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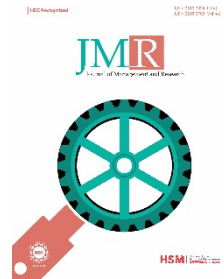
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Impact of Job Stress on Job Performance and Innovative Work Behavior in the Construction Industry of Pakistan: Role of Psychological Capital (PsyCap) as a Mediator

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Abstract

The current research explores the relationship between job stress, job performance and innovative work behaviour, as mediated by psychological capital (PsyCap), in the construction sector in Pakistan. More specifically, it investigates as to whether PsyCap indeed helps to mediate the interaction between job stress and job performance. For this purpose, cross-sectional survey research design was adopted and questionnaires were administered on one hundred (100) construction workers. The results revealed that high levels of PsyCap have a positive relationship with job performance and innovative work behaviour, as well as a negative relationship with job stress. The study also examined how PsyCap mediates the negative impact of job stress, as well as the need to reduce it and improve employees' productivity and creativity in stressful areas. The findings enhance the knowledge base of PsyCap as an organizational asset that may effectively minimize the effects of job stress and provide suggestions to enhance the management of employees' outcomes. In light of these findings, organizations in the construction sector should promote PsyCap to boost the performance and resistance of workers to stress in the demanding environment that characterizes the industry.

Keywords: construction industry, innovative behavior, job performance, job stress, psychological capital

Introduction

Human resource efficacy constantly affects a company's production. Performance is doing an activity well- in-line with its obligations and expected results (Sunarsi et al., 2022). The success of a company depends on employees' effectiveness in fulfilling their tasks. Knowing the workforce's psychological perspective may assist a business to meet the standards and performance goals (Suratman et al., 2021). An organization

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must control employee performance to achieve its goals (Ali & Anwar, [2021](#)).

The stakeholder-employee relationship has grown increasingly complex in the business world. Organizations require a competent workforce and a workplace with a service culture that prepares people for new and difficult situations to handle such complexity (Shukla et al., [2023](#)). Indeed, organizational processes and leadership behaviors must create the climate to influence employees activities that support the business objectives (Zainab et al., [2022](#)). An individuals psychological climate — how they interpret their surroundings — can also influence their decisions (Williams et al., [2021](#)). Due to this fact, the mental environment at work is vital to how people react to their occupations (Suratman, [2021](#)). Workplace psychological climate determines how workers see their workplace (Singh, [2022](#)). Since everyone has their unique psychological environment, researchers focus on the ways in which past and present responsibilities and experiences shape how people react to their jobs and their surroundings. A persons opinion forms the basis for the ir psychological climate, while a groups evaluation of the ir respective organizations policies, practices, and rewards forms the basis for organizational climate (Eckardt et al., [2021](#)).

Pakistan, a developing country, has considerable space to enhance its infrastructure. No country can flourish and prosper without good communication infrastructure and services. Pakistan has come a long way since its founding, yet it still craves expansion, riches, and progress. Infrastructure expansion helps industry, agriculture, and others. Building industry is crucial to every other industry and a major source of national wealth. It has a big pool of talented employees and creates supplementary enterprises. Private firms, public-private partnerships, and public works drive building projects in Pakistan (Liu et al., [2024](#)). For years, Pakistans building sector has lagged behind intellectually and technologically. Comparing Pakistans construction knowledge to contemporary Asian and western countries shows conceptual and technical gaps as well as the lack of basic competencies.

The construction industry in Pakistan also strives to follow global trends but remain far behind international standards. Pakistan has failed to adopt the global trend toward tall structures. Most of the countrys tall buildings are located in Karachi and Lahore. However, they seldom exceed 10 floors (Soomro et al., [2022](#)). The construction sector has failed to appropriate

high-rise living, which would have helped the public and the economy. Thus, vertical housing has not taken root in Pakistan. Consequently, much space and resources have been spent on horizontal development. Although, the fact of the matter is that the development of underground construction methods has helped the world by maximizing urban space utilization, reducing surface congestion, and enhancing transportation networks (Al-Kodmany, [2021](#)). Industrialized towns and megacities maximize underground space. Underground communication infrastructure including highways, rail networks, and other facilities allow mass movement and conserve a lot of otherwise useless real estate (Sim, [2020](#)). Unfortunately, construction below sea level, mega bridges, tunnels, and skyscrapers are almost impossible for local builders in Pakistan.

Ambitious business objectives as well as high-tech planning and execution tools increase work stress in corporate and industrial environments. Due to growing demand, employee stress has increased proportionally, affecting adversely creativity and job effectiveness (Wu & Zhang, [2023](#)). However, psychological capital (PsyCap) is a worker strength that ensures corporate and personal success. The human resource and management techniques utilized in the construction industry of Pakistan haven't evolved sufficiently to maximize employees job-related strengths (Islam & Md, [2022](#)). The competitive environment and unreasonable expectations set by senior management stress employees, lowering their work performance and organizational effectiveness.

On the other hand, innovative work techniques aid the building business because of their distinctiveness (Al-Ghazali, [2020](#)). Pakistans construction industry, which heavily depends on government and supply chain resources, faces challenges in achieving its goals due to its unique characteristics (Maqsoom et al., [2022](#)). To improve construction work practices and output quality, job stress must be identified as a factor affecting job performance and creativity. The governments relaxation for the countrys building industry, which is growing, have raised the demand for such a study.

