Emotional Intelligence and Psychological Ownership: Entrepreneurial Behaviour of Employees in SMEs in Pakistan

lawaid Ahmed Qureshi

Department of Management Sciences, Shaheed Zulfikar Ali Bhutto Institute of Science & Technology (SZABIST), Pakistan-UAE

Arslan Ayub

Lahore Business School, The University of Lahore, Sargodha Campus, Sargodha, Pakistan

Masood Ul Hassan

Department of Commerce, Bahauddin Zakariya University Multan Pakistan

Salman Bahoo

Department of Commerce, The Islamic University of Bahawalpur

Abstract

The purpose of this study is to explore individual and work contextual factors that stimulate entrepreneurial behavior of employees in small and medium enterprises (SMEs). The study utilized the nonexperimental face-to-face method of data collection and analysed 383 responses using SmartPLS (v 3.2.7). Since SMEs operate in small scale; thereby, we propose that this results in a proximal employeeemployer relationship. This proximity induces psychological ownership in employees which results in increased entrepreneurial behavior. Results show a significant positive relationship between emotional intelligence and entrepreneurial behavior and perceived supportive context and entrepreneurial behavior. Additionally, the study found significant mediation of psychological ownership in the proposed relationship. Since the results support our theoretical framework, e.g., people high in emotional intelligence deliver exceptional outcomes than those with low emotional intelligence. Thus, the study proposes that employers should assess emotional intelligence of applicants in the recruitment process so that people with high emotional intelligence can be hired.

Key Words- Emotional Intelligence; Perceived Supportive Context; Psychological Ownership; Entrepreneurial Behavior; SMEs

Introduction

Research in entrepreneurship provides two-fold benefits for the scientific community and economy at large. First, it helps in expanding the existing body of knowledge; second, it results in advancing economic activities (Acs, Desai, & Hessels, 2008). There has been considerable popular interest in bringing clarity to the concept of entrepreneurship (Bruyat & Julien, 2001; Bygrave & Hofer, 1992; Zahra, 2007). For instance, one strand of researches advocates that entrepreneurship is about the creation of a new business (Barringer& Ireland, 2010; Bygrave & Hofer, 1992; Davidson & Wiklund, 2007). This form of entrepreneurship may also occur outside the organizations (e.g., individual's undertaking part-time businesses, Ahmetoglu, Leutner, & Chamorro-Premuzic, 2011).

On the contrary, another strand of researches has endorsed that entrepreneurship also exists within organizations. This notion prevails in many literatures under different tags such as corporate entrepreneurship (Sharma & Chrisman, 2007; Stevenson & Jarillo, 2007), day-to-day entrepreneurship (Mair, 2005; Zampetakis,

Beldekos, &Moustakis, 2009), intrapreneurship (Antoncic&Hisrich, 2001, 2003), and sometimes social entrepreneurship (in regards of CSR activities, Dees, 1998). Being species to its genus, entrepreneurship within organizations has gained substantial researchers' attention. For reflecting parsimony, the authors have considered day-to-day entrepreneurship or entrepreneurship (used interchangeably) in this study.

Zampetakis et al. (2009) stated that "day-to-day entrepreneurship aims at getting things done in an unusual and entrepreneurial-innovative way within organizations". As,day-to-day entrepreneurship may occur at all individual levels, and all types of individuals can exercise entrepreneurial activity within organizations. Therefore, an integrative view of this literature suggests that entrepreneurial success can be better explained in terms of individual behavior. There has been found a substantial nexus between entrepreneurship and organizational behavior field (Baron, 2002). Following the behavioral approach, two factors are found paramount in stimulating or constraining entrepreneurial behavior within organizations, i.e. individual personality differences and work contextual.

The authors in this study extend the version of Zampetakis et al. (2009) that both work contextual factors and individual differences in personality play significant roles in explaining entrepreneurial behavior of employees within organizations. Expanding the notion, work contextual factors are characterised as perceived supportive context of organizations (Mair, 2005). Simultaneously, research in the field of personality has endorsed that individual differences can be examined in terms of personality traits (Ajzen, 1987), personality styles (Moscoso& Salgado, 2004), and/or abilities (Daus&Ashkanasy, 2005).

Building on this research, we link emotional intelligenceand perceived supportive context with entrepreneurial behavior through the mediating role of psychological ownership.

Theoretical Justification

"Experience is not what happens to you, experience is what you do with what happens to you."

-- Epictetus

Emotional intelligence has gained plentiful popularity since the publicationofDaniel Goleman's best-selling article "What makes a leaderff" (1995). Thereafter, researchers have explored it from trait-based model to ability-based model to mixed-model of emotional intelligence (Mayer, Salovey, & Caruso, 2002; Petrides,

Pita, & Kokkinaki, 2007; Salovey & Mayer, 1990; Wong & Law, 2002). It has been found that emotional intelligence delivers more promising outcomes than IQ (Goleman, 1995).

For the last two decades, emotional intelligence has shown significant impacts on job satisfaction and job performance (Van Rooy&Viswesvaran, 2004). Indeed, a recent metaanalysis has shown significant predictive capabilities of emotional intelligence on job performance even after controlling big five personality factors and IQ (O'Boyle et al., 2010). Despite practitioners' trust in emotional intelligence, its relationship with other forms of career success has been found near to non-existent (Ahmetoglu et al., 2011). In the related stream, only limited studies can be found in examining the impact of emotional intelligence on entrepreneurial behavior/success (Ahmetoglu et al., 2011; Zampetakis et al., 2009). As such, Zampetakiset al. (2009) have found a positive correlation between emotional intelligence and entrepreneurial behavior. Besides, Ahmetoglu et al. (2011) have found significant results in the relationship between emotional intelligence and entrepreneurship.

