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BURNOUT AND PSYCHOLOGICAL PERFORMANCE IN FAST-FOOD SMALL BUSINESS ENTREPRENEURS: THE MEDIATING ROLE OF PSYCHOLOGICAL CAPITAL

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Abstract

Entrepreneurs in developing economies often face long hours, high pressure, and limited resources, heightening burnout risk. This study examines how burnout influences psychological performance and assesses the mediating role of Psychological Capital (PsyCap) among fast-food small business entrepreneurs in Sindh, Pakistan. A cross-sectional survey of 316 entrepreneurs from Karachi, Hyderabad, Jamshoro, Dadu, Sukkur, and Larkana used validated scales for burnout, PsyCap, and psychological performance (satisfaction, gratitude, and preparedness) rated on a seven-point Likert scale. Simple random sampling ensured representativeness. Using Partial Least Squares Structural Equation Modelling (PLS-SEM), burnout showed a negative effect on psychological performance ($\beta = -0.157$, $t = 2.830$, $p < 0.05$) and PsyCap ($\beta = -0.143$, $t = 2.802$, $p < 0.05$). PsyCap also significantly mediated the burnout–performance link ($\beta = -0.042$, $t = 2.456$, $p < 0.05$). The findings align with the Job Demands–Resources model and highlight the value of psychological resources.

Introduction

Small business entrepreneurs contribute significantly by innovation, providing jobs and satisfying market needs and wants through products and services, particularly in developing countries where socio-economic challenges persist. Pakistan continues to face multiple crises, including low economic growth, high unemployment, inflation, weak exports, and widespread poverty. Entrepreneurship boosts economic growth and fosters individuals' well-being. Entrepreneurial activities have a substantial influence on the economy by creating employment, fostering micro, small, and medium-sized enterprises (MSMEs), improving GDP and meeting society's needs by providing goods and services (UNICEF, 2021). These small business activities are triggered through entrepreneurial processes, which are key to achieving the Sustainable Development Goals (SDGs). Despite great potential for businesses, Pakistan is far behind other countries on global entrepreneurship indicators, ranking 109th out of 137 countries on the Global Entrepreneurship Index (GEI, 2019). According to the Global Entrepreneurship Monitor (GEM, 2012), Pakistan has lower entrepreneurial activity compared to other low-income countries in the region, with a larger share of necessity-driven

businesses than opportunity-driven ones. These facts underline the need for immediate actions to promote entrepreneurial activities for empowering youth, improving individuals' well-being and achieving economic growth.

In resource-constrained regions, such as Sindh, Pakistan, specifically in major business hubs like Karachi, Sukkur, Larkana, Jamshoro, Hyderabad, and Dadu, small business owners in the fast food sector face various challenges, including weak infrastructure, limited financial support, lack of institutional support, and market uncertainties. These circumstances compel entrepreneurs to face heavy job demands, including long working hours, huge tasks, and emotional exhaustion, which leads to the risk of burnout. Burnout refers to the psychological dysfunction characterized by a sense of personal detachment, emotional fatigue and decline in achieving one's success, resulting from chronic exposure to stressors (Maslach, 1982; Boyd & Gumpert, 1983). This condition not only harms entrepreneurs' physical and emotional health but also impairs cognitive functioning, weakens decision-making abilities, and threatens the long-term sustainability of their businesses (Naik, 2012; Omrane et al., 2018). The study of Dwyer et al. (2025) also highlighted the importance of a psychological perspective among the self-employed, indicating that faith-driven resources are positively associated with determination in achieving goals by improving psychological well-being and health.

Traditionally, entrepreneurial success has been measured through financial outcomes; however, researchers increasingly emphasize its psychological dimension, which reflects non-financial outcomes essential for long-term well-being and sustainability. This study conceptualizes psychological performance as consisting of three key elements: satisfaction, gratitude, and preparedness, which reflect how entrepreneurs evaluate their achievements, experience positive emotions from their efforts, and mentally prepare to face future challenges. These psychological outcomes are especially relevant for fast-food entrepreneurs in Sindh who operate in high-stress and resource-constrained environments.

Psychological Capital (PsyCap), introduced by Luthans et al. (2007), is a positive psychological state characterized by "Hope, Efficacy, Resilience, and Optimism (HERO)". PsyCap equips entrepreneurs with personal resources that enable them to overcome obstacles, adapt to uncertainty, recover from setbacks, and sustain performance despite high job demands (Gohel, 2012; Baron et al., 2016; Hmieleski & Carr, 2007). Drawing on the "Job Demands-Resources (JD-R) model", PsyCap is considered a critical buffering mechanism that mitigates the adverse effects of burnout, allowing entrepreneurs to maintain their mental well-being and psychological performance even under severe stress.

Although previous research has examined the association between burnout, psychological resources, and work outcomes in employee populations, limited empirical evidence explores these relationships among entrepreneurs, particularly in the context of developing countries like Pakistan. There is a notable research gap in understanding how burnout affects non-financial psychological performance outcomes and the extent to which PsyCap mediates this relationship among small business owners in Sindh's fast-food sector.

Therefore, this study investigates the relationship between burnout and psychological performance, focusing on the mediating role of Psychological Capital among fast-food small business owners operating in Jamshoro, Hyderabad, Dadu, Karachi, Sukkur, and Larkana. By exploring how PsyCap enables entrepreneurs to maintain satisfaction, gratitude, and preparedness despite high burnout levels, this research contributes to the growing literature on entrepreneurial well-being. It provides context-specific insights for enhancing psychological resilience and sustainable entrepreneurship in Pakistan's fast-food industry.

Underpinning Theoretical Foundation: The Job Demands-Resources (JD-R) Model

The "Job Demands-Resources (JD-R) model" given by Demerouti et al. (2001), provides a comprehensive framework for understanding how workplace characteristics affect individual well-being and performance. The model

classifies working conditions into two broad components: "job demands" and "job resources", which may vary depending on the specific work environment.

Job demands refer to the physical, psychological, social, or organizational aspects of a job that require sustained mental or physical effort, often leading to physiological and psychological costs (Demerouti et al., 2001). For fast food small business owners in cities such as Jamshoro, Hyderabad, Dadu, Karachi, Sukkur, and Larkana, job demands include long working hours, high customer volumes, multitasking, financial pressures, market uncertainty, and lack of institutional support. These constant pressures can deplete an entrepreneur's energy, resulting in emotional exhaustion, stress, and burnout. Burnout manifests as emotional fatigue, a decline in personal accomplishment, and, in severe cases, detachment from the business and customers.

Conversely, job resources are defined as the physical, social, or organizational aspects of work that (a) help achieve goals, (b) reduce the impact of "job demands" and associated costs, or (c) foster personal development and growth (Demerouti et al., 2001). For fast food entrepreneurs, resources may include social support from family and employees, access to financial capital, skill development opportunities, and autonomy in decision-making, and positive customer feedback. These resources can act as protective factors, reducing the likelihood of burnout and maintaining motivation in high-pressure business environments.

