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ENTREPRENEURS' PSYCHOLOGICAL CAPITAL AND PERCEIVED FINANCIAL PERFORMANCE: UNVEILING THE MEDIATING EFFECT OF BURNOUT THROUGH THE JD-R MODEL

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Abstract

Entrepreneurship boosts economic activity and has been regarded as crucial for the socio-economic development of emerging economies, including Pakistan. Entrepreneurs in developing regions, such as Sindh, Pakistan, face various challenges, including resource shortages, demanding work environments, and persistent pressures that can weaken venture performance. This study investigates how Psychological Capital (PsyCap) impacts the perceived financial performance of entrepreneurs and further evaluates burnout as a mediator from the perspective of the JD-R Model. A research design included a cross-sectional survey of 312 entrepreneurs in major urban centres of Sindh, and the data were analyzed using SmartPLS version 4. The findings indicated that higher levels of PsyCap are positively and significantly related to perceived financial performance, whereas PsyCap is negatively and significantly associated with burnout. Furthermore, burnout partially mediates the link between PsyCap and perceived financial performance. These research outcomes offer valuable theoretical and practical insights in the context of emerging economies' entrepreneurial landscape. Furthermore, results highlight the significance of fostering psychological resources for achieving venture financial success by mitigating burnout in resource-constrained environments.

INTRODUCTION

Globally, the entrepreneurship role has been recognized for creating jobs, boosting the economy, and socio-economic development, particularly in developing regions (GEM, 2022). In Pakistan's emerging economy, individuals in urban Hubs, such as Karachi, Hyderabad, and Sukkur, experience challenges due to resource constraints, financial problems, lack of infrastructure, and inadequate government support. These pressures impact in an adverse manner to the well-being of entrepreneurs and venture financial performance (Khan et al., 2024). Recently, the literature review has focused more on the psychological characteristics of entrepreneurs that impact their business

outcomes. Authors Luthans et al. (2007) and Avey et al. (2010) have recognized Psychological Capital (PsyCap) as a vital resource, comprising hope, efficacy, resilience, and optimism that promotes positive work attitudes, coping capacity, and performance-related outcomes. The entrepreneurial work is characterized by greater uncertainty, long working hours, financial challenges, and market inequalities, all of which contribute to elevated stress and burnout (Lechat & Torrès, 2016; Omrane et al., 2018). Burnout, conceptualized as emotional exhaustion, depersonalization, and reduced accomplishment (Maslach & Jackson, 1981), has been observed to diminish entrepreneurs' well-being and impede business performance (Fatoki, 2019).

The Job Demands–Resources (JD-R) model illustrates that job demands, such as workload, role stress, and financial pressure, lead to strain and burnout, while personal resources, including psychological capital (PsyCap), mitigate these demands and promote motivation (Bakker & Demerouti, 2017). Recently, researchers have focused on using the JD-R framework to examine entrepreneurship, indicating that personal psychological resources can buffer stress, reduce exhaustion, and enhance entrepreneurial outcomes (Obschonka et al., 2023; Kibler et al., 2024).

Literature reports low entrepreneurial activities in Pakistan due to higher risks, resource constraints, and lack of institutional support (Hisrich et al., 2010; GEM, 2022; GEI, 2019). Since earlier studies have focused on exploring motivation, mental health, and psychological traits of entrepreneurs, however, they lack theoretical application (Saraf, 2019; Alam, 2019; Qudus et al., 2022). Recent studies have investigated Psychological Capital (PsyCap) with more focus on the healthcare industry and limited emphasis on entrepreneurship (Chen et al., 2024; Peng et al., 2025). In addition, the focus on examining the association of PsyCap, burnout, and perceived financial performance seems underexplored, particularly in Sindh's challenging environment (Arshi et al., 2021; Soomro et al., 2018). Therefore, in the entrepreneurial landscape of Urban Sindh, Pakistan, a clear gap exists in investigating how PsyCap influences perceived financial performance while interacting with burnout. Entrepreneurs in Karachi, Hyderabad, and Sukkur are exposed to various challenges, such as energy shortages, inflation, market volatility, and limited access to formal financing, which cause burnout and threaten business sustainability. It is therefore essential to understand, both in theory and practice, how psychological resources can safeguard the financial outcomes of the entrepreneurs. Therefore, this study aims to explore the direct link between PsyCap and perceived financial performance, the association between PsyCap and burnout, and to check the mediation effect of burnout on the relationship PsyCap between financial performance of entrepreneurs.

LITERATURE REVIEW

The authors of the research have carefully reviewed the relevant literature, including the JD-R model, prior empirical studies on the relationship between PsyCap, burnout, and perceived financial performance. This helps us to understand our research problem and construct the hypotheses and conceptual framework of the study.

Job Demand-Resources (JD-R) Model

The Job Demands–Resources (JD-R) proposed by Demerouti et al. (2001) refers to the influence of the working conditions on the well-being and performance due to differences in demands and resources. Job demands are characterized by psychological, physical, and social pressures that cause stress, whereas job resources are aspects that mitigate stress and help in achieving goals. The JD-R model suggests two important processes. One is the health-impairment process, which explains that huge demands lead to exhaustion (Bakker & Demerouti, 2017). The second is the motivational process, which suggests that resources enable individuals to diminish stress (Schaufeli, 2017). Research evidence that excessive demands cause burnout, while sufficient resources reduce pressures and increase performance (Lesener et al., 2019; Bakker et al., 2023). Moreover, job resources enable individuals in coping work

burdens (Breevaart & Bakker, 2018). The JD-R model is widely applied in entrepreneurial settings where individuals are exposed to heavy workloads, emotional strain, and financial vulnerabilities (Uy et al., 2013). The intensity of these challenges is increased in emerging economies due to resource limitations (Wincent et al., 2008). The entrepreneurs in Urban cities of Sindh (Pakistan), such as Karachi, Hyderabad, and Sukkur, are vulnerable to burnout due to excessive demands and limited access to resources.

Burnout is understood in relation to the JD-R model as a tense situation being produced due to excessive demands and limited resources. Research by Schaufeli & Taris (2013) underlined that when demands exceed personal or external resources over time, exhaustion and disengagement develop. Entrepreneurs frequently engage in multitasking, face market uncertainty and financial risks, and experience emotional strain associated with running a business, conditions that directly activate the health-impairment process, making burnout a likely psychological outcome (Stephan, 2018). Burnout has been shown to reduce decision quality, lower motivation, reduce strategic clarity, and ultimately compromise financial performance (Shepherd & Patzelt, 2017).

Recent research extends the JD-R model by recognizing personal resources, such as Self-efficacy, hope, resilience, and optimism, as crucial factors influencing how individuals interpret and respond to demands (Xanthopoulou et al., 2007). PsyCap, a set of positive psychological capabilities, facilitates entrepreneurs to cope with stress, remain motivated, and maintain performance under pressure (Newman et al., 2014). PsyCap augments the motivational process, increases engagement, shields against burnout, and contributes to better performance, making it a vital personal resource in entrepreneurial settings (Avey et al., 2011).

In this study, entrepreneurs' burnout is conceptualized as the mediating mechanism through which job demands influence perceived financial performance. PsyCap, operating as a personal resource, is expected to decrease burnout and enhance performance. Using the JD-R framework allows this study to empirically examine how demands (entrepreneurial stressors) and resources (PsyCap) jointly influence entrepreneurial outcomes in major urban centers of Sindh. Thus, the JD-R model offers an excellent theoretical structure to explain how entrepreneurs' psychological resources reduce burnout and influence perceived financial performance within Pakistan's challenging business landscape.