Ahmetogluet al.(2011) have provided grounds for investigating the incremental validity of emotional intelligence in the context of entrepreneurial behaviour over other individual differences. However, these authors have used trait-based emotional intelligence in their study. Whereas, Wong and Law (2002) have developed an instrument based upon Salovey and Mayer's (1990) ability-based model of emotional intelligence. They have developed this scale in accordance to the Chinese context, which is quite like Pakistani context, e.g. collectivist culture (Sultana, Yousaf, Khan, & Saeed, 2016); therefore, the construct mentioned above has been adapted in this study.

Another independent variable of this study is perceived supportive context of organizations. For instance, Mair (2005) endorsed that organizational factors significantly affect entrepreneurial behavior. The notion is why do some managers act entrepreneurially while others cannot despite being exposed to the same work environmentfl The answer is simple but tricky and can be found in the literature of organizational support theory (Eisenberger et al., 1986). It has been advocated that organizational support is subjective; therefore, the employee's perception of organizational support determines their behavior. Furthermore, given the role of emotional intelligence, an investigation of the organizational contextual factor is also needed to answer the aforesaid question (Zampetakis et al., 2009).

In lieu of this study, psychological ownership has been considered a mediating variable. Since this study addresses entrepreneurial activity in terms of subjective support from the organization and individual differences; psychological ownership serves as a critical factor that stimulates overall relationship (Sieger, Bernhard, & Frey, 2011). As discussed in the preceding paragraphs, entrepreneurial behavior depends upon the affective experience of individuals. In this filament, literature advocates that the feeling of possession or ownership can regulate affective experience of individuals, a concept became much famous for the last decade in OBOP (Van Dyne & Pierce, 2004).

Contextual Justification: An Overview of SMEs

In the nineteenth and twentieth centuries, the organizational scale was considered an important factor in international trade. Since small scale enterprises could not enter in the international markets. As historically, trade has been considered a costly activity. However, this internet era has witnessed rapid globalization and shrinking of distant boundaries which have lowered the trade costs (World Trade Report, 2016). Hence, proved fruitful for micro, small, or medium enterprises (MSMEs) or more generally known as Small and Medium Enterprises (SMEs). According to IFC's MSME Country Indicators, MSMEs constitute 80.5% micro firms, 15.6% small firms, and 3.9% medium-sized firms in developing nations (2016).

SMEs are critical players in today's economy for any nation ranging from developing, emerging, to developed (Rauch &Frese, 2000). In this regard, Drucker (1985) has endorsed this as a shift to an entrepreneurial economy from managerial one. According to World Bank Enterprise Surveys, in the sample of 99 developing and emerging countries, SMEs stand for two-thirds of private employment (World Bank, 2013). SMEs have been considered a vital source of employment and constitute a significant share in the national income of countries. These also result in technological innovation, for instance, technological upgradation in SMEs help them compete in the national/international markets as well as their easy access in the markets also stimulate innovation in other firms (WTR, 2016).

Despite the importance of SMEs for any developing country, SMEs face severe challenges that range from micro to macro level and internal and external environment which underpin their performance (PBS, 2011). Given the perspectives of the present study, the authors have considered individual factors. For instance, according to OECD and World Bank (2015), workforce capacity and managerial skills are the factors at the individual level that affect the level of productivity of SMEs. Accordingly,

management training, the resilience of formal institutional frameworks, and individual innovation and learning are those factors that need serious and immediate attention (Dar et al., 2017).

Since this individual level perspective demands a shift from managerial mindset to an entrepreneurial mindset. Therefore, the current study aims at measuring the impact of emotional intelligence and perceived supportive context in entrepreneurial behavior of employees through psychological ownershipas a mediator in SMEs in Pakistan.

Research Questions

Given the nature of the problem in SMEs in a developing country like Pakistan, the current study aims to address the following research objective:

"Why do some managers act entrepreneurially while others cannot despite being exposed to the same work environments?"

Since, the upsurge of SMEs and their significant proportion in the business markets, researchers has shown greater interest in examining the antecedents of entrepreneurial behavior of employees (Mair, 2005; Zampetakiset al., 2009). As such, SMEs operate in smaller scales, and this problem slows down their progress. Contrariwise, employees become more receptive due to psychological proximity with their employers (Bernhard &O'Drisscoll, 2011). Also, this results in a shift from a managerial mindset to an entrepreneurial mindset.

To address this issue, the current study employing theoretical lenses at both individual and contextual levels emphasizes the roles of emotional intelligence and perceived supportive context and empirically demonstrates the value-added nature of psychological ownership in entrepreneurial behavior of employees.

Thus, extracting from the research objective following research questions are addressed in this study:

RQ1. How do emotional intelligence and perceived supportive context influence entrepreneurial behaviorfl

RQ2. How do emotional intelligence and perceived supportive context influence psychological ownership that affects entrepreneurial behaviorfl

RQ3. How does psychological ownership affect entrepreneurial behaviorfl

Literature Review

Emotional Intelligence and Entrepreneurial Behavior

Entrepreneurship research proposes different perspectives

on entrepreneurship (Ahmetoglu et al., 2011). Due to its multidimensionality, to define entrepreneurship and identify the nature of entrepreneurial activities ascertained with entrepreneurial behavior has remained obscure till date (Hisrich, Langan-Fox, & Grant, 2007). However, entrepreneurial behavior, i.e. to pursue opportunities by innovatively exploiting organizational resources is vital for organizations (Dess, Lumpkin, & McGee, 1999; Sharma & Chrisman, 1999).