Job performance and innovative work behavior have a clear relationship with job stress, which is a basic component of practically every work setting (Ahmed et al., [2018](#); Cropanzano et al., [1997](#)). A comprehensive investigation details the relationship among employment stress, job performance, and innovative work behavior. The construction scenario, where interactions between these variables have not been analyzed, is the

primary aspect of the literature gap. There is a lack of evidence that PsyCap mediates the connections between stress, job performance, and innovative actions on the job.

The construction industry in Pakistan is the primary focus of this study. It aims to provide theoretical support for the notion that PsyCap might reduce the negative effects of stress on job performance and creativity. The study incorporates a detailed description of the various organizational frameworks, processes, and methodologies used to increase productivity inside the corporation (Mubarik et al., [2022](#)). This description provides a more accurate reflection of the companys culture and inner workings. Finding the key factors that enable performance and innovative behavior in the Pakistani construction industry would highlight the principal obstacles inhibiting the contribution of these variables to the sectors success.

Aims and Objectives

The current study reviews the effects of employee work stress on their performance on the job, as well as how the presence or absence of organizational support influences this correlation. Moreover, this research provides the novel concept of the role of PsyCap as mediating the association between workplace stress, novel conduct on the job, and job success. Thus, the following research objectives were set:

- Examining the relationship between stress on the job and job performance among Pakistani construction sector workers.
- Assessing the relationship between job stress and innovative work behavior among Pakistani construction sector workers.
- Exploring how PsyCap mediates the relationship between job stress and job performance in the Pakistani construction industry.
- Investigating how PsyCap mediates workplace stress and creative work methods in the Pakistani construction industry.

Literature Review

Job Stress and Employee Performance

Workplaces have become more stimulating and productive because of technical developments and the encouragement of originality and innovation. Employees whose occupation requires them to meet certain targets experience undue stress because of their current settings. Moreover,

employees experience unnecessary stress due to complicated work arrangements, unclear duties, resource limits, and unreasonable expectations (de Klerk et al., [2021](#)).

Bashir and Ramay ([2010](#)) found a link between workplace stress and productivity in the Pakistani construction industry. They found that employee stress is negatively related to, or inversely proportionate to, performance. Managers and executives may take steps to lessen their employees stress levels by customizing job descriptions, working conditions, and regulations. Stress from work is reduced and productivity increases when there is a positive culture at all levels (Diamantidis & Chatzoglou, [2018](#)).

Consistent evidence connects occupational stress to a decline in productivity. Elsafty & Shafik ([2022](#)) aimed to determine the impact of several aspects of occupational stress on employee performance across a wide range of employees from a variety of industries. The key signs or characteristics of job stress included time pressure, workload, lack of desire, and role uncertainty. Time constraints and unclear roles were shown to have a negative impact on productivity (Rosso, [2014](#)). This indicates that when superiors set unrealistically high deadlines for work and then exert undue pressure on their subordinates to get the task done in a very short amount of time, the subordinates job satisfaction and performance suffer. Also, the absence of leadership backing in this scenario has been shown to increase the rate of employee turnover. Employee turnover rates rise dramatically when workers are forced to juggle several responsibilities within a short period of time (Edwards-Dandridge, [2019](#); Yahya, [2019](#)).

Stress caused by working under a tight deadline is a major factor in the decline in efficiency. Additional stress and low productivity arise from employees working over the recommended eight hours per day, seven days per week, including weekends and holidays (Mokhtar et al., [2021](#)). The same research found that employees productivity dropped when their roles were unclear. Ambiguity develops when higher-ups fail to provide necessary details and clarifications about work and available resources. Uncertainty regarding ones place in the company, ones position within the organization, and ones career prospects may cause a great deal of stress for workers, which can have a negative effect on productivity on the job (Khallash & Kruse, [2012](#)). The results indicate that high levels of job pressure and a lack of leadership motivation have a detrimental effect on

worker productivity. When combined with other positive aspects, employees understanding of the importance of workload management in keeping their employment is not a limiting factor in their productivity (Brynjolfsson & McAfee, [2012](#); Elnaga & Imran, [2013](#)). To encourage workers, more than just words or pep speeches are needed; indeed, a well-defined system of incentives and service advantages is required.

Ahmed et al. ([2014](#)) explored the relationship between job stress and productivity among employees of private universities in Pakistan. Although limited in scope, the study provides generalizable information regarding the connection between stress at work and poor performance on the job. Challenge stressors and hindrance stressors were discussed in this research as well. The former stir up workers potential and stimulate inventive talents to produce optimal results, whereas the latter are unproductive and coercive, reducing their capacity and efficiency (Gostick & Elton, [2007](#)).

Sygit-Kowalkowska et al. ([2021](#)) focused on just three sources of stress for workers and the links between those sources and poor productivity at the workplace. These included overburdening tasks, clashing roles, and inadequate monetary compensation. Having too much work to do in too little time is the leading cause of stress on the job. Confusion and tension are increased when workers roles are unclear or in dispute. Similarly, the size of ones monetary compensation has a direct correlation with both job stress and productivity (Ek & Mukuru, [2013](#)). Workload, monetary incentives, and role conflict were all shown to be contributors to stress and negatively impacted employee performance at private institutions in Karachi, Pakistan. While it may not be possible to totally remove workplace stress, steps may be taken to lessen its impact or reframe it as a challenge.