According to the revised "JD-R model" (Xanthopoulou et al., 2007), two psychological processes operate simultaneously: the "health impairment process" and the "motivational process". The "health impairment process" refers to the persistent high job demands, such as excessive workload and uncertainty in business operations, draining personal energy and psychological resources. In the long run, this depletion of mental resources causes stress, emotional exhaustion and burnout, which adversely impact physical and psychological health. On the other hand, the" motivational process" describes that having "job resources" such as PsyCap can promote engagement, resilience, and goal attainment. These enable entrepreneurs to remain resilient in the face of challenges and focus on achieving venture goals with devotion.

Under the JD-R framework, PsyCap ("hope, optimism, resilience, self-efficacy") works as a vital personal resource for entrepreneurs. In the context of fast food business owners in Sindh, PsyCap empowers individuals to withstand high job demands, navigate operational challenges, and recover from setbacks such as financial losses or operational difficulties, while maintaining positive psychological functioning in uncertain and risky environments. Thus, PsyCap can function as a buffer against the adverse impacts of burnout, thereby fostering psychological performance among entrepreneurs, including satisfaction, gratitude, and preparedness for achieving operational success and growth of business under pressure.

Empirical evidence shows that job demands strongly predict stress and burnout, whereas positive psychological resources mitigate the adverse effects of burnout and improve the positive outcome (Bakker et al., 2005; Schaufeli & Bakker, 2004). Application of the "JD-R model" to this study assists in the theoretical understanding of how fast food business owners experience burnout due to heavy job demands and how PsyCap, as a mediator, works to buffer the adverse effects of burnout and continue psychological performance under stressful and resource-constrained environments, such as Sindh, Pakistan.

Research Gap

Entrepreneurs and small business owners play a significant role in the economic growth of the country. However, starting and running a business involves uncertainties, risks, and mental stress, which negatively affect both the entrepreneur's well-being and the performance of their venture (Hisrich et al., 2010). In Pakistan, the general tendency to avoid risk-taking behavior (Hofstede, 2001) has contributed to low levels of entrepreneurial activity. As a result, most business ventures tend to be necessity-driven rather than opportunity-driven (GEM, 2012; GEI, 2019). Although the government has implemented various initiatives to foster youth entrepreneurship (Hameed

Khan, 2016; Aslam & Hasnu, 2016; Mahmood et al., 2017), the country continues to experience low entrepreneurial engagement, stagnant GDP growth, and rising poverty levels. Existing literature on entrepreneurial contexts in Pakistan has predominantly explored areas such as entrepreneurial intentions, leadership styles, motivations, and mental health concerns, including anxiety and depression (Saraf, 2019; Hussain & Li, 2022; Alam et al., 2019; Soomro et al., 2019). Although some empirical work has examined constructs from positive psychology—such as resilience, psychological well-being, and Psychological Capital (PsyCap) (Sarwar et al., 2021; Soomro et al., 2018; Qudus et al., 2022)—and the stress experienced by entrepreneurs (Arshi et al., 2021), limited evidence exists on the specific impact of burnout on entrepreneurial outcomes. Furthermore, the extent to which PsyCap may buffer the detrimental effects of burnout remains under-investigated. This research gap is particularly pronounced in the resource-constrained province of Sindh, especially in rapidly developing urban centers like Jamshoro, Hyderabad, Dadu, Karachi, Sukkur, and Larkana. In these cities, the growing fast-food industry has led small business owners to operate under significant uncertainty, limited resources, and high work pressure—conditions that increase their vulnerability to burnout and psychological distress.

Moreover, prior research has primarily assessed entrepreneurial success through financial indicators, with limited attention given to non-financial dimensions, particularly psychological performance. Key elements such as satisfaction, gratitude, and preparedness remain underexplored, despite their relevance as essential markers of sustainable entrepreneurial performance in high-pressure environments. This oversight is particularly significant in the context of fast-food small business owners operating within the socio-economic complexities of Sindh. The limited focus on psychological outcomes, combined with a lack of empirical investigation into the interplay between burnout, psychological performance, and Psychological Capital (PsyCap), highlights a critical research gap. Understanding how PsyCap may enhance entrepreneurs' well-being and performance, even in the presence of burnout, is crucial for advancing theory and practice in entrepreneurial research. The present study aims to address this gap by investigating the relationship between burnout and psychological performance, with PsyCap serving as a mediating variable among fast-food small business owners. This research provides empirical insights into an underexplored area, contributing to the literature on entrepreneurial psychological performance in emerging economies. Furthermore, the findings offer valuable implications for policymakers and practitioners, as they can inform the development of targeted interventions aimed at enhancing resilience and psychological strengths among entrepreneurs operating in resource-constrained and high-stress environments.

Literature Review

The critical review of the literature has been made for the present study. This discusses relevant past studies about the variables and relates them to the theoretical underpinning. Based on these hypotheses of the study has been developed along with a framework as illustrated in Figure 1.

Burnout and Psychological Performance

Entrepreneurship, particularly in the fast-food sector, is highly demanding, requiring constant physical effort, long working hours, emotional labour, and rapid decision-making under uncertainty. According to the "Job Demands-Resources (JD-R) model" (Demerouti et al., 2001), high job demands deplete personal energy, leading to strain and eventual burnout. Burnout is conceptualized as a "psychological syndrome" comprising "emotional exhaustion", "depersonalization", and "reduced personal accomplishment" (Leiter, 1988; Pines & Aronson, 1988). Among small business owners, continuous exposure to financial pressures, customer demands, and lack of institutional support can intensify burnout symptoms (Boyd & Gumpert, 1983; Tahar, 2012).

Traditionally, entrepreneurial success has been measured by financial indicators such as profit margins and revenue growth. However, scholars argue that psychological performance—

encompassing non-financial measures like satisfaction, gratitude, and preparedness—provides a more holistic understanding of entrepreneurial success (Sisodia et al., 2007; Tang et al., 2010). Burnout diminishes entrepreneurs' ability to feel accomplished, maintain a positive outlook, and stay mentally prepared for future challenges (Cooper & Artz, 1995; Weiner, 1985). The JD-R model's "health impairment" pathway predicts that when "job demands" exceed available resources, entrepreneurs experience lower psychological performance, leading to dissatisfaction, reduced gratitude, and a lack of readiness to seize new opportunities.

Hypothesis 1 (H1): Burnout is negatively associated with psychological performance among fast food small business owners in Sindh, Pakistan.

Burnout and Psychological Capital (PsyCap)

The "JD-R model" highlights that "job resources"—including personal psychological resources—can mitigate the adverse effects of high job demands (Schaufeli & Taris, 2014). "Psychological Capital (PsyCap) refers to an individual's positive psychological state, characterized by hope, efficacy, resilience, and optimism" (Luthans et al., 2007). Entrepreneurs with high PsyCap possess greater confidence in their abilities, can reframe challenges positively, recover quickly from setbacks, and maintain optimistic outlooks despite adversity.

