risk taking ESE and small business performance, results show the acceptance of this hypothesis as well as there exists a positive and significant relationship of 0.52 ($p=0.000$) between both latent constructs. Lastly, as far as the relationship between financial control ESE and small business performance is concerned, both possess the positive and significant relationship with a path coefficient of 0.10 (0.038) between both constructs leading to the acceptance of fifth sub-hypothesis.

5. Discussion and Conclusion

There have been a number of studies which support the findings of the current study. For instance, first sub-hypothesis acceptance with narrow margin shows that although marketing ESE plays its role in escalating the small businesses' performance, small businesses in Pakistan put less emphasis on the marketing dimension of ESE. Reason being the already squeezed revenues of the small businesses and taking the marketing as expense instead of investment. Out of all five sub-hypotheses, this relationship was proved to be the second weakest. Moreover, the innovation dimension of ESE has shown a relatively better relationship with small businesses performance. There are a number of small businesses in Pakistan who work on to try

new ideas and come up with the modification of existing products or with new products and procedures which reflect positively upon their performance. Moving on to the relationship between the management dimension of ESE and small businesses performance, study has shown a positive and significant impact due to better management styles prevailing in the small businesses. Goals/plans are properly defined and executed within timelines in most of the cases which leads to the better performance level of small businesses in Pakistan. Due to uncertainty and dynamic conditions of the industry in Pakistan, entrepreneurs have to play the important role of risk taking to either survive in the competition or maneuver the growth of their set ups in a positive way. This role of risk taking by the entrepreneurs eventually leads them for the betterment in the performance level and this sub-hypothesis has shown a highest path-coefficient among all latent constructs. Lastly, as per financial control dimension of ESE, it has been the least path coefficient out of all five dimensions. The reason for having the weakest relationship in the model is the absence of records or non-maintenance of proper financial control systems present in small businesses. Most of the economy in Pakistan is already undocumented and even those who have registered themselves are not having the proper systems in place to control the financial cash flows. In nutshell, it is concluded that ESE exists in the small businesses of Pakistan and there is a significant positive relationship with the performance of small businesses. Similarly, this study suggests that all five dimensions of ESE are important to develop to achieve reasonable performance level.

5.1 Practical Implications

This study provides guidelines to the management of new ventures or other start-ups in a way that the investment should be done on building and enhancing ESE level. Investors should focus on developing ESE of the entrepreneurs by taking a few mandatory steps who want to start their ventures. Moreover, those individuals who are the nascent entrepreneurs and want to start the business, they should consider themselves in scoring reasonably good in all of the five dimensions if they want to escalate the performance level of their start-ups. As far as small businesses are concerned, state can build some mechanisms to screen such small businesses owners which have high scores across all five dimensions of ESE and owners of such small businesses in future can work on developing the ESE of their key prospective employees which they can further use in starting their own venture in future and this can be done through educational training courses on innovation, management, risk taking, marketing and financial analysis.

5.2 Limitations and Future Directions

Although this paper has a number of contributions, there are few limitations as well. For instance, ESE scale is having the self-reported measures which are adopted from the well-established study however, using objective measures instead of self-reported measures to determine the performance could be more useful. The major issue for getting objective measures of performance in this study was the lack of data available in most of the small businesses. As per Dess and Robinson (1984), in case of absence of objective measures, subjective measures can be obtained. In addition, this study was conducted using single construct of ESE with five dimensions which did not affect the validity of the scale; however, one can use different constructs in future which can affect the performance of small businesses such as level technological turbulence, environment uncertainty and level of government support to assess the effect on the endogenous variable. Moreover, data can be collected from other provinces to gain more representation. Lastly, prior experience plays an important role in the life of entrepreneurs specifically in case of ESE (Cassar & Friedman, 2009), therefore, future research can be conducted considering prior experience of entrepreneurs as such entrepreneurs with prior experience can exhibit better ESE and can further escalate the performance.