Review of Relevant Prior Research Evidence

Psychological Capital (PsyCap) and Entrepreneurs' Perceived Financial Performance

PsyCap is a very important construct consisting of hope, optimism, resilience, and self-efficacy (Luthans et al., 2010). Research in recent years has consistently demonstrated that PsyCap plays a key role in shaping entrepreneurial performance outcomes. Paul and Devi (2018) found that PsyCap significantly predicted entrepreneurial success across multiple categories of micro, small, and medium enterprise (MSME) owners, including sole proprietors, partnership-based entrepreneurs, and both first-generation and traditional business owners. Their study emphasized that entrepreneurs seeking long-term sustainability must continuously build and maintain their psychological resources. In the same way, a study observed that PsyCap was positively related to entrepreneurs' success (Juhdi et al., 2015). Another earlier study also highlighted the importance of growing PsyCap for better business performance (Juhdi & Juhdi, 2013).

PsyCap is referred to as psychological resources that enable entrepreneurs to both psychological and financial success (Luthans et al., 2007). PsyCap is viewed as affecting altogether with elements of hope, optimism, resilience, and self-efficacy to achieve goals while managing risks and setbacks with limited resources (Avey et al., 2010; Newman et al., 2014). Documented literature validated these claims. A study evidenced that PsyCap results in better financial results of the ventures in the turbulent market conditions (Mahfud et al.,

2020). Findings of research by Malak et al. (2022) also observed a positive impact of PsyCap on the success of entrepreneurs. Another research highlighted that resilience and optimism enhance entrepreneurs' decision-making abilities, which help in better financial performance during difficult times (Alshebami & Murad, 2022). Similarly, an investigation found that PsyCap enhances consistency and assists in exploiting opportunities, which subsequently increase financial returns in developing economies (Niu, 2023). These studies help us in understanding that PsyCap is a beneficial resource that contribute entrepreneurs in coping with adverse situations and achieving better financial results. Thus, it is hypothesized that:

H1: *PsyCap relates positively to the entrepreneurs' perceived financial performance.*

Psychological Capital and Entrepreneurs' Burnout

Burnout is expressed as a psychological condition that is due to persistent exposure to work demands and stressors. It is denoted as emotional fatigue, physical tiredness, and mental disturbances (Pines & Aronson, 1988). In resource-constrained environments, the entrepreneurs face continuous decision-making, uncertainty, operational pressures, and financial risks, leading to burnout, which adversely impacts the business performance and well-being. In such challenging environments, entrepreneurs have to work long hours, operate with scarce resources, and manage various responsibilities, causing them psychological vulnerabilities and burnout.

A growing literature highlights the importance of PsyCap in safeguarding against burnout effects. Authors reported that employees with improved PsyCap had experienced lower emotional exhaustion levels (Peng et al., 2025). Likewise, researchers observed that among healthcare professionals and nurses in various countries, PsyCap was linked to mitigating burnout and healthier functioning (Zambrano-Chumo & Guevara, 2024; Chen et al., 2024; Xue et al., 2024). Evidence in the entrepreneurship context also demonstrated matching results. Entrepreneurs with better PsyCap were indicated to help them in remaining confident and hopeful for business results. These personal abilities reduced fatigue and burnout (Baron et al., 2016; Feng et al., 2020; Hmieleski & Carr, 2007). Increased PsyCap buffered the burnout and enhanced the well-being of entrepreneurs (Malak & Qassim, 2025). Individuals with stronger PsyCap resources experience less emotional drain. Likewise, PsyCap fosters positive psychological evaluations and effective coping mechanism thereby decreasing stress (Huang et al., 2025). Hence, literature suggests that higher Psycap of entrepreneurs causes them less burnout. It is proposed that:

H2: *PsyCap relates negatively to the entrepreneurs' Burnout*

Mediating Effect of Burnout

The Job Demands–Resources (JD-R) model expresses that an individual's experience burnout due to higher demands and lower psychological resources to handle pressures (Demerouti et al., 2001). Entrepreneurs' job demands include financial risks, uncertainty, social obligations, customer pressures, and the struggle to achieve goals, which can cause burnout. While job resources refer particularly PsyCap, such as hope, optimism, resilience, and self-efficacy, which help entrepreneurs to manage these challenges effectively and achieve success. It is noted that job resources reduce the detrimental effects of job demands (Schaufeli & Taris, 2013). Burnout has been reported to have adverse effects on both personal health and business performance, which may cause anxiety, depression, and business failure (Lechat & Torrès, 2016; Lewin & Sager, 2007; Wincent et al., 2008). Authors' study evidenced that healthier PsyCap resulted in mitigating burnout and improved business performance (Hmieleski & Carr, 2007). Burnout is not good for business performance. Entrepreneurs' experiencing persistent burnout report weaker financial performance of their businesses (Fatoki, 2019). It was also observed that burnout weakens the business (Omrane et al., 2018). Emerging evidence reported that burnout also mediated

between PsyCap and subjective well-being in the medical workers (Fan et al., 2024).

Entrepreneurship is the strenuous journey demanding greater efforts and energy in managing and running business under persistent stressors resulting to burnout (Cadet & Chasseigne, 2012; Sheehan & St-Jean, 2014; Salami, 2011). Entrepreneurs having deficient positive psychological resources in meeting demands are vulnerable to damaging emotional and physiological reactions (Naik, 2012). PsyCap is regarded as a key psychological resource that results better behavior and performance (Luthans, 2002; Luthans et al., 2004; Luthans & Youssef-Morgan, 2017). Evidence showed that burnout mediated partially the relationship between PsyCap and psychological well-being (Manzano-García & Ayala, 2017), demonstrating that PsyCap lessens burnout and then causes improved performance. In the landscape of entrepreneurs in Urban Sindh, burnout in conceptualized as mediating variable that intervene in the link between PsyCap and perceived financial performance. Thus it is postulated that:

H3: *Burnout mediates the relationship between PsyCap and perceived financial performance of entrepreneurs*