The investigations have confirmed that higher PsyCap is related to lower levels of stress and burnout (Baron et al., 2016; Hmieleski & Carr, 2007). Similarly, research by Manzano-García & Ayala (2017) and Malekitabar et al. (2017) revealed that individuals with strong PsyCap not only experience reduced burnout but also demonstrate improved psychological well-being. It is also evidenced that women entrepreneurs achieve greater success when higher levels of psychological capital are coupled with strong technological readiness (Kadiyono & Sulistiobudi, 2024). In fast-food businesses across Sindh, where owners face unpredictable market conditions, limited resources, and intense workloads, insufficient psychological resources may exacerbate burnout symptoms. Conversely, high PsyCap serves as a buffer, enabling entrepreneurs to cope with job demands more effectively.

Hypothesis 2 (H2): Burnout is negatively associated with Psychological Capital among fast food small business owners in Sindh, Pakistan.

Psychological Capital as a Mediator between Burnout and Psychological Performance

While burnout is known to impair psychological well-being, PsyCap may act as a mediating mechanism that reduces the detrimental effects of burnout on psychological performance outcomes. A study of Malak et al. (2022) witnessed that augmented PsyCap mitigated burnout and supported entrepreneurs in achieving better business performance and success. The other research also highlights the role of PsyCap by evidencing that it influences employees' work performance, enhancing their ability to achieve desired outcomes and perform effectively (Dev et al., 2025). An empirical study also witnessed that PsyCap safeguards from the adverse impact of burnout on entrepreneurs (Malak et al., 2025). PsyCap enhances cognitive and emotional resilience, allowing entrepreneurs to sustain positive mental states despite high job demands (Avey et al., 2010; Luthans et al., 2007). Through hope, entrepreneurs can identify alternative paths to goals; efficacy strengthens their belief in overcoming obstacles; resilience helps them recover from failures; and optimism sustains motivation and forward-looking attitudes (Paul & Devi, 2018).

According to the "motivational process" of the "JD-R model", personal resources such as PsyCap not only counteract exhaustion but also promote engagement and non-financial success indicators, including satisfaction, gratitude, and preparedness (Schaufeli & Bakker, 2004; Gorgievski et al., 2011). Empirical evidence suggests that PsyCap positively influences entrepreneurial success in both financial and psychological terms (H. Juhdi et al., 2015; N. H. N. Juhdi & Juhdi, 2013), thereby mediating the adverse relationship between burnout and psychological performance. Psychological Capital (PsyCap) contributes to the enhancement of the entrepreneurial mindset, leading to improved performance and stronger psychological functioning (Bado et al., 2025). For fast-food business owners in Sindh, strong

PsyCap can help them maintain mental well-being and achieve sustainable performance despite facing high stress and uncertainty.

Hypothesis 3 (H3): Psychological Capital mediates the relationship between burnout and psychological performance among fast food small business owners in Sindh, Pakistan.

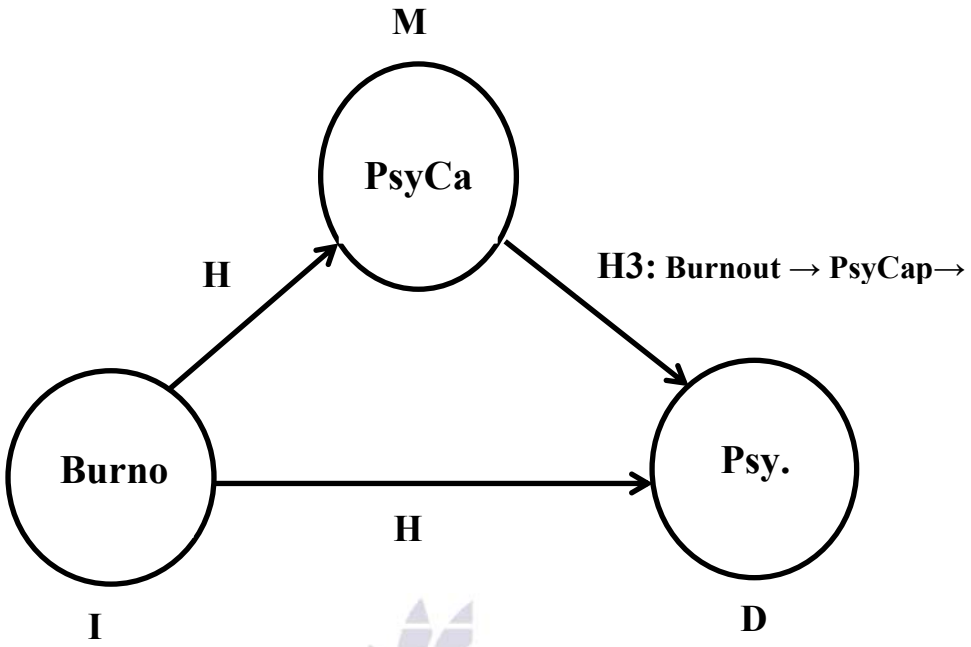

Figure 1: Framework and hypothesized Paths of the study
Source: Authors' own work

Research Methodology

Research Design and Approach

This quantitatively designed research has used a cross-sectional survey method to examine the relationships between burnout, psychological performance and psychological capital (PsyCap), among fast food small business owners in Sindh, Pakistan.

Sampling Technique and Procedure

The study's target sample included the fast food small business owners from the major cities of Sindh, comprising Karachi, Hyderabad, Sukkur, Jamshoro, Larkana, and Dadu. The reason for selecting these locations was the rapidly growing fast-food business activities and diverse entrepreneurial settings. A "simple random sampling technique" has been used to ensure an equal chance of business owners' selection in the representative sample from the accessible population. A sample of 316 respondents participated in the survey, which is above the required sample size of the study.

Data Collection Instrument and Procedure

The data were collected through a survey instrument with the validated scale items adopted from relevant previous studies. The questionnaire consisted of 37 items, including 10 items of burnout (Malach-Pines, 2005), 12 items of PsyCap (Avey et al., 2011), and 15 items of Psychological Performance (Juhdi et al., 2015; Paul and Devi, 2018). Data were collected using both physical distribution of printed questionnaires through in-person visits and online dissemination via email and WhatsApp links.

