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ORIGINAL ARTICLE

Work-related stress and its relationship with performance among workers in a construction company, Callao, 2024

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ABSTRACT

The purpose of this study was to determine the relationship between work stress and performance among workers in a construction company. The study used a quantitative approach with a correlational-descriptive type of applied research and a non-experimental cross-sectional design. The population consisted of 84 employees, and a census was conducted. The chosen technique was a survey, and the instrument used was a 22-item questionnaire. A descriptive analysis was performed to determine the levels of the study variables, and an inferential statistical analysis was performed to confirm the hypotheses proposed. The main results showed that work stress was low in 44.05% of cases, while job performance was high in 36.90% of cases. A significant negative relationship was also found between work stress and performance, which was supported by Spearman's test (Rho = -0.653), which was significant ($p < 0.05$). In addition, it was found that work stress was significantly and negatively related to the dimensions of job performance: knowledge (Rho = -0.377; $p < 0.05$), with a moderate relationship; communication (Rho = -0.599; $p < 0.05$), with a substantial relationship; and teamwork (Rho = -0.511; $p < 0.05$), also with a substantial relationship. It was concluded that lower levels of work stress among employees are associated with higher levels of job performance.

Keywords: emotional exhaustion; work stress; stress management; job performance.

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INTRODUCTION

The study of work capabilities in the current performance context has advanced in recent decades in areas such as organizational learning, job change, and industrial psychology, particularly in the relationship between employee stress and job performance related to competencies and functions (Khan *et al.*, 2024). However, gaps remain in the literature on how work stress relates to knowledge acquisition, teamwork, and communication, as well as its impact on job performance in personal domains, adverse work environments, and disruptive change in understudied sectors such as construction.

Internationally, work-related stress has attracted increasing research interest due to its direct relationship with employee performance and organizational productivity. One such study is the State of the Global Workplace, Gallup (2023), which found that one-third of employees worldwide experience work-related stress, more than half feel emotionally disconnected from their jobs, and two-thirds report discomfort in their work environment. These findings highlight the detrimental effects of stress on employee health, with extreme exhaustion and difficulty fulfilling responsibilities being key markers associated with high cortisol levels (Ponce *et al.*, 2024; Maji & Durám, 2022).

The Organización Mundial de la Salud (OMS, 2022) urged world leaders to implement corrective and preventive measures for occupational mental health. This recommendation emphasizes the need for strategies such as monitoring workload, managing negative behaviors, monitoring risk factors, and creating healthy environments. If these measures are not adopted, global productivity could be reduced by $12 trillion, while depression could cause economic losses of $1 trillion. Paradoxically, the health sector is not exempt from this problem: almost half of its workforce has moderate levels of stress, low performance, and limited resilience (Taan *et al.*, 2024).

In Latin America, several studies show that a high percentage of workers experience high levels of work-related stress. In fact, 50% of participants report feeling stressed, highlighting the magnitude of the phenomenon in the region. Contributing factors include excessive work pressure, poor leadership, and a negative work environment that undermines employee well-being and performance (Marín *et al.*, 2024; Mercer, 2023; Pujol & Lazzaro, 2021).

In Peru, the Ministerio de Salud (Minsa, 2021) reported that 52% of the population of Lima suffers from moderate to severe stress, mainly due to the post-COVID-19 period. In addition, 55% of the economically active population has difficulty sleeping and requires medical attention. These states of tension and emotional overload not only affect psychological and physical well-being, but also reduce job performance and efficiency, generating a negative impact.

The Trabajando.com study found that 50% of Peruvians experience constant work-related stress due to the dynamics of remote work and high unemployment. Similarly, more than a third of workers reported stress due to unfavorable conditions at work, while the same proportion reported being affected by unemployment due to economic instability (Lizama, 2021). Regarding the impact of stress on the construction sector, it was found that 63% of men had a higher prevalence than 37% of women, with the most vulnerable age groups being 33% between 30 and 39 years and 30% between 50 and 59 years. The most affected sectors at the national level were engineering and sales (Tueros, 2021).

In this sense, work-related stress is a recurrent problem that affects physical and mental health, deteriorates the organizational climate and constitutes a public health priority. Studies have shown that more than 75% of Peruvian workers experience emotional exhaustion, develop physical illnesses, or suffer from anxiety and anger, confirming that stress affects performance and health regardless of the productive sector (Flores *et al.*, 2024; Delgado *et al.*, 2020; Bada *et al.*, 2020; Gamarra & Arévalo, 2023).

