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Action Characteristics as a Bridge in Individual Entrepreneurial Orientation and SME Success Pathway

Tehreem Fatima * Ahmad Raza Bilal[†]

Abstract: In contrast to the much examined external factors as determinants of SME success, the present study brought focus on the entrepreneurial psychological context. This research examines the impact of individual entrepreneurial orientation on the success of SMEs in Pakistan. Moreover, this study emphasize the role of 'action' as a linking bridge to psychological factors and entrepreneurial outcomes, through the role of action characteristics (access to finance, social network, exploration activities, and response performance). Based on 182 responses obtained through a stratified sample of manufacturing SMEs, multiple mediation analysis was used to test the mediation. The results indicated that individual entrepreneurial orientation had a positive impact on SMEs success and all the action characteristics (access to finance, social network, exploration activities, and response performance) mediate this relationship. The study theoretically contributes to emotive perspective, action regulation theory and orientation-action-outcome perspective and offers implications for SME owners, SMEDA and training professionals.

Keywords: Small and medium enterprises, action characteristics, individual entrepreneurial orientation, success.

Introduction

There has been a growing interest in the investigation of the factors that lead SMEs to the verge of failure (Shepherd, Haynie, & Patzelt, 2013) specifically, in developing nations like Pakistan where SMEs constitute 90% of business and are a paramount contributor in economic success (Maula-Bakhsh & Raziq, 2018; SMEDA, 2019). Despite their importance, small businesses in Pakistan are facing issues in maintaining their survival (Hyder & Lussier, 2016). SMEs in developing nations have been facing the issues of limited finance that cause high failure rate (Bilal, Khan, & Akoorie, 2016; Lee, Sameen, & Cowling, 2015). SMEs fail to have timely and efficient response to the changes in market and inefficient market response is yet another cause of failure (Hughes, Hughes, & Morgan, 2007). SMEs in developing nations lack innovation and focus on routine business, low exploration activities result in average and low performance (Yeniaras & Unver, 2016). Having effective social network is the life blood of SMEs, but most of the SME owners lack the skills of building effective social ties and resultantly face failure (X.-y. Zhao, Frese, & Giardini, 2010).

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In order to have better comprehension of the underlying causes of entrepreneurial failure, psychological factors offer an important area of investigation. The behavioral, emotional, cognitive and motivational factors are an important precursor of entrepreneurial actions that lead to success or failure (Baluku, Kikooma, & Otto, 2018; Frese & Gielnik, 2014). The present research aims to extend the extant theories on psychological factors of entrepreneurial success/ failure by empirically investigating the psychological factor as an antecedent in Pakistani SMEs by building on emotive approach that state psychological factors of an entrepreneur are an important element in causing success and failure of business (Shepherd et al., 2013). In this regard this study will focus on the construct of individual entrepreneurial orientation (IEO) that has emerged as an important factor of business success and failure in SMEs (Irwin et al., 2018) of developing nations (Krauss, Frese, Friedrich, & Unger, 2005). The individual level investigation of this construct is still phase of infancy.

The emphasis of entrepreneurial orientation (EO) research has been on finding out the operational performance variables that transfer the impact of orientation variables on performance variables (Li, Huang, & Tsai, 2009; Yeniaras & Unver, 2016; Zhang, Edgar, Geare, & O'Kane, 2016). Nonetheless the literature on entrepreneurial psychology is somewhat unvoiced on the impact of psychological abilities and orientations on operational business variables (Kantur, 2016). In Pakistan, few studies have examined the construct of EO in relation to SME performance, such as Akhtar, Ismail, Hussain, and Umair-ur Rehman (2015) investigated the role of EO on manufacturing SMEs performance through moderating role of family relationship. Imran et al. (2018) investigated the role of EO on SMEs performance through mediating role of total quality management (TQM), Fayaz and Shah (2017) investigated this relationship with mediating role of transformational leadership. Hussain, Salia, and Karim (2018) investigated the role of learning orientation in determining SME performance and examined interaction impact of EO. Although the literature on entrepreneurial orientation at firm level and business success is well established (Irwin et al., 2018; Lumpkin & Dess, 1996; Rodríguez-Gutiérrez, Moreno, & Tejada, 2015), yet there is need to examine this association at individual level (Frese & Gielnik, 2014) especially in SMEs. There lies a need to examine the actionable steps that business owners with high entrepreneurial orientation to translate them into business success (Frese, 2009).