Jehanzeb ([2017](#)) investigated organizational culture, tension, and contentment in Malaysian tax administration. The study was restricted to a certain field and geographical area and found a negative correlation between workplace stress and dissatisfaction among tax administration workers. If an employee is feeling overwhelmed, it shows in their work. Employees stress levels may be lowered by creating a welfare system that includes incentives and recognition (Maslach & Leiter, [2006](#)). Their stress levels are lowered and their happiness and productivity are increased when they are given more autonomy and opportunities for open communication (Shao et al., [2022](#)).

Hypothesis 1: There is a negative relationship between job stress and job performance.

Job Stress and Innovative Work Behavior

De Spiegelaere et al. (2017) focused on the correlation between job structure, employee enthusiasm for ones work, and creative problem solving on the job. Tasks that are both low in demand and high in control tend to inspire the most creativity among employees. When pressure on workers is low, they are more likely to come up with fresh ideas and approaches on their own. Research shows that greater levels of job control and employee motivation are associated with more creative workplace behaviors. Employees are more likely to be creative on the job when they have demanding tasks and little oversight mechanisms. Human resource policies also need to be in sync with initiatives meant to foster more creative approaches to the workplace.

Employees innovative work behavior is crucial to the success of businesses across a wide range of sectors and specializations. Keeping employee motivation in a mediating position, Alshoukri (2019) examined the connection between leadership and creative work behavior among FM service providers in Oman. Workers intrinsic motivation was shown to moderate the association between leadership and creative actions on the job. The research demonstrated how leadership, as a potent instrument, influences workers proactivity in coming up with new ways to do their jobs and their dedication to the growth of their careers and organizations.

Alshoukri et al. (2020) determined that leadership and motivation may significantly increase workers creative work behavior which is beneficial to their respective organizations productivity. Adopting more creative practices in the workplace can boost productivity. Ethics and practices in the workplace today are shaped by the technology and contexts in which they emerge. The term "New World of Work" has gained significant traction in the field of human resource. Bruhn et al. (2013) developed a framework for the New World of Work in which he identified four overarching concepts. These concepts include the ability to choose when and where to get the work done, the freedom to direct ones own work schedule, the sharing of information without restrictions, and adaptable work arrangements.

De Spiegelaere et al. (2015) used a cross-sectoral approach to establish a connection between the New World of Work and innovative work behavior. The research demonstrated that the principles of the New World of Work are inadequate to shed light on workers creative approaches to the workplace. It was hypothesized that the adoption of a more contemporary work philosophy would inspire a sea change in how workers approach their jobs or how they behave on the job, however, the research did not find this to be the case (Steers & Sánchez-Runde, 2017).

Employees creative actions on the job are the most influenced by the second principle of the New World of Work—"self-management of employees"—although this principle is not central to the concept itself (Manz & Sims, 1981). The ability to work whenever and wherever is linked to more creative output. Employees creative output is only marginally affected by other variables, such as scheduling freedom and job security. Workplace innovation was found to be unexpectedly linked to workers ability to do their work from home. In todays dynamic workplace, employees ability to negotiate their own terms of employment has a negligible effect on their propensity to engage in creative problem solving. If you want individuals to perform better then give them a good task to do, which seems to be in line with the findings of this research, as proposed by Bassett-Jones and Lloyd (2005).

Employees willingness to innovate may be influenced by a wide range of personal and institutional variables (Awwad & Ali, 2012). Emotional intelligence is a factor in how creatively they approach their work, among other things. In 1990, researchers first began to use the term "emotional intelligence." It is defined by Salovey & Mayer (1990) as "the capacity to monitor ones thoughts and emotions, to discern among and utilize this knowledge to direct ones thinking and behavior."

Emotional intelligence may be broken down into its constituent parts, each of which can be described by one of the four sets of talents and abilities. Perceiving emotions, using emotions to aid in cognition, comprehending emotions, and controlling emotions are the four domains covered (Grewal et al., 2006). Therefore, a smart person may use his feelings, both positive and negative, to further his own and others goals. Salovey and Grewal (2005) examined the connection between EQ and creative problem solving on the job. The only way for businesses to thrive in todays competitive and globally integrated environment is to constantly

push the boundaries of what they've done before. An innovative company is driven by its workers' original thinking and unconventional actions. A culture of acceptance of innovative ideas, communication, and support generates the climate inside the firms that catalyzes creative work behavior. Through literature analysis, this research showed that workers' emotional intelligence increases their creative output on the job. Individuals with a high EQ have a greater propensity for originality in the workplace (Jordan et al., [2002](#)).

Leaders in any company are responsible to determine the organization's goals, developing strategies to accomplish these goals, and implementing these strategies. There are numerous good and bad aspects of innovative behavior in the workplace. Rahmah et al. ([2020](#)) uncovered these considerations via a qualitative examination of the relevant literature. The research showed that innovative work behavior is influenced mostly by transformational leadership, which inspires workers and shares a shared vision. Secondly, if you want more original thoughts and ideas, you should share your expertise with others (Dong et al., [2017](#)).

The process of organizational learning occurs as a result of employee interaction and a supportive work environment (Polston-Murdoch, [2015](#)). It fosters creative thinking in the workplace. Contrarily, innovative work behavior is hampered by factors such as corporate politics, job instability, and transactional leadership (Rahmah et al., [2020](#)). Obedience to orders and refraining from behavior that might be detrimental to the business are hallmarks of a transactional leadership style (Liu et al., [2011](#)).