Data Analysis and Results

The demographic data analysis of fast food small business owners in Table 1 shows that

97.15% were male and 2.85% were female respondents. Besides, different characteristics of sample respondents, such as age group, marital status, and their level of education, are also reported in the table. Table 2 reveals the mean of the items of the survey questionnaire. In cross-sectional data through a survey, there is a potential risk of "Common Method Bias (CMB)". To assess the CMB, the authors have recommended collinearity assessment through VIF (variance Inflation factor) check and through Harman's Single Factor Test. Table 3 indicates that the VIF values of all indicators are below 3; hence, no collinearity issue exists in our Model. Furthermore, the table also reveals Harman's single factor score, with 24.127% variance of the total variance explained, which is below the limit of 50%. This indicates that no data error persists and confirms the robustness and integrity of the study Model.

Table 1: Demographics of Fast Food Small Business Owners

Characteristics		Frequency	(%)
Gender			
	Male	307	97.15
	Female	09	2.85
Age Group			
	18-30	95	30.06
	31-40	109	34.49
	41-50	101	31.96
	Above 50	11	3.48
Marital Status			
	Single	98	31.01
	Married	218	68.99
Qualification			
	Matric & Intermediate	68	21.52
	Graduates	197	62.34
	Masters & above	51	16.14

Note. N = 316
Sources: Authors' own work

Table 2: Items Mean Statistics

Name	Mean	Standard deviation	Excess kurtosis	Skewness	Cramér-von Mises p value
Hope1	5.326	1.177	-0.771	-0.187	0
Hope2	5.139	1.174	-0.478	-0.261	0
Hope3	5.500	1.110	-0.324	-0.496	0
Opt.1	5.611	1.154	0.594	-0.762	0
Opt.2	5.389	1.092	-0.132	-0.351	0
Opt.3	5.386	1.200	0.172	-0.580	0
Res.1	5.320	1.178	-0.758	-0.198	0
Res.2	5.247	1.226	-0.608	-0.273	0
Res.3	5.342	1.184	-0.846	-0.159	0
SE1	5.320	1.170	-0.767	-0.215	0
SE2	5.380	1.129	-0.503	-0.269	0
SE3	5.335	1.131	-0.577	-0.226	0

Sat.1	5.345	0.964	0.461	-0.439	0
Sat.2	5.269	1.007	-1.130	0.151	0
Sat.3	5.411	0.929	-0.759	0.046	0
Sat.4	5.494	0.873	-0.555	-0.224	0
Sat.5	5.509	0.877	-0.692	-0.001	0
Grat.1	5.642	0.905	-0.768	-0.134	0
Grat.2	5.665	1.026	-0.255	-0.529	0
Grat.4	5.462	1.173	-0.842	-0.358	0
Grat.5	5.570	1.138	1.075	-1.001	0
Prep.1	5.693	1.054	-0.441	-0.533	0
Prep.2	5.684	1.001	-0.263	-0.513	0
Prep.3	5.608	1.002	-0.356	-0.497	0
Prep.4	5.519	0.943	-0.380	-0.340	0
BO1	4.209	0.800	-0.599	-0.022	0
BO2	4.184	0.856	0.040	0.217	0
BO3	4.111	0.840	-0.302	0.045	0
BO4	4.038	0.791	-0.155	0.125	0
BO5	4.136	0.902	0.320	0.196	0
BO6	4.006	0.823	0.233	0.159	0
BO7	4.066	0.826	-0.103	0.079	0
BO8	3.918	0.827	0.129	0.155	0
BO9	3.987	0.846	0.343	-0.165	0
BO10	4.108	0.804	-0.411	0.132	0

Sources: Authors' own work

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Table 3: Common Method Bias (CMB) Assessment

VIF		Total Variance Explained					
		Initial Eigenvalues			Extraction Sums of Squared Loadings		
Items	VIF	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Hope1	1.36	8.690	24.827	24.827	8.690	24.827	24.827
Hope2	1.396	5.115	14.613	39.441			
Hope3	1.365	4.440	12.685	52.126			
Opt.1	1.365	1.798	5.136	57.262			
Opt.2	1.37	1.281	3.659	60.921			
Opt.3	1.314	1.171	3.347	64.268			
Res.1	1.658	1.043	2.980	67.248			
Res.2	1.548	0.868	2.481	69.729			
Res.3	1.325	0.808	2.308	72.037			
SE1	1.567	0.769	2.198	74.234			
SE2	1.652	0.728	2.080	76.314			
SE3	1.379	0.701	2.003	78.317			
Sat.1	2.457	0.652	1.864	80.181			

Sat.2	2.754	0.599	1.710	81.891
Sat.3	1.799	0.575	1.644	83.535
Sat.4	1.904	0.520	1.485	85.021
Sat.5	1.475	0.471	1.347	86.368
Grat.1	1.798	0.470	1.342	87.709
Grat.2	1.883	0.437	1.250	88.959
Grat.4	2.436	0.420	1.201	90.160
Grat.5	2.161	0.405	1.158	91.319
Prep.1	1.464	0.373	1.065	92.384
Prep.2	2.793	0.331	0.945	93.329
Prep.3	2.218	0.313	0.894	94.223
Prep.4	2.822	0.305	0.873	95.096
BO1	1.973	0.282	0.807	95.903
BO2	1.951	0.253	0.723	96.626
BO3	2.348	0.242	0.690	97.316
BO4	2.386	0.213	0.608	97.924
BO5	1.903	0.196	0.560	98.484
BO6	2.556	0.156	0.445	98.929
BO7	1.988	0.145	0.414	99.342
BO8	2.033	0.125	0.357	99.699
BO9	1.765	0.063	0.179	99.878
BO10	2.325	0.043	0.122	100.000

Note. Extraction Method: Principal Component Analysis
Sources: Authors' own work

Measurement Model Assessment

"Partial Least Squares Structural Equation Modelling (PLS-SEM)" has been used in SmartPLS version 4 (Ringle et al., 2024). The study employed "embedded two-stage approach" proposed by Ringle et al. (2012); which involves checking the measurement model lower order constructs (LOCs) for reliability and validity and creating latent variable scores in the first stage, and then using latent variable scores as manifest indicators for higher order constructs (HOCs) in stage two (Hair et al., 2018). Table 4 (also see Figure 2) reports that all items have loadings above the required limit of 0.70, and "Cronbach's alpha" and "composite reliability" values are also greater than 0.70, which confirms the reliability of the outer model according to the authors' criteria (Hair et al., 2021; Hulland, 1999). Two items of Gratitude (Grat . 3 and Grat . 6) were deleted because they did not meet the reliability criteria. "Convergent validity" shows how well a construct explains its indicators' variance, measured by Average Variance Extracted (AVE). An AVE value of 0.50 or above suggests that the construct accounts for at least half of the variance (Hair et al., 2021). Table 4 shows that AVE values are above 0.50, which confirms the "convergent validity" of the model.