Though, Krauss et al. (2005) established that seven dimensional combined construct of IEO had significant impact on success of small business owners yet the research in small and medium scale enterprises did not pay much attention to examine and further unravel the underlying actions that are undertaken by the business owners by using their entrepreneurial orientation to become successful. It is argued that individuals that have high entrepreneurial orientation are risk takers, more competitive, have better learning orientation, achievement orientation, autonomy orientation, proactiveness, and innovativeness. On the tenant of Theory of action regulation and orientation-action-outcome framework (Frese, 2009; Johnson, Christensen, & Kagermann, 2008) it is stated that the psychological characteristics result into certain actions that cause success/ failure. The SMEs' owners that have high IEO are active in having access to resources i.e. finance (Lee et al., 2015) having efficient market response (Hughes et al., 2007) exploration activities (Yeniaras & Unver, 2016) and development of strong social ties (X. Zhao, 2005; X.-y. Zhao et al., 2010). All the action characteristics have been found to have a positive impact on success of SMEs. It would be reasonable to postulate that these four action characteristics act as an explanatory link in IEO and SMEs success.

In this research the aim is to examine IEO as a precursor of success/failure of SMEs in the manufacturing sector of Pakistan. On the tenant of Theory of action regulation and orientation-action-outcome framework (Frese, 2009; Johnson et al., 2008) we have introduced four action characteristics that are, access to resources i.e. finance (Lee et al., 2015), having efficient market response (Hughes et al., 2007), exploration activities (Yeniaras & Unver, 2016) and development of strong social ties (X. Zhao, 2005; X.-y. Zhao et al., 2010) as potential mediating mechanisms linking IEO and business success. This research answers two questions i.e. What is the impact of IEO on SMEs success in the manufacturing sector of Pakistan? What are the mediating mechanisms that link IEO to SMEs success in manufacturing sector SMEs of Pakistan? The findings would extend the policy direction for the owners of SMEs in manufacturing sector of Pakistan to avoid failure by using better psychological regulation and and invigorating their psychological capabilities.

Literature Review

Theoretical Framing

According to Shepherd et al. (2013), the emotive realm takes more comprehensive view of success/ failure in terms of entrepreneur's psychological characteristics. It extends beyond the organizational and environmental explanations for unsuccessful ventures; by anchoring around the idea of individual level psychological barriers to entrepreneurial success. The main point of argument in this approach implies that human emotional and motivational factors are important determinants accounting for survival or failure of small and medium enterprises (Van Gelderen, Thurik, & Bosma, 2005). In an extensive review on the psychology of entrepreneurship. Frese and Gielnik (2014) found that entrepreneurial psychological motivations and cognitive abilities have no direct influence on business performance rather these orientations translate into action characteristics that decide the success of business. Frese (2009) emphasized the importance of action regulation in examining the impacts of psychological traits on business outcomes. Johnson et al. (2008) indicated the orientation-action-outcome framework, that emphasize that the orientations have no direct impact on the business outcomes, rather they translate into actions that are responsible for successful business performance. Entrepreneurial orientation is one of the affective/ cognitive psychological variables that results in business success. Post business start-up, the major actions that business require include gaining access to resources i.e. finance (Lee et al., 2015), having efficient market response (Hughes et al., 2007), exploration activities (Yeniaras & Unver, 2016) and development of strong social ties (X.-y. Zhao et al., 2010; X. Zhao, 2005). Thus, building on the theory of action regulation (Frese, 2009) and orientation-action-outcome framework (Johnson et al., 2008) it is posited that SME owners that have high entrepreneurial orientation will involve actively in the action characteristics that are required for business growth and survival.

Hypotheses Development

Individual Entrepreneurial Orientation and SME Success

Frese and Gielnik (2014) emphasized that entrepreneurial orientation can be examined from a psychological view point as an attitude of individual entrepreneur and as an action characteristic. Krauss et al. (2005) created the model of entrepreneurial orientation at the level of individual characteristics of entrepreneurs and found it to be linked to the success of entrepreneurial ventures in developing nations. Individual characteristics of entrepreneurs specifically: achievement orientation, autonomy orientation, innovativeness, risk taking, proactive personality, and competitive aggressiveness were added in his proposed model of IEO.