Founded in 1936, the company is dedicated to the melting of steel and ferrous metal parts. It is ISO 9001 certified and has 106 employees (workers and administrative staff) under labor regime No. 728. It was found that employees suffer from work-related stress due to, among other things, high performance targets, excessive production demands, poor communication,

unexpected schedule changes, mandatory overtime, and inadequate working conditions.

The consequences of failing to intervene include adverse health effects such as biological symptoms (headaches, general malaise, fainting), psychological symptoms and social symptoms. In addition, organizational effects were observed: deterioration in relationships with peers and supervisors, demotivation, avoidance of responsibility, increased absenteeism and turnover, and decreased productivity. Thus, the research question was How is work-related stress related to employee performance in a construction company in Callao, 2024?

The study is theoretically grounded by identifying new causal factors of work stress from selected theories, generating knowledge for performance management without compromising occupational well-being. Its innovative approach is in line with the health and well-being goals of the United Nations. The practical justification lies in the fact that the construction industry, a sector in sustained growth, demands high physical, mental and emotional levels. Despite the available scientific evidence, the literature on construction workers remains limited. The findings are expected to contribute to the improvement of stress management policies, the promotion of healthy and efficient work environments, and organizational practices that enhance well-being and productivity, which are key elements for success in this competitive sector.

Internationally, Dolores *et al.* (2023) identified the relationship between work stress and employee performance in an organization. The approach was quantitative, with a descriptive cross-sectional non-experimental design. The results showed in the Anova test that there is an F value = 0.001 and a significance of 0.970, confirming a significant relationship between the variables. In the descriptive data, it was found that 27.9% of the employees never or almost never experienced stress, while 63.3% always maintained adequate job performance. They concluded that the demands of achieving organizational goals generate high levels of stress that negatively affect employee performance and, consequently, the competitiveness of the organization.

Similarly, Velásquez (2022) determined the relationship between work stress and performance among promoters in a financial institution in Mexico. The study used a quantitative approach with a non-experimental design and a correlational level. The results showed the following: a Spearman test (Rho = 0.576, $p < 0.001$) confirmed a significant relationship between the variables; descriptive data showed that 23% had a low level of work stress and 63% had a high level of performance. In addition, Spearman (Rho = 0.612, $p < 0.001$) showed a significant relationship between work stress and job performance (knowledge). Similarly, Spearman (Rho = 0.701, $p < 0.001$) showed a significant relationship between job performance and organizational emotional exhaustion. Finally, Spearman (Rho = 0.62, $p < 0.001$) confirmed a significant relationship between performance and individual factors (physiological effects).

Ávila (2022) identified the presence of work-related stress and predisposing factors among operational personnel in Bolivia. The study used a mixed approach (descriptive and cross-sectional cohort), using the Maslach Burnout Inventory (MBI) test and an ad hoc questionnaire based on the CoPsoQ-istas21. The results showed a sustained increase in work-related stress (from 26% to 59% in three years), mainly due to a lack of communication between the company and its employees. It was concluded that there are high levels of stress due to physical/mental exhaustion, sedentary lifestyles, dependence on substances to get through the working day, insomnia and excessive use of electronic devices, factors that significantly affect production performance.

Arcos and Velásquez (2020) evaluated heat stress in the foundry area of the Fundi Laser company and its impact on occupational health. Using a qualitative approach and the prevention techniques NTP 322 and NTP 323, they calculated the WBGT index (ISO 7243), taking into account the ambient temperature, the temperature of the globe and the physical capacity of the personnel (sample: 8 employees). Pearson's test ($r = -0.468$, $p < 0.001$) showed a significant correlation between job performance and environmental factors. It was concluded that employees are constantly exposed to health risks (cardiovascular, respiratory, nervous, and

renal diseases), which changes their physical and mental well-being.

Panchano (2019) determined the influence of work stress on the performance of workers in a metalworking company. The study combined quantitative and qualitative methods with a cross-sectional, descriptive, and correlational design. The results, using Pearson's chi-squared test, showed that 84% of workers had low stress and 14% had moderate stress, while 70% had "somewhat satisfactory" performance, 26% had "satisfactory" performance, and the rest had "very satisfactory" performance. It was concluded that employees have low levels of stress and high levels of job performance.

