



Emphasis on Multilevel Factors Psychosocial Stressors, Coping Strategies, and Mental Health Outcomes Among Construction and Industrial Workers: A Review Analysis

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Abstract

Among construction and maintenance workers, occupational stress represents a significant public health concern, and still remains insufficiently addressed in existing literature and study. This review analysis studies the prevalence, causes, and consequences of stress, anxiety, depression and burnout among construction workers and maintenance workers, along with the coping orientations used by this population. Based on ten peer-reviewed studies published between 2015 and 2025, sourced from databases such as PubMed, PLoS ONE. The findings reveal increasingly high rates of mental health concerns within this population, with some studies reporting depression being up to 49.3% of workers, anxiety being up to 73.2%, and stress experienced frequently by over 96% of the sampled workers in the studies. Key stressors identified include various factors such as hazardous working conditions, excessive workload, financial insecurity, work-life imbalance, lack of supervisory support and for ethnic minority workers, migration-related challenges and cultural adjustment. Majorly, maladaptive coping strategies such as substance use, self-blame, denial, and behavioral disengagement were found to be higher and significantly associated with poorer mental health outcomes, whereas adaptive strategies including instrumental support seeking and, religious coping demonstrated protective effects in certain contexts. The review further emphasizes the strong reciprocal relationship between physical and mental health, with respiratory problems and poor sleep quality regularly linked to elevated psychological distress. Social exclusion, occupational stigma, and gender based workplace norms were identified as contributing additional barriers to seeking help and recovery. These findings illustrate the limitations of individual-level coping alone and encourage multilevel interventions that involve workplace structural improvements, culturally relevant support programs, early mental health screening, and targeted training activities. Future research may prioritize longitudinal designs, cross-cultural comparisons, and consider inclusion of ethnic minority and maintenance worker populations to address existing gaps in the literature and study.

Keywords: occupational stress, construction workers, industrial workers, mental health, coping strategies, social exclusion, burnout, anxiety, depression

Introduction

Occupational Stress

Occupational stress tends to occur when a job's demands exceed a worker's capacity or resources to cope, which may risk their overall well-being. Various theoretical models highlight this field, such as Karasek's (1979) Demand-Control Model, which conveys that very high job demands combined with low decision-making control result in psychological strain. Some of the common occupational stressors are factors such as excessive workload, role ambiguity, lack of autonomy, poor working conditions, and interpersonal conflict, all of which have been associated with outcomes like burnout, absenteeism, reduced productivity, and deterioration of both physical and mental health.

Coping Orientation

Coping is referred to as the cognitive and behavioral efforts individuals employ to manage internal and external demands that may be perceived as exceeding their resources (Lazarus & Folkman, 1984). Carver, Scheier, and Weintraub (1989) distinguished coping further into major orientations, such as problem-focused coping, which targets the source of stress in a direct manner, emotion-focused coping, which regulates emotional responses to stress, avoidant coping, which involves the individual's disengagement from the stressor, and seeking social support, which draws on interpersonal resources. In the context of occupation, coping orientation has been shown to significantly influence the health outcomes, resilience, and job performance, with maladaptive strategies such as avoidance and substance use being relatively prevalent among workers in physically demanding and hazardous industries.

Types of Coping

The coping strategies are widely grouped based on their orientation type and function in response to stress. In occupational settings, the effectiveness of coping is generally understood to depend on the nature of the stressor, the resources available to the individual, and the larger organisational and cultural context in which work occurs. Recently, meaning-based coping has been understood as a distinct orientation in which individuals rely on their own beliefs, values, and ambitions to sustain well-being in the face of chronic or severe stress (Folkman, 2001). Social support-seeking type of coping involves reaching out to others for practical or reality-based help, emotional support, or information-related guidance.

Construction Workers

The construction field is identified as one of the most stressful industries globally by exposing workers to a complex combination of physical and psychosocial hazards. While psychosocial stresses include deadline pressure, job insecurity, contract-based employment, and insufficient supervisory support, physical dangers include noise, vibration, severe temperatures, intensive manual labour, and a significant risk of injury or death. Compared to the overall working population, this population had higher rates of depression, anxiety, and suicide, indicating a significant mental health burden (Boschman et al., 2013). Crucially, help-seeking behaviour is frequently discouraged by dominant masculine workplace norms, which limit access to suitable therapies and contribute to the underreporting of stress-related symptoms.