References

- Amatucci, F. M., & Crawley, D. C. (2011). Financial self-efficacy among women entrepreneurs. *International Journal of Gender and Entrepreneurship*, 3(1), 23-37.
- Antoncic, B., Antoncic, J. A., & Aaltonen, H. M. (2016). Marketing self-efficacy and firm creation. *Journal of Small Business and Enterprise Development*, 23(1), 90-104.
- Bakar, M. S., Ramli, A. B., Ibrahim, N. A., & Muhammad, I. G. (2017). Entrepreneurial self-efficacy dimensions and higher education institution performance. *IJMS*, 24(1), 119-137.
- Bandura, A. (1977). Self-efficacy theory: Toward a unifying theory of behavioral-change. *Psychological Review*, 84, 191-225.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, 37(2), 122-147.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359-373.
- Bandura, A. (1990). Perceived self-efficacy in the exercise of personal agency. *Journal of Applied Sport Psychology*, 2(2), 128-163.
- Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. *Handbook of principles of organization behavior*, 2, 11-21.
- Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of Personality and Social Psychology*, 41(3), 586-598.
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4), 587.
- 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.

- Bonsu, S., & Kuofie, M. (2019). Small Business Survival. *Journal of Marketing & Management*, 10(1), 51-63.
- Carland, J. W., Hoy, F., & Carland, J. A. C. (1988). "Who is an entrepreneur?" is a question worth asking. *American journal of small business*, 12(4), 33-39.
- Cassar, G. & Friedman, H. (2009). Does self-efficacy affect entrepreneurial investment? *Strategic Entrepreneurship Journal*, 3(3), 241-60.
- Cervone, D., & Peake, P. K. (1986). Anchoring, efficacy, and action: The influence of judgmental heuristics on self-efficacy judgments and behavior. *Journal of Personality and Social Psychology*, 50(3), 492-501.
- Chandler, G. N., & Jansen, E. (1997, August). FOUNDER SELF-EFFICACY AND VENTURE PERFORMANCE: A LONGITUDINAL STUDY. In *Academy of Management Proceedings* (Vol. 1997, No. 1, pp. 98-102). Briarcliff Manor, NY 10510: Academy of Management.
- Chen, C.C., Greene, P.G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316.
- Chen, Y., & Zhou, X. (2017). Entrepreneurial self-efficacy and firms' innovation behavior: The negative mediating role of social capital. *Social Behavior and Personality: An International Journal*, 45(9), 1553-1562.
- Coad, A. (2007). Firm growth: A survey. Retrieve from <https://halshs.archives-ouvertes.fr/file/index/docid/155762/file-name/R07024.pdf>
- Cooper, S. Y., & Lucas, W. A. (2007). Enhancing self-efficacy for entrepreneurship and innovation: An educational approach. In *University collaboration for innovation* (pp. 79- 98). Brill Sense.
- Cumberland, D. M., Meek, W. R., & Germain, R. (2015). Entrepreneurial self-efficacy and firm performance in challenging environments: Evidence from the franchise context. *Journal of Developmental Entrepreneurship*, 20(01), 1-19.
- Dess, G. & Robinson, R. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business units. *Strategic Management Journal*, 5, 265-73.
- Ensley, M. D., Hmieleski, K. M., & Pearce, C. L. (2006). The importance of vertical and shared leadership within new venture top management teams: Implications for the performance of startups. *The leadership Quarterly*, 17(3), 217-231.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gaskin, J. (2012). Confirmatory factor analysis. *Gaskination's StatWiki*.
- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems*, 16(1), 91-109.
- Hair Jr, J. F., 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
- Hair, J. F., Black, W. C., Babin, B., Anderson, R., & Tatham, R (2006). *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice Hall
- Hayward, M. L., Shepherd, D. A., & Griffin, D. (2006). A hubris theory of entrepreneurship. *Management science*, 52(2), 160-172.
- Herath, H. M. A., & Mahmood, R. (2014). Dimensions of entrepreneurial self-efficacy and firm performance. *Global Journal of Management And Business Research*, 14(4), 22-30.
- Hmieleski, K. M., & Baron, R. A. (2008). When does entrepreneurial self-efficacy enhance versus reduce firm performance?. *Strategic Entrepreneurship Journal*, 2(1), 57-72.
- 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.
- Kale, E. (2020). Attachment styles and job performance in the hospitality industry: the mediating role of general self-efficacy. *Journal of Human Resources in Hospitality & Tourism*, 19(1), 23-42.
- Lindsley, D. H., Brass, D. J., & Thomas, J. B. (1995). Efficacy-performing spirals: A multilevel perspective. *Academy of Management Review*, 20(3), 645-678.
- Luthans, F., & Peterson, S. J. (2002). Employee engagement and manager self-efficacy. *The Journal of Management Development*, 21(5), 376-387.
- Markman, G. D., Balkin, D. B., & Baron, R. A. (2002). Inventors and new venture formation: The effects of general self-efficacy and regretful thinking. *Entrepreneurship Theory and Practice*, 27(2), 149-165.
- Markman, G. D., Phan, P. H., Balkin, D. B., & Gianiodis, P. T. (2005). Entrepreneurship and university-based technology transfer. *Journal of Business Venturing*, 20(2), 241-263.
- McGee, J. E., & Peterson, M. (2019). The long-term impact of entrepreneurial self-efficacy and entrepreneurial orientation on venture performance. *Journal of Small Business Management*, 57(3), 720-737.
- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: refining the measure. *Entrepreneurship Theory and Practice*, 33(4), 965-988.
- McIver, J., & Carmines, E. G. (1981). *Unidimensional scaling* (No. 24). Sage.
- Miao, C., Qian, S., & Ma, D. (2017). The relationship between entrepreneurial self-efficacy and firm performance: a meta-analysis of main and moderator effects. *Journal of Small Business Management*, 55(1), 87-107.
- Nunnally, J.C. & Bernstein, I.H. (1994). *Psychometric Theory*, 3rd ed., McGraw-Hill, New York, NY.
- Podsakoff, P.M. & Organ, D.W. (1986). Self-reports in organizational research: problems and prospects. *Journal of Management*, 12(4), 69-82.