To reach some agreement about what entrepreneurial behavior is, the current study employs a definition proposed by Mair (2005). Mair (2005) encapsulated entrepreneurial behavior based upon the fundamental elements of entrepreneurship, i.e. autonomy, innovation, and opportunity and defined it as autonomous practices and set of activities that individuals undertake by innovatively exploiting resource combinations at different hierarchical levels in the pursuance of opportunities. Mair's (2005) conceptualization can be traced in the literature of Pearce et al. (1997) that entrepreneurial behavior is the ability to cut the red tape by setting the strategic vision and changing orientation that creates an energetic working environment. Similarly, this line of inquiry is corroborated by Ghosal and Barlett (1994) that "it includes a spectrum of activities ranging from independent/autonomous to integrative/cooperative behavior."

Indeed, the consideration from the integrative/cooperative behavioral aspect opens avenues for emotional intelligence research. A growing stream of research on emotional intelligence has been employed in the fields/disciplines of organizational behavior (Ashkanasy&Daus, 2005), leadership (George, 2000), psychology (Salovey, Mayer, Caruso, &Yoo, 2008), and neuroscience (Baron-Cohen, Tager-Flusberg, & Lombardo, 2013). To date, emotional intelligence construct has been conceptualized in terms of traits (Petrideset al., 2007), abilities (Mayer &Salovey, 1997), and mixed models (Goleman, 1995) and various instruments have been developed that yield psychometric properties and incremental validities (Spielberger, 2004).

Emotional intelligence is defined as "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional intelligence and intellectual growth" (Mayer &Salovey, 1997, p. 10).

As noted above, emotional intelligence has shown incremental validity in examining job satisfaction and job performance. Despite its paramount importance in explaining satisfaction/performance outcomes, only a

handful of literature correlates it with other forms of career success (Ahmetogluet al., 2011; Van Rooy&Viswesvaran, 2004), specifically, entrepreneurship (Chell, 2008; Zampetakiset al., 2009). Not surprisingly, it has been found that emotional intelligence delivers promising results when explaining entrepreneurial behavior (Ahmetogluet al., 2011).

Emotional intelligence plays a significant role in exhibiting entrepreneurial behavior. Following a cognitive approach, recent research conducted at Cambridge provided a comparison of top managers with entrepreneurs and found that managers and entrepreneurs both shared abilities of rational analysis, i.e. cold cognitive as well as emotional thinking, i.e. hot cognitive (Lawrence et al., 2008). The term hot cognitive explains entrepreneurial abilities in regard to emotions. As such, entrepreneurs are engaged in complex and cognitive appraisal of opportunities; therefore, hot cognition appraises the social dimension of entrepreneurs (Krueger & Welpe, 2014). Therefore, we hypothesize:

H1. There is a positive relationship between emotional intelligence and entrepreneurial behaviour

Perceived Supportive Context and Entrepreneurial Behavior

Perceived supportive context plays a significant role in determining employee's behavior (Zampetakiset al., 2009). Based on perceived organizational support theory, the authorselucidate perceived supportive context (Eisenbergeret al., 1986). Perceived organizational support theory translates organizational membership into self-identity thus, stimulating emotional bonding of employees with the organization. This theory explains that employees create an image of organization based upon the perception of support they receive from their employers as explained by effort-outcome expectancy. Secondly, emotional bonding increases employee's efforts to achieve organizational goals and objectives as explained by affective attachment.

It has been found in the literature that amongst other factors management support is at the top that explains entrepreneurial behavior (Kuratko et al., 2005). It is the facilitation and promotion of entrepreneurial activities within the organization (Zampetakiset al., 2009). An abundant literature has highlighted the importance of support in inducing entrepreneurial behavior in employees (Alpkanet al., 2010; Hornsby, Kuratko, & Zahra, 2002). However, the vital consideration of Eisenbergeret al.(1986) theory is "globality" which induces that employees accumulate overall treatment and form "global perception concerning the extent to which the organization

values their contributions and cares about their well-being." In this regard, empirical researches proclaimed that perceived supportive context influences entrepreneurial behavior (Zampetakiset al., 2009). Therefore, we hypothesize:

H2. There is a positive relationship between perceived supportive context and entrepreneurial behavior

Introducing Mediating Effect

Psychological ownership has received significant researchers' attention (Avey et al., 2009). Psychological ownership is at the stage of infancy, and researches need to be conducted that may expose it under different contexts and with different antecedents and consequences (Aveyet al., 2009). It addresses the key issue "feeling of possession," i.e., something as 'Mine' or 'Ours' (Van Dyne & Pierce, 2004). It is the feeling of possession, which can take place in the presence as well as absence of legal possession (Wilpert, 1991). Etzioni (1991, p. 466) differentiated possession from the feeling of possession and explained ownership as "dual creation, part attitude, part object, part in the mind, part real".