Hypothesis 2: There is a negative relationship between job stress and innovative work behavior.

Mediating Role of Psychological Capital (PsyCap) Between Job Stress and Job Performance

Managing or reducing stress and anxiety at work is a challenge for every business, although it is possible to do so with the right human resource policy, company culture, and management strategies. Hmieleski and Carr ([2007](#)) examined the connection between entrepreneurs' ideal levels of job satisfaction and their levels of psychological capital or PsyCap and workplace stress. It was found that job satisfaction was favorably connected with greater levels of PsyCap (as expected), although there was a negative relationship between work stress and job satisfaction.

Organizational PsyCap seems to be a potent defense against a variety of stresses. Additionally, the results of Çavuş & Gökçen (2015) imply that ones level of PsyCap is a critical component in achieving ones financial goals and maintaining the level of happiness and contentment one desires in ones career.

An employees work attitude encompasses their feelings towards their employment and the company as a whole. Kappagoda et al. (2014) investigated the association between personal growth, professional success, and workplace satisfaction in the Sri Lankan banking industry. Employment success was shown to be significantly correlated with higher levels of PsyCap. Work attitudes were also shown to positively correlate with both PsyCap and job performance (Avey et al., 2010). The above discussion makes it clear that a companys PsyCap is a valuable resource that affects every aspect of employee and company success.

The foundation of an organizations success is its workers performance on the job. Any strategy that boosts productivity on the job would help the company get closer to its objectives (Markos & Sridevi, 2010). Hence, the notion of PsyCap adds a whole new dimension to how one does their work in the workplace. Independently and in the context of work attitudes and work values, (Kappagoda, 2021; Kappagoda et al., 2014), analyzed the correlation between emotional intelligence and productivity in the workplace. Research summaries indicate a positive association between PsyCap and job performance, with the proviso that this relationship is moderated by an individuals values and opinions about their work.

Employees throughout the world are increasingly finding it difficult to strike a balance between work and personal lives outside of working hours because of the increasing competition for jobs and tighter budgets. Achieving a happy medium between ones career and ones personal life is what we call "work life balance." Irrespective of age and gender, the capacity of people to develop a rhythm allowing them to concurrently manage work with personal duties, means activities, and goals is how Panisoara and Serban (2013) and Saputra et al. (2021) described work life balance.

Anushi et al. (2022) examined the association between the four pillars of PsyCap and the quality of ones personal life outside work. Maintaining a healthy work life balance is a major contributor to ones psychological

health. Higher levels of PsyCap allow workers to better balance their professional and personal lives. Work-life harmony is highly connected with effectiveness, the cornerstone of PsyCap (Atiku & Fields, 2019). Optimism, hope, and resilience are all forms of PsyCap, although none of them were shown to have a substantial relationship with a well-rounded existence outside work. When workers believe in themselves, they are better equipped to find the equilibrium between their professional and personal lives.

Hypothesis 3: PsyCap mediates the relationship between job stress and job performance.

Mediating Role of PsyCap Between Job Stress and Innovative Work Behaviour

The relationship between stress on the job and innovative actions taken by employees is likely mediated by PsyCap. The notion of PsyCap was first proposed by Luthans et al. (2007). It is defined as a positive mental state marked by hope, optimism, self-efficacy, and other traits. Enhancing performance in stressful environments is the outcome of stress resilience characteristics, which may reshape the traditional link between stress and innovation.

Sweetman and Luthans (2010) highlighted the transformative potential of PsyCap, suggesting that individuals with high levels of PsyCap are better equipped to perceive stressful situations as challenges rather than threats, thus fostering a conducive environment for innovation. Furthermore, Avey et al. (2011) argued that PsyCap can act as a buffer against the negative effects of stress, thereby preserving or even enhancing innovative work behaviour under stress.

In the context of the construction industry in Pakistan, where job stress is prevalent due to tight project deadlines, safety concerns, and high expectations, the role of PsyCap becomes particularly significant. According to Shahid et al. (2023), the construction sector can benefit from fostering PsyCap among its employees to enhance not only their coping mechanisms but also to stimulate innovative solutions in challenging work environments.

Workers who are more positive, optimistic, and resilient are likely to do better in a variety of local and worldwide business environment situations than those who are less so. Gom et al. (2021) observed a positive

relationship between PsyCap and innovative work behavior. They also found that creative approaches to the workplace mediated the relationship between PsyCap and job performance among Indian IT professionals. Resilience also has a beneficial effect on productivity in the workplace. However, this optimistic trait does not influence ones productivity at work (Sweetman & Luthans, [2010](#)).

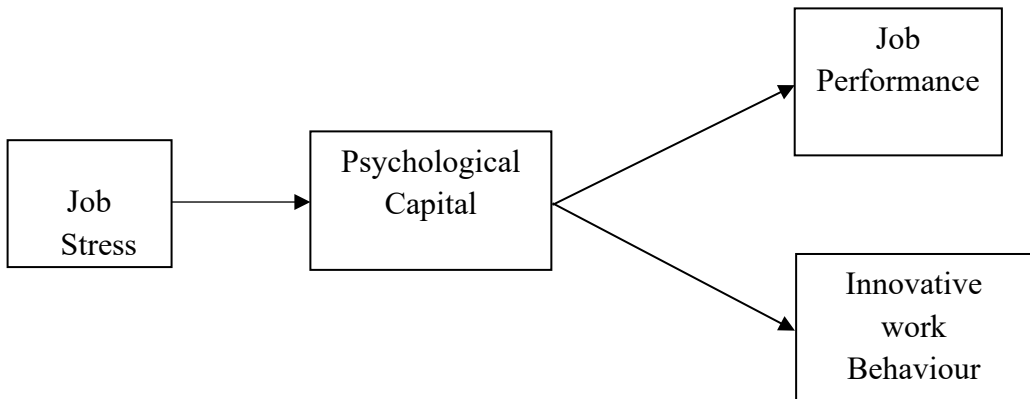
Bockorny and Youssef-Morgan ([2019](#)) investigated the impact of entrepreneurs mental resources on the success of their businesses. Quantitative research linked high PsyCap to successful new ventures. New enterprises may benefit greatly from the initiative and fresh perspectives provided by employees with high levels of PsyCap. Changes in the environment have a beneficial influence on this link.