Conceptual Model & Hypothesized Links

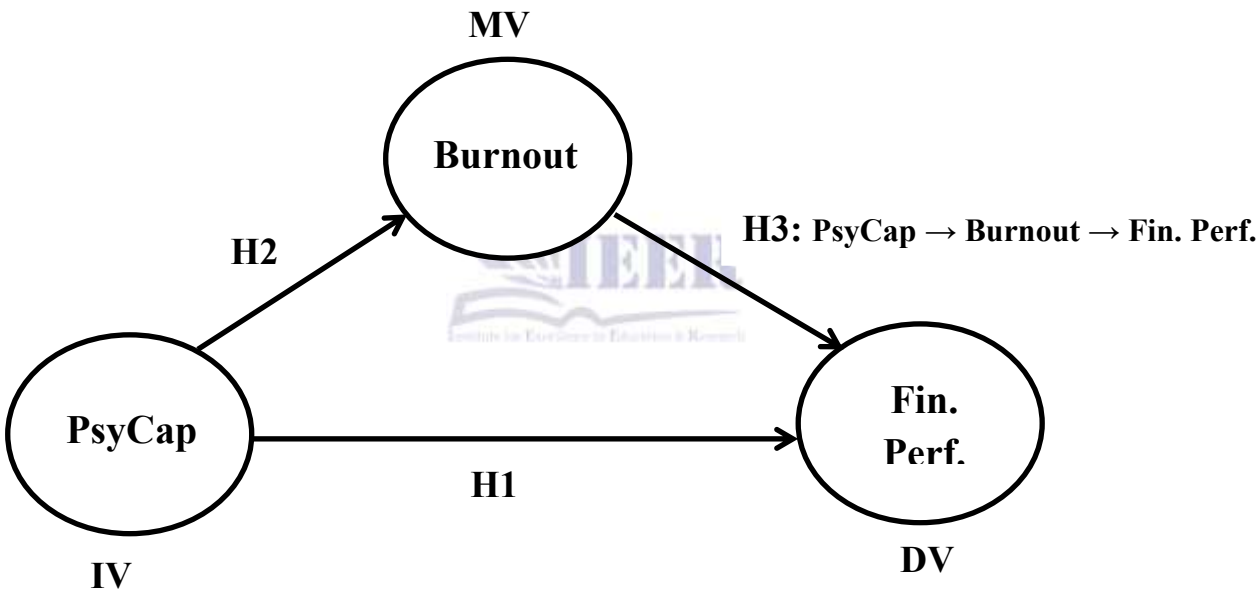

Figure 1. Conceptual Framework of this study

Source: This study

RESEARCH FRAMEWORK

The present study adopts a quantitative, cross-sectional research design to investigate the relationships among Psychological Capital (PsyCap), burnout, and entrepreneurs' perceived financial performance. The research focuses on entrepreneurs operating in the three major urban centers of Sindh, Pakistan, including Karachi, Hyderabad, and Sukkur. 312 entrepreneurs were surveyed, representing various sectors.

The sample size determined through G* power was 296; however, we collected data from 312 entrepreneurs through a simple random sampling technique via a survey questionnaire through physical and online means. The survey instrument adopted from a validated scale consisted of 25 items; PsyCap 12 items measure through

compound psychological capital (CPC-12) given by Lorenz et al. (2016), burnout 10 items measured through Burnout Measure Short Version (BMS) developed by Malach-Pines (2005), and perceived financial performance 3 items drawn from validated scale of Haber and Reichel (2005). Items of PsyCap and perceived financial performance were rated on a 7-point Likert agreement scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"). While items of Burnout were rated on a 7-point frequency scale, ranging from 1 ("never") to 7 ("always"), following the original instrument guidelines.

DATA ANALYSIS AND RESULTS

The analysis of demographic characteristics (see Table 1) reveals that the majority of participants were male (89.7%), while female entrepreneurs accounted for 10.3% of the sample. These respondents were involved in initiating and managing businesses across various sectors, including services, manufacturing, retail, and other related industries. Additionally, Table 2 presents the mean scores derived from the survey responses, which were measured using a 7-point Likert scale.

Table 1. Respondents' Demographics

Respondents' Features	Frequency	(%)
Gender		
Male	280	89.7
Female	32	10.3
Age Group		
21-30	77	24.7
31-40	156	50.0
41-50	60	19.2
Above 50	19	6.1
Marital Status		
Single	96	30.8
Married	216	69.2
Education Level		
Matric- Intermediate	63	20.2
Graduate- Masters	205	65.7
M.Phil.- PhD	44	14.1

Source: This study N = 312

Table 2. Mean Analysis of the respondents' responses

Name	No.	Mean	Standard deviation	Excess kurtosis	Skewness	Cramér-von Mises p value
Hope1	1	5.365	1.185	-0.823	-0.193	0
Hope2	2	5.173	1.186	-0.483	-0.269	0
Hope3	3	5.542	1.109	-0.339	-0.496	0
Opt.1	4	5.635	1.174	0.505	-0.785	0
Opt.2	5	5.429	1.104	-0.138	-0.409	0
Opt.3	6	5.413	1.206	0.203	-0.628	0
Res.1	7	5.359	1.185	-0.799	-0.213	0

Res.2	8	5.288	1.222	-0.569	-0.312	0
Res.3	9	5.401	1.172	-0.8	-0.209	0
SE1	10	5.356	1.176	-0.807	-0.221	0
SE2	11	5.423	1.13	-0.482	-0.297	0
SE3	12	5.385	1.121	-0.449	-0.306	0
FP1	31	6	0.954	-0.781	-0.534	0
FP2	32	5.734	1.079	-1.02	-0.363	0
FP3	33	5.647	0.976	-0.961	-0.18	0
BO1	47	4.064	0.833	-0.696	-0.021	0
BO2	48	4.042	0.859	0.077	0.255	0
BO3	49	3.965	0.848	-0.488	0.036	0
BO4	50	3.878	0.791	-0.427	0.143	0
BO5	51	3.994	0.916	-0.041	0.163	0
BO6	52	3.865	0.793	-0.298	0.091	0
BO7	53	3.926	0.827	-0.263	0.173	0
BO8	54	3.782	0.823	0.008	0.146	0
BO9	55	3.849	0.851	0.515	-0.24	0
BO10	56	3.968	0.804	-0.595	0.17	0

Source: This study

PLS_SEM Results

Partial Least Squares Structural Equation Modeling (PLS-SEM), in SmartPLS version 4 (Ringle et al., 2024), has been used for the analysis of data and getting. PLS-SEM is recognized as a good fit for models with complex structures and works well with small sample sizes. The embedded two-stage procedure proposed by the authors (Ringle et al., 2012) has been used to estimate PsyCap, a higher-order construct. Applying authors' guidelines (Hair et al., 2018), latent variable scores were calculated at the first stage, then were used to represent constructs of higher order in 2nd stage.

Measurement Model Assessment

Table 3 indicates the first stage lower-order constructs reflective measurement model evaluation results, including indicator reliability, construct reliability, and convergent validity. The factor loadings for the ten burnout items, twelve PsyCap items (covering hope, optimism, resilience, and self-efficacy), and three financial performance items all exceeded the recommended minimum value of 0.70 (see Figure 2), demonstrating satisfactory indicator reliability as suggested by previous guidelines (Hair et al., 2021; Hulland, 1999). Similarly, both Cronbach's alpha and composite reliability were above the 0.70 threshold, confirming that each construct consistently measures the concept it is intended to capture (see Table 3). Convergent validity is defined as the degree to which indicators of a construct share a high proportion of common variance (Hair et al., 2021; Hair et al., 2019). It was examined using the Average Variance Extracted (AVE). All constructs reported AVE values greater than 0.50, indicating that each construct accounts for more than 50% of the variance in its indicators.

In line with established methodological recommendations, this study also assessed discriminant validity, which reflects the extent to which a construct is empirically distinct from other constructs in the model (Chin, 2010; Hair et al., 2021; Hair et al., 2019). To evaluate this, both the Fornell–Larcker criterion and the heterotrait–monotrait (HTMT) ratio were applied,

as advised in the literature. Table 4 presents the Fornell–Larcker results, where the bold italic values on the diagonal represent the square roots of each construct's AVE. Because these values exceed the inter-construct correlations listed beneath them, the criterion for discriminant validity is met. Additionally, discriminant validity was examined using the HTMT ratio proposed by Henseler et al. (2015). The recommended threshold for HTMT is below 0.85 or, in some cases, 0.90. As shown in Table 5, all HTMT values fall within these acceptable limits, confirming that the constructs in the model are sufficiently distinct from one another.