As of its application, psychological ownership enhances employee's feeling of possession/ownership in the organization which induces a higher degree of control over business activities (Van Dyne & Pierce, 2004). Simultaneously, literature endorsed that individual locus of control is majorly affected by emotional intelligence (Singh, 2006). Such as, "people with high emotional intelligence exhibit more significant control over their emotions and hence, they achieve a higher degree of personal control which is ultimately regarded as a proxy that serves to control their work environment" (Singh, 2006). Thus, enabling them to have a feeling of ownership.

Another line of inquiry in this study is the relationship between perceived supportive context and psychological ownership. Literature in this perspective endorsed that there is a proximal relationship between psychological ownership and psychological connection with the whole organization. For instance, managerial support, work environment, organizational culture and setting, policies, procedure, goals, and objectives are the number of different characteristics that influence psychological ownership (Mayhew, Ashkanasy, Bramble, & Gardner, 2007). Employees are willing to exercise control when they perceive the feeling of fair support from the organizations (Rudmin& Berry, 1987). Since psychological ownership helps in shaping self-identity therefore, those factors which are out of personal control are associated with non-self, thus, demand appropriate support from the organization to form the part of the extended self to exhibit higher performance (Mayhew et al., 2007).

As noted above, two aspects have been identified as crucial for psychological ownership such as proximity and autonomy. For instance, considering the small-scale nature of SMEs, it has been found that employees working in SMEs must go beyond their job description and to perform other tasks as well which increases their control over business operations, and hence they exhibit entrepreneurial behavior (Bernhard & O'Driscoll, 2011). Literature also suggested that based upon the proximal employeeemployer relationship, information access increases and the rights to exercise influence enhances (Sieger, Zellweger, & Aquino, 2013). Therefore, chances of a shift from a managerial mindset to an entrepreneurial mindset increases. Since employees feel a more affective attachment with their organizations, they exercise more entrepreneurial activities which ultimately results in the enhanced entrepreneurial behavior. Therefore, we hypothesize:

H3a. Psychological ownership mediates the positive relationship between emotional intelligence and entrepreneurial behavior

H3b. Psychological ownership mediates the positive relationship between perceived supportive context and entrepreneurial behavior

Method

Participants and Procedures

The target population was employees at different hierarchical levels in these organizations located in Northern Punjab, Pakistan. Initially, researchers interacted several respondents and discussed the significance of the study with them in person. The discussion helped researchers to bring parsimony in research. They were then requested and informed in random to provide their feedback. There was no monetary benefit to complete the survey. At the next level, researchers employed enumerators that were experts in this area.

The study employed the positivist philosophical stance to explore the proposed theoretical framework. Thereby, a non-experimental, face-to-face data collection method was utilized (Saunders, Lewis, & Thornhill, 2009). The enumerators administrated 500 research questionnaires, and437 were received back out of which 383 were found appropriate for data analysis leaving a response rate of 77%. The instrument contained 38 items along with demographic data. The sample included 311 males and 72 females. More than 50% of respondents were graduates and aged between 26 to 35 years.

Accounting for Survey Method Bias

The study utilized a cross-section design using self-report measures. However, the self-report measure is problematic because of the common method bias (CMB), which was accounted for using Harmon's One-Factor test, and its value was below the acceptable threshold of 50% (Podsakoffet al., 2000).

Table 1 Research Instrument

Measurement of Theoretical Constructs

The study contains four variables, two exogenous variables, and two endogenous variables. The scales to measure each construct have been adapted from the well-known researches having established psychometric properties. All instruments are assessed through multi-items self-report measures on 5-point Likert scales ranging from 1 for strongly disagree to 5 for strongly agree.

Construct	No. of Items	Source
Emotional Intelligence	16	Wong and Law (2002)
Perceived Supportive Context	9	Mair (2005)
Psychological Ownership	7	Van Dyne and Pierce (2004)
Entrepreneurial Behavior	6	Pearce et al. (1997)

Results

Measurement Model

The study employed SmartPLS (v 3.2.7) using a two-stage approach (Hair et al., 2017). The study assessed the measurement model through internal consistency,

indicator reliability, convergent validity, and discriminant validity (Henseleret al., 2009). Variance inflation factor (VIF) scores are presented in table 2. Results show that the study is free from multicollinearity issue.

Table 2 Collinearity Assessment

Constructs	Entrepreneurial Behavior	Psychological Ownership
Emotional Intelligence	2.648	2.146
Perceived Supportive Context	2.198	2.146
Psychological Ownership	1.790	

Table 3 shows psychometric properties. Composite reliability values were higher than the baseline value of 0.6 (Hair et al., 2017). Besides, the indicator reliability was measured by assessing the outer loadings of the manifest

variables. Scale items with outer loadings above 0.5 were retained for further analysis (Henseleret al., 2009). Moreover, the average variance extracted (AVE) was utilized to determine the convergent validity (Hair et al.,

2017). All the AVE values were above the minimum acceptable threshold value of 0.5. Thereby, the findings

indicated no convergent validity issue in this study.