People are more productive, achieve more, and are better able to adjust to change when they are in a positive frame of mind. This is known as psychological capital or PsyCap (Luthans et al., [2010](#); Luthans et al., [2007](#)). Workers emotional commitment to change was investigated by Mangundjaya and Mufidah ([2018](#)). They found that it was related to both employees PsyCap and their level of psychological empowerment. The researchers found that workers emotional investment in the transition process was significantly affected by their level of PsyCap. Worker innovation seems to relate to an emotional commitment to change, which is a desirable trait. Since PsyCap represents an optimistic frame of mind, it would have a constructive effect on productive and original actions at the office.

The interaction between job stress and PsyCap in predicting innovative work behavior implies a complex and moderated relationship, where the level of PsyCap determines the strength and direction of the impact of job stress on innovation. As posited by Bakker and Demerouti ([2017](#)), the JD-R model offers more evidence that personal resources, such as PsyCap, have a mediating role in the link between job demands and resources available. This suggests that those who have greater psychological resources are more likely to be innovative, even when confronted with high levels of work demands.

Hypothesis 4: PsyCap mediates the relationship between job stress and innovative work behavior.

Research Model



Job Demands-Resources (JD-R) Model

The Job Demands-Resources (JD-R) model is a prominent theory that describes the relationship between psychological capital, job performance, workplace stress, and creative work behaviour. Nguyen-Phuoc et al. (2024) postulate a dual process whereby job demands may trigger burnout and performance decline (health impairment process), while job resources can be conducive to higher levels of engagement and better performance (motivational process).

The JD-R model is a comprehensive framework that can be adapted to the nature of the construction industry in Pakistan. This industry is known to have high job demands involving on-pressure lifestyle including catching deadlines, physical labour, and risks on safety. Work-related stress emerges because job demands exhaust emotional resources. However, JD-R model suggests that it directly affects both performance and innovation levels through the health impairment process. This factor is the most important in a high-stress environment where employment requires the employee to perform the job effectively and to innovate within their roles. The security of employees is sometimes taken for granted (Maynes et al., 2024).

However, the JD-R model is adamant about the relevance of job resources related to work-life balance. Positivity, hope, effectiveness, and resilience make up PsyCap, which is a powerful personal resource. The JD-R model proposes that high levels of PsyCap can buffer the negative impact of workplace stressors, as well as sustain job performances and innovative behaviours in high demand jobs. This is congruent with the research outcomes showing PsyCap as the one variable that mediates between job

demands (stress) and factors affecting job performance, such as creativity and innovation (Daswati et al., [2022](#)).

The JD-R model is ideally fit to the job system of the construction sector in Pakistan because it includes a purview of both positive (job resources) and negative aspects (job demands) present in the environment where the work is being performed. Here, aside from work stress which hinders performance and creativity, presence of strong resources such as PsyCap is an alternative to the effect. Thus, it leads to improved outcome.

According to the JD-R theory, heavy job demands such as working for long hours or being under pressure constantly are associated with burnout and poor performance at work, if not counterbalanced by available resources (Demerouti et al., [2001](#)). The study showed that job resources can offset the impact of demands in a way that promotes engagement and enhance the performance of the employees, for example, via PsyCap. Hope, optimism, resilience to stress, and self-efficiency are the elements of PsyCap that strengthen the individual's ability to perform effectively even under stress (Luthans et al., [2007](#)).

Keeping in view the current scenario of the construction industry in Pakistan, the current study attempted to understand how PsyCap interacts between stress and performance in terms of JD-R model. Psychological capital faces this problem since high job demands are characteristic of this industry because of intense time pressure and safety issues, which contribute to stress and reduced productivity (Maqsoom et al., [2022](#)). However, employees with high PsyCap would be in a better position to view such stressful situations as a challenge instead of a threat. Therefore, their job performance and innovative work behavior would improve or be even stimulated (Sweetman & Luthans, [2010](#)).

Additionally, based on the JD-R model, the nature of an occupation postulates that high-level job resources can effectively decrease the negative effect of high-level demand and promote employee well-being and performance. This theoretical framework is in line with the current study's purpose to explore the mediating role of PsyCap through its ability to enhance job performance and promote innovation despite stress (Bakker & Demerouti, [2017](#)). Therefore, including this deeper analysis within the JD-R framework can offer a richer picture of the way PsyCap affects the results in response to job demands in the construction industry of Pakistan.