At the national level, Caro and López (2020) determined the effects of heat stress on workers' health and performance in the foundry sector. The methodology used was WBGT (wet bulb globe temperature index) and Fanger's mean rating index (MRI). The results showed that job performance and environmental factors are significantly related according to Pearson's test ($r = -0.501$; $p < 0.001$). They concluded that physical and mental health conditions have an impact on work stress, which reduces efficiency in meeting industrial production goals and negatively affects performance.

According to Manay (2020), stress at work is related to performance in a private company. The approach was quantitative, with a baseline study, relational level, and non-applied cross-sectional design. The results showed that work stress and knowledge were significantly related according to Kendall's tau test ($\tau = 0.402$; $p = 0.022 < 0.05$), which was confirmed by Spearman's test ($\rho = 0.436$), showing a medium strength. Similarly, work stress and skills were significantly related ($\tau = 0.402$; $p = 0.022 < 0.05$), supported by Spearman ($\rho = 0.436$). Finally, work stress and performance showed a significant correlation ($\tau = 0.688$; $p = 0.003 < 0.05$), confirmed by Spearman ($\rho = 0.622$), with considerable strength. He concluded that there is a moderate positive relationship between work stress and performance.

Rivera (2020) found that working under heat stress is associated with job satisfaction among workers exposed to heat during steelmaking processes. The approach was quantitative, with a non-experimental design and association of variables in a single retrospective data collection. The results showed a relationship between work stress and performance dissatisfaction ($r = -0.509$; $p = 0.004 < 0.05$), which was significant and of considerable magnitude. He concluded that field jobs have high levels of heat stress, which generates dissatisfaction and affects performance in a Peruvian steel mill.

Carrera and Cueto (2022) studied the relationship between work stress and performance of workers in a company. The approach was quantitative, with an applied and correlational design. The results showed a 77.5% low level of work stress and a 69.9% high level of performance. The Spearman test ($\rho = -0.223$; $p = 0.025 < 0.05$) indicated a weak but significant association.

Chambi (2021) examined the relationship between stress and job performance among employees of a mining company. The approach was quantitative with a non-experimental correlational design. Surveys were conducted using the ILO questionnaires and those developed by Calizaya, Bellido, and Huamani. The results, using Spearman's test ($\rho = -0.641$; $p = 0.001 < 0.05$), showed a significant inverse correlation between stress and performance. It was concluded that higher workloads increase stress and decrease organization and performance.

Work stress is defined as the mismatch between job demands and an individual's ability to respond to internal and external pressures. This imbalance creates tension and discomfort, affecting the physical and emotional well-being of employees and their performance (Chiavenato, 2013).

Work stress has three dimensions, which are environmental factors, referring to all those elements that can affect the employees of a company, as they generate negative effects, especially because they create thoughts of uncertainty and risk. Some of these elements are lighting, ventilation, noise and comfort. Organizational factors, on the other hand, refer to demands that exceed the capabilities of employees and that usually occur in inopportune situations, known as "work challenges". Some indicators are task overload, lack of resources, monotony, and mandatory overtime (Rasool *et*

al., 2024). Finally, individual factors are those aspects of each worker's personality that generate discrepancies, such as disapproval or disagreement among colleagues, which can lead to conflictive and stressful situations (Junca & Lopez, 2023).

According to Velázquez (2023), job performance is defined as the performance of one or more people in achieving objectives, evidenced by effectiveness and quality. Similarly, Zaragoza Andrade *et al.* (2023) conceptualize it as employee behavior aimed at achieving the goals set by the organization.

According to Davis and Newstrom (2003), job performance can be measured in terms of teamwork, communication and knowledge. Knowledge is a set of skills that integrates academic and experiential information acquired over time, either individually or in groups (Chiavenato, 2000).

Likewise, knowledge is considered a flexible mix of organized practices based on experience, together with applied behaviors of contextual information based on real facts that can be assimilated through habit (Davenport & Prusak, 2006). Indicators include practical experience, academic information, and observation of tasks and activities.