Table 3 Psychometric Properties

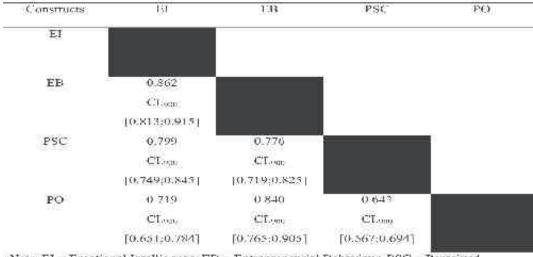
Constructs	Outer Loadings (λ)	Cronbach's Alpha (α)	CR	AVE
Emotional Intelligence		0.882	0.912	0.597
"I have a good sense of why I have certain feelings most of the time"	0.816			
"I have good understanding of my own emotions"	0.876			
"I always know whether or not I am happy"	0.807			
"I always know my friends' emotions from their behaviour"	0.740			
"I am a good observer of others' emotions"	0.824			
"I am sensitive to the feelings and emotions of others"	0.842			
"I have good understanding of the emotions of people around me"	0.841			
"I always set goals for myself and then try my best to achieve them"	0.704			
"I would always encourage myself to try my best	0.753			
I am able to control my temper and handle difficulties rationally"	0.810			
"I am quite capable of controlling my own emotions"	0.772			
"I have good control of my own emotions"	0.760			
Perceived Supportive Context		0.876	0.902	0.537
"How I organize my department is pretty much left to me"	0.656			
"I can manage my department in an autonomous manner"	0.673			
"I am autonomous in managing employees in my department"	0.751			

"I have the support I need from colleagues at the regional office to do my job well"	0.786			
"I have the support I need from colleagues at head office to do my job well"	0.752			
"When I need additional financial and material resources I can get them"	0.804			
"When I need additional human resources and manpower I can usually get them"	0.678			
"It is easy to receive means and instruments for realizing original (new) projects within my	0.747			
department"				
Psychological Ownership		0.807	0.867	0.567
	0.628	0.807	0.867	0.567
Psychological Ownership	0.628 0.802	0.807	0.867	0.567
Psychological Ownership "This is MY organization"		0.807	0.867	0.567
Psychological Ownership "This is MY organization" "I sense that this is MY company"	0.802 0.770	0.807	0.867	0.567
Psychological Ownership "This is MY organization" "I sense that this is MY company" "This is OUR company" "Most of the people that work for this organization	0.802 0.770	0.807	0.867	0.567

In addition to convergent validity, discriminant validity was also measured (Hair et al., 2017). Heterotrait-monotrait (HTMT) ratio was assessed using Bias-corrected and accelerated (BCa) bootstrap confidence intervals with

resampling of 5,000 using one-tailed tests at 90% significance level to warrant an error probability of 5% (Henseleret al., 2015) and results indicate no issues regarding discriminant validity (table 4).

liable 4Heierotran Monotran Ratio (HTMT)



Note: El - Emotional Intelligence, EB - Entrepreneurial Behaviour, PSC - Perceived Supportive Context, PO - Psychological Ownership

Structural Model

Table 5 illustrates the results of the β for the direct and indirect effects. β value for H1 was 0.431 (t = 4.762, p < 0.001) with CIs between 0.247 and 0.603. β value for H2 was 0.177 (t = 2.477, p < 0.05) with CIs 0.047 and 0.328. Similarly, β value for the indirect paths were 0.165 for H3a and 0.053 (t = 3.511, p < 0.001) for H3b (t = 1.869, p < 0.1) respectively. The findings demonstrated that

complementary mediation exists because the direct and indirect effects were significant and point in the same direction (Zhao, Lynch, & Chen, 2010). Moreover, in our study, coefficients of determination (R2) indicated moderate and substantial impacts on psychological ownership with variance explained by 44.1% and entrepreneurial behavior with variance explained by 66.4% (see figure 1).

Table 5 Tests of Direct and Indirect Effects

Effects	Coefficients	95% BCa CIs	S.E.	t-value
Direct Effect				
ЕІ→ЕВ	0.431***	[0.247; 0.603]	0.090	4.762
EI→PO	0.530***	[0.377; 0.680]	0.077	6.835
PSC→EB	0.177**	[0.047; 0.328]	0.072	2.477
PSC→PO	0.170**	[0.007; 0.308]	0.078	2.196
РО→ЕВ	0.312***	[0.186; 0.458]	0.072	4.352
Indirect Effect				
ЕІ→РО→ЕВ	0.165***	[0.095; 0.281]	0.047	3.511
PSC → PO → EB	0.053*	[0.005; 0.113]	0.028	1.869

^{*}Significance p<0.1 (1.65)

^{**}Significance p<0.05 (1.96)

^{***}Significance p<0.01 (2.57)

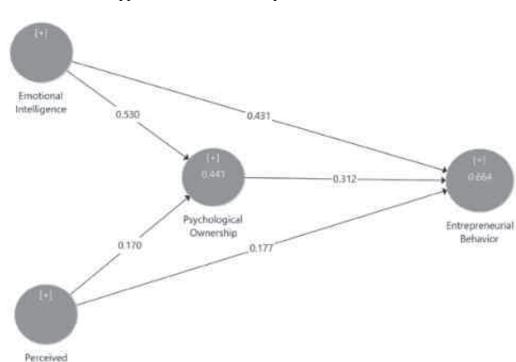


Figure 1 Structural Equation Model with Psychological Ownership as proposed mediator of Emotional Intelligence and Perceived Supportive Context to Entrepreneurial Behaviour

The GoF Index

Recent literature has advised the use of a global fit measure criterion for PLS-SEM (Wetzels, Odekerken-Schröder, & Van Oppen, 2009). For this purpose, the goodness-of-fit (GoF) index is utilized to serve the diagnostic purpose in