Table 4: Measurement Model Assessment: Lower Order Constructs (LOCs)

Lower Order Constructs (LOCs)					
Items	Loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance

					extracted (AVE)
BO1	0.717	0.915	0.920	0.929	0.565
BO2	0.723				
BO3	0.768				
BO4	0.792				
BO5	0.725				
BO6	0.773				
BO7	0.758				
BO8	0.753				
BO9	0.732				
BO10	0.774				
Grat.1	0.758	0.821	0.825	0.882	0.651
Grat.2	0.822				
Grat.4	0.855				
Grat.5	0.789				
Hope1	0.877	0.704	0.800	0.827	0.617
Hope2	0.740				
Hope3	0.730				
Opt.1	0.769	0.700	0.735	0.826	0.615
Opt.2	0.854				
Opt.3	0.723				
Prep.1	0.722	0.858	0.864	0.905	0.705
Prep.2	0.893				
Prep.3	0.837				
Prep.4	0.895				
Res.1	0.877	0.723	0.747	0.844	0.644
Res.2	0.783				
Res.3	0.742				
SE1	0.852	0.749	0.779	0.855	0.664
SE2	0.860				
SE3	0.726				
Sat.1	0.840	0.863	0.868	0.902	0.648
Sat.2	0.874				
Sat.3	0.781				
Sat.4	0.810				
Sat.5	0.710				

Sources: Authors' own work

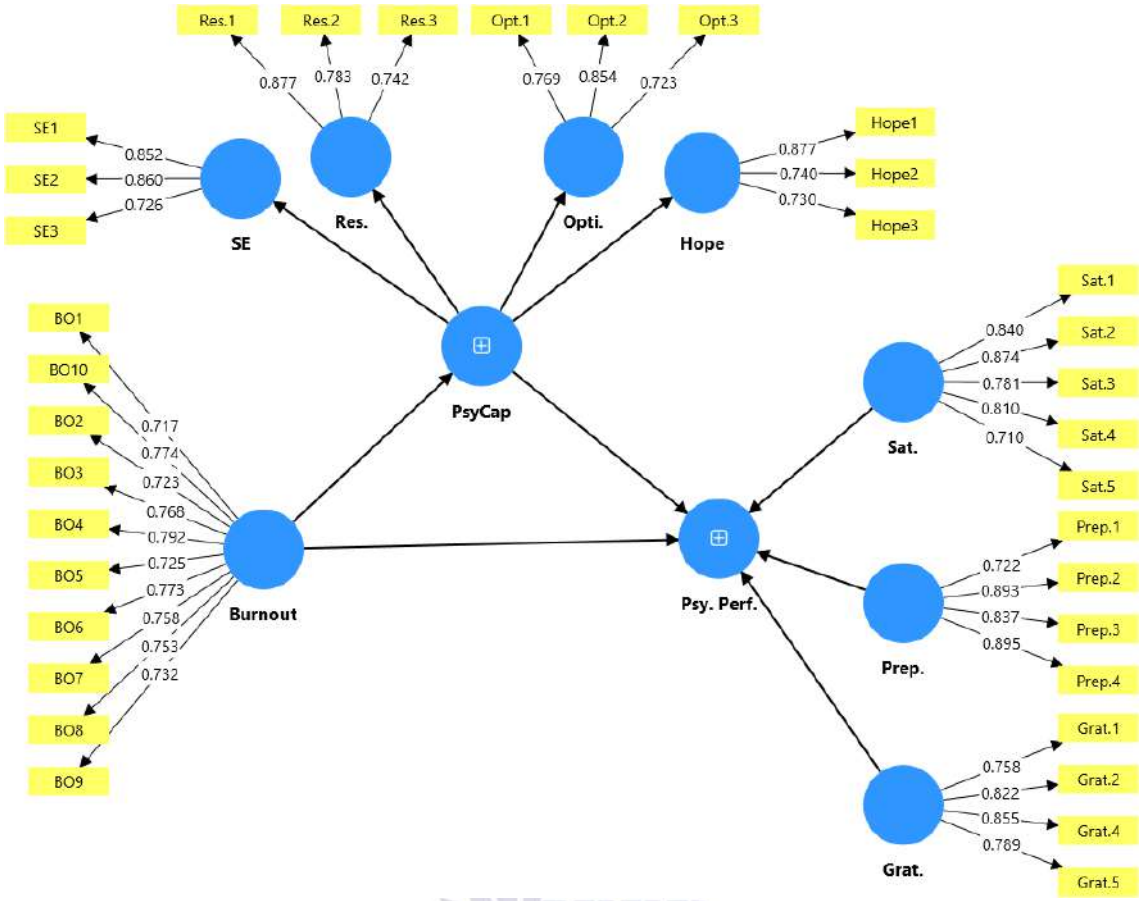

Figure 2: First stage: Evaluation of the measurement model
Source: Authors' own work.

Discriminant validity indicates how well a construct can be distinguished from the other constructs within the model (Chin, 2010; Hair, Risher et al., 2019). It is commonly assessed using the HTMT ratio and the Fornell-Larcker criterion (Hair et al., 2017). HTMT ratio (Henseler et al., 2015) is a preferred method to assess "discriminant validity", with acceptable values below 0.85 or 0.90 (Hair et al., 2021). Table 5 shows all values within the threshold, confirming no "discriminant validity" issues. "Fornell and Larcker Criterion" results (Table 5) indicate that the diagonal italicized bold values, representing squared AVE, are higher than the correlations of other constructs below them and confirm the establishment of discriminant validity.

Table 5: Discriminant Validity Assessment

Heterotrait-monotrait ratio (HTMT) - Matrix								
Items	Burnout	Grat.	Hope	Opti.	Prep.	Res.	SE	Sat.
Burnout								
Grat.	0.199							
Hope	0.226	0.412						
Opti.	0.175	0.240	0.856					
Prep.	0.168	0.748	0.397	0.222				
Res.	0.116	0.313	0.850	0.825	0.331			
SE	0.127	0.307	0.838	0.886	0.338	0.885		
Sat.	0.203	0.778	0.395	0.239	0.604	0.208	0.288	

Fornell-Larcker criterion								
Items	Burnout	Grat.	Hope	Opti.	Prep.	Res.	SE	Sat.
Burnout	***0.752***							
Grat.	-0.178	***0.807***						
Hope	-0.181	0.313	***0.785***					
Opti.	-0.141	0.172	0.622	***0.784***				
Prep.	-0.152	0.632	0.294	0.062	***0.840***			
Res.	-0.080	0.247	0.764	0.613	0.256	***0.803***		
SE	-0.094	0.245	0.756	0.691	0.269	0.725	***0.815***	
Sat.	-0.183	0.659	0.301	0.120	0.517	0.155	0.229	***0.805***

Note. Bold italic values in diagonal are squared AVE
Sources: Authors' own work

The model includes HOCs: PsyCap ("hope, optimism, resilience, self-efficacy") and Psychological Performance (satisfaction, gratitude, preparedness). Latent scores from lower-order constructs are used as manifest variables in the second stage, with HOCs evaluated similarly to lower-order constructs (Chin, 2010). Table 6 reports that PsyCap reflective higher order indicators ("hope, optimism, resilience, self-efficacy") have loadings above 0.70, and Cronbach's alpha as well as "composite reliability" values are also higher than the required value of 0.70 (see Figure 3), which ascertains the reliability of this study, as per guidelines (Hair et al., 2021). In addition, this also confirms the "convergent validity" as AVE is greater than 0.50. There are no "discriminant validity" issues in the model, as HTMT values are below the threshold of 0.85 and 0.90 (Henseler et al., 2015), and the square of AVE, represented as diagonal italicised values in the Fornell-Larcker criterion, is higher than the correlated values of the other constructs beneath them (see Table 6).