Material and Method

This research adopts a quantitative research methodology based on a cross-sectional study design to investigate the effects of occupational stress on productivity and creativity in the Pakistani construction industry. Primary data was gathered through questionnaires distributed to workers at all levels including middle management, supervisory, and engineering positions who were engaged in planning, estimating, and financing projects. Convenient sampling was used and the participants were chosen depending on their availability and willingness to participate. The questionnaire items covered job performance, innovative work behavior, psychological capital, and demographics, besides perceived autocratic leadership, work hours, conscientiousness, and time theft. After data collection, a comprehensive process of data cleaning and validation was performed to confirm the accuracy of the results. The study used statistical analysis, such as Pearson correlation coefficient and multiple regression analysis, to test the hypotheses and investigate the relationships among the variables, while helping to clarify the interplay between organizational psychological capital, creative work behavior, job performance, and stress. Ethical considerations remained central, with the participants being informed of every study purpose, ensuring voluntary participation, data privacy, and the right to withdraw consent at any time.

As for the tools used for data analysis, SPSS and Hayes Process macro were chosen because both software programs are quite effective at analysing complex data. SPSS is popular all over the world because of its rich package of statistical tools which are vital to perform descriptive analysis, the evaluation of reliability, and correlation analysis. Hayes Process macro is popular specifically for mediation and moderation, while conditional process analyses are more effective in testing the relationships specified in this study, such as the role of psychological capital as a mediator (Hayes [2017](#)). It must be noted that these tools are standard in social sciences research, hence are reliable and have high validity.

Adequacy of Sample Size

The data was collected from 100 respondents, which is a justified sample size given the exploratory nature of this study. This number was deemed satisfactory keeping in view the exploratory nature of the current research. Even though the given sample appears to be small, it was quite

appropriate to use for the initial testing of the hypothesis. This sample size offered sufficient power to assess different effect sizes, namely small, medium, and large, according to power analysis (Cohen, [1988](#)). The diverse sample included different professions within the construction industry which helped to avoid bias and generalize the findings.

Addressing Cross-Sectional Bias and CMV

The current study has limitations which stem from the use of cross-sectional data and the possibility of CMV. To reduce the risk of CMV, some precautions were made to include anonymous responses, using validated and reliable scales for constructs such as job stress, job performance, and psychological capital.

Measurements

Job Performance

Job performance was measured using a 21-item scale developed by Williams and Anderson ([1991](#)), the constructs of which were conceived keeping in view the various facets of employee performance. Guan et al. ([2014](#)) used this scale for the participants' self-assessment reports. The respondents degree of agreement was measured using a 5-point Likert scale, where 1 indicated *strong disagreement* and 5 indicated *strong agreement*. There were closed-ended statements in this section.

Innovative Work Behavior

Innovative work behavior was measured using a 9-item scale developed by Janssen ([2000](#)). The scale has three dimensions with three questions representing each dimension. The first dimension is idea generation, the second is idea promotion, and the third is idea mobilization. The responses are given on a frequency scale varying from 1=*Never* to 7=*Always*. There were closed-ended statements in this section.

Job Stress

Job stress is the independent variable of this study and its relationship with other variables was also evaluated. Job stress was measured on a 13-item scale developed by Parker and DeCotiis ([1983](#)). The responders agreement was assessed using a 5-point Likert scale, with 1 indicating *strong disagreement* and 5 *strong agreement*. This section contained closed-ended statements.

Psychological Capital (PsyCap)

Psychological Capital or PsyCap is the mediating variable of the current study. It was measured by using a 24-item scale developed by (Youseef & Luthans et al., [2007](#)). The respondents comments were measured using a 5-point Likert scale, with 1 denoting *strong disagreement* and 5 denoting *strong agreement*. This section contained closed-ended statements.

Results

Descriptive Analysis

Table 1

Descriptive Analysis of Demographic

	Variables	Frequency	Percentage %
Age	18-29 years	7	7.0
	30-41 years	76	76.0
	42-53 years	17	17.0
Gender	Male	85	85.0
	Female	15	15.0
Experience	Less than 5 years	13	13.0
	6-10 years	55	55.0
	11-15 years	32	32.0
	Senior manager	39	39.0
Position	Construction engineer	35	35.0
	Workers supervisor	26	26.0
	Total	100	100.0

The survey population, comprising 100 participants from various areas of the construction industry, had a predominantly male demographic. Most respondents were aged 30-41 years, with 76% being men and 15% being women. This is a typical representation of the gender imbalance in the construction sector. Most respondents had 6-10 years of work experience. Further, 32% had 11-15 years of experience, while 13% had less than 5 years of experience. The survey sample consisted of senior managers (39%), construction engineers (35%), and workers or supervisors (26%). This blend of higher management and field-level supervision or engineering skills provides varied perspectives on the industrys stress factors. However, the samples bias towards experienced professionals may affect the survey results, particularly in areas such as job stress and creative work behaviour.

The concentration of upper-middle-class respondents in the sample may also affect the representation of stress on performance from the perspective of individuals involved in decision-making processes and project management.

Table 2
Reliability Analysis

Variables	No. of Items	α
Job Stress	13	.163
Job performance	21	.615
Innovative work behavior	9	-.934
Psychological capital	23	.949

The reliability of research may be thought of as the measurement of the consistency of the constructs or variables within themselves. If the variables alpha value is larger than .70, it may be considered credible (Hair et al., 2013). Construct reliability was assessed using Cronbach's alpha. The results revealed job stress with 5 items ($\alpha = .163$), job performance with 5 items ($\alpha = .615$), psychological capital with 5 items ($\alpha = .949$), and innovative work behavior with 7 items ($\alpha = -.934$).

