



Investigating the Nexus of Psychological Capital With Entrepreneurial Success: The Mediating Role of Burnout

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Abstract

This research empirically investigates the association of psychological capital (PsyCap) with success of entrepreneurs, and also examines the mediating role of burnout on the relationship between PsyCap and entrepreneurial success. In research design, quantitative methods were employed and cross-sectional data were collected by using random sampling technique through online survey questionnaire adopted from previous studies. The sample size determined through G power was 134 for this study; however, we got response from 296 entrepreneurs of Sindh province, Pakistan. The data are analyzed in SmartPLS-SEM to assess measurement and structural models, and to compute hypotheses testing results. The findings reveal that PsyCap has positive significant relationship with success of entrepreneurs. This suggests that higher PsyCap abilities ensure more success of entrepreneurs in their entrepreneurial activities. Interestingly, PsyCap reported a negative impact on burnout; means good PsyCap resources reduce the negative effects of burnout among entrepreneurs. Results further indicate that burnout partially mediates the relationship between PsyCap and success; hence shows that entrepreneurs in Pakistan due to more Job demands, risks, and uncertain situations experience burnout which impacts on their success, however, positive PsyCap resources; including resilience and optimism, as well as self-efficacy and hope, work as buffer and ameliorate negative burnout effects and help entrepreneurs in achieving businesses success. The outcomes of this research provide valuable practical implications for countering burnout through fostering PsyCap resources which is important for strengthening entrepreneurship, and adds fresh insights in the existing literature*

Keywords: Psychological Capital, Entrepreneurial Success, Burnout

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1. INTRODUCTION

Developing economies, including Pakistan, focus on “fostering entrepreneurship” as a key policy item for generating youth employment opportunities for the jobless (A. Alam, 2019). Entrepreneurship is defined as “the process of creating something new with value by devoting the necessary time and effort; assuming the accompanying financial, psychic, and social risks and uncertainties; and receiving the resulting rewards of monetary and personal satisfaction” (Hisrich, Peters, & Shepherd, 2010, p. 6). As reported in Global Entrepreneurship Monitor (GEM, 2022), “being an entrepreneur means starting or running your own business”. The role of entrepreneurs is significant in economy; they create jobs, increase productivity, and boost economic growth (Van Praag & Versloot, 2008). According to Global Entrepreneurship Index (GEI), entrepreneurship is important factor in improving economic performance (GEI, 2019). Mainstream psychology mainly focused on negative aspects of life such as mental illness, anxiety, and depression, so it was limited to treating diseases and negative emotions (Seligman & Csikszentmihalyi, 2000). As a result, the research publications on entrepreneurship and entrepreneurs were also conducted from negative aspects, such as entrepreneurial stress (Buttner, 1992; Grant & Ferris, 2012; Naik, 2012), entrepreneurial burnout (Lechat & Torrès, 2016; Lewin & Sager, 2007; Wincent, Örtqvist, & Drnovsek, 2008), and mental health issues of entrepreneurs (Freeman, Staudenmaier, Zisser, & Andresen, 2019). However, with the emergence of positive psychology by Martin Seligman (1998), which focuses on positive aspects and strengths of human functioning (Seligman & Csikszentmihalyi, 2000). According to these authors, the human positive aspects include wellbeing, happiness, positive traits, qualities, and virtues which flourish individuals and societies. Thus, researchers conducted researches from positive psychology perspectives, such as entrepreneurs’ mental health and wellbeing (Stephan, 2018) motivation, and action. Yet relevant knowledge is dispersed across disciplines, which makes what we currently understand about entrepreneurs’ MWB unclear. In this systematic review I integrate insights from 144 empirical studies. These studies show that research is focused on three research questions: (1, psychological functioning and subjective well-being (Nikolaev, Boudreaux, & Wood, 2020) but the pathway from self-employment to well-being is poorly understood. To address this, we develop a model in which psychological functioning—purposeful engagement with life, realization of personal talents and capabilities, and fulfillment of intrinsic needs such as autonomy and competence—mediates the relationship between entrepreneurship and subjective well-being. We test our model with data from the European Social Survey using structural equation modeling and a series of robustness tests (e.g., propensity score matching estimators and accounting for model uncertainty, and entrepreneurship happiness (Chen, Chang, & Lin, 2018; Stephan, Rauch, & Hatak, 2022).

The act of entrepreneurship does not only yield rewards by devoting essential efforts and time in producing “something of value”, but it also bears “risks and uncertainties” too (Hisrich et al., 2010). In positive psychology aspect, psychological capital has become a vital resource of entrepreneurs that can help them to decide and to handle risky, uncertain environments and to exploit new opportunities (Newman, Schwarz, & Borgia 2014). Fred Luthans pioneered the concept of psychological

capital (PsyCap) and defined it as “an individual’s positive psychological state of development” (Luthans, Youssef, & Avolio, 2007), which includes four elements; Hope, (Self-) efficacy, Resilience, and Optimism, commonly referred as HERO (Luthans & Youssef-Morgan, 2017). PsyCap resources helped entrepreneurs to handle risky situations and achieve success in entrepreneurship (Avey, Luthans, Smith, & Palmer, 2010; H. Juhdi, Hamid, Rizal, N. Juhdi, 2015; Paul & Devi, 2018). The effects of service orientation and market orientation on entrepreneurial factors were also tested. Respondents were the owner-managers of small and medium service enterprises (service SMEs). Burnout is the consequence of a severe stress (Salami, 2011). Burnout relates to individuals’ feelings of frustration and fatigue that emerge due to their failure to achieve expected results in their professional setups (Freudenberger, 1974). The entrepreneurship is not smooth and an easy job (Sheehan & St-Jean, 2014). Entrepreneurs due to limited abilities, resources, skills, and excessive job demands and activities experience stress (Naik, 2012), and severe stress causes job burnout (Boyd & Gumpert, 1983; Maslach, 1982) among the entrepreneurs. Entrepreneurial burnout can have negative effects at personal and organizational level. At personal level, the burnout causes entrepreneurs’ poor health, anxiety, and self-doubt, whereas entrepreneurial burnout, at organization level, results low productivity, more absenteeism, low profits, business failure and increases intentions to quit business (Lechat & Torrès, 2016; Lewin & Sager, 2007; Wincent et al., 2008).