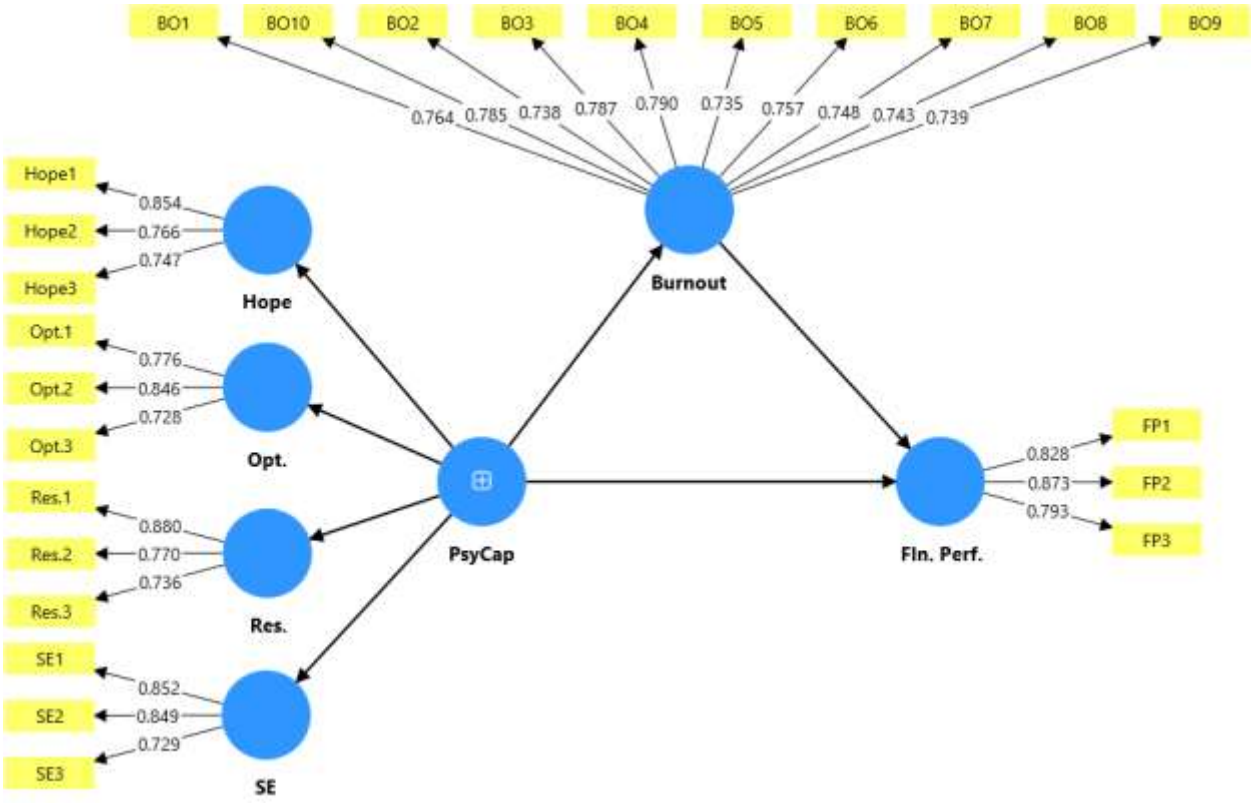

Figure 2. First Stage: Measurement Model Assessment

Table 3. Loadings, Reliability and Validity

Items	Loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BO1	0.764	0.918	0.923	0.931	0.576
BO2	0.738				
BO3	0.787				
BO4	0.790				
BO5	0.735				
BO6	0.757				
BO7	0.748				
BO8	0.743				
BO9	0.739				

BO10	0.785				
FP1	0.828	0.781	0.812	0.871	0.693
FP2	0.873				
FP3	0.793				
Hope1	0.854	0.708	0.753	0.833	0.625
Hope2	0.766				
Hope3	0.747				
Opt.1	0.776	0.700	0.727	0.827	0.616
Opt.2	0.846				
Opt.3	0.728				
Res.1	0.880	0.714	0.749	0.839	0.636
Res.2	0.770				
Res.3	0.736				
SE1	0.852	0.743	0.766	0.853	0.660
SE2	0.849				
SE3	0.729				

Source: This study

Table 4. Fornell-Larcker criterion

Constructs/Variables	Burnout	Fin. Perf.	Hope	Opt.	Res.	SE
Burnout	0.759					
FIn. Perf.	-0.199	0.832				
Hope	-0.243	0.348	0.790			
Opt.	-0.140	0.222	0.644	0.785		
Res.	-0.130	0.236	0.745	0.635	0.798	
SE	-0.155	0.283	0.739	0.697	0.722	0.812

Source: This study

Table 5. Heterotrait-monotrait ratio (HTMT) - Matrix

Constructs/Variables	Burnout	Fin. Perf.	Hope	Opt.	Res.	SE
Burnout						
FIn. Perf.	0.229					
Hope	0.297	0.464				
Opt.	0.174	0.302	0.889			
Res.	0.161	0.287	0.845	0.861		
SE	0.187	0.358	0.836	0.808	0.883	

Source: This study

In the second stage of analysis, the reflective measurement model for the higher-order construct, derived from the latent variable scores computed during the first stage, was assessed using the same evaluation criteria (Chin, 2010). The results show that all indicators representing

PsyCap, including Hope, Optimism, Resilience, and Self-efficacy, exhibit loadings above the recommended threshold of 0.70 (see Table 6 and Figure 3), indicating satisfactory indicator reliability (Hair et al., 2021; Hulland, 1999). Furthermore, the PsyCap construct demonstrates acceptable levels of internal consistency, with both Cronbach's alpha and composite reliability values exceeding 0.70. The AVE value is also above 0.50, confirming that the construct meets the requirement for convergent validity (see Table 6). Discriminant validity was also confirmed. As shown in Tables 7 and 8, the Fornell–Larcker criterion is satisfied because the bold italic values on the diagonal, representing the square roots of AVE, are higher than the corresponding inter-construct correlations. In addition, the HTMT ratios fall below the suggested cutoffs of 0.85 and 0.90, further validating discriminant adequacy in accordance with recommended guidelines (Hair et al., 2021; Henseler et al., 2015).