Correlation Analysis

To determine whether there was a significant relationship between the variables, correlation analysis was performed. The link between occupational stress and performance was shown to be negative ($r = -.055$, $p > .0001$). So, H1 stands approved. The link between job stress and innovative work practices was shown to be statistically negligible ($r = 0.71$, $p > 0.001$). So, H2 is supported.

Table 3
Correlation

	PC	JP	JS	IWB
PC	1			
JP	.301**	1		
JS	.094	-.055	1	
IWB	.757**	.557**	.071	1

Note. ** $p < .01$.

Regression Analysis

Table 4

Regression Analysis

Direct Paths	Coefficient	<i>S. E</i>	<i>t</i>	<i>p</i>
JS → IWB	.071	1.84	.705	.00
JS→ JP	-.055	3.79	-.548	.00

Regression analysis reveals two major correlations. Firstly, a positive link between job stress (JS) and innovative work behaviour (IWB) is indicated by the coefficient of 0.071. Although the *t*-value of 0.705 suggests otherwise, the *p*-value of 0.00 is in opposition and reveals a significant result. Secondly, a -0.055 negative correlation between job stress (JS) and job performance (JP) is evident. Like the *t*-value of -0.548 and the *p*-value of 0.00 indicate that the relationship is not practically significant. It logically follows that higher job stress may favour additional innovative work behaviour, whereas increased job burnout is related to a decrease in job performance. The disparity in the obtained *t*-values and *p*-values might indicate either a reporting error or a strange significance threshold. This requires more thorough verification to be interpreted correctly.

Mediation Analysis

Table 5

Mediation Analysis

Total Effect of JS on JP and IWB					
Effect	<i>S. E</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
0.0940	.1333	.7055	0.4822	-.1705	0.3586
Direct Effect of JS on JB and IWB					
Effect	<i>S. E</i>	<i>t</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
.0000	.2048	-.0002	.9998	-.4066	.4065
Indirect Effect of JS on PC, IWB, and PS					
Effect	Boot <i>SE</i>	Boot <i>LLCI</i>	Boot <i>ULCI</i>		
.0941	.1749	-.3928	.3069		

According to the previously reported findings of the mediation study conducted by JS, JP, IWB, and PC, the effect, the direct effect, and the indirect effect were all found to be statistically significant. The indirect effect of JS on PC, IWB, and PS is significant as the confidence interval

(Boot $LLCI = -0.3928$ and Boot $ULCI = 0.3069$) does not include zero within its range. This indicates that PsyCap is positively associated with innovative job performance and inversely related to job stress, supporting the mediation model and validating the acceptance of Hypotheses 3 and 4.

Discussion

This research primarily aimed to examine the relationship between psychological capital (PsyCap), job stress, and job performance among construction workers in Pakistan. It also aimed to assess whether job stress serves as a mediator between PsyCap and job performance. Four (04) hypotheses were formulated to address these objectives. The study revealed that factors contributing to worker dissatisfaction also had a detrimental impact on worker productivity, underscoring the interconnectedness of these variables. Importantly, the study highlighted the adverse effect of job related stress on workplace productivity, shedding light on how various stressors can impede job performance.

Employing a quantitative approach, the study investigated how employees PsyCap influenced their willingness to take risks and effectively cope with job related stress. The findings emphasized that individuals with higher levels of PsyCap exhibited a greater propensity toward embracing innovation in their work and remained open to trying new approaches. Moreover, those with elevated PsyCap levels demonstrated a proclivity for initiating and implementing creative ideas within the workplace. Additionally, higher PsyCap was also associated with reduced job related stress, supporting the hypothesis that high PsyCap individuals are more likely to be innovative and creative.

H1 proved a negative relationship between job stress and job performance. The results showed that the relationship between them is positively strong. The results are in line with what is already known, since job stress is a key factor in the workplace that affects how people do their jobs and act on the job.

H2 proposed that being stressed at work has little impact on ones ability to think beyond the box. Research has shown, however, that job stress has a negative and moderate impact on creative behavior in the workplace. Among the most crucial factors in a companys ability to stay relevant in this day and age is its capacity for innovation. An organizations success relies on several factors and is closely connected to its stated objectives. It

depends on its capacity to efficiently use resources and produce goods that align with its objectives and are beneficial to its consumers (Grošelj et al., 2020). Researchers found that organizations that keep coming up with new ideas do better than those that don't (Valizade et al., 2016). The ability of employees to come up with and implement new ideas and solutions is directly linked to innovative business behavior.

Hypothesis 3 hypothesized that PsyCap acts as a mediator between job stress and job performance. Moreover, it was hypothesized that PsyCap has a significant and beneficial influence on both variables. According to the findings, a high level of PsyCap is positively associated with creative output in work but negatively associated with stress levels on the job. Positive psychology is a field of study that grew out of the criticism of the field of psychology. It focuses on diagnosing and fixing the bad parts of human thinking and behavior (human pathology), instead of finding and building on people's good qualities or strengths (Seligman & Csikszentmihalyi, 2000). PsyCap is a positive state of mind that can be developed and improved at any point in a person's life (Avey et al., 2011).