Psychological performance is the formative HOC in our study model, consisting of satisfaction, gratitude, and preparedness as its manifest indicators. In line with the authors' suggestions, we assessed the significance of outer weights along with VIF through a bootstrapping procedure (Hair, Risher et al., 2019). Results in Table 7 reveal that outer weights of gratitude and preparedness are significant, but satisfaction has insignificant outer weights. However, satisfaction was retained due to its significant outer loadings, as per the authors' guidelines (Hair et al., 2021). The VIF values are also below the threshold of 3, which further confirms the significance of the indicators.

Table 6: PsyCap (Reflective) Higher Order Construct (HOC) Evaluation

Items	Loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Hope	0.917	0.908	0.967	0.934	0.781
Opti.	0.782				
Res.	0.906				
SE	0.923				

Discriminant Validity: Heterotrait-monotrait ratio (HTMT) – Matrix		
Constructs	Burnout	PsyCap

Burnout	
PsyCap	0.147

Discriminant Validity: Fornell-Larcker criterion

Constructs	Burnout	PsyCap
Burnout	***1.000***	
PsyCap	-0.143	***0.884***

Note. Bold italic values in diagonal are squared AVE
Sources: Authors' own work

Table 7: Psychological Performance (Formative) Higher Order Construct (HOC) Evaluation

Outer Weights Significance				Loadings Significance			
Construct Items	Weights	T-values	P values	Loadings	T-values	P values	VIF
Grat. → Psy. Perf.	0.466	2.096	0.036	0.913	13.579	0.000	2.222
Prep. → Psy. Perf.	0.381	2.052	0.040	0.837	9.257	0.000	1.716
Sat. → Psy. Perf.	0.313	1.527	0.127	0.817	8.929	0.000	1.821

Sources: Authors' own work

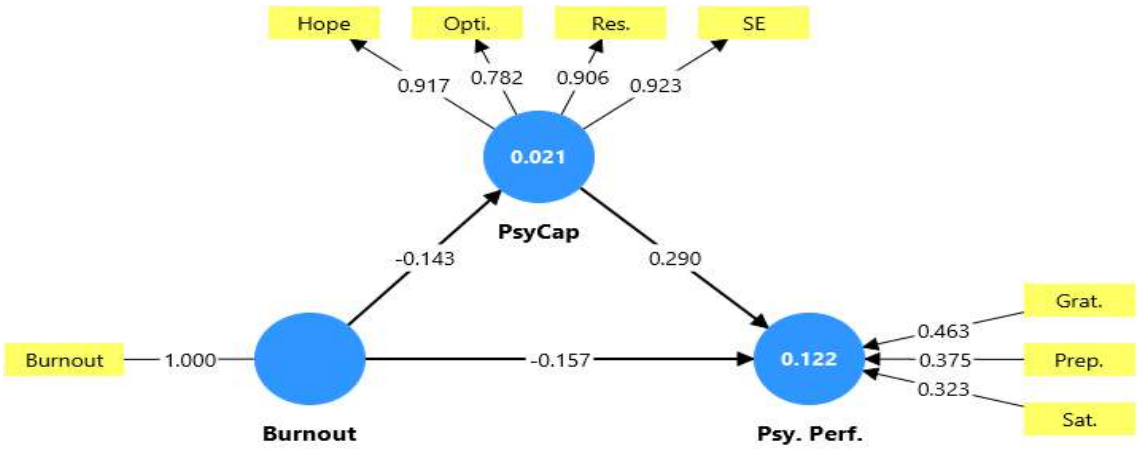

Figure 3: Second stage: Evaluation of the measurement model
Source: Authors' own work

Structural Model Assessment

The study's structural path model was evaluated using PLS-SEM bootstrapping to test path coefficient significance, collinearity, "explanatory power (R^2)", "predictive relevance (Q^2)", and "effect size (f^2)" as recommended by Hair et al. (2021). Results in Table 8 illustrate that burnout has a significant negative correlation (β = -0.157, t = 2.830, & p< 0.05) with the psychological performance of the small business owners in the fast food industry. The table also reports the R-square, Q-square predict and f-square values.

Table 8: Evaluation of Path Model

Path coefficients, STDEV, T values, p values, Confidence Interval and VIF							
Paths	Original sample (O)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	2.5%	97.5 %	VIF
Burnout → Psy. Perf.	-0.157	0.055	2.830	0.005	-0.267	-0.048	1.021
Burnout → PsyCap	-0.143	0.051	2.802	0.005	-0.246	-0.042	1.000
PsyCap → Psy. Perf.	0.290	0.056	5.218	0.000	0.184	0.403	1.021

R-square, f-square and Q-square Predict			
Constructs	R-square	R-square adjusted	Q^2predict
Psy. Perf.	0.122	0.116	0.025
PsyCap	0.021	0.017	0.022

Paths	f-square
Burnout → Psy. Perf.	0.028
Burnout → PsyCap	0.021
PsyCap → Psy. Perf.	0.094

Sources: Authors' own work

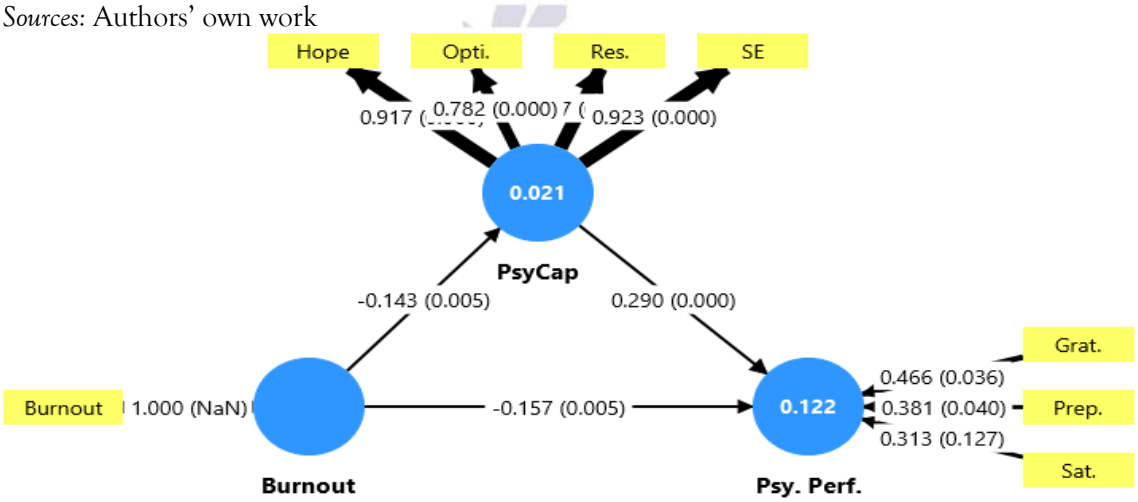

Figure 4: Final path model: Assessment of the structural model
Source: Authors' own work