Supportive Context

the structural path (Wetzelset al., 2009). The GoF (0

GoF 1), defined as "the geometric mean of the average communality and average R2" (Navimipour, Milani, &Hossenzadeh, 2018). The GoFindex calculation is as follows:

$$GoF = \sqrt{AVE \times R^2}$$
 (1)

For calculation of the AVE average value, Eq. (2) is employed:

$$\mu_{AVE} = \frac{1}{n} \sum_{i=1}^{n} x_{i}$$

$$\mu_{AVE} = \frac{AVE_{EI} + AVE_{EB} + AVE_{PSC} + AVE_{PO}}{4}$$

$$\mu_{AVE} = \frac{0.597 + 0.581 + 0.537 + 0.567}{4} = 0.570$$

$$\mu_{AVE} = 0.570$$

For calculation of the R2 average value, Eq. (3) is employed:

$$\mu_{R^2} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

$$\mu_{R^2} = \frac{R_{PO}^2 + R_{EB}^2}{2}$$

$$\mu_{R^2} = \frac{0.441 + 0.664}{2} = 0.552$$

$$\mu_{R^2} = 0.552$$
(3)

Substituting Eq. (2) and (3) into Eq. (1), the GoF value will be:

$$GoF = \sqrt{0.570 \times 0.552} = 0.561$$

$$GoF = 0.561$$

The GoF index value is 0.561, which is above the baseline value of 0.36 for the large effect size of R2 (Cohen, 1988).

Discussion

The structural equation modelling supported our all hypotheses. For instance, hypothesis H1 was "there is a positive relationship between emotional intelligence and entrepreneurial behaviour". The result of this relationship is in harmony with other research findings. As such, Ahmetogluet al.'s (2011) research findings indicated incremental validity of emotional intelligence in the prediction of entrepreneurial activities beyond other personality measures. Similarly, hypothesis H2 was "there is a positive relationship between perceived supportive context and entrepreneurial behaviour". The result of this relationship is in harmony with other research findings. As such, Eisenbergeret al. (1986) endorsed that organizational support reciprocates employees' effort in the organizational activities and found significant rise in the perceived organizational support impacting increased work behavior and activities. Similarly, findings of Mair (2005) validated the effect of perceived supportive context in entrepreneurial behavior.

Consistent with hypotheses H3a and H3b, the results are in harmony with other research findings. Ultimately, this tendency of leaders gives them control over things which impacts their feeling of owning work situations, thus enabling them to induce higher psychological ownership (Singh, 2006). Correspondingly, Mayhew et al. (2007) argued that a significant relationship exists between psychological ownership and autonomy. Similarly, Eisenberger et al. (1986) found that a high level of perceived support motivates employees in reciprocity to increase their support for the organization to achieve its goals and objectives. Besides, the literature of psychological ownership suggests that a proximal employee-employer relationship exists which helps in instilling the entrepreneurial intentions of the employer in the managerial mindset of employees (Sieger et al., 2013). Hence, this shift results in enhanced entrepreneurial behavior.

Study Limitations and Future Research

The study addressed the following limitations and directions for future studies. First, the current study employed self-report measure to assess the relationship amongst variables. To evaluate the predictive validity of the construct, object measures may be employed in addition to self-report measures (Podsakoff et al., 2000). Second, contextual limitation of this study includes the

sample extracted out of SMEs. Since it has been observed that large organizations have more resource potential as compared to SMEs, thus, entrepreneurial behavior in large firms in different contexts is needed to be assessed (Stambaugh et al., 2017). Third, the study used the ability-based emotional intelligence model to measure the construct (Petrideset al., 2016). Fourth, since entrepreneurial behavior also depends on other personality factors of individuals, therefore, future studies should assess emotional intelligence with some other measures as well (Miller, 2015). Fifth, by controlling extraneous variables, results attained can be varied; therefore, future studies should control those factors that affect emotional intelligence such as gender, education, age, and organizational tenure.

Practical Implications

The study provides numerous practical and research implications. First, the current study consistent with other researches throws light on the significance of emotional intelligence in delivering desired outcomes in regards of job satisfaction, performance, and entrepreneurial behavior (Zampetakiset al., 2009). As it has been noticed that individuals with high emotional intelligence outerperform others those having low emotional intelligence. Therefore, organizations should consider assessing emotional intelligence of applicants while hiring them and should hire those individuals who are high in emotional intelligence. Second, as discussed above the role of government in SMEs development in developing countries. Therefore, governments should promote SMEs by providing financial assistance to organizations at small and medium scale with people high in emotional intelligence so that SMEs role in economic upgradation may be stimulated. Third, organizations should provide vocational training to their employees to synchronize goals and objectives.

Conclusion

The current study revolves around a critical agenda that 'why do some managers act entrepreneurially while others cannot despite being exposed to the same work environmentfl. To empirically investigate this issue, entrepreneurial behavior and factors that stimulate entrepreneurial behavior are addressed in this study. The current study proposed that both individual personality differences and work contextual factors stand significant in explaining entrepreneurial behavior of employees in SMEs. The study found the significant result, as such,i) at individual level, i.e. emotional intelligence positively impacts entrepreneurial behavior; and ii) at contextual level, i.e. perceived supportive context positively impacts

entrepreneurial behavior. In addition, the study introduced psychological ownership as a mediating variable and found a significant positive impact of psychological ownership in entrepreneurial behavior. Thus, the results reported in this study are useful for researchers and practitioners as these provide essential insight into the significance of this theoretical framework.