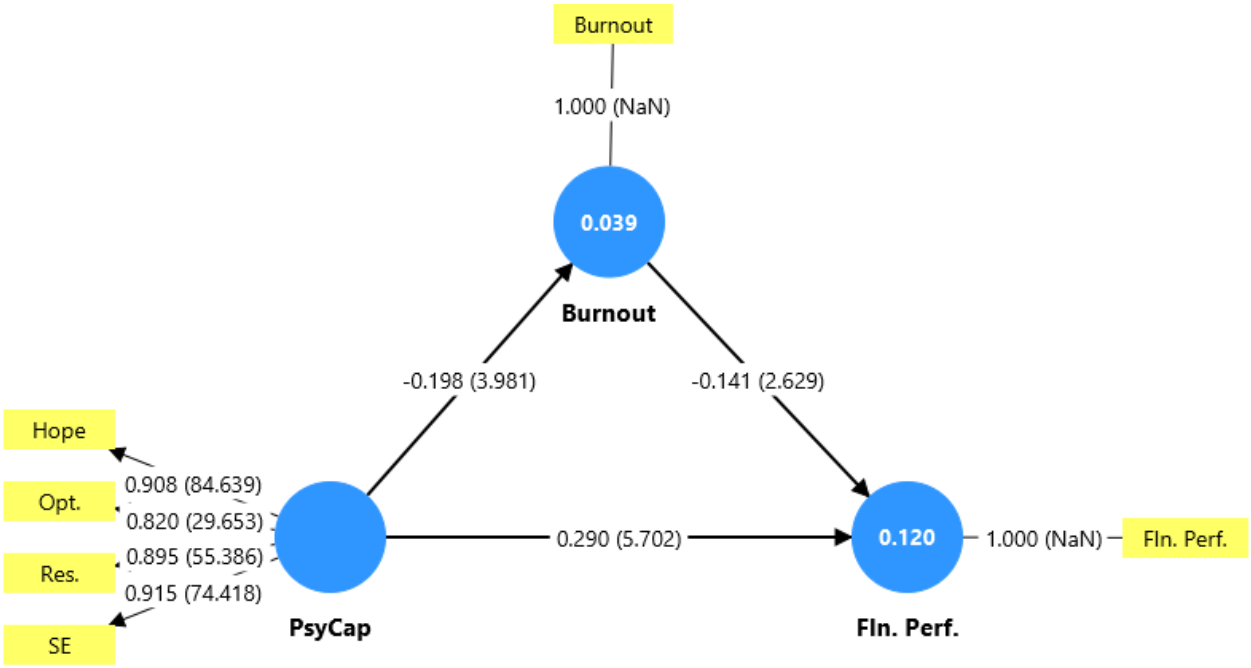

Figure 3. Second Stage: Measurement Model Evaluation

Table 6. Loadings, Reliability and Validity

Items	Loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Burnout	1				
Fin. Perf.	1				
Hope	0.908	0.909	0.950	0.935	0.784
Opt.	0.820				
Res.	0.895				
SE	0.915				

Source: This study

Table 7. Discriminant Validity: Fornell-Larcker criterion

Constructs	Burnout	Fin.Perf.	PsyCap
Burnout	*1*		
Fin.Perf.	-0.199	*1*	
PsyCap	-0.198	0.318	***0.885***

Source: This study

Table 8. Discriminant Validity: Heterotrait-monotrait ratio (HTMT) – Matrix

Constructs	Burnout	Fin.Perf.	PsyCap
Burnout			
Fin.Perf.	0.199		
PsyCap	0.198	0.323	

Source: This study

Structural Path Model Assessment and Hypotheses Testing Results

The structural path model, also referred to as the inner model, was examined to determine the significance of path coefficients, assess potential collinearity, and evaluate the model's explanatory and predictive ability through R^2, Q^2 (predict), and effect size (f^2), in line with the guidelines provided by Hair et al. (2021).

To generate the results for the structural assessment, the bootstrapping technique was applied in PLS-SEM. As presented in Table 9 and illustrated in Figure 4, PsyCap demonstrates a positive and statistically significant influence on perceived financial performance (PsyCap → Fin. Perf., $\beta = 0.290$, $t = 5.702$, $p < 0.05$). The findings also indicate that PsyCap has a negative and significant effect on burnout (PsyCap → Burnout, $\beta = -0.198$, $t = 3.981$, $p < 0.05$). Likewise, burnout shows a negative and significant relationship with perceived financial performance (Burnout → Fin. Perf., $\beta = -0.141$, $t = 2.629$, $p < 0.05$).

In addition, the significance of the path coefficients was verified using the bootstrapping method with bias-corrected confidence intervals, as recommended by Aguirre-Urreta and Rönkkö (2018). Table 9 shows that at the 5% level of significance, zero is not included within the upper and lower bounds of the 95% bias-corrected confidence interval, confirming statistical significance. Furthermore, collinearity was not observed in the structural model, as all VIF values fall below the recommended cutoff value of 3.

To determine the explanatory strength of the model, the coefficient of determination (R^2) was computed, and the results are presented in Table 10. The table also shows that the Q^2 predict values are above zero, confirming the minimum required threshold. These results demonstrate that the model has adequate predictive relevance and satisfactory predictive accuracy. Moreover, the effect sizes (f^2) for the relationships among the variables are also reported in Table 10.

Table 9. Path coefficients (Mean, STDEV, T Values & P Values)

Paths	β	(STDEV)	T statistics	P values	2.50%	97.50%	VIF
PsyCap → Fin.Perf.	0.290	0.051	5.702	0.000	0.187	0.388	1.000
PsyCap → Burnout	-0.198	0.050	3.981	0.000	-0.295	-0.100	1.000
Burnout → Fin.Perf.	-0.141	0.054	2.629	0.009	-0.245	-0.033	1.000

Source: This study

Table 10. R^2, Q^2 predict & f^2

LV	R-square	Q^2predict
Burnout	0.039	0.033
Fin.Perf.	0.120	0.096
Paths	**f-square**	
Burnout → Fin.Perf.	0.022	
PsyCap → Burnout	0.041	
PsyCap → Fin.Perf.	0.092	

Source: This study

Evaluating Burnout as a mediator

To examine the mediating role of burnout, the indirect effect was tested using the bootstrapping method in PLS-SEM. The findings reported in Table 11 show that the total effect of PsyCap on financial performance (β = 0.318) is higher than its direct effect (β = 0.290). This difference indicates the presence of mediation, suggesting that a portion of the relationship between PsyCap and perceived financial performance is transmitted through burnout. The indirect path from PsyCap to perceived financial performance through burnout (PsyCap → Burnout → Fin. Perf.) is statistically significant (β = 0.028, t = 2.051, $p < 0.05$), confirming that burnout acts as a mediating mechanism in the model.

Table 11. Indirect Effect (Mediation Analysis)

Effect Type	Paths	β	SD	T-Values	P- Values
Total Effect	PsyCap → Fin.Perf.	0.318	0.048	6.582	0.000
Direct Effect	PsyCap → Fin.Perf.	0.290	0.051	5.702	0.000
Indirect Effect	PsyCap → Burnout → Fin.Perf.	0.028	0.014	2.051	0.040