Hypothesis 4 suggested that PsyCap acts as a mediator between job stress and creative problem solving on the job. There is evidence that PsyCap is directly related to creativity (Arain et al., 2020). Indeed, creativity and new actions go hand in hand, although creativity itself is just the first step. On the other side, innovation is the implementation of novel concepts throughout an organization (Amabile et al., 1996). Positive PsyCap has been linked to job performance, job satisfaction, job stress, and turnover intentions.

These findings stress the significance of PsyCap as a protective factor against the detrimental impact of job stress on performance and creativity. These perspectives have the most significance in the construction sector because people working in this field have increased stress rates resulting from meeting strict time lines, safety issues, and client specifications. Thus, by giving an overall explanation in the current study for how PsyCap can protect against these negative effects, this examination lays the standard that can be used in future assessments with a substantially diverse sample and population. Based on hope theory, optimism, resilience, and self-efficacy that make up PsyCap, this research established that it has an impact on job performance. Furthermore, employees with high PsyCap can manage their job stress, produce more, and show improved performance at the workplace.

The results indicate that increasing PsyCap among the employees might be a viable way to optimize job performance, including in stressful conditions.

The study also discussed the mediating effect of PsyCap on innovative work behaviour. Since innovation is deemed strategic in an organization, it would be instrumental to know how PsyCap facilitates the generation, championing, and implementation of ideas. In this way, this research contributes to the literature by explicating PsyCap as a factor that facilitates the process of creating a more innovation-friendly organizational environment. The practical relevance of these conclusions is of utmost importance for managers and HR specialists. The ways of enhancing or building PsyCap might be focused on training programs, workshops, and leadership support.

JD-R model was also extended to show that PsyCap, as a personal resource, protects employees' well-being against the harm caused by job stressors. Thus, the research that extends the JD-R model by including PsyCap contributes to the growth of knowledge in the field of organizational psychology regarding personal resources that can improve employees' positive functioning and outcomes.

To conclude, this research is useful in expanding the knowledge regarding the effectiveness of PsyCap in managing job stress and improving job performance and innovation in the construction industry, despite certain limitations in terms of scope, sample size, and depth of analysis. Such initial conclusions open further research and application perspectives, revealing a crucial roadmap to enhance the performance of employees in stressful conditions.

Conclusion

The results provide significant evidence that PsyCap acts as a mediator in the correlation between professional achievement and creative conduct in the workplace. Work experience was shown to mediate the relationship between creative behavior and overall job performance, especially among personnel in the construction sector in Pakistan. This study addressed a gap in Pakistan-specific PsyCap literature and aligns with previous research linking innovative behavior and employees PsyCap. A significant finding of this study is that PsyCap has a more substantial influence on innovative work behavior. This suggests that while PsyCap helps employees to actively

engage in communication and better integrate into the business, innovative work behavior stands to benefit even more from access to PsyCap.

Moreover, the current study revealed a strong connection between taking risks and being creative on the job, as well as how this influences professional success. Positive behaviors associated with PsyCap were found to have a positive impact on employees thinking and performance at work. Interestingly, a history of professional achievement was shown to boost creative actions in the workplace. However, it was noted that creative work methods do not mediate the relationship between PsyCap and workplace productivity.

On the flip side, job stress was found to have a detrimental effect on employees productivity, aligning with the idea that mentally healthy workers tend to perform better. This emphasizes the significance of the managements involvement in dealing with workplace stress, since it may result in unproductive actions, absenteeism, and diminished overall firm performance.

Implications

This study carries significant practical and theoretical implications. By investigating the link between PsyCap and creative output, this work contributes to the existing literature on the issue and paves the way for future research on additional dimensions of creativity and innovation. Given that PsyCap is a condition that can be enhanced over time, it implies that managers may be crucial in assisting their staff members in developing their PsyCap via training interventions. By nurturing PsyCap, managers can foster creativity and originality among their workforce, potentially giving their organizations a competitive advantage in the market.

However, the findings also underscore the importance of being cautious when assigning demanding tasks to employees with low PsyCap, as they are more likely to report job related stress. This suggests that managers should consider the psychological well-being of their employees when doing task assignments, as excessive stress can hinder innovative behavior. Moreover, this study holds relevance for practitioners and decision-makers in the construction sector. It suggests that individuals who invest a significant time in this sector should have their stress levels monitored at work to detect any anomalies. Additionally, stress detection strategies could be employed to support employees in enhancing their innovative work

behavior. This research also contributes novel insights to the field of stress management by suggesting that managing unexpected crises may lead to cognitive rigidity and may also impact creativity negatively and innovation positively.

Limitations and Future Directions

The current research has several limitations. Like most previous studies, this research comprised a cross-sectional field survey, limiting the ability to draw causal inferences from the observed associations. The fact that PsyCap and work stress were assessed using the same questionnaire answered by the same respondents raised the prospect of shared method/same source bias. However, since inventive performance was assessed using supervisory ratings, this shouldn't be a problem. There were also certain restrictions. Data collection was restricted to the construction sector. Other industries, such as those in manufacturing and services, may also be taken into consideration for data gathering in the future for the broad application of the findings, which might provide different results.

Future research should include more appropriate measurements to provide a more in-depth understanding of the connection between positive psychological factors and criteria on related to creativity and innovation. Future studies may also be useful in determining the relative strengths of these dispositions by comparing the PsyCap mediator's performance with other creativity-related personality traits. Finally, longitudinal study approaches are essential to the comprehension of the relationship between PsyCap and employment outcomes.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

The data associated with this study is not available due to ethical restrictions, however, data will be provided by the corresponding author upon request.

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