Mediation Analysis

PsyCap is the mediating variable in our model. To check the mediating effect, the indirect effect was assessed through bootstrapping. Table 9 shows that the total effect of burnout on psychological performance is greater (β = -0.198) than the direct effect of burnout on psychological performance (β = -0.157). This suggests that there is also an indirect effect of burnout on psychological performance through mediator PsyCap (β = -0.042) which is also significant (t = 2.456, & p< 0.05).

Table 9: Assessing PsyCap as a Mediator

Effect Type	Links	β	SD	T-Values	P-Values
Total	Burnout → Psy.Perf.	-0.198	0.057	3.510	0.000
Direct	Burnout → Psy.Perf.	-0.157	0.055	2.830	0.005
Indirect	Burnout → PsyCap → Psy.Perf.	-0.042	0.017	2.456	0.014

Sources: Authors' own work

Discussion

The results of this study indicate that burnout has a significant negative association with psychological performance (β = -0.157, t = 2.830, p < 0.05) among fast food small business owners in Sindh, Pakistan, thereby supporting Hypothesis 1 of this research. This is consistent with prior studies highlighting that prolonged exposure to excessive "job demands" diminishes entrepreneurs' mental and emotional resources, ultimately leading to reduced psychological well-being and performance outcomes (Leiter, 1988; Pines & Aronson, 1988). As outlined in the literature review, burnout undermines entrepreneurs' ability to maintain satisfaction, gratitude, and preparedness, key components of psychological performance essential for sustaining entrepreneurial ventures (Sisodia et al., 2007; Tang et al., 2010).

From the perspective of the "Job Demands-Resources (JD-R) model" (Demerouti et al., 2001), this negative relationship can be explained by the health impairment process, where high "job demands"—such as long working hours, financial uncertainty, and constant pressure to meet customer expectations—deplete psychological energy. In the fast food sector, where owners often work extended hours with minimal support, these demands outweigh available resources, leading to emotional exhaustion and reduced positive psychological functioning. The results of this study empirically validate the JD-R assumption that excessive demands, when not balanced with sufficient resources, impair cognitive and emotional well-being, ultimately reducing an entrepreneur's ability to remain mentally prepared, satisfied, and optimistic about future opportunities.

Furthermore, these findings directly address the research gap highlighted in this study, where limited empirical evidence existed on how burnout affects non-financial performance outcomes of entrepreneurs in developing regions like Sindh. Prior research in Pakistan has predominantly focused on financial success indicators or general entrepreneurial intentions, overlooking the psychological dimensions of entrepreneurial performance (Saraf, 2019; Qudus et al., 2022). By confirming that burnout significantly erodes psychological performance among small business owners, this study provides context-specific evidence from urban centers such as Karachi, Hyderabad, Jamshoro, Sukkur, Larkana, and Dadu, offering a more nuanced understanding of entrepreneurial well-being in high-demand environments.

In summary, the findings reinforce theoretical propositions of the JD-R model and previous empirical studies by demonstrating that high job demands, if not offset by adequate personal or external resources, lead to burnout, which in turn negatively impacts psychological performance. This underscores the need for interventions and resource-building strategies, particularly psychological resources like PsyCap, to help fast food entrepreneurs maintain mental resilience and sustain long-term success in challenging business environments.

The results of this study show that burnout has a significant negative association with Psychological Capital (PsyCap) (β = -0.143, t = 2.802, p < 0.05) among fast food small business owners in Sindh, Pakistan, thereby supporting Hypothesis 2 of this research. This finding aligns with prior studies indicating that chronic exposure to work-

related stressors depletes personal psychological resources, weakening an individual's ability to remain hopeful, resilient, optimistic, and efficacious (Baron et al., 2016; Hmieleski & Carr, 2007). As highlighted in the literature review, entrepreneurs facing prolonged emotional exhaustion, high workload, and uncertainty experience a decline in their psychological capabilities, limiting their capacity to cope effectively with business challenges (Manzano-García & Ayala, 2017; Malekitabar et al., 2017).

According to the "Job Demands-Resources (JD-R) model" proposed by Demerouti et al. (2001), excessive "job demands" coupled with inadequate resources initiate a "health impairment process" that drains individuals' physical and psychological capacities. In the context of fast-food entrepreneurship in Sindh, persistent challenges such as limited financial security, inadequate institutional support, and prolonged working hours contribute to chronic stress. Over time, this persistent strain depletes key psychological resources like Psychological Capital (PsyCap), undermining entrepreneurs' well-being and performance. This depletion results in reduced resilience to setbacks, lower confidence in decision-making, diminished hope for business growth, and a weakened optimistic outlook toward future success. Thus, the findings empirically validate JD-R theory's proposition that excessive demands, when unmatched by sufficient resources, undermine personal psychological capacities, increasing vulnerability to stress and burnout.

This result also addresses a critical research gap identified in this study: the scarcity of empirical evidence on the relationship between burnout and PsyCap among entrepreneurs in developing economies. Most previous research in Pakistan has focused on general entrepreneurial motivation or financial outcomes, overlooking the role of psychological resources in mitigating burnout. By demonstrating a significant negative relationship between burnout and PsyCap among fast food entrepreneurs across key urban centers—including Karachi, Hyderabad, Jamshoro, Sukkur, Larkana, and Dadu—this study contributes context-specific insights into how sustained exposure to high job demands depletes entrepreneurs' psychological resources.

In essence, these findings reinforce the JD-R theoretical framework and prior empirical evidence by highlighting that burnout not only impairs psychological performance but also diminishes the very psychological resources (PsyCap) needed to cope with demanding entrepreneurial environments. This underscores the necessity for targeted interventions to strengthen entrepreneurs' PsyCap, enabling them to manage stress better and sustain both their psychological well-being and long-term business success.

The findings of this research further demonstrate that PsyCap significantly mediates the relationship between burnout and psychological performance among fast food small business owners in Sindh, Pakistan ($\beta = -0.042$, $t = 2.456$, $p < 0.05$), thereby supporting Hypothesis 3 of this study. This study's result highlights the critical buffering role of PsyCap in mitigating the detrimental effects of burnout on psychological performance by enhancing key psychological resources such as hope, resilience, optimism, and self-efficacy.