Entrepreneurial climate is characterized by ambiguous information, competitive goals, changing situations and uncertainty (De Vries & Shields, 2006). In such cases entrepreneurs with more tolerance to ambiguity, changing situations and ability to learn from their mistakes have greater chances of survival (Cooper, Estes, & Allen, 2004). Though, most of the recent research studies still focus on the three dimensional construct of individual entrepreneurial orientation (Bolton & Lane, 2012); Krauss et al. (2005) conceptualization of individual level entrepreneurial construct is holistic and it is proven to be a predictor of success in perspective of small business operating in the developing nations. Therefore, we deem it to be a suitable dimensional in the context of present study.

 H_1 : There is a significant impact of IEO on SMEs success.

Mediating Role of Action Characteristics between Individual Entrepreneurial Orientation and SME Success

Entrepreneurial orientation at firm level has been linked to exploration activities (Kollmann & Stöckmann, 2014; Yeniaras & Unver, 2016). In SMEs business owners are the prime actors to decide the strategic stance their business will take (Krauss et al., 2005) so it is reasonable to consider that psychological component of IEO will link to the exploration activities. Exploration is a behavior of a firm that includes searching, discovering, experimenting, risk taking, and innovation (He & Wong, 2004). Overall it is the action for exploring new ideas and experimenting with new alternatives for development of new ways of doing business (Bauer & Leker, 2013). In this way the business has an enhanced ability to identify the new opportunities in market and find out better ways of doing business through experimenting with the alternatives of content, structure and governance of the activities that are inherent in exploiting new business opportunities along with improving the ability of firms to have better risk tolerance and uncertainties (Yeniaras & Unver, 2016). This allows the business to conduct experimentation to keep abreast with changes in market and effectively dealing with market competition and as a result making a positive contribution towards the performance of firm (Gupta, Tesluk, & Taylor, 2007). Thus, it is argued that exploration activities have a positive impact on business performance (Yeniaras & Unver, 2016).

*H*₂: Exploration activities mediate the relationship between IEO and SMEs success.

In addition to exploring the new opportunities it is important for a business to be responsive to the changes in market and the strategies of competitors to exploit the available opportunities in market. It is important for the business to make maximum utilization of existing resources. In this regard responsive performance plays an important role in shaping business survival performance. The components of IEO will instill an anticipatory capacity in entrepreneurs that allow them to instigate intelligent, timely and creative responses for adapting to the changes in market conditions. IEO makes the business owners geared to discover and avail opportunities ahead of the rival firms by being risk taker, autonomous, achievement oriented, learning oriented, competitive, proactive and innovative (Hughes et al., 2007; Krauss et al., 2005). In this way the business will be able to exploit opportunities by experimentation and probing in face of continuously changing environment.

*H*₃: Responsive performance mediate the relationship between IEO and SMEs success.

Moreover, one of the major issues facing SMEs in developing nations is access to resources amongst which finance is the most important (Yoshino & Taghizadeh-Hesary, 2018). It has been found in a review on the antecedents of entrepreneurial success that access to resources is an important factor that can be improved by having psychological motivations of entrepreneurial orientation (Frese & Gielnik, 2014). The business owner who is innovative, risk taker, proactive, autonomous, achievement oriented, learning oriented and competitive by having higher IEO (Krauss et al., 2005) has the capacity to seek resources actively as compared to the competitors (Frese & Gielnik, 2014). Finance is one of the basic resources needed to conduct business operations (Hussain et al., 2018) it is argued that business owners that have higher IEO will be able to access finance more easily as compared to those who have lower IEO.

*H*₄: Access to finance mediates the relationship between IEO and SMEs success.

Lastly, the importance of social networking in small business context cannot be over emphasized. The small business owners rely on informal networks i.e. family, friends, businesses for conducting business operations and reaping the opportunities (Zimmer, 1986). The psychological factors are found to be antecedents of developing social networks in small scale business that ultimately leads to business growth (X.-y. Zhao et al., 2010; X. Zhao, 2005). The business owners having entrepreneurial orientation have the innovative ideas, ability to take calculated risks, proactiveness, learning, autonomy, pursuit for achievement and competitiveness (Krauss et al., 2005) that help them in developing social networks in a proactive manner to serve the future business needs (Frese & Gielnik, 2014). The individuals that have entrepreneurial orientation develop and apply the strategies for broadening their social network that plays an important role in entrepreneurial success. *H*₅: Social networking mediates the relationship between IEO and SMEs success.