Workers in Maintenance

Workers in a variety of industries, including management facilities, industrial plants, and transportation, are known as maintenance workers. They deal with a distinct but very demanding type of occupational stress. Their nature of work is frequently characterized by unpredictability and maintenance demands that may often require rapid response to emergencies that are outside of regular working hours. Complex situations in technical, physical hazards, including confined and tiny spaces, and exposure to hazardous materials, and the major undervaluation of maintenance labor further contribute to occupational stress in this group. Despite sharing many risk factors with the construction workers, maintenance workers

remain a very understudied population in occupational health research, representing a significant gap in the existing literature.

Social Exclusion

Social exclusion is described as a multidimensional concept that describes the process by which individuals, as well as groups, are systematically marginalized or restricted from full participation in the economic, social, cultural, and political life of their society (Levitas et al., 2007). It might go beyond materialistic deprivation and include things like being denied recognition, a sense of belonging, and a voice in social situations and societies. Social exclusion in the workplace can take the shape of informal processes like social network exclusion as well as discrimination based on characteristics like gender, race, disability, or employment status. The relationship between social exclusion and stress is well-recognized, with the help of studies, with individuals who are excluded reporting significantly higher levels of psychological distress, a very diminished self-worth, and a reduced sense of control over their situational factors (Bhalla & Lapeyre, 1997). When it comes to manual labor populations such as construction and maintenance workers, social exclusion may be accompanied by occupational stigma, unsafe employment arrangements, and limited access to health and social services, further escalating their vulnerability to occupational stress and its adverse health consequences. Social exclusion is hence increasingly recognized not just as an outcome of disadvantage but as an independent stressor with direct and indirect effects on individual and community and each person's well-being.

Methodology

Study Design

This review analysis examines the existing research conducted on stress, mental health, and coping strategies among construction workers and industrial workers. A review analysis approach was used to combine the findings from various studies and provide an in-depth view of the topic.

Search Strategy

The articles were searched using keywords such as construction workers, industrial workers, occupational stress, depression, anxiety, burnout, coping strategies, and mental health. Databases such as PubMed, PLoS ONE, Frontiers in Public Health, and ScienceDirect were used.

The studies that are included in this analysis are published in the duration between 2015 and 2025 which primarily focuses on construction workers or industrial workers and examines stress, mental health problems, or coping strategies. Only studies published in English were included in this analysis. The studies about other types of workers or those unrelated to mental health were excluded.

Study Selection and Analysis

Around 10 relevant articles that met the criteria. The shortlisted studies were organized into themes including mental health rates, risk factors, protective factors, and coping strategies. Information about study goals, worker characteristics, and main findings was extracted and reviewed systematically.

Results and Discussion

How Common Are Mental Health Problems?

Mental health problems are highly common among construction workers and industrial workers. A cross-sectional study in North Karnataka, India, found that 49.3% had depression, 73.2% had anxiety, and 25.4% had stress (Deshmukh et al., 2022). In Bangladesh, rates were 17.9% for depression, 30.3% for anxiety, and 12% for stress (Islam et al., 2024). A study in Gujarat, India, found comparatively higher numbers, with 85.4% experiencing very high stress and 2.1% experiencing extreme stress (Patel & Trivedi, 2015).

These subsequently high rates show that the construction work creates a set of serious mental health challenges among individuals. The differences between the countries suggest that the local factors, such as work rules, safety standards, and the culture of the location, may play a role. A review of 35 such studies confirmed the widespread stress, fear, and anxiety among the construction workers globally (Cabello & Florido, 2023).

Among social workers in the construction-related sectors, burnout has also developed as a notable concern among the population, with both personal burnout and work-related burnout that is strongly linked with perceived stress levels (Popescu et al., 2025).

Who Is Most at Risk?

Age

The obtained studies display mixed results about age. Deshmukh et al. (2022) found that workers aged 31-40 years had the most depression, anxiety, and stress levels. This age group faces pressure from family responsibilities, demands in career, and physical based work requirements all at once. However, Patel and Trivedi (2015) found minimal or no connection between age and stress levels, suggesting that the workplace conditions may matter more than age alone. Among industrial workers in Madhya Pradesh, 41.67% were under 25 years, with smaller proportions in older age groups (Rathore & Patel, 2025).