The state of entrepreneurship is not ideal in Pakistan. Report suggests that Pakistan is on number 109 in entrepreneurship activities among 137 countries (GEI, 2019). Entrepreneurship is the key driver of the economy, in this the entrepreneurs identify new opportunities, establish ventures, create innovative products to offer in market which involves financial and psychological risks (GEM, 2022). These result new job opportunities, contribute to GDP, and reduce poverty. The ability of new entrepreneurs to use creativity and undertake risks depend on the support of country’s entrepreneurial ecosystem (GEM, 2022). People in Pakistan are more risk averse (Hofstede, 2001), subsequently people avoid taking risks in availing new opportunities, and so Pakistan has a low rate of entrepreneurship activity, especially the opportunity-based entrepreneurship, than other low-income countries (GEM Pakistan, 2012). Despite government’s various steps to promote youth entrepreneurship (Aslam & Hasnu, 2016), and encouraging young individuals to utilize skills and knowledge in availing new business opportunities and to contribute to country’s economic development (Mahmood, Farhan, & Nosheena, 2017), the rate of entrepreneurship in Pakistan is very low, and country’s economic situation remains feeble. Furthermore, regardless of bulk research papers have been published on entrepreneurship in context of Pakistan, such as, entrepreneurship and mental health (Saraf, 2019), state of entrepreneurship in Pakistan (Mustafa, Kakakhel, & Shah, 2019; Soomro, Almahdi, & Shah, 2020) Pakistan. The literature on firm-level entrepreneurship studies argued that external environmental factors vary across countries and regions, therefore, investigating the relationship between entrepreneurial orientation and firm performance is contingent on the external factors known as an entrepreneurial ecosystem of the region. Data were collected from 392 managers, senior officials and owners of the SME’s representing four different business sectors of food and beverages, textile and leather products,

wood and wood products, arms ammunition and other manufacturing products geographically located in Peshawar, Gadoon, Risalpur and Hattar industrial zones of Khyber Pakhtunkhwa. Proportionate stratified random sampling technique was utilized to give proper representation to each sub-population stratum. Data analysis was performed in IBM SPSS 23 and IBM SEM AMOS 23. Constructs Measurement model, structural model, and path analysis were done through AMOS structural equation modeling. Further, to examine the moderation effect of the variables entrepreneurial culture and government support on the relationship between Entrepreneurial Orientation and firm performance Baron and Kenny's (1983), on "attitude", "perceived behaviour control" "entrepreneurial intentions", and "entrepreneurial motivation" (Alam, Kousar, & Rehman, 2019) which is considered by academic researchers as under-researched area. It further examines the moderating role of entrepreneurial motivation between intention and behaviour (action, entrepreneurial Leadership (Soomro, Shah, & Mangi, 2019), "entrepreneur's quest" (Naveed & Ahmad, 2020), psychological capital resources (Sarwar, Ahsan, & Rafiq, 2021), psychological factors (such as, locus of control, need for independence, risk-taking, and emotional intelligence) by authors (Qudus, Mazhar, Tabassum, & Farhan, 2022), locus of control (PsyCap), entrepreneurial adversity, resiliency, and well-being of entrepreneurs (Soomro, Shah, & Anwar, 2018), and entrepreneurship and stress (Arshi, Kamal, Burns, Tewari, & Rao, 2021) reverse, reciprocal relationships and moderation effects between stressors and PES. Further, it looked at the moderating impact of psychological capital. More than 300 entrepreneurs in emerging markets, namely India, Pakistan, and the United Arab Emirates, participated in this longitudinal study (Time 1 n = 325, Time 2 n = 310). However, the research gap was identified to fill as less empirical evidence exists to examine relationships between PsyCap and success, and mediating role of burnout among entrepreneurs in context of Sindh province, Pakistan.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Literature review includes the logical discussion and debate about the relevant past studies and findings which contribute to our understanding of concepts regarding variables as well as support in developing conceptual framework and hypotheses of present study. This study has covered the major themes in the literature review. The following were the major themes searched in the literature:

2.1 PsyCap and Entrepreneurial Success

To be successful entrepreneurs in unpredictable environment, entrepreneurs require psychological capital which is the critical factor for success (Avey et al. 2010; Luthans, Avolio, Avey, & Norman, 2007). Research findings by Paul & Devi (2018) reported that a positive relationship existed between psychological capital and entrepreneurial success among the various types of entrepreneurs (Sole traders, Partnerships, first generation and traditional) of micro, small and medium enterprises (MSME). This study further explored that MSME entrepreneurs, for long run success, should grow and strengthen the psychological resources such as optimism, resilience, hope and efficacy. Another research investigation evidenced that a psychological capital resource positively influenced on entrepreneurial

success among entrepreneurs of small and medium service enterprises (service SMEs) in Malaysia (H. Juhdi et al., 2015) the effects of service orientation and market orientation on entrepreneurial factors were also tested. Respondents were the owner-managers of small and medium service enterprises (service SMEs). Similar results were also witnessed that a positive strong association existed between entrepreneurial psychological capital and entrepreneurial success among established entrepreneurs in Malaysia (N. H. N. Juhdi & Juhdi, 2013). According to authors entrepreneurial success construct includes financial performance as well as psychological performances measures. Financial performance measures of entrepreneurial success entail organization performance indicators such as profitability return on investment, market share, employee growth (Chandler & Hanks, 1998). However, the psychological performance includes the measures of success such as satisfaction, feeling of gratitude, and preparedness (Sisodia, Wolfe, & Sheth 2007; Tang, Kacmar, & Busenitz, 2010). Entrepreneurial satisfaction shows entrepreneur's relative higher success than what he/she had put efforts (Cooper & Artz, 1995; Davidsson, 2005). Feeling of gratitude refers to the measures of positive emotions due to belief in accomplishment after hard efforts (Weiner, 1985). Entrepreneurial preparedness refers to entrepreneur's quality of evaluation and judgment regarding exploitation of opportunities based on existing information (Tang et al., 2010). Based on theoretical concepts and past literature evidence support we develop first hypothesis (H1):

H1: There exists a positive significant empirical relationship between psychological capital and success among entrepreneurs.