References

- Acs, Z. J., Desai, S., & Hessels, J. (2008). Entrepreneurship, economic development and institutions. Small business economics, 31(3), 219-234.
- Ahmetoglu, G., Leutner, F., & Chamorro-Premuzic, T. (2011). EQ-nomics: Understanding the relationship between individual differences in trait emotional intelligence and entrepreneurship. Personality and Individual differences, 51(8), 1028-1033.
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. In Advances in experimental social psychology (Vol. 20, pp. 1-63). Academic Press.
- Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G., &Kilic, K. (2010). Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance. Management decision, 48(5), 732-755.
- Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. Journal of business venturing, 16(5), 495-527.
- Antoncic, B., &Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. Journal of small business and enterprise development, 10(1), 7-24.
- Ashkanasy, N. M., &Daus, C. S. (2005). Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated. Journal of Organizational Behavior, 26(4), 441-452.
- Avey, J. B., Avolio, B. J., Crossley, C. D., &Luthans, F. (2009). Psychological ownership: Theoretical extensions, measurement and relation to work outcomes. Journal of Organizational Behavior, 30(2), 173-191.
- Baron, R. A. (2002). Entrepreneurship and organizational behavior. Research in organizational behavior, 24, 225-270.
- Baron-Cohen, S., Tager-Flusberg, H., & Lombardo, M. (Eds.). (2013). Understanding other minds:

- Perspectives from developmental social neuroscience. Oxford University Press.
- Barringer, E., & Ireland, R. D. (2010). Successfully Launching New Ventures. Pearson.
- Bernhard, F., & O'Driscoll, M. P. (2011). Psychological ownership in small family-owned businesses: Leadership style and nonfamily-employees' work attitudes and behaviors. Group & Organization Management, 36(3), 345-384.
- Bruyat, C., & Julien, P. A. (2001). Defining the field of research in entrepreneurship. Journal of business venturing, 16(2), 165-180.
- Bygrave, W. D., & Hofer, C. W. (1992). Theorizing about entrepreneurship. Entrepreneurship theory and Practice, 16(2), 13-22.
- Chell, E. (2008). The entrepreneurial personality: A social construction (2nd Ed). Routledge.
- Cohen, J. (1988).Statistical Power Analysis for the Behavioral Sciences. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dar, M. S., Ahmed, S., &Raziq, A. (2017). Small and medium-size enterprises in Pakistan: Definition and critical issues. Pakistan Business Review, 19(1), 46-70.
- Daus, C. S., &Ashkanasy, N. M. (2005). The case for the ability based model of emotional intelligence in organizational behavior. Journal of Organizational behavior, 26(4), 453-466.
- Davidsson, P., &Wiklund, J. (2007). Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. In Entrepreneurship (pp. 245-265). Springer, Berlin, Heidelberg.
- Dees, J. G. (1998). The meaning of social entrepreneurship.
- Dess. G. G., Lumpkin, G. T., & McGee, J. E. (1999). Linking corporate entrepreneurship to strategy. structure. and process: Suggested research directions. Entrepreneurship Theory and Practice, 23(3), 85-102
- Drucker, P.F. (1985). Innovation and Entrepreneurship. New York: Harper.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied psychology, 71(3), 500.
- Etzioni, A. (1991). The socio-economics of property. In F. W. Rudmin (Ed.), To have possessions: a handbook on ownership and property. Journal of Social Behavior

- and Personality, 6(6), 465–468.
- George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. Human relations, 53(8), 1027-1055.
- Goleman, D. (1995). Emotional intelligence. New York, NY: Bantam Books.
- International Finance Corporation (IFC) (2016). MSME Country Indicators. Available at www.ifc.org/msmecountryindicators
- Hair, J. F., Hult, G. T. M., Ringle, C. M., &Sarstedt, M. (2017). A primer on partial least squares structural equation modelling (PLS-SEM), Sage Publications, Thousand Oaks, CA.
- Henseler, J., Ringle, C. M., &Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the academy of marketing science, 43(1), 115-135.
- Henseler, J., Ringle, C. M., &Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In New challenges to international marketing (pp. 277-319). Emerald Group Publishing Limited.
- Hisrich, R. D., Langan-Fox, J., & Grant, S. (2007). Entrepreneurship research and practice. A call to action for psychology. American Psychologist, 62, 575–589.
- Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. Journal of business Venturing, 17(3), 253-273.
- Krueger, N. F., & Welpe, I. (2014). Neuroentrepreneurship: what can entrepreneurship learn from neuroscience. Annals of Entrepreneurship Education and Pedagogy, 60-90.
- Kuratko, D. F., Ireland, R. D., Covin, J. G., & Hornsby, J. S. (2005). A model of middle level managers' entrepreneurial behavior. Entrepreneurship Theory and Practice, 11, 699-716.
- Lawrence, A., Clark, L., Labuzetta, J., Sahakian, B., Vyakarnum, S. (2008). The innovative brain. Nature, 456(7219), 168-169.
- Mair, J. (2005). Entrepreneurial behavior in a large traditional firm: Exploring key drivers. In Corporate entrepreneurship and venturing (pp. 49-72). Springer, Boston, MA.