- 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(5), 879-903.
- Prajapati, K., & Biswas, S. N. (2011). Effect of entrepreneur network and entrepreneur self-efficacy on subjective performance: a study of handicraft and handloom cluster. *The Journal of Entrepreneurship*, 20(2), 227-247.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological bulletin*, 124(2), 240-261.
- Straub, D. W. (1989). Validating instruments in MIS research. *MIS quarterly*, 13(2), 147-169.
- 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.
- Torres, J. L. N., & Watson, W. (2013). An examination of the relationship between manager self-efficacy and entrepreneurial intentions and performance in mexican small businesses. *Contaduría y Administración*, 58(3), 65-87.
- Trevelyan, R. (2011). Self-regulation and effort in entrepreneurial tasks. *International Journal of Entrepreneurial Behavior & Research*, 17(1), 39-63.
- Vancouver, J. B., Thompson, C. M., Tischner, E. C., & Putka, D. J. (2002). Two studies examining the negative effect of self-efficacy on performance. *Journal of Applied Psychology*, 87(3), 506.
- Venkatraman, N., & Ramanujan, V. (1986). Drivers of market orientation and performance in service firms. *Journal of Service Marketing*, 12(1), 3-58.
- Wei, J., Chen, Y., Zhang, Y., & Zhang, J. (2020). How Does Entrepreneurial Self-Efficacy Influence Innovation Behavior? Exploring the Mechanism of Job Satisfaction and Zhongyong Thinking. *Frontiers in Psychology*, 11, 1-15.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review*, 14(3), 361-384.



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