2.2 PsyCap, Success and Burnout as a Mediator

A negative relationship was noted between entrepreneurs' PsyCap and stress level; the entrepreneurs who had greater PsyCap resources experienced less anxiety and stress (Baron, Franklin, & Hmieleski, 2016). Entrepreneurs PsyCap reduces the work stress (burnout) among entrepreneurs (Hmieleski & Carr, 2007). It was observed in the research findings by Manzano-García & Ayala, (2017) that a good psychological capital resources (such as self-efficacy, hope, optimism, and resilience) reduced the burnout effects. A study reported that a PsyCap influenced negatively to job burnout (Malekitabar, Riahi, & Malekitabar, 2017). Another study of Manzano-Garcia and Ayala-Calvo (2013) argued that staff with strong psychological capital resources learns how to face and handle challenges in their dynamic work environments and they also know how to manage and cope with burnout. Job Demands-Resources (JD-R) model of burnout (Demerouti, Nachreiner, Bakker, Schaufeli, 2001) describes two processes which causes burnout; heavy job demands, & lack of job resources. In context of entrepreneurship, job demands includes maintaining relationships, uncertainties, risks, and achieving targets, which causes entrepreneurs burnout, however, resources include entrepreneurs' PsyCap resources of "resilience", "hope", "optimism", and "self-efficacy", which help in coping negative aspects of burnout and help entrepreneurs in achieving success. It is asserted by authors that "JD-R model predicts that job resources mitigate the negative effect of job demands on exhaustion" (Schaufeli & Taris, 2014). Authors have discussed that entrepreneurial burnout construct consists of three dimensions:

emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion means emotionally overwhelmed due to enormous tasks while contacting with other people (Leiter, 1988). Depersonalization refers a change from caring, positive, and soft attitude to uncaring, negative, and cruel attitude (Caputo, 1991; Leiter, 1988). Reduced personal accomplishment means “perceived decline in feelings of competence and career achievement” (Leiter, 1988). Burnout represents an individual’s physical, emotional, and mental exhaustion level (Pines and Aronson, 1988). The researchers and authors argued that entrepreneurial burnout leads to entrepreneurs’ poor health, anxiety, and self-doubt at personal level, whereas causes low productivity, more absenteeism, low profits, business failure and increases intentions to quit business at organization level (Lechat & Torrès, 2016; Lewin & Sager, 2007; Wincent et al., 2008). An empirical study witnessed that entrepreneurial burnout negatively related to business performance (Fatoki, 2019). Burnout affected adversely more to health and venture of nascent entrepreneurs (Omrane, Kammoun, & Seaman, 2018). Based on past evidence, we posit Hypotheses H2:

H2: Burnout mediates the relationship between psychological capital and success among entrepreneurs.

2.3 Conceptual Framework

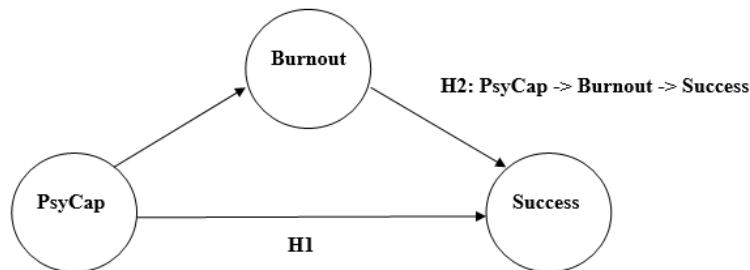


Figure 1. Conceptual Framework

3. RESEARCH METHODOLOGY

This study adopts a quantitative research method design which collects cross-sectional data. The authors choose positivists philosophy and deductive approach to evaluate hypotheses for generalized findings.

3.1 Respondents and Sampling

The respondents of this study were entrepreneurs of Sindh province, Pakistan, who participated and gave responses in online survey. The simple random sampling technique was applied for collecting data, and the sample size determined were 134, however, we got responses from 296 entrepreneurs.

3.2 Data Collection Instrument

For present study, a questionnaire was adopted from relevant literature for our study variables such as PsyCap (Avey, Avolio, & Luthans, 2011), entrepreneurial success (H. Juhdi et al., 2015) the effects of service orientation and market orientation on entrepreneurial factors were also tested. Respondents were the owner-managers of small and medium service enterprises (service SMEs; Paul & Devi, 2018), and burnout (Malach-Pines, 2005), which was administered online to collect the primary data. PsyCap construct included statements such as “I can think of many ways to reach my current goals”, and such as “I am confident that I could deal efficiently with unexpected events” etc. Likewise, entrepreneurial success construct consisted of items such as “I expect having a high income for the next following years”, and such as “I have a gut feeling for potential opportunities” etc. Burnout included statements such as “Disappointed with people”, and such as “depressed” etc.