Source: This study

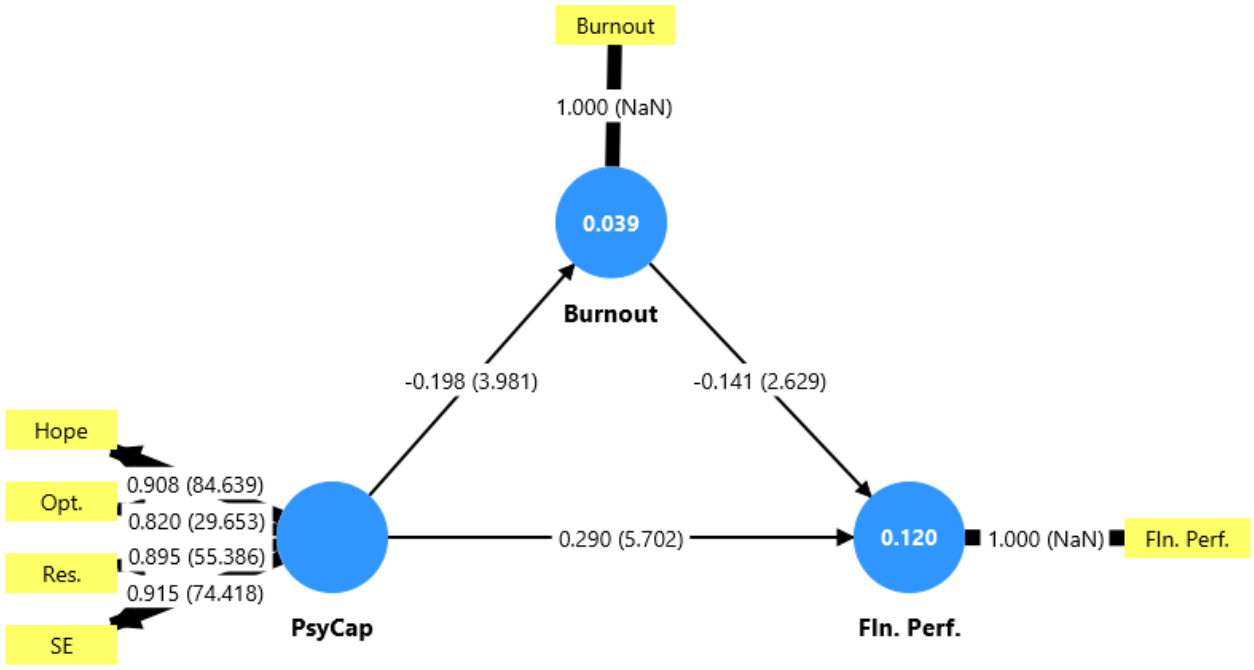

Figure 4. Final Path Model: Structural Model Assessment

DISCUSSION

This study reported a statistically significant and positive link of PsyCap with perceived financial performance among entrepreneurs (PsyCap → Fin. Perf., β = 0.290, t = 5.702, p < .05), which confirms our study hypothesis H1. This suggests that entrepreneurs who had greater PsyCap resources show greater resilience and efficacy and achieved better financial results. This result is consistent with the perspective that psychological abilities greatly help entrepreneurs in facing risks and uncertainties and work persistently to achieve better business results (Luthans, Youssef-Mohamed et al., 2007). Similarly, studies also reported that PsyCap enabled small business owners to get higher business returns (Chen et al., 2024; Lanchimba et al., 2024; Niu, 2023). Additionally, relating to this, during reviewing literature, it has been noted that PsyCap potentials widely help in exploiting business opportunities, in making suitable decisions, and managing resources, leading to excellent financial gains (Margaça et al., 2023; Kadiyono et al., 2024). These findings also align with the entrepreneurs of emerging-economy settings in which PsyCap buffers stress and burnout and yields better financial results (Welter & Baker, 2021; Fatoki, 2019). In similar settings, a study also reported that PsyCap safeguards from the adverse effects of burnout and strengthens the well-being and performance of entrepreneurs (Malak et al., 2025)

In the context of the JD-R Model, PsyCap enables entrepreneurs with sufficient resources to run and operate businesses successfully under stress and burnout caused by hefty demands (Demerouti et al., 2001; Bakker & Demerouti, 2017). In the resource-constrained environment of Sindh, entrepreneurs are exposed to various challenges of financial issues, lack of institutional support, and market inequalities, which lead to heavy pressures and cause burnout and subsequent financial loss. However, research has shown that PsyCap mitigates burnout effects and improves the financial achievement of entrepreneurs (Chen et al., 2024; Lanchimba et al., 2024). Altogether, it is evidenced that PsyCap not only support in better PsyCap benefits but also helps in gaining financial benefits of ventures. Thus, entrepreneurs and

policymakers should design strategies for effective interventions in improving PsyCap assets for greater financial outcomes.

The results demonstrated that Psychological Capital has a negative and significant association with burnout among entrepreneurs (PsyCap → Burnout, $\beta = -0.198$, $t = 3.981$, $p < .05$), providing support for H2. This shows that entrepreneurs with sufficient psychological resources have decreased emotional exhaustion and fatigue. Entrepreneurs in challenging environments such as Hyderabad, Sukkur, and Karachi experience more strain due to limited resources and more stressors. In such a situation, PsyCap works as a buffer to alleviate the adverse effects of burnout. Earlier studies have also evidenced similar results advocating that higher PsyCap leads to a decline in distress and emotional fatigue (Peng et al., 2025; Xue et al., 2024). Documented literature also provides consistent results showing that entrepreneurs' better PsyCap reduces burnout (Feng et al., 2020; Baron et al., 2016). Likewise, authors reported that PsyCap enables individuals to perform better by diminishing burnout across professions (Chen et al., 2024; Zambrano-Chumo & Guevara, 2024).

From the JD-R lens, PsyCap, as a personal resource keep entrepreneurs motivated and helps in facing heavy job challenges through coping mechanisms (Bakker & Demerouti, 2017). In the resource-constrained environment of Sindh, PsyCap instills energy among entrepreneurs to persistently work for achieving goals and handle stress as well. In link to JD-R Model, PsyCap being an important resource reduces burnout (Demerouti et al., 2001), and also supports entrepreneurs' long-term well-being under pressure (Lanchimba et al., 2024).

The results also confirm that burnout has a mediating effect between Psychological Capital and perceived financial performance of the entrepreneurs in Sindh, Pakistan ($\beta = 0.028$, $t = 2.051$, $p < 0.05$). This shows that PsyCap strengthens not only financial performance but also indirectly helps in reducing burnout effects, which in turn support entrepreneurs in gaining more business outcomes. In simple words, it can be said that entrepreneurs with higher PsyCap safeguard against burnout effects, which facilitate better financial results.

Talking about this finding in the context of the JD-R model with an entrepreneurial perspective of Sindh, it can be argued that healthier PsyCap resources play an essential role for entrepreneurs who face various hefty tasks, including multitasking, long working hours, uncertainty, and continuous problem-solving. These challenges pose risks of stress and burnout, leading decline in financial performance; however, better PsyCap enables entrepreneurs to reduce burnout and obtain financial success in businesses. Prior researches support this view that PsyCap impacts negatively on burnout (Newman et al., 2014). Decline in burnout results in effective creativity and decision making and better outcomes (Uy et al., 2013). On the other hand, the heightened burnout has an adverse effect on entrepreneurial decision-making, investment options, and performance (Gorgievski & Stephan, 2016). Thus, partial mediation in this study suggests that entrepreneurs need to grow PsyCap in the socio-economic resource-constrained environment of Sindh to lessen burnout and achieve sustained business financial performance.

Implications of the Study

This study offers both theoretical and practical implications. Theoretically, this research validates the JD-R model in the unique context of the socioeconomic resource-constrained entrepreneurial environment of Sindh, Pakistan. It helps in understanding how burnout hinders the financial performance and how PsyCap resources help in better financial performance by buffering the negative effects of burnout. Practically, this study's results highlight important interventions for developing the psychological resources of the entrepreneurs. The institutions and policymakers can facilitate entrepreneurs to handle stress and have better financial outcomes in business activities.

Limitations

The results of the study are limited to being used carefully in resource-constrained economies such as Sindh, Pakistan. The study has also used a cross-

sectional research design. The sample of the study is also restricted to the Urban Hubs. Well, the financial performance may be checked through a longitudinal study, and there can be other variables as well impacting the financial performance, so the study is limited to burnout, PsyCap, and the financial performance of the entrepreneurs. The future research can address these limitations.

Future research directions

Future research should focus on testing these variables in a more diverse population, such as from rural areas and in different industrial sectors. The upcoming research can design a longitudinal research design by including more variables that can impact the financial performance of entrepreneurs.

CONCLUSION

This research investigated the impact of PsyCap on the perceived financial performance of entrepreneurs with burnout as a mediating variable through the JD-R lens in the context of entrepreneurs of Sindh, Pakistan. It was revealed in the research outcomes that PsyCap improves the financial outcomes of the entrepreneurs by mitigating burnout influence. Hence, this study underlines the value of growing PsyCap resources (hope, optimism, resilience, and self-efficacy) for entrepreneurs' sustained performance in business and yielding financial benefits. Overall, this research highlights the need to support entrepreneurs through training and mentorship in a resource-constrained landscape for business financial performance success.

REFERENCES

Aguirre-Urreta, M. I., & Rönkkö, M. (2018). Statistical inference with PLS using bootstrap confidence intervals. *MIS quarterly*, *42*(3), 1001-1020.