On the other hand, communication is the efficient verbal or written interaction that facilitates the exchange of relevant information. In other words, it is a process of knowledge transfer between people in which emotions, knowledge, and feelings are shared (Davis & Newstrom, 2003). In this sense, communication is inherent to human relationships and functions as a linguistic tool that enables interaction, development, and socialization (Gómez, 2016).

Robbins and Judge (2013) emphasize that language and the way information is conveyed are fundamental to managing ideas, regulating motivation, and controlling emotional expression, which are key elements in influencing the behavior of team members. Some indicators are reports, technological transmission, exchange of ideas and expression of thoughts. Finally, Davis and Newstrom (2003) point out that teamwork is based on connection, equality, and leadership, supported by behaviors accepted by all members. Some key aspects are collective decision making, shared tasks, democracy, and accepted behaviors. According to Acosta (2014), working at the level of unanimity is defined as two or more people working together to achieve a single goal". On the other hand, Chiavenato (2015) states that "work teams operate through a participatory process of decision making, task sharing, and work responsibility" (p. 221). Given these theoretical foundations, the general objective was to determine the relationship between work stress and performance among workers in a construction company in Callao, 2024.

METHODS

The study took a quantitative approach, as it used statistical science to test the hypotheses presented. In addition, the study was applied in nature because it aimed to provide ideas for solutions based on its findings on how to reduce work stress in relation to increased job performance (Hernández & Mendoza, 2018).

Likewise, the level of research was correlational, as it sought to measure the association between work stress and job performance in order to understand not only the strength of the relationship, but also its meaning and direction (Ñaupa *et al.*, 2018). In addition, it was a descriptive study because it used descriptive statistics to measure the current situation of both variables, using a scale that describes the factual reasons (Hernández & Mendoza, 2018). On the other hand, the study used a nonexperimental design because it did not manipulate any independent variable to stimulate the phenomenon under study, nor did it intervene in the reality of the problem (Supo & Zacarías, 2020). Accordingly, the inductive method was used for data collection, that is, the data were collected only once, commonly referred to as transactional, in order to make specific measurements on both variables that would serve to validate the selected general theories (Hernández & Mendoza, 2018).

With regard to the procedure for defining the study population, inclusion and exclusion criteria were used, defining precisely and accurately the characteristics of the elements that made up the population, which consisted of 84 workers, all registered in the census. In terms of techniques, a survey was used because it is

a procedure for collecting data in a systematic, rapid and reliable manner (Ñaupa *et al.*, 2018). Accordingly, a questionnaire consisting of a Likert scale was used as an instrument. On the other hand, authors Hernández and Mendoza (2018) advised that documentary measurement instruments should be validated by at least two experts for improvement; for this reason, three experts validated the instruments. Subsequently, a pilot test was conducted with 25 items similar to the study population to obtain a Cronbach's alpha (CA) accepted by the scientific community, with results for work stress of CA = 0.791 and for job performance of CA = 0.746. On the other hand, Spearman's statistical test was chosen because the measurement level of both variables was ordinal and did not meet the assumptions of normality.

Finally, in the words of Álvarez (2024), the ethical considerations applied to the study were presented, such as ensuring that the participants were informed about the objectives of the research and that they consented to participate voluntarily. Likewise, the principles of confidentiality and protection of personal data were strictly applied in accordance with Ley n.° 29733 on the Protection of Personal Data, guaranteeing anonymity throughout the process.

In addition, the autonomy of the participants was fully respected, allowing them to express their opinions, judgments and attitudes without external influence, ensuring that their decisions were free from interference.

RESULTS

The descriptive results were as follows:

Figure 1 shows the current situation of the work stress variable, whose results reflect a high level of 9.52%, a medium level of 46.43% and a low level of 44.05%. It should be noted that these data indicate the existence of a healthy work environment, supported by health and safety management that promotes the well-being of employees. Likewise, the organizational design proves to be efficient, with a clear definition of roles, responsibilities and processes for each position.

However, there is a discrepancy that is beginning to widen the gap between middle managers' expectations of employee performance and the results they deliver, creating tension and pressure.