3.3 Operationalizing and Measuring Variables

Current research includes PsyCap as an independent variable, which is operationalized as reflective higher order construct (HOC). PsyCap construct consists of four dimensions (Hope, self-efficacy, optimism, and resilience) each with three reflective indicators. Total 12 items of PsyCap construct are measured on Likert 7-point scale ranging from 1= strongly disagree to 7 = strongly agree. For collecting data, we adopted psychological capital questionnaire (PCQ-12) as suggested by authors (Avey, Avolio, & Luthans, 2011). Similarly, entrepreneurial success, is dependent variable in our study, and it is higher order formative construct formed from financial performance (4 reflective items), and psychological performance (satisfaction = 4 reflective items, feeling of gratitude = 6 reflective items, and preparedness = 4 reflective items). These 18 items of entrepreneurial burnout are measured on Likert 7-point scale ranging from 1= strongly disagree to 7 = strongly agree. We adopted entrepreneurial success 18- items scale as used by researchers (H. Juhdi et al., 2015) the effects of service orientation and market orientation on entrepreneurial factors were also tested. Respondents were the owner-managers of small and medium service enterprises (service SMEs; Paul & Devi, 2018). Burnout is mediating variable which is operationalized as reflective first order construct with 10 items. We use Malach-Pines’ (2005) Burnout Measure Scale (BMS-10) a short version to measure entrepreneurs’ burnout (mental, emotional, and physical) on a rating scale of Likert 7-point ranging 1 = never, and 7 = always.

4. RESULTS

4.1 Data Analysis and Results in SPSS

Data were analyzed pertaining to respondents’ demographic characteristics and firm/ business profile of entrepreneurs in “Statistical Package for the Social Sciences” (SPSS) version- 25, see Tables 1 and Table 2.

Table 1. Frequency Statistics of Respondents' Demographics

Demographic Characteristics		Frequency	Percent (%)
Gender	Male	280	94.6%
	Female	16	5.4%
Age Group	21-30	72	24.3%
	31-40	152	51.4%
	41-50	56	18.9%
	Above 50	16	5.4%
Marital Status	Single	88	29.7%
	Married	208	70.3%
Education Level	Matric- Intermediate	56	18.9%
	Graduate- Masters	200	67.6%
	M.Phil.- PhD	40	13.5%

(N = 296)

Table 2. Frequency Statistics of Firm Characteristics

Firm Characteristics		Frequency	Per-cent (%)
Age of Firm/ Business	Less than 3 years	64	21.6%
	3-4 years	80	27.0%
	4-5 years	32	10.8%
	Above 5 years	120	40.5%
Type of Ownership	Proprietor (Self-started)	200	67.6%
	Family-owned venture	48	16.2%
	Partnership	48	16.2%
Number of Employees	None	24	8.1%
	1-3	72	24.3%
	4-5	80	27.0%
	6-10	48	16.2%
	Above 10	72	24.3%

Type of Industry	Service (Education, Health etc)	88	29.7%
	Real Estate and construction	32	10.8%
	Reselling (Retail and Wholesale)	80	27.0%
	Agriculture, Food and Beverages	40	13.5%
	Manufacturing/Production	40	13.5%
	Others	16	5.4%

(N = 296)

4.2 Data Analysis and Results in PLS-SEM

Partial Least Square Structure Equation Modeling (PLS-SEM) technique is used to estimate our model, analyze data, and compute results through SmartPLS Version 4 (Ringle, Wende, & Becker, 2022). This is because our study model has higher order constructs with several relationships which make it complex. Therefore, we preferred to use SmartPLS-SEM, as it works in an efficient way with complex models and small sample sizes (Cassel, Hackl, & Westlund, 1999; Hair, Sarstedt, & Ringle, 2019). In our study model PsyCap and entrepreneurial success are higher order constructs, so we adopted embedded two stage approach (Ringle, Sarstedt, & Straub, 2012) to specify the model at higher order construct level in SEM. In the two-stage approach at first stage the latent variable scores of lower-order components are computed, same as repeated indicator approach, these values are then used as the manifest variables for the HOCs in the second stage (Hair, Sarstedt, Ringle, & Gudergan, 2018). As suggested by authors, evaluating PLS-SEM results has two steps, in first step we assessed measurement model, and in second step we evaluated structural model as well as performed hypotheses testing (Hair, Hult, Ringle, & Sarstedt, 2017).

4.3 Measurement Model Assessment

Measurement model denotes the links between constructs and indicators (also referred as outer model) which may be reflective (shows arrows from construct to indicators) as well as formative (shows arrows from indicators to construct) in nature (Hair, Hult, Ringle, Sarstedt, Danks, & Ray, 2021). We assessed measurement model for lower order constructs as well as for higher order constructs (Hair, Risher, Sarstedt, & Ringle, 2019). As a part of measurement model assessment, we first assessed reflective lower order constructs for quality check, such as “factor loadings”, “reliability”, “convergent validity”, and “discriminant validity”.

Reflective Measurement Model Assessment for Lower Order Constructs (LOCs)

Current study model shows PsyCap, Success, and burnout as reflective lower order constructs (see Figure 2), which as a part of measurement model were assessed for “indicator loadings”, “internal consistency reliability”, “convergent validity”, and “discriminant validity” through Smart PLS-SEM (Hair, Risher, Sarstedt, and Ringle, 2019).

In factor loadings results, two items of feeling of gratitude, FOG-3 and FOG-6 in entrepreneurial success construct were deleted as their loadings did not meet the criteria. However, all other reflective indicators (see Table 3) have loadings above the recommended threshold values of 0.708 and 0.40 (Hair et al., 2021; Hulland, 1999). This suggests reliability of indicators in our model. Composite reliability, Cronbach’s Alpha, and ρ_A , were computed to ascertain internal consistency reliability of constructs (Hair et al., 2021; Hair, Risher, Sarstedt, & Ringle, 2019; Hoffmann & Birnbrich, 2012). Table 3 indicates that all values are in acceptable range between 0.6 to 0.90 which confirms the internal consistency reliability of constructs. Convergent validity is calculated through average variance extracted (AVE) which is defined as average mean value of square of loadings of items of the construct. The AVE values greater than 0.50 are suggested to explain more than 50% variance in the indicators of the construct (Hair et al., 2021; Hair, Risher, Sarstedt, & Ringle, 2019). The AVE are higher than 0.50 (see Table 3) which shows that constructs explain more than 50% variance of its items which satisfy convergent validity criteria.