Previous studies have demonstrated that individuals with elevated levels of PsyCap are better equipped to navigate stressful circumstances, sustain positive emotions, and remain motivated even in adverse conditions (Avey et al., 2010; Manzano-Garcia & Ayala-Calvo, 2013). Within entrepreneurial contexts—particularly in the demanding and uncertain environment of fast food businesses in Sindh—PsyCap serves as a crucial resource that helps business owners cope with uncertainty, manage emotional exhaustion, and maintain essential psychological outcomes such as satisfaction, gratitude, and preparedness (Paul & Devi, 2018; H. Juhdi et al., 2015). Similarly, the findings emphasized that psychological capital strengthens entrepreneurs' skills and willingness to take risks, which in turn promotes sustainable

performance in SMEs. (Ngo & Vu, 2025). The previous study also witnessed that entrepreneurs' higher levels of PsyCap reduced adverse burnout effects (Malak & Qassim, 2025). The mediating role of PsyCap observed in this study reinforces earlier findings, indicating that PsyCap functions not only as a vital personal resource but also as a buffer that mitigates the negative impacts of burnout while promoting well-being and enhanced performance.

The findings of this study align with the "motivational process" outlined in the "JD-R model" (Schaufeli & Bakker, 2004), which posits that psychological resources like PsyCap can offset the detrimental effects of excessive job demands by fostering work engagement and enhancing positive psychological outcomes even amidst uncertainty and risk. In the context of fast-food entrepreneurs operating in the socioeconomically dynamic cities of Karachi, Hyderabad, Jamshoro, Sukkur, Larkana, and Dadu, the results indicate that despite facing significant challenges and resource constraints, many business owners were able to sustain positive psychological functioning due to elevated levels of PsyCap. This highlights PsyCap's role as a protective mechanism that shields entrepreneurs from the harmful impacts of stress and burnout, ultimately contributing to non-financial psychological success and promoting sustainable entrepreneurial performance

Theoretical Implications

This study extends the applicability of the "JD-R model" (Demerouti et al., 2001) to the small business and entrepreneurial context by demonstrating how burnout negatively affects psychological performance, and how personal psychological resources such as PsyCap mediate this relationship. Previous research on JD-R has primarily focused on organizational employees, leaving a gap in understanding how these processes operate for entrepreneurs exposed to high workloads, uncertainty, and resource constraints.

The study empirically confirms that high job demands lead to burnout, which diminishes non-financial measures of entrepreneurial success, such as satisfaction, gratitude, and preparedness. Importantly, it validates the motivational pathway of JD-R theory, showing that PsyCap functions as a key personal resource that buffers against strain and sustains positive psychological outcomes. This contributes to entrepreneurship literature by positioning PsyCap as a critical factor in maintaining psychological resilience and long-term sustainability for small business owners, an area previously overlooked in developing country contexts.

Practical Implications

The results provide valuable insights for fast food entrepreneurs operating in high-demand, resource-limited environments like Karachi, Hyderabad, Jamshoro, Sukkur, Larkana, and Dadu. Burnout significantly reduces their psychological readiness and satisfaction, which are essential for opportunity recognition, decision-making, and long-term business viability. However, entrepreneurs with higher PsyCap—manifested as "hope, self-efficacy, resilience, and optimism"—demonstrated better psychological performance despite high stress levels.

This suggests that entrepreneurs can benefit by strengthening their psychological resources through well-designed training programs, mentorship, and self-regulated development techniques. Programs focusing on stress management, resilience-building, and positive thinking could empower entrepreneurs to navigate uncertainty more effectively, recover from setbacks, and maintain the mental clarity required for business growth.

Limitations and future research directions

The study contributes meaningful perspectives on the influence of burnout on psychological performance and highlights the mediating role of PsyCap among fast-food small business owners in Sindh, Pakistan. However, the use of a cross-

sectional survey design limits the ability to capture changes in job demands over time within entrepreneurial settings. Furthermore, the focus on the fast-food sector in a specific geographic region constrains the generalizability of the findings to other industries and contexts.

Future research could employ longitudinal and mixed-method approaches to capture the dynamic nature of burnout and PsyCap over time. Subsequent studies may examine the same variables across different industries and regions to enhance generalizability. Researchers may also explore additional moderating and mediating variables—such as emotional intelligence and institutional resources—alongside psychological and financial performance indicators, to gain a more comprehensive understanding of entrepreneurial well-being and success

Recommendations

In light of this study's findings, it is recommended that entrepreneurs in Sindh—particularly those operating fast-food small businesses—be supported in developing PsyCap resources. Targeted training and mentorship initiatives can strengthen mental resources such as hope, optimism, resilience, and self-efficacy, enabling entrepreneurs to better cope with job demands, reduce the adverse effects of burnout, and sustain psychological performance. Government institutions, SME development organizations, and other stakeholders should design and implement skill development and stress management programs tailored to the needs of small business owners in high-pressure, resource-constrained environments. Furthermore, policymakers are encouraged to establish dedicated mental health and well-being centers to assist entrepreneurs in addressing occupational stressors and achieving long-term success.

Conclusion

This research explored the relationship between burnout and psychological performance among fast-food small business owners in Sindh, Pakistan, with a focus on the mediating role of Psychological Capital (PsyCap). The results revealed that burnout is significantly and negatively correlated with entrepreneurs' psychological performance, leading to reduced levels of satisfaction, gratitude, and preparedness. In line with the "Job Demands–Resources (JD-R) model", excessive job demands, when not balanced by sufficient resources, depleted entrepreneurs' mental and emotional energy, ultimately diminishing their psychological performance. These findings align with prior literature suggesting that persistent exposure to stressors impairs cognitive functioning, decision-making capacity, and emotional well-being.

Moreover, the study confirmed that PsyCap plays a significant mediating role and serves as a critical mental resource for entrepreneurs. Small business owners with higher levels of "hope, self-efficacy, resilience, and optimism" were better equipped to manage entrepreneurial stress, maintain positive psychological states, and counteract the adverse effects of burnout. This context-specific evidence from Sindh addresses a notable gap in the existing literature, emphasizing the importance of psychological resources for sustaining entrepreneurial well-being in challenging and resource-constrained environments. Overall, the study highlights the necessity of interventions designed to strengthen PsyCap and mitigate burnout among small business owners, thereby promoting sustainable entrepreneurship in developing economies.

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Declaration of Interest Statement

The authors confirm that there are no conflicts of interest related to the research, authorship, or publication of this article. This study was conducted without any external financial support or funding.

Ethical Approval Statement

This study followed all the ethical standards required for research which involves human participants. Ethical approval was not required, as the study collected survey data that did not pose any risk to the participants.

Informed Consent Statement

The participants were informed about the purpose of the study and provided their consent prior to completing the survey. Confidentiality and anonymity of the data were maintained throughout the research process.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

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