Al Kahtani, N. S., & M. M., S. (2022). A Study on How Psychological Capital, Social Capital, Workplace Wellbeing, and Employee Engagement Relate to Task Performance. *SAGE Open*, *12*(2), 215824402210950. https://doi.org/10.1177/21582440221095010

Alam, A. (2019). *Youth Entrepreneurship: Concepts and Evidence| February Issue Brief* (Issue February). https://www.unicef.org/globalinsight/reports/youth-entrepreneurship-concepts-and-evidence.

Alshebami, A. S., & Murad, M. (2022). The moderation effect of entrepreneurial resilience on the relationship between financial literacy and sustainable performance. *Frontiers in Psychology*, *13*, 954841.

Arshi, T., Kamal, Q., Burns, P., Tewari, V., & Rao, V. (2021). Examining perceived entrepreneurial stress: A causal interpretation through cross-lagged panel study. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 1–17. https://doi.org/10.3390/joitmc7010001

Avey, J. B., Avolio, B. J., & Luthans, F. (2011). Experimentally analyzing the impact of leader positivity on follower positivity and performance. *Leadership Quarterly, 22*, 282-294. doi: 10.1016/j.leaqua.2011.02.004

Avey, J. B., Luthans, F., Smith, R., & Palmer, N. (2010). Impact of positive psychological capital on employee well-being over time. *Journal of Occupational Health Psychology, 15*, 17–28. doi: 10.1037/ a0016998

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands–resources theory: Ten years later. *Annual review of organizational psychology and organizational behavior*, *10*(1), 25-53.

Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of occupational health psychology*, *22*(3), 273.

Baron, R. A., Franklin, R. J., and Hmieleski, K. M. (2016). Why entrepreneurs often experience low, not high, levels of stress: the joint effects of selection and psychological capital. *Journal of Management, 42*(3): 742–768

Breevaart, K., & Bakker, A. B. (2018). Daily job demands and employee work engagement: The role of daily transformational leadership behavior. *Journal of occupational health psychology*, *23*(3), 338.

Cadet, B., & Chasseigne, G. (2012). *Risque, stress et decision (pp. 65–78)*. France: Editions Publibook. ISBN: 9782748397833. hal-00773075

Chen, G., Wang, J., Huang, Q., Sang, L., Yan, J., Chen, R., ... & Ding, H. (2024). Social support, psychological capital, multidimensional job burnout, and turnover intention of primary medical staff: a path analysis drawing on conservation of resources theory. *Human resources for health, 22*(1), 42.

Chin, W. W. (2010). How to write up and report PLS analyses. In *Handbook of partial least squares* (pp. 655-690). Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-540-32827-8_29

Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Fan, J., Chang, Y., Li, L., Jiang, N., Qu, Z., Zhang, J., ... & Qu, D. (2024). The relationship between medical staff burnout and subjective wellbeing: the chain mediating role of psychological capital and perceived social support. *Frontiers in Public Health, 12*, 1408006.

Fatoki, O. (2019). Entrepreneurial stress, burnout, intention to quit and performance of immigrant-owned small businesses in South Africa. *International Journal of Entrepreneurship*, *23*(4), 1–15.

Feng, B., & Chen, M. (2020). The impact of entrepreneurial passion on psychology and behavior of entrepreneurs. *Frontiers in Psychology*, *11*, 1733.

GEI. (2019). *Global Entreprenurship Index 2019.* http://thegedi.org/wp-content/uploads/ 2021/02/2019 GEI-2019 final v2.pdf

GEM. (2022). *Global Entrepreneurship Monitor 2021 / 2022 Global Report Opportunity Amid Disruption*.

Gorgievski, M. J., and Hobfoll, S. E. (2008). Work can burn us out or fire us up: Conservation of resources in burnout and engagement. In *J. R. B.* Halbesleben (Ed.), *Handbook of Stress and Burnout in Health Care*, 3rd edn. (pp. 7–22). Hauppauge, NY: Nova Science.

Gorgievski, M. J., & Stephan, U. (2016). Advancing the psychology of entrepreneurship: A review of the psychological literature and an introduction. *Applied psychology*, *65*(3), 437-468.

Haber, S., & Reichel, A. (2005). Identifying performance measures of small ventures–the case of the tourism industry. *Journal of small business management*, *43*(3), 257-286.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*. Springer International Publishing. https://doi.org/10.1007/978-3-030-80519-7

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hair, J.F. , Sarstedt, M. , Ringle, C.M. , Gudergan, S.P. (2018). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage, 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. https://doi.org/10.1007/s11747-014-0403-8

Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2010). *Entrepreneurship*, Edition.

Hmieleski, K. M., & Carr, J. C. (2007). The Relationship Between Entrepreneur Psychological Capital and Well-Being. *Frontiers of Entrepreneurship Research*, *27*(5), 1–12. http://digitalknowledge.babson.edu/fer/vol27/iss5/3

Huang, Z., Ismail, I. A., Ghazali, A. H. A., D'Silva, J. L., Abdullah, H., & Zhang, Z. (2025). The influence of psychological capital on employment expectations of vocational undergraduate students: the chain mediating role of active coping style and educational flow experience. *PloS one*, *20*(3), e0319742.

Hulland, J. S. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal, 20*(4), 195–204.

Juhdi, H., Hamid, R. A., Rizal, A. M., & Juhdi, N. (2015). Psychological Capital and Entrepreneurial Success: a Multiple-Mediated Relationship. *European Journal of Interdisciplinary Studies*, *2*(1), 110. https://doi.org/10.26417/ejis.v2i1.p110-133

Juhdi, N. H., & Juhdi, N. (2013). Entrepreneurial success from positive psychology view. In *4th International Conference on Business and Economic Research, Bandung, March* (pp. 4-5).

Kadiyono, A. L., & Ashriyana Sulistiobudi, R. (2024). Linking psychological capital, technology readiness and entrepreneurial orientation to entrepreneurs' financial performance: a study of women MSMEs in Indonesia. *Cogent Business & Management*, *11*(1), 2413380.

Khan, A., Zeb, I., Zhang, Y., Fazal, S., & Ding, J. (2024). Relationship between psychological capital and mental health at higher education: Role of perceived social support as a mediator. *Heliyon, 10*(8).

Kibler, E., Sirén, C., Maresch, D., Salmivaara, V., & Fink, M. (2024). Aging and entrepreneurs' emotional exhaustion: The role of entrepreneurial strategy, psychological capital, and felt age gap. *Journal of Business Venturing*, *39*(5), 106418.

Lanchimba, C., Welsh, D. H., & Kaswengi, J. (2024). Unveiling the interplay of psychological capital, family business, and gender on firm performance during COVID-19. *International Entrepreneurship and Management Journal*, *20*(2), 1401-1427.

Lechat, T., & Torrès, O. (2016). Exploring negative affect in entrepreneurial activity: Effects on emotional stress and contribution to burnout. In *Emotions and organizational governance* (Vol. 12, pp. 69-99). Emerald Group Publishing Limited.

Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, *33*(1), 76-103.

Lorenz, T., Beer, C., Pütz, J., & Heinitz, K. (2016). Measuring psychological capital: Construction and validation of the compound PsyCap scale (CPC-12). *PloS one*, *11*(4), e0152892.

Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of management*, *33*(3), 321-349.

Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior, 23*(6), 695-706.

Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics, 33*(2): 143-160.

Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological Capital: An Evidence-Based Positive Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 339–366. https://doi.org/10.1146/annurev-orgpsych-032516-113324

Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The de- velopment and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly, 21*, 41–67. doi: 10.1002/hrdq.20034

Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology, 60*, 541–572. doi: 10.1111/j.1744-6570.2007.00083.x

Luthans, F., Luthans, K., & Luthans, B. (2004). Positive psychological capital: Going beyond human and social capital. *Business Horizons, 47*(1), 45–50.

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological Capital : Developing the Human*. Oxford University Press.

Mahfud, T., Triyono, M. B., Sudira, P., & Mulyani, Y. (2020). The influence of social capital and entrepreneurial attitude orientation on entrepreneurial intentions: the mediating role of psychological capital. *European Research on Management and Business Economics*, *26*(1), 33-39.

Maslach, C. and Jackson, S.E. (1981), The measurement of experienced burnout. J. Organiz. Behav., 2: 99-113. https://doi.org/10.1002/job.4030020205

Malach-Pines, A. (2005). The Burnout Measure, Short Version. *International Journal of Stress Management, 12*(1), 78–88. https://doi.org/10.1037/1072-5245.12.1.78

Malak, S. A., Khoso, I., & Jariko, M. A. (2022). Investigating the Nexus of Psychological Capital With Entrepreneurial Success: The Mediating Role of Burnout _. *IBT Journal of Business Studies (JBS)*, *18*(2).

Malak, S. A., & Qassim, A. A. (2025). Unpacking the interplay between psychological capital and wellbeing in entrepreneurs: the mediating role of burnout through conservation of resources theory. *Frontiers in Psychology*, *16*, 1590554.

Malak, S. A., Raza, A., & Jariko, M. A. (2025). Entrepreneurs' psychological capital as a mediator: a broaden-and-build perspective on burnout and psychological well-being. *BMC psychology*, *13*(1), 1179.

Manzano-García, G., & Ayala, J. C. (2017). Relationship between psychological capital and psychological well-being of direct support staff of specialist autism services. The mediator role of burnout. *Frontiers in Psychology*, *8*(DEC), 1–12. https://doi.org/10.3389/fpsyg.2017.02277

Margaça, C., García, J. C. S., & Sánchez, B. H. (2023). Psychological capital and entrepreneurship: A systematic literature review of a growing research agenda. *Intangible Capital*, *19*(2), 276-295.

Naik, B.A. (2012). Entrepreneurial role stress among women working in mahila bachat gat (Women self-help group). *Golden Research Thoughts, 1*(7), 1-10.

Newman, A., Schwarz, S., & Borgia, D. (2014). How does microfinance enhance entrepreneurial outcomes in emerging economies? The mediating mechanisms of psychological and social capital. *International Small Business Journal*, *32*(2), 158-179. doi: 10.1177/0266242613485611

Niu, X. R. (2023). The relationship between psychological capital, entrepreneurial ability, and entrepreneurial performance of digital entrepreneurs. *International Journal of Science and Business*, *23*(1), 106-119.

Obschonka, M., Pavez, I., Kautonen, T., Kibler, E., Salmela-Aro, K., & Wincent, J. (2023). Job burnout and work engagement in entrepreneurs: How the psychological utility of entrepreneurship drives healthy engagement. *Journal of Business Venturing*, *38*(2), 106272.

Omrane, A., Kammoun, A., & Seaman, C. (2018). Entrepreneurial Burnout: Causes, Consequences and Way Out. *FIIB Business Review*, 7(1), 28–42. https://doi.org/10.1177/2319714518767805

Paul, M. T., & Devi, U. (2018). Exploring the Relationship Between Psychological Capital and Entrepreneurial Success. *International Journal of Pure and Applied Mathematics.*, *119*(18), 2987–3000.

Peng, X., Ma, J., Chen, Y., Han, Y., Zhou, H., Gong, A., ... & Zeng, Q. (2025). The moderating effect of psychological capital on the relationship between nurses' perceived workplace bullying and emotional exhaustion: a cross-sectional study. *BMC nursing*, *24*(1), 103.

Pines, A., & Aronson, E. (1988). *Career burnout: Causes and cures*. New York: Free Press.

Qudus, A., Mazhar, M., Tabassum, M. F., & Farhan, M. (2022). The Role of Psychological Factors on Entrepreneurial Intentions among Business Students. *Journal of Behavioral Sciences*, *32*(1), 2022.

Ringle, C.M. , Sarstedt, M. , Straub, D.W. (2012). Editor's comments: a critical look at the use of PLS-SEM in *MIS Quarterly*. *MIS Q. 36*, iii–xiv .

Ringle, C. M., Wende, S., & Becker, J. M. (2024). SmartPLS 4. SmartPLS, Bönningstedt. *available at: Link to the cited article.(accessed 29 Nov. 2025)*.

Salami, S.O. (2011). Job stress and burnout among lecturers: Personality and social support as moderators. *Asian Social Science*, *7*(5), 110-117.

Saraf, P. (2019). Investing in Better Cognitive and Behavioral Skills for Small Medium Enterprise Entrepreneurs to Thrive in Conflict-Affected Areas of Pakistan. In *World Bank, Washington, DC*.

Schaufeli, W. B. (2017). Applying the Job Demands-Resources model: A 'how to'guide to measuring and tackling work engagement and burnout. *Organizational dynamics*, *46*(2), 120-132.

Schaufeli, W. B., & Taris, T. W. (2013). A critical review of the job demands-resources model: Implications for improving work and health. *Bridging occupational, organizational and public health: A transdisciplinary approach*, 43-68.

Sheehan, A., & St-Jean, E. (2014). La santé des entrepreneurs : une scoping study. *Présenté au 12ème congrès international francophone en entrepreneuriat et PME, Agadir*: Association internationale de recherche en entrepreneuriat et PME.

Shepherd, D.A., Patzelt, H. (2017). Researching entrepreneurships' role in sustainable development. In: *Trailblazing in Entrepreneurship*. Springer, pp. 149–179.

Soomro, B. A., Shah, N., & Anwar, S. (2018). Determining the impact of entrepreneurial adversity and psychological capital on entrepreneurial resilience among entrepreneurs of Pakistan. *Journal of Asia Entrepreneurship and Sustainability*, *14*(2), 95-116.

Stephan, U. (2018). Entrepreneurs' mental health and well-being: A review and research Agenda. *Academy of Management Learning and Education*, *17*(3), 290–322. https://doi.org/10.5465/amp.2017.0001

Uy, M. A., Foo, M. D., & Song, Z. (2013). Joint effects of prior start-up experience and coping strategies on entrepreneurs'

psychological well-being. *Journal of Business Venturing*, *28*(5), 583-597. doi: 10.1016/j.jbusvent.2012. 04.003

Welter, F., & Baker, T. (2021). Moving contexts onto new roads: Clues from other disciplines. *Entrepreneurship Theory and Practice*, *45*(5), 1154-1175.

Wincent, J., Örtqvist, D., & Drnovsek, M. (2008). The entrepreneur's role stressors and proclivity for a venture withdrawal. *Scandinavian Journal of Management*, *24*(3), 232-246.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International journal of stress management*, *14*(2), 121.

Xue, B., Wang, S., Chen, D., Hu, Z., Feng, Y., & Luo, H. (2024). Moral distress, psychological capital, and burnout in registered nurses. *Nursing ethics*, *31*(2-3), 388-400.

Zambrano-Chumo, L., & Guevara, R. (2024). Psychological capital and turnover intention: the mediating role of burnout among healthcare professionals. *International journal of environmental research and public health*, *21*(2), 185.