In reflective measurement model, we also checked the discriminant validity of indicators through Fornell and Larcker Criterion and HTMT Ratio in PLS-SEM (Algorithm). Discriminant validity indicates the degree to which a construct in the model is different from other constructs in empirical sense (Chin, 2010; Hair et al., 2021; Hair, Risher, Sarstedt, & Ringle, 2019). Table 4 reports discriminant validity – Fornell and Larcker Criterion calculations and tells that diagonal italic bold values are squared AVE which are higher than correlation of other constructs beneath values. This suggests discriminant validity has been established. The authors proposed Heterotrait-monotrait (HTMT) ratio another approach to assess discriminant validity and recommended threshold values below 0.85 or 0.90 (Henseler, Ringle, & Sarstedt, 2015) such as partial least squares, the Fornell-Larcker criterion and the examination of cross-loadings are the dominant approaches for evaluating discriminant validity. By means of a simulation study, we show that these approaches do not reliably detect the lack of discriminant validity in common research situations. We therefore propose an alternative approach, based on the multitrait-multimethod matrix, to assess discriminant validity: the heterotrait-monotrait ratio of correlations. We demonstrate its superior performance by means of a Monte Carlo simulation study, in which we compare the new approach to the Fornell-Larcker criterion and the assessment of (partial. All the HTMT values are less than cut-off of 0.85 and 0.90 and hence explain no discriminant validity issues exist in our study (see Table 5).

Table 3. Loadings, Reliability, & Validity

Items	Loadings	Cronbach Alpha	rho_A	Composite Reliability	AVE
HOPE_1	0.773	0.743	0.765	0.853	0.659
HOPE_2	0.872				
HOPE_3	0.787				
OPTI_1	0.716	0.744	0.774	0.854	0.663
OPTI_2	0.884				
OPTI_3	0.833				
RESI_1	0.821	0.737	0.740	0.849	0.652
RESI_2	0.777				
RESI_3	0.823				
SE_1	0.871	0.666	0.714	0.818	0.604
SE_2	0.825				
SE_3	0.611				
FP_1	0.717	0.629	0.635	0.801	0.573
FP_2	0.762				
FP_3	0.790				
FOG_1	0.807	0.853	0.853	0.900	0.694
FOG_2	0.843				
FOG_4	0.858				
FOG_5	0.822				
PREP_1	0.463	0.721	0.773	0.830	0.561
PREP_2	0.876				
PREP_3	0.772				
PREP_4	0.817				
SATI_1	0.798	0.852	0.855	0.895	0.630
SATI_2	0.848				
SATI_3	0.765				
SATI_4	0.820				
SATI_5	0.732				
B_1	0.703	0.911	0.857	0.910	0.507
B_2	0.641				
B_3	0.643				
B_4	0.632				
B_5	0.676				
B_6	0.864				
B_7	0.802				

B_8	0.559				
B_9	0.653				
B_10	0.875				

Table 4. Discriminant Validity – Fornell and Larcker Criterion

Constructs	B	FOG	FP	HOPE	OPTI	PREP	RESI	SATI	SE
Burnout (B)	0.712								
Feeling of Gratitude (FOG)	-0.124	0.833							
Financial Performance (FP)	-0.212	0.421	0.757						
Hope (HOPE)	-0.197	0.288	0.262	0.812					
Optimism (OPTI)	-0.135	0.269	0.083	0.646	0.814				
Preparedness (PREP)	-0.107	0.726	0.379	0.395	0.215	0.749			
Resilience (RESI)	-0.299	0.326	0.410	0.511	0.481	0.367	0.807		
Satisfaction (SATI)	-0.079	0.758	0.453	0.326	0.172	0.712	0.373	0.794	
Self-Efficacy (SE)	-0.253	0.203	-0.010	0.416	0.387	0.221	0.514	0.192	0.777

Table 5. Discriminant Validity – HTMT Ratio

	B	FOG	FP	HOPE	OPTI	PREP	RESI	SATI	SE
Burnout (B)									
Feeling of Gratitude (FOG)	0.123								
Financial Performance (FP)	0.237	0.559							
Hope (HOPE)	0.209	0.356	0.386						
Optimism (OPTI)	0.170	0.353	0.296	0.838					
Preparedness (PREP)	0.161	0.806	0.603	0.563	0.397				

Resilience (RESI)	0.241	0.396	0.609	0.647	0.625	0.502			
Satisfaction (SATI)	0.155	0.883	0.615	0.396	0.285	0.812	0.463		
Self-Efficacy (SE)	0.250	0.266	0.250	0.567	0.532	0.318	0.680	0.264	