The study framework is shown in the Figure 1

Figure 1 Research Framework



Method

Research Design

The study utilized a time-lagged quantitative mail survey approach based on the theoretical conceptions of positivism and deductive stance (Cooper et al., 2004). It is widely accepted in entrepreneurship research particularly in SMEs (Lussier & Halabi, 2010).

The population comprises of owners of small and medium enterprises (SMEs) operating in manufacturing sector in Pakistan. As per the SME Sector genesis, challenges and prospect report published by Small and medium enterprise authority (SMEDA), Faisalabad, Sialkot, Lahore, Karachi, Bahawalpur, Gujranwala, Jhang, Multan, Peshawar and Sargodha contain majority of manufacturing SMEs. Ten strata were developed on the basis of industrial zones and sample was drawn proportionally as per the criteria suggested by Sekaran and Bougie (2009) i.e. Faisalabad (18%), Sialkot (14%), Lahore (13%), Karachi (12%), Bahawalpur (9%), Gujranwala (9%), Jhang (8%), Multan (7%), Peshawar (7%) and Sargodha (5%). The chosen enterprises were registered under Security and Exchange Commission of Pakistan (SECP), filed annual returns on regular basis and submitted audited financial records to relevant government authorities, having up-to 250 employees and sales revenue not exceeding 400 million PKR (small enterprises) and 800 million PKR (medium enterprises) as per criteria of State Bank of Pakistan (2017). The participants fulfilling these criteria were contacted and their consent to participate in the study was formally obtained. According to Tabachnick, Fidell, and Ullman (2007) the minimum acceptable sample size can be calculated as per the study variables, with the formula N> 50 + 8m, where m represents the (independent, mediating and moderating variables in model), so for this study minimum sample should be N > 50+8*5=90, therefore 250 questionnaires were distributed out of which 182 were returned, yielding the response rate of 73%. The data were gathered in three waves; at T1 the individual entrepreneurial orientation was measured, at T2 the data on mediators (access to finance, social network, and response performance and exploration activities) were obtained and lastly at T3 the business success was measured with the time lag of 4 weeks between the waves. The sample size was well above the criteria suggested by Hair, Ringle, and Sarstedt (2011) that is 175 respondents. Out of 182 respondents 87% were male and 13% were female. 66% of the businesses were in small scale while 34% were in medium scale, 22% of the business had 0-3 years of operation, 31% had 3-6% of operations, 27% were having 6-9 years of operations, 20% were having more than 9 years of operation.

Measurement

Individual Entrepreneurial Orientation (IEO).

A 28 item scale was adapted to measure 7 dimensions of IEO from Krauss et al. (2005), sample item is "Do you Scan for the potential opportunities and threats?" The response was measured on five point likert scale ranging from 1-never to 5-always.

Exploration Activities (EA)

In order to measure the exploration activities 4 items were adapted from He and Wong (2004). A sample item is "Creating products or services that are innovative for the firm". The scale ranged from 1-strongly disagree to 5-strongly agree.

Response Performance (RP)

A 3 item scale is used to measure the response performance as suggested by Hughes et al. (2007). Sample item is "I react to market and environmental changes in a quick and satisfactory way". The scale ranged from 1-strongly disagree to 5-strongly agree.

Access to Finance (AF)

Access to finance was measured using 2 items suggested by Lee et al. (2015). Sample item is "I have difficulty in accessing finance for my business". The response ranged from 1-never to 5-always.

Social Networking (SN)

To measure the social networking strategies of business 10 items were adapted from X. Zhao (2005). Sample item is "I skillfully use intermediaries to introduce me to those people with whom I really want to associate". The scale ranged from 1-strongly disagree to 5-strongly agree.

Success (S)

In order to measure success, 7-items venture progress scale was used, developed by Van Gelderen et al. (2005). The responses were taken on a 5-points scale spanning from not at all to to a very great extent. Sample item is "Your business has achieved the goal related to products/services".

Analysis Strategy

To analyze the results SPSS 22 was employed and descriptive statistics (mean, SD and correlations) were computed. For testing hypotheses of direct relationships, regression analysis was used and to check the multiple mediations, we used model 4 as suggested by Hayes (2017) via PROCESS macro.