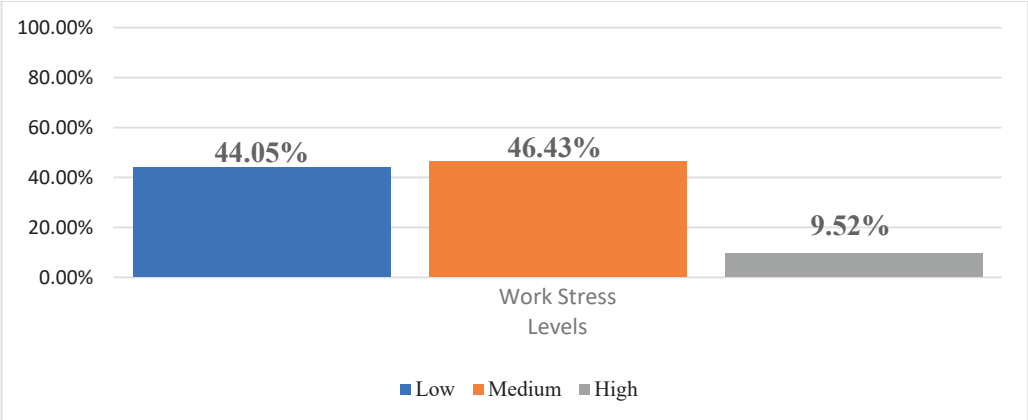
Figure 2 shows the current situation of the job performance variable, whose results reflect a high level of 36.90%, a medium level of 55.95% and a low level of 7.15%. It should be noted that this data indicates a poor allocation of workloads due to inadequate distribution. In addition, there are activities that do not have a designated person in charge, a situation that coexists with a certain lack of support from supervisors to their subordinates.

Regarding the inferential results:

Table 1 shows that stress and job performance are significantly related, according to

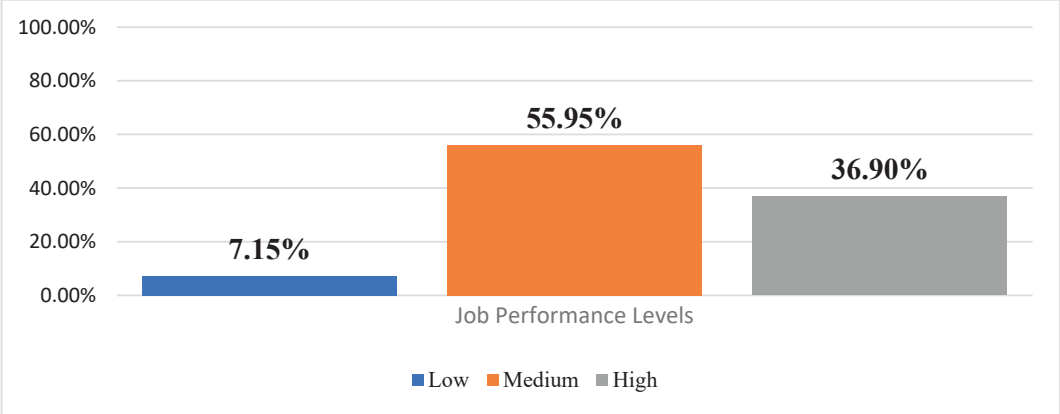
Figure 1

Current situation of the work stress variable



Note. Prepared by the author.

Figure 2
Current situation of the job performance variable



Note. Prepared by the author.

Table 1
Results of the combination of relational tests

Variable 1	Variable 2	Sig.	Rho
Work stress	Job performance	< .001	-.653
		Sig.	Rho

Nota. Results obtained by processing data using SPSS software version 27.

Spearman's rho correlation coefficient, which is equal to rho = -0.653. This relationship is inverse, as it has a negative sign, and it is also significant, with a significance level of <0.001. This indicates that there is a tendency in human resource management to demand performance levels that exceed the individual capabilities of employees without providing the necessary resources to achieve them.

On the other hand, it was observed that variable 1 (work stress) is related to each of the dimensions of variable 2 (job performance), namely:

Table 2 shows that work stress is related to job performance dimensions according to the results of Spearman's test. The correlation coefficients, ordered from the highest to the lowest, are communication Rho = -.599 (significant), teamwork Rho = -.551 (significant), and knowledge Rho = -.377 (moderate). It should be noted that there is a deficiency in communication management, considering that its effectiveness reduces uncertainty and misinterpretation, which are common sources of stress. Similarly, there was a deficiency in the management of work groups, with a lack of coordination that limits their ability to face challenges, which in turn increases the pressure to complete tasks.

On the other hand, variable 2 (job performance) and its relationship with each of the dimensions of variable 1 (job stress) were analyzed, with the following results:

Table 3 confirms that job performance has a significant relationship with the dimensions of job stress, as determined by Spearman's test. The correlation coefficients, from highest to lowest, are organizational factors Rho = -.540 (significant association), environmental factors Rho = -.465 (moderate association), and individual factors Rho = -.431 (low association).

It should be noted that deficiencies were identified in four key areas in the company under study: 1) task organization, 2) resource allocation, 3) monotony of activities, and 4) overtime assignment.

Table 2
Relationship between work stress and dimensions of job performance

Variable 1	Dimensions of Variable 2	Sig.	Rho
Work Stress	Knowledge	<.001	-.377
	Teamwork	<.001	-.551
	Communication	<.001	-.599

Nota. Results obtained from data processing using SPSS software version 27.

Table 3
Relationship between job stress and dimensions of job performance

Variable 2	Dimensions of Variable 1	Sig.	Rho
Job performance	Individual Factors	<.001	-.431
	Environmental Factors	<.001	-.465
	Organizational Factors	<.001	-.540

Nota. Results obtained from data processing using SPSS version 27 software.

DISCUSSION

With regard to work stress and performance among workers in a foundry, thanks to the information derived from inferential statistics using Spearman's test (Rho), which yielded a value of -0.653 and a p-value of 0.000 (less than 0.05), it was confirmed that there is a significant, negative, inverse and significant association between the variables. On the other hand, work-related stress was low in 44.05% of cases, while job performance was high in 36.90% of cases, according to the most representative data.

In this regard, the results were corroborated by Dolores *et al.* (2023), who demonstrated through the ANOVA test that there is a value of -f = 0.001 and a significance of 0.970, confirming the significant relationship between the variables. In terms of descriptive data, it was found that 27.9% of employees never or almost never experienced stress, while 63.3% always showed adequate job performance.

On the other hand, the results coincided with those of Velásquez (2022), who, using the Spearman test (Rho) = 0.576 and a p < 0.001, demonstrated a significant relationship between the study variables. In the descriptive data, 23% of the employees had low levels of job stress and 63% had high levels of job performance.

Furthermore, the evidence was consistent with Panchano (2019), who demonstrated that stress and job performance were significantly related using the chi-squared test with a value of 218.04 and 12 degrees of freedom. Likewise, the results were consistent with Manay (2020), who found a significant relationship between stress and job performance using Kendall's tau test = 0.688; p (0.003) < 0.05, which was also confirmed by Spearman's test = 0.622, indicating considerable strength.

Similarly, it agrees with Rivera (2020), who demonstrated a relationship between the variables using Pearson's r = -0.509; p (0.004) < 0.05, which is considerable and significant. Thus, the descriptive and inferential data were confirmed by Carrera and Cueto (2022), who reported 77. 5% low level of work stress and 69.9% high level of job performance, along with a Spearman test (Rho) = -0.223; p (0.025) < 0.05, reflecting a weak but significant association.

Finally, the study confirmed the findings of Chambi (2021), who demonstrated a Spearman correlation (Rho) = -0.641; p (0.001) < 0.05, significant and inverse between the level of job stress and job performance.

Similarly, inferential statistics using Spearman's test (Rho) = -0.377 and a p-value of 0.000 (less than 0.05) confirmed a moderate, negative, inverse and significant relationship between work stress and knowledge among workers in a smelting company.

The information was corroborated by Velásquez (2022), who proved by Spearman's test (Rho) = 0.612 and a p < 0.001, which confirmed

a considerable and significant relationship between the variable work stress and professional performance focused on knowledge.

On the other hand, the results coincide with Manay (2020), who demonstrated that work stress and knowledge (skills and abilities) were significantly related using Kendall's tau test = 0.402; p (0.022) < 0.05, corroborated by Spearman's test = 0.436, indicating a medium strength.

Furthermore, between work stress and communication among workers in a foundry, the inferential analysis using Spearman's test (Rho) = -0.599 and a p-value of 0.000 (less than 0.05) confirmed that there is a significant, negative, inverse and significant relationship. The results are in line with Ávila (2022), who, using the Maslach test, demonstrated a sustained increase in work stress over three years (from 26% to 59%) due to factors such as poor communication between the company and its employees.

In this regard, with respect to work stress and teamwork among workers in a foundry, inferential statistics using the Spearman test (Rho) = -0.551 and a p-value of 0.000 (less than 0.05) validated a significant, negative, inverse and substantial association. It should be noted that there were no previous studies contrasting these results.

On the other hand, in relation to job performance and environmental factors, Spearman's test (Rho) = -0.465 and a p-value of 0.000 (less than 0.05) confirmed a moderate, negative, inverse and significant association. These results were consistent with those of Arcos and Velásquez (2020), who found a significant correlation between job performance and environmental factors using Pearson's test (r = -0.468; p < 0.001). The study also confirmed the results of Caro and López (2020).

Similarly, regarding job performance and organizational factors, Spearman's test (Rho) = -0.540 and a p-value of 0.000 (less than 0.05) confirmed a substantial, negative, inverse and significant association. These data were consistent with Velásquez (2022) who, using Spearman's test (Rho) = 0.701 and p < 0.001, confirmed a significant relationship between job performance and emotional exhaustion derived from organizational aspects.

In addition, the results are consistent with Manay (2020), who showed that job performance and organizational factors (working conditions) are significantly related using Kendall's tau test = 0.601; p (0.000) < 0.05, supported by Spearman's test = 0.645, with a considerable strength of association.

Finally, with regard to job performance and individual factors, Spearman's Rho = -0.431 and a p-value of 0.000 (less than 0.05) confirmed a moderate, negative, inverse and significant association. These results were corroborated by Velásquez (2022), who, using Spearman's test (Rho) = 0.62 and p < 0.001, confirmed a substantial and significant relationship between performance and individual factors (physiological effects).

CONCLUSIONS

Work stress and job performance showed a moderate and significant relationship, indicating that the lower the job stress, the higher the performance of employees. In other words, the level of stress experienced by a worker can directly affect his ability to perform his tasks efficiently. In the construction sector, reducing work stress improves workers' concentration and efficiency, which increases their performance, ensures the quality of work, and optimizes project productivity.

Work stress and knowledge showed a small but significant relationship, where lower work stress is associated with greater knowledge absorption by employees. This means that stress in the work environment can hinder a person's ability to acquire and apply new knowledge. Therefore, it is important for construction companies to foster an environment that facilitates the efficient absorption of knowledge without putting pressure on learning time.

Work stress and communication showed a moderate and significant relationship, suggesting that the lower the job stress, the better the communication between employees. Stress can lead to frustration, irritability, or exhaustion in employees, resulting in poor communication and increased conflict within the team. For

this reason, companies in the construction sector should promote assertive communication, minimize conflict, and create a collaborative environment, which is key to the success of projects.

There was a moderate and significant relationship between work stress and teamwork, indicating that the lower the job stress, the greater the cooperation among team members. When employees are stressed, their willingness to cooperate decreases, which affects the group's efficiency. Emotional stress can cause employees to focus on their individual problems rather than collective goals. Therefore, construction organizations need to strengthen teamwork to improve cohesion and ensure the success of construction projects.

Job performance and environmental factors showed a moderate and significant relationship, indicating that the less exposure to unfavorable environmental factors, the better the performance of employees. This refers to how working conditions (such as noise, physical hazards, or work overload) directly affect employee effectiveness and performance. In the construction industry, mitigating these factors improves performance, increases productivity, and enhances safety, which are essential to team well-being.

Job performance and organizational factors showed a moderate and significant relationship, demonstrating that the less influence negative organizational aspects (such as rigid structures, lack of resources, or inefficient policies) have, the better the performance of employees. In the construction sector, optimizing these factors promotes efficiency, work quality, and conflict reduction, contributing to the success of projects.

Finally, job performance and individual factors confirmed a moderate and significant relationship, indicating that the less the impact of unfavorable personal characteristics (such as limited skills or negative attitudes), the better the performance of workers. In the construction industry, strengthening individual capabilities and reducing these factors will improve performance and increase the quality and efficiency of project delivery.

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Conflict of Interest

The author has no conflicts of interest to declare.

Author Contributions

Ana Luisa Zevallos Hernández (lead author): conceptualization, research, methodology, resources, supervision, validation, visualization, writing (original draft, review, and editing).