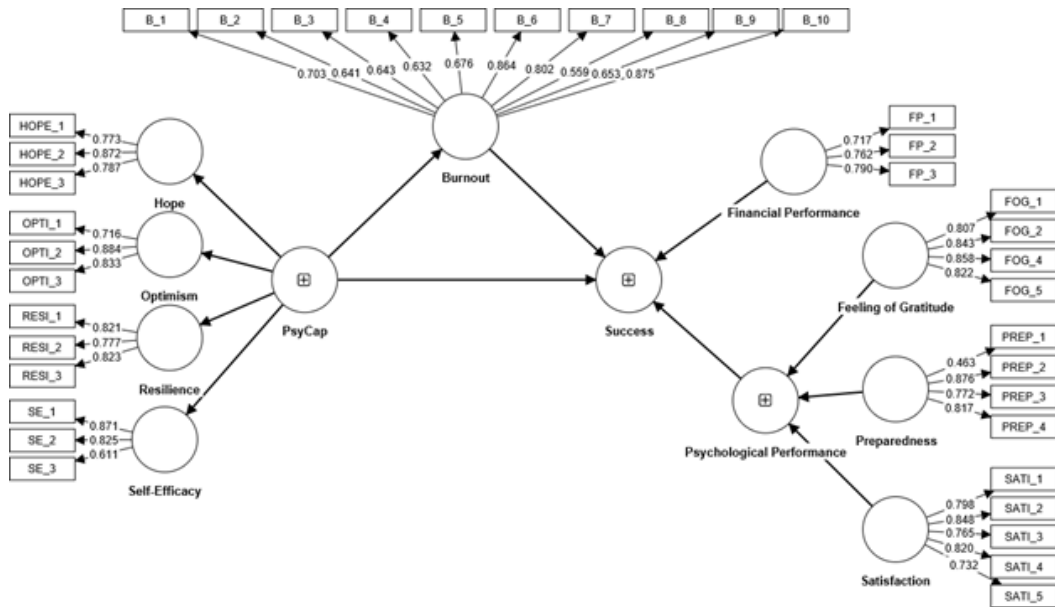


Figure 2. Stage one: Measurement Model Assessment of Lower Order Constructs (LOCs)

Reflective Measurement Model Assessment for Higher Order Constructs (HOCs) Higher order constructs (HOCs) are to be assessed in a similar way as (LOCs) lower order constructs were evaluated (Chin, 2010). Following guidelines, we assessed HOCs for reflective and formative indicators (Sarstedt, Hair, Cheah, Becker, & Ringle, 2019) which facilitate modeling a construct on a more abstract higher-level dimension and its more concrete lower-order subdimensions, have become an increasingly visible trend in applications of partial least squares structural equation modeling (PLS-SEM).

Measurement model (in stage two, see Figure 3) shows that PsyCap is HOC having four reflective indicators (Hope, Optimism, Resilience, & Self-efficacy). Table 6 shows that all loadings are above the suggested threshold value of 0.708 and 0.40 (Hair et al., 2021; Hulland, 1999), hence confirms acceptable reliability of reflective indicators. To ascertain constructs internal consistency reliability, table also reports that composite reliability, Cronbach’s Alpha, and rho_A values are in suggested range of 0.60 to 0.90 (Hair et al., 2021; Hair, Risher, Sarstedt, & Ringle, 2019),

which shows reliability of constructs. Furthermore, it also indicates acceptable convergent validity ($AVE = 0.582$), which denotes that variable explains more than 50% variance of its indicators (See Table 6).

Discriminant validity was ascertained through Fornell and Larcker Criterion, and as per guidelines, Table 7 reports diagonal italic bold values (0.763) are squared AVE which are greater than correlations of other construct values, hence confirms establishing discriminant validity. Furthermore, HTMT values (see Table 8) were also below the recommended cut-off of 0.85 or 0.90 (Henseler et al., 2015) such as partial least squares, the Fornell-Larcker criterion and the examination of cross-loadings are the dominant approaches for evaluating discriminant validity. By means of a simulation study, we show that these approaches do not reliably detect the lack of discriminant validity in common research situations. We therefore propose an alternative approach, based on the multitrait-multimethod matrix, to assess discriminant validity: the heterotrait-monotrait ratio of correlations. We demonstrate its superior performance by means of a Monte Carlo simulation study, in which we compare the new approach to the Fornell-Larcker criterion and the assessment of (partial. This suggests discriminant validity satisfaction of our model.

Table 6. Loadings, Reliability and Validity

Items	Loadings	Cronbach Alpha	rho_A	Composite Reliability	AVE
Hope	0.762	0.768	0.857	0.847	0.582
O p t i - mism	0.688				
R e s i l - ience	0.876				
Self-Effi- cacy	0.712				

Table 7. Discriminant Validity – Fornell and Larcker Criterion

	Burnout	PsyCap
Burnout	1.000	
PsyCap	-0.353	<i>0.763</i>

Table 8. Discriminant Validity – HTMT Ratio

	Burnout	PsyCap
Burnout		
PsyCap	0.380	

4.4 Formative Measurement Model Assessment for Higher Order Constructs (HOCs)

Entrepreneurial success is a formative higher order construct (HOC) formed from financial performance and psychological performance indicators (see Figure 3). As suggested by authors, we evaluated formative measurement model by assessing indicators’ collinearity and outer weights and their significance. (Hair et al., 2021; Hair et al., 2017; Hair, Risher, Sarstedt, & Ringle, 2019).

Collinearity issues were assessed through variance inflation factor (VIF) values. Table 9 reports VIF values are below the suggested threshold of 3 (Hair, Risher, Sarstedt, & Ringle, 2019). This suggests no multicollinearity problem in our model. Furthermore, the bootstrap results (see Table 9) also indicate that the outer weights of formative indicators (financial performance & psychological performance) were significant ($t > 1.96$), which satisfy the quality criteria of formative measurement model.

Table 9. Outer Weights, Significance and VIF Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	VIF Values
Financial Performance → Success	0.504	0.496	0.119	4.241	0.000	1.142
Psychological Performance → Success	0.737	0.735	0.094	7.854	0.000	1.142

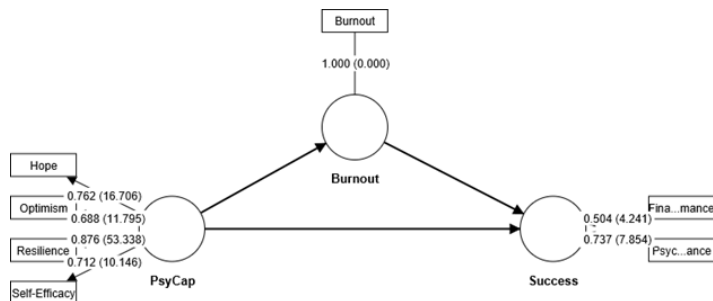


Figure 3. Stage Two: Measurement Model Assessment of Higher Order Constructs (HOCs)

4-5 Structural Model Assessment

The structural model describes the hypothesized paths of research study. The structural model is assessed based on VIF values, path coefficients significance, R2, and Q2 (Hair et al., 2021; Hair, Risher, Sarstedt, & Ringle, 2019).