Results

Table 1

Construct Validity and Reliability

It was ensured that all sacles are reliable as Cronbach alpha's values ranged from 0.7 to 0.9 showing average to good consistency (George & Mallery, 1999) see Table 1. Moreover, the construct validity was gauged by the values of convergent validity (IEO=0.66, AF=0.57, SN=0.62, EA=0.53, RP=0.59, S=0.61, AVE > 0.50). The values of discriminant validity also affirmed this point (MSV < AVE and ASV < AVE). Composite reliability was indicated as CR > 0.70 (IEO=0.77, AF=0.72, SN=0.81, EA=0.81, RP=0.72, S=0.79) that is in the threshold range suggested by (Hair et al., 2011).

Validity and Reliability Analysis						
Constructs	Number of Items	α	AVE	CR	MSV	ASV
Individual Entrepreneurial Orientation (IEO)	28	0.89	0.66	0.77	0.42	0.39
Access to Finance (AF)	2	0.78	0.57	0.72	0.41	0.36
Social Networks (SN)	10	0.84	0.62	0.81	0.39	0.33
Exploration Activities (EA)	4	0.71	0.61	0.79	0.36	0.3
Response Performance (RP)	3	0.81	0.59	0.72	0.4	0.36
Success (S)	7	0.90	0.53	0.81	0.42	0.37

Notes: Reliability range: \geq 0.9=excellent, \geq 0.8= good, \geq 0.7= acceptable, \geq 0.6= questionable \geq =0.5=poor and < 0.5 = unacceptable.

Common Method Bias and Confirmatory Factor Analysis

Harman single-factor test was conducted which indicated that single factor was responsible for less than half (22.87%) variance. Confirmatory factor analysis was carried out using AMOS 20. Two measurement models were made, i.e. one with twelve factors i.e. achievement orientation, autonomy orientation, innovativeness, risk taking, proactive personality, and competitive aggressiveness, access to finance, social network, exploration activities, response performance and success; but the model didn't show a good fit, 2 (df) = 1987.31(265), $\chi 2/df = 7.49$; comparative fit index (CFI) = .42; incremental fit index (IFI) = .21; root mean square error of approximation (RMSEA) = .23; standardized root mean square residual (SRMR) = .13. Then we tested a six factor model having combined dimensions of IEO (achievement orientation, autonomy orientation, innovativeness, risk taking, proactive personality, and competitive aggressiveness), access to finance, social network, exploration activities, response performance and success and the model revealed a better fit, $\chi 2$ (df) = 398.14(265), $\chi 2/df = 1.50$; CFI = .91; IFI = .92; RMSEA = .053; SRMR = .067.

Descriptive Analysis

Table 2 indicates a moderate to strong positive correlation in the variable of study and the mean values ranged from 2.12 to 2.55 and the SD was from .72 to .93.

Table 2 Mean,SD and Correlations								
Correlations							Mean	SD
	1	2	3	4	5	6		
IEO	1						2.22	0.81
AF	.718**	1					2.19	0.93
SN	.647**	.802**	1				2.32	0.91
EA	.721**	.736**	.623**	1			2.12	0.72
RP	.809**	.410**	.721**	.801**	1		2.55	0.80
S	.654**	.706**	.799**	.691**	.767**	1	2.18	0.75

Notes:**p \leq 0.01, IEO=Individual entrepreneurial orientation, AF=access to finance, SN=social network,EA=exploration activities, RP=response performance, S=success

Hypothesis Testing

Direct Impact

First of all, the hypotheses regarding the direct link in IEO and success was measured. It was shown that IEO (β =.65, t=13.01, p \leq 0.01) has a significant positive relationship with SMEs success. The model is fit at R^2 =657, Adj. R^2 =.602 and F value of 237.005 (See Table 3). Thus, H1 is accepted.