- Mayer, J. D., &Salovey, P. (1997). What is emotional intelligencefl In P. Salovey, & D. Sluyter (Eds.), Emotional development and emotional intelligence: educational implications (pp. 3–34). New York: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT) user's manual. Toronto, Ontario, Canada: MHS Publishers.
- Mayhew, M. G., Ashkanasy, N. M., Bramble, T., & Gardner, J. (2007). A study of the antecedents and consequences of psychological ownership in organizational settings. The Journal of social psychology, 147(5), 477-500.
- Miller, D. (2015). A downside to the entrepreneurial personalityfl.
- Moscoso, S., & Salgado, J. F. (2004). "Dark side" personality styles as predictors of task, contextual, and job performance. International Journal of Selection and Assessment, 12(4), 356-362.
- Navimipour, N. J., Milani, F. S., &Hossenzadeh, M. (2018). A model for examining the role of effective factors on the performance of organizations. Technology in Society, 55, 166-174.
- O'Boyle, E. H., Jr., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. (2010). The relation between Emotional Intelligence and job performance. A meta-analysis. Journal of Organizational Behavior, 10, 1002.
- PBS (2011). Economic Census of Pakistan 2005. Retrieved on 9 January, 2010, from http://www.statpak.gov.pk.
- Pearce, J. A., Kramer, T. R., & Robbins, K. D. (1997). Effects of managers' entrepreneurial behavior on subordinates. Journal of Business Venturing, 12, 147-160.
- Petrides, K. V., Mikolajczak, M., Mavroveli, S., Sanchez-Ruiz, M. J., Furnham, A., & Pérez-González, J. C. (2016). Developments in trait emotional intelligence research. Emotion Review, 8(4), 335-341.
- Petrides, K. V., Pita, R., &Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. British journal of psychology, 98(2), 273-289.
- Podsakoff, P.M., MacKenzie, S.B., Paine, J.B., and Bachrach, D.G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future

- research. Journal of Management, 26(3), 513-563.
- Rauch, A., &Frese, M. (2000). Psychological approaches to entrepreneurial success: A general model and an overview of findings. International review of industrial and organizational psychology, 15, 101-142.
- Rudmin, F. W., & Berry, J. W. (1987). Semantics of ownership: A free-recall study of property. The Psychological Record, 37, 257-268.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, cognition and personality, 9(3), 185-211.
- Salovey, P., Mayer, J. D., Caruso, D., &Yoo, S. H. (2008). Chapter 11: The positive psychology of emotional intelligence. Counterpoints, 336, 185-208.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students. Pearson education.
- Sharma. P. & Chrisman, J. J.(1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. Entrepreneurship Theory and Practice. 23(3). 11-27.
- Sharma, P., & Chrisman, S. J. J. (2007). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. In Entrepreneurship (pp. 83-103). Springer, Berlin, Heidelberg.
- Sieger, P., Bernhard, F., & Frey, U. (2011). Affective commitment and job satisfaction among non-family employees: Investigating the roles of justice perceptions and psychological ownership. Journal of Family Business Strategy, 2(2), 78-89.
- Sieger, P., Zellweger, T., & Aquino, K. (2013). Turning agents into psychological principals: aligning interests of non owners through psychological ownership. Journal of Management Studies, 50(3), 361-388.
- Singh, S. K. (2006). Social work professionals' emotional intelligence, locus of control and role efficacy: an exploratory study. South African Journal of Human Resource Management, 4, 39-45.
- Spielberger, C. (2004). Encyclopedia of applied psychology. Maryland Heights, MO: Academic Press.
- Stambaugh, J. E., Martinez, J., Lumpkin, G. T., &Kataria, N. (2017). How well do EO measures and entrepreneurial behavior matchfl. International Entrepreneurship and Management Journal, 13(3), 717-737.

- Stevenson, H. H., & Jarillo, J. C. (2007). A paradigm of entrepreneurship: Entrepreneurial management. In Entrepreneurship (pp. 155-170). Springer, Berlin, Heidelberg.
- Sultana, R., Yousaf, A., Khan, I., & Saeed, A. (2016). Probing the interactive effects of career commitment and emotional intelligence on perceived objective/subjective career success. Personnel Review, 45(4), 724-742.
- Van Dyne, L., & Pierce, J. L. (2004). Psychological ownership and feelings of possession: Three field studies predicting employee attitudes and organizational citizenship behavior. Journal of organizational behavior, 25(4), 439-459.
- Van Rooy, D. L., &Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. Journal of vocational Behavior, 65(1), 71-95.
- Wetzels, M., Odekerken-Schröder, G., & Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. MIS quarterly, 177-195.
- Wilpert, B. (1991). Property, ownership, and participation: on the growing contradictions between legal and psychological concepts. In R. Russell, & V. Rus (Eds.), International handbook of participation in organizations: For the study of organizational democracy, co-operation, and self management (Vol. 2, pp. 149–164). New York: Oxford University Press.

- Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. The leadership quarterly, 13(3), 243-274.
- World Bank (2013). Doing Business 2014: Understanding Regulations for Small and Medium-Size Enterprises. Washington DC: World Bank.
- World Bank (2015). Doing Business 2016: Measuring Regulatory Quality and Efficiency. Washing DC: World Bank.
- World Trade Report (WTR) (2016). Levelling the trading field for SMEs. World Trade Organization.
- Zahra, S. A. (2007). Contextualizing theory building in entrepreneurship research. Journal of Business venturing, 22(3), 443-452.
- Zampetakis, L. A., Beldekos, P., & Moustakis, V. S. (2009). "Day-to-day" entrepreneurship within organisations: The role of trait Emotional Intelligence and Perceived Organisational Support. European Management Journal, 27(3), 165-175.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. Journal of consumer research, 37(2),197-206.