No collinearity issues existed for this study model as the VIF values of predictor variables (see Table 10) are below the recommended threshold of below 3 and or 5 (Hair, Risher, Sarstedt, & Ringle, 2019). R 2(also referred as coefficients of determination) assesses the model’s explanatory power (Hair et al., 2021; Shmueli & Koppius, 2011). To ascertain model’s goodness, the strength of paths in structural model is determined by R2 of endogenous constructs (Briones Peñalver, Bernal Conesa, & de Nieves Nieto, 2018). Table 10 reveals that R2 values of endogenous variables in our model are above 0.10, which meet authors suggested guidelines that R2 should be equal to or greater than 0.10 (Falk & Miller, 1992). This shows our model has predictive ability. To evaluate predictive relevance, we computed Q2 through PLSpredict procedure (Shmueli, Ray, Estrada, & Chatla, 2016). Q2 values above zero (0) are suggested (Henseler, Ringle,& Sinkovics, 2009). Table 10 shows that Q2 values are higher than recommended threshold of zero (0), hence suggests good predictive relevance of our model.

We run a bootstrapping procedure with 5000 resamples to further assess structural paths, significance, 95% confidence interval bias corrected, and hypotheses testing. H1 assesses whether PsyCap has any impact on entrepreneurial success. The results in Table 10 (also see Figure 4) indicate that PsyCap has positive significant effect on entrepreneurial success ($\beta = 0.367, t = 7.511, p < 0.001$). Hence H1 is supported. In direct effect results, the PsyCap was reported to have negative significant impact on entrepreneurial burnout ($\beta = -0.353, t = 5.646, p < 0.001$), and burnout was also observed to have direct significant negative influence on success of entrepreneurs ($\beta = -0.159, t = 2.849, p < 0.05$), see Table 10.

Table 10. Structural Model Assessment and Hypotheses Testing

Paths	β	STDEV	T Statistics	P Values	2.5%	97.5%	VIF
PsyCap → Success	0.367	0.049	7.511	0.000	-0.262	-0.046	1.142
PsyCap → Burnout	-0.353	0.063	5.646	0.000	-0.467	-0.222	1.000
Burnout → Success	-0.159	0.056	2.849	0.004	0.257	0.451	1.142
	R²	Q²					
Success	0.201	0.167					
Burnout	0.125	0.106					

4-6 Mediation Analysis

The mediation analysis was done to evaluate the mediating role of burnout on the relationship between PsyCap and success of entrepreneurs. PLS-SEM bootstrapping results in Table 11 show the significant indirect effect ($p < 0.05$) of PsyCap on success of entrepreneurs through mediator burnout ($\beta = 0.056$, $t = 2.647$, $p = 0.008$). As can be seen in Table 11 that total effect which includes direct and indirect effect is higher (0.423) than the direct effect (0.367), this indicates that there is also indirect effect of PsyCap on success of entrepreneurs (0.056) through mediator (Burnout) which is significant too. Hence, relationship between PsyCap and success among entrepreneurs is partially mediated, which supports our hypothesis H2.

Table 11. Mediation Analysis

Paths	β	SD	T – Values	P Values
Total Effects				
PsyCap → Success	0.423	0.04	10.535	0.000
Direct Effects				
PsyCap → Success	0.367	0.049	7.511	0.000
Indirect Effects				
PsyCap → Burnout → Success	0.056	0.021	2.647	0.008

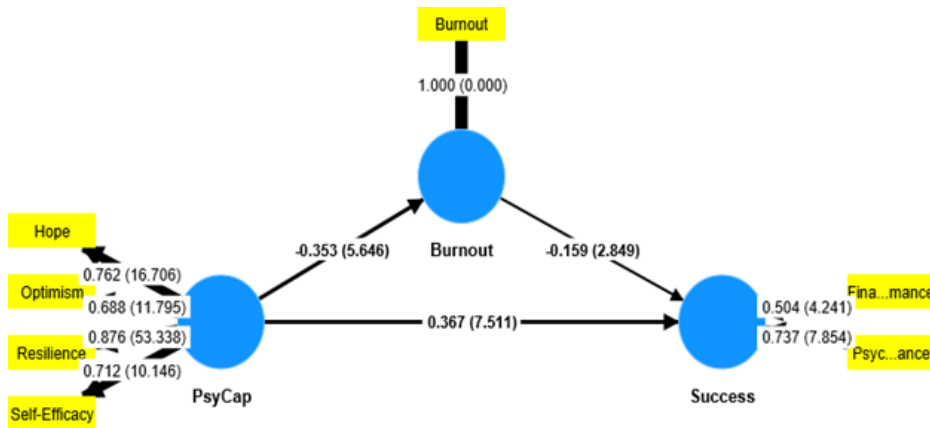


Figure 4. Highlighted Paths –Structural Model Assessment and Hypotheses Testing

5- DISCUSSION AND CONCLUSION

The research results found that PsyCap positively relates to success of entrepreneurs in a significant way. This suggests that entrepreneurs who have strong positive PsyCap resources entailing “optimism”, “hope”, “self-efficacy”, and “resilience” are able to perform better in their entrepreneurial activities and achieve more businesses success, which is supported by similar research results (N. H. N. Juhdi & Juhdi, 2013; Paul & Devi, 2018) further the results revealed that the relationship