Table 3 Regression analysis		
Variables	SME Success	
	Un-standardized Coefficients	t-value
Individual Entrepreneurial Orientation	.65***	13.01
R^2	0.657	
Adj. R ²	0.602	
F-stat	237.005	
Notes. ***p≤ 0.001,		

Multiple Mediation Impact

In order to test the mediation hypotheses, multiple mediation model 4 was employed via boot strapping method devised by Hayes (2017). The bias corrected boot strapping was done with 5000 draws, and confidence interval (CI) of 95% was used (see Table 4 and 5). The mediating impact of AF, SN, EA, RP was simultaneously examined between IEO and S. It was found that, IEO is positively linked to AF (Path a^1 : β =.62 t=15.29, \leq 0.001) and AF is linked positively to S (Path b^1 : β =.71, t= 19.2, \leq 0.001). It was shown that IEO was linked positively to SN (Path a^2 : β =.80 t=20.8, \leq 0.001) and SN had a significant association with S (Path b^2 : β =.23, t= 3.2, \leq 0.05). Significant positive impact of IEO was gauged on EA (Path a^3 : β =.84 t=20.49, \leq 0.001) and EA was linked positively to S (Path b^3 : β =.66, t= 9.2, \leq 0.001). It was shown that IEO was linked positively to RP (Path a^4 : β =.62 t=18.07, \leq 0.001) and RP had a significant association with S in positive manner (Path b^4 : β =.18, t= 2.9, \leq 0.05). The overall impact of IEO on S was also significantly positive (Path c: β =.65, t=13.01, \leq 0.001), after the mediators were controlled this impact reduced in a significant manner (Path c' β =.25 t=2.7, \leq 0.001). AF, SN, EA and RP acted as partial mediators between IEO and S, at BCa, 95% and their CI does not contain 0 with combined indirect impact of .7440 with AF having the strongest effect size of (.2574), followed by RP (.2401), SN (.1290) and EA (.1175). Thus support for H2, H3, H4, and H5 was obtained.

 Table 4

 Meditation Test for indirect impact

	Path a1	Path b1	Path a2	Path b2	Path a3	Path b3	Path a4	Path b4	Path c	Path c'
В	.62***	.71***	.80***	.23**	.84***	.66***	.62***	.18**	.65***	.25**
Se	0.037	0.056	0.038	0.057	0.031	0.055	0.022	0.07	0.037	0.041
t-value	15.29	19.20	20.80	3.20	20.49	9.20	18.07	2.90	13.01	2.70
R	0.646	0.686	0.625	0.686	0.625	0.686	0.69	0.686	0.661	0.686
F	321.06	256.1	223.21	256.1	223.01	256.1	189.43	256.1	454.69	256.1
Sig	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1. ***p≤0.001, **p≤0.05

2. Path a= IV \rightarrow M, Path b=M \rightarrow DV (IV-controlled), Path c= IV \rightarrow DV -Total effect (c =c' + ab), Path c'=IV \rightarrow DV - Direct effect (M controlled / c'=c-ab)

3. Paths a1, b1, c, c' show mediating impact of AF, Paths a^2 , b^2 , c, c' show mediating impact of SN, Paths a^3 , b^3 ,

c, c' show mediating impact of EA, Paths a⁴, b⁴, c, c' show mediating impact of RP.

Bootstrapping for Indirect Impacts							
Indirect Impact	Bias Correct	Effect					
	Lower	Upper					
Total	0.4033	0.6031	0.7440				
AF	0.0183	0.2027	0.2574				
SN	0.2835	0.5354	0.1290				
EA	0.4847	0.6389	0.1175				
RP	0.0227	0.2420	0.2401				

Table 5

Notes: AF=access to finance, SN=social network, EA=exploration activities, RP=response performance, CI=95%, No. of bootstraps resamples=5000, BCa=Bias Corrected and accelerated.

Discussion

This study found a positive association in IEO and business success in the manufacturing sector SMEs of Pakistan and offered support to the notion that small and medium scale businesses in developing nations share certain characteristics that implies the success is not a product of sheer external factors (Gindling & Newhouse, 2012). Entrepreneurial orientation at the level of firm is found to be linked with exploration activities (Yeniaras & Unver, 2016). These findings are affirmed at individual level in this study as well, that business owners having higher entrepreneurial orientation engage in more actions for exploring new ideas and experimenting with new alternatives for development of new ways of doing business that ultimately leads to success (Yeniaras & Unver, 2016). Additionally, having a timely response to the moves of competitors and changes is market is fundamental for small business owners. At individual level the construct of entrepreneurial orientation also predicted effective and timely response to market changes and competitive maneuvers (Hughes et al., 2007) that result in success of SMEs (Tan & Liu, 2014). The results affirmed mediating role of access to finance in linking IEO and success. Consistent with the inference of Frese and Gielnik (2014) that state psychological cognitive/ affective components make it easier for the entrepreneurs to access the resources they need to operate their business. Access to finance is one of the most important resources that business in small and medium sector needs (Lee et al., 2015). Firms that have entrepreneurial orientation were found to have a better access to debt financing (Fatoki, 2012). Thus, SME owners that are empowered in taking the business decisions having high entrepreneurial orientation had better access to finance given their calculated risk taking, innovative mind set, competitive aggression, autonomous decision making, need for achievement and learning orientation.

Moreover, the results affirmed that business owners that had high entrepreneurial orientation had better social networking, because they are proactive, risk takers, innovative, autonomous, competitive aggressive, have higher need for achievement and positive orientation towards learning (Krauss et al., 2005). The entrepreneurs that have positive cognitive/affective psychological characteristics i.e. IEO have better ability to take actions amongst which one is better development of social networks (Frese & Gielnik, 2014). The effective social networks are prime factor in growth and survival of business (Greve &

Salaff, 2003; Zimmer, 1986).

Theoretical Contribution

This study contributes to the SME success and failure literature building on the emotive perspective that argues that the psychological factors of entrepreneurs are one of the prime determinants in successful ventures (Shepherd et al., 2013). It has offered evidence that psychological factors play an important role in translating into entrepreneurial actions essential for success (Gindling & Newhouse, 2012). Since 1980's the research in the area of entrepreneurship has focused on the concept of entrepreneurial orientation and its link to firm success. The complexity in conceptualization and lack of mechanisms clarifying the association of entrepreneurial orientation and success was inherent in this research area (Rauch, Wiklund, Lumpkin, & Frese, 2009). The individual level psychological conceptualization of entrepreneurial orientation (Krauss et al., 2005) made it more important to examine the construct on an individual level. IEO is an orientation towards a specific action and it requires certain entrepreneurial actions for realization of business success (Kollmann & Stöckmann, 2014). In addition to examining the construct of exploration and exploitative innovation (Kollmann & Stöckmann, 2014), functional performance (Rezaei & Ortt, 2018), strategic entrepreneurship (Kantur, 2016) and access to debt finance (Fatoki, 2012) this study took a step ahead and examined the multiple mediation impact of access to finance, exploration activities, social networking and response performance to find out a comprehensive view of the underlying mechanisms that link IEO to business success through action regulation theory (Frese, 2009) and tenants of orientation-action-outcome conceptualization (Johnson et al., 2008).

Practical Contribution

The results of this study offer practical implications for the SMEs' owners, policy makers and trainers in the field of entrepreneurship. The owners of business in SMEs sector should practice on developing their entrepreneurial mindset through IEO and also make active efforts to accessing finance, developing social networks, exploration activities and active market response to become successful because action is the centerpiece of psychology of entrepreneurship (Frese & Gielnik, 2014). The policy making authorities (SEMEDA in Pakistan) should focus on the development of psychological mindset of entrepreneurs that is a precursor of effective entrepreneurial behaviors and success Human resource practices i.e. training that can improve the psychological capabilities of SMEs' owners should be encouraged (Raziq & Wiesner, 2016). The entrepreneurship trainers should build their trainings on psychological concepts like IEO rather focusing on generic business trainings that are far less effective (Campos et al., 2017). In this way the state of entrepreneurship in SME sector can be improved in a developing nation like Pakistan that has a stark rate of failure.

Limitations and Future Research Directions

The study is not free from limitations, yet these limitations illuminate a meaningful path for future research. Although taking an aggregated measure of IEO is considered acceptable to capture overall stance in small business settings (Krauss et al., 2005), yet the dimensionality of the construct is not unchallenged. Individual dimensions may represent divergent results, so in future the researchers can use disintegrated construct (Kollmann & Stöckmann, 2014). Other actions could also be examined that could possibly mediate the IEO-performance association (e.g knowledge creation) (Li et al., 2009). Moreover, it will be beneficial to examine the moderating impacts of factors i.e. deliberate practice (Keith, Unger, Rauch, & Frese, 2016), entrepreneurial cognition (Chaston & Sadler-Smith, 2012) and other personal dispositions of self-regulations and decision heuristics (Bryant, 2007). From a methodological perspective this study was a time lagged investigation and in future the impact of IEO on performance could be examined by true longitudinal designs to access the impact over the period of time (McGee & Peterson, 2017). All these future avenues will be fruitful for the IEO research to realize its full potential.

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