Gender

Most of the construction workers are male, and men show high rates of mental health problems (Deshmukh et al., 2022). However, this may also be because construction is more male-dominated than because men are more vulnerable. Patel and Trivedi (2015) found that 53.2% of male workers had sleeping problems compared to 35.3% of female workers, showing that stress affects both men and women differently. The industrial worker study showed an equal distribution of male and female workers (50% each) in several industrial settings (Rathore & Patel, 2025).

Education and Income

Deshmukh et al. (2022) found that the workers who completed their high school showed higher rates of mental health problems. This may mean that more educated workers are more aware of their difficult situations and may have higher expectations. Lower income on a constant basis may be related to more stress. A study on building construction workers found that 63% lacked formal and basic level education and earned wages up to Rs. 400, working as helpers (Kumar & Singh, 2023). Workers belonging to socioeconomic Class IV (lower income) experienced more and more mental health problems (Deshmukh et al., 2022).

Family and Marital Status

Patel and Trivedi (2015) had identified a significant connection between marital status and the psychological stress factor of the subjects. Rathore and Patel (2025) revealed that 50% of industrial workers were married, 33.33% unmarried, and 16.66% divorced. They also found several family structure differences, including 50% from a nuclear family dynamic and 50% from rural areas.

What Causes Stress at Work?

Low Working Conditions

Cabello and Florido's (2023) review shows major problems, such as insufficient safety equipment, unpleasant work environments, and low safety. Physical health problems, such as breathing difficulties, are strongly connected to mental health. Islam et al. (2024) found that workers who are without breathing problems had 45% less depression and 82% less anxiety levels. Extended period of working hours with very little rest, schedules which are inflexible, and physically demanding work create a constant stress among the individuals (Patel & Trivedi, 2015). Kumar and Singh (2023) reported that the 53% worked 8-hour days,

though the actual hours mostly exceeded this. Leung et al. (2017) identified the nature of tasks themselves as an important stressor category.

Time and Work-Life Balance

Leung et al. (2017) found that lack of personal and family time is an extremely powerful stressor contributing to the psychological strain of individuals. Work-time pressure affects both physical and emotional stress of the persons (Ahmad & Chan, 2025). Workers often seem to struggle to balance job demands with family responsibilities, and unpredictable and sudden schedules make this worse. Work-family conflict also developed, affecting workers' emotional stress levels (Ahmad & Chan, 2025).

Money Worries

Financial problems are believed to be a major source of stress (Cabello & Florido, 2023). Leung et al. (2017) found that increases in the cost of living, as well as the fears about job security, act as powerful stressors among construction workers. Kumar and Singh (2023) noted that workers earn minimal daily wages. Construction work is often a seasonal or project-based opportunity, creating an ongoing worry about future income and long-term stability.

Lack of Support

Cabello and Florido (2023) revealed low support from supervisors and coworkers, unfair treatment, and lack of rewards as major key stressors. Patel and Trivedi (2015) comprehend that lack of organizational support, as well as insufficient support from co-workers, friends, and family members, leaves workers in a vulnerable condition, contributing to mental health deterioration.

Job Challenges

Islam et al. (2024) revealed that the individuals who were bricklayers had 72% less stress compared to other construction workers, depicting that skilled positions may give more control or better working conditions for the individuals. Kumar and Singh's (2023) study, shows that majority of the workers as helpers, which is considered the lowest occupational level, may tend to increase their vulnerability.

Challenges for Ethnic Minority Workers

Ahmad and Chan (2025) examined ethnic minority construction workers and found they face additional challenges. Migration related stress tends to affect emotional well-being through separation from their home, cultural adjustments to be made, and possible discrimination in the workplace or region. Work-family conflict is very hard for workers far from their families or dealing with cultural differences in family expectations.

What Protects Workers from Stress?

Good Sleep

Getting enough sleep is very important. Islam et al. (2024) found that workers with a healthy sleep pattern were 64% less likely to be depressed. However, Patel and Trivedi (2015) reported that many of the workers were having trouble sleeping (53.2% of men, 35.3% of women), creating a cycle of stress that disrupts sleep, and poor sleep increases stress levels.

Physical Health

Maintaining one's physical health highly protects one's mental health. Islam et al. (2024) found that the workers without breathing issues after starting construction-related work had 66% less stress, showing how much physical and mental health are interconnected.

Job Positions

Islam et al. (2024) revealed that the skilled positions like bricklaying give more protection against the stress component compared to helper or laborer positions or positions that are comparatively low.

How Workers Cope with Stress

Harmful Coping Strategies

The type of coping strategies that an individual chooses makes things worse or better. Popescu et al. (2025) found that the avoidant coping pattern partially connected the relationship between stress and personal burnout, whereas self-blame and denial coping strategies had displayed positive mediation effects on burnout levels. Leung et al. (2017) showed that acceptance, self-blame, and disengagement were linked with higher levels and prevalence of psychological distress. Cabello and Florido (2023) confirmed that more frequent use of maladaptive coping strategies led to higher levels of stress and burnout.

Substance use is concerning. Leung et al. (2017) found that increased levels of substance use were connected to lower anxiety in the short term; this is mostly a temporary solution with long-term adverse effects. Jhanwar and Gaur (2022) found very strong links ($r = 0.82$ for anxiety, $r = 0.79$ for depression) between nicotine dependence and mental health issues, suggesting that the workers may turn to substances as a way to cope but end up with more problems than before.

Helpful Coping Strategies

The ways for helpful coping are even more complex. Popescu et al. (2025) found that the emotion-focused coping method partially mediated stress and work-related burnout, but with a reduced impact. Problem-focused coping did not mediate the stress-burnout relationship, contradicting expectations. Cabello and Florido (2023) showed that more frequent use of adaptive strategies showed no positive effect, suggesting that workers need specific strategies matched to the specific problems.

Whereas Ahmad and Chan (2025) found that several approaches do help. Seeking practical help as well as advice from others helps ease the effects of migration stress, work-family conflict, and work-time pressure on emotional stress and physical stress. For some workers, religion-based coping helps mitigate the effects of physically demanding work on emotional stress. This was the very first study to examine religious-focused coping in construction worker stress research.

Leung et al. (2017) found an unexpected result with humor as a coping strategy, showing a counterintuitive relationship contrary to previous research, requiring more study to understand.

The Importance of Matching Coping Methods to Stressors

Ahmad and Chan (2025) demonstrated that coping effectiveness depends on matching the right strategy to the right problem. The same stressor can produce different stress levels based on how the workers tend to respond. This means that the training should help the workers identify which strategies work best for them and the specific challenges they face in work or life, rather than teaching coping skills that are very generic.

Coping Skills Levels

Rathore and Patel (2025) studied industrial workers' coping skills and found out that 56.666% showed average coping skills and 43.333% demonstrated good coping skills, with minimal or no workers in the poor/low category. They also found a positive correlation ($r = 0.667$) between the stress levels and coping skills, showing that the workers experiencing higher stress may tend to develop more vast coping ranges out of necessity.

Health Consequences

Physical Symptoms

Stress tends to create various physical problems. Patel and Trivedi (2015) reported sleeping difficulties (53.2% of men, 35.3% of women), headaches (48.4% of men, 38.2% of women), and backaches (38.7% of men, 35.3% of women). Workers also suffered from heart disease, musculoskeletal disorders, and digestive issues.

Psychological Symptoms

Using the Garrett ranking method, Kumar and Singh (2023) found that depression ranked as the top outcome or result of stress (score 75.88), followed by alcohol addiction, difficulties in sleeping, elevated blood pressure, low mood levels, anxiety, physical illness, isolation, and interpersonal conflicts. Loss of concentration received the lowest rank (score 34.28). Patel and Trivedi (2015) noted that workers under stress experienced distress, irritation, difficulty concentrating, trouble making decisions, and reduced work commitment.

Stress Levels Distribution

Rathore and Patel (2025) found that 63.333% of workers experienced stress factor "fairly often" and 33.333% experienced it "very often," with only 3.333% reporting stress "sometimes" and 0% reporting "almost never." The mean stress score was 22.216, showing consistently elevated stress levels.

Conclusion

This review analysis of compiled research from 2015 to 2025 shows that construction workers and industrial workers face extremely high levels