was high among the entrepreneurs of partnership firm and among first generation entrepreneurs. Additionally the results also showed that gender of the entrepreneurs did not differ in their perception towards psychological capital and entrepreneurial success. Practical implications- Based on the study, the results implied that MSME entrepreneurs pursuing success must strive to cultivate high level of psychological capital as the psychological resources are key determinants of entrepreneurial success among MSMEs entrepreneurs in Coimbatore district. Originality/value- The original contribution of the paper suggests that the Entrepreneur's Psychological Capital is measured using the Psychological Capital Questionnaire (PCQ). Entrepreneurship is considered as a strenuous and hard job which requires strong mental abilities to cope uncertain and risky situations. The report reveals that rate of opportunity-based entrepreneurial activity in Pakistan is very low (GEM-Pakistan, 2012). This is because culturally people in Pakistan are risk-averse (Hofstede, 2001), subsequently they avoid taking risks for the new arising business opportunities, and hence results low entrepreneurship or remain unsuccessful in businesses. However, as our hypothesis (H1) findings indicate that entrepreneurs with higher PsyCap resources such as "hope", "optimism", "resilience", and "self-efficacy" can manage adverse situations, which enable them to take risks for new opportunities, and are able to achieve success in their entrepreneurial activities. This is consistent with research findings of authors who advocated that entrepreneurs with good level of PsyCap achieved more success in their businesses (Avey et al., 2010; H. Juhdi et al., 2015; Luthans, Avolio et al., 2007) further the results revealed that the relationship was high among the entrepreneurs of partnership firm and among first generation entrepreneurs. Additionally the results also showed that gender of the entrepreneurs did not differ in their perception towards psychological capital and entrepreneurial success. Practical implications- Based on the study, the results implied that MSME entrepreneurs pursuing success must strive to cultivate high level of psychological capital as the psychological resources are key determinants of entrepreneurial success among MSMEs entrepreneurs in Coimbatore district. Originality/value- The original contribution of the paper suggests that the Entrepreneur's Psychological Capital is measured using the Psychological Capital Questionnaire (PCQ).

Interestingly, it is reported in results that PsyCap has negative significant impact on entrepreneurial burnout, which explains that higher level of PsyCap enables entrepreneurs to reduce the impacts of burnout during their entrepreneurial activities, as indicated in some research investigations that PsyCap decreases the burnout effects among the entrepreneurs (Baron et al., 2016; Hmieleski & Carr, 2007; Malekitabar et al., 2017). The burnout also negatively impacts to performance of entrepreneurs in their businesses, this was similar to research findings (Fatoki, 2019).

Mediation analysis results of study model show that burnout partially mediates the relationship between PsyCap and success of entrepreneurs. Authors maintained that entrepreneurs confront with risks and uncertainties during their activities, which causes them to experience a severe stress (Harris, Salstone, & Fraboni, 1999; Monsen, & Wayne Boss, 2009). This suggests that entrepreneurs in Pakistan due to inadequate entrepreneurial ecosystem facilities; infrastructure, environmental factors, and more uncertainties face troubles and have to take hard efforts in

their entrepreneurial activities which cause them mental, physical and emotional exhaustion (burnout). This is in line with Job Demands-Resources (JD-R) model of burnout (Demerouti et al., 2001). In current study context, entrepreneurial job demands include workloads, maintaining relationships with others, decision making, uncertainties, and risks which cause stress, exhaustion, and burnout. However, job resources are positive PsyCap resources (hope, optimism, resilience, and self-efficacy) which enable entrepreneurs to handle risks and uncertainties, perform entrepreneurial activities in better way, achieve success, and experience less burnout during business and entrepreneurship activities. In our study results burnout mediates the link between PsyCap and success of entrepreneurs, however, positive PsyCap works as buffer to mitigate the negative effect of burnout (Schaufeli & Taris, 2014), hence entrepreneurs experience less impacts of burnout and achieve success in their businesses. This is similar to the authors, who found that individuals who possess greater level of PsyCap resources, can utilize more for more work demanding conditions, this gives them more ability to deal with work demands, which leads to experience less exhaustion (Bakker, Demerouti, & Euwema, 2005). This is also consistent with authors' research who revealed that PsyCap mitigates the burnout effects and entrepreneurs experience less or no anxiety and stress (Baron et al., 2016). In context of Pakistan, PsyCap is very important resource as it contributes to ameliorate the entrepreneurs' stress and burnout effects caused by more job demands, lack of entrepreneurial ecosystem facilities, and uncertain environments.

With all these results, this research contributes to fill the research gap by providing the empirical evidence on PsyCap and success of entrepreneurs in context of Sindh Province, Pakistan. This paper contributes greatly about the mediating role of burnout on the relationship between PsyCap and success among entrepreneurs. This paper also suggests conducting more research on positive psychology aspects in relation with entrepreneurs and entrepreneurship.

Practically, this research paper contributes to entrepreneurs that PsyCap is important for their success in businesses and helps them in coping of stress and burnout that emerges from uncertain and risky environments. In addition, policymakers can use these findings to devise strategies, courses, and trainings to strengthen the entrepreneurship and resolve economic issues.

DECLARATION OF INTEREST

It is declared that authors of this research work have no competing interest.

AUTHORSHIP(S) VALIDATION

It is to declare that sarfraz Ali, Malak is the corresponding author, who is PhD (scholar) in Business Administration, has genuinely undertaken this investigation and has contributed throughout this research manuscript authentically. In co-authors, Dr. Imamuddin Khoso, a Professor in Business Administration, has contributed in data analysis and discussion part of this research article and Dr. Mushtaque Ali Jariko, who is also Professor of Business Administration, has made contributions in

literature review and research methodology section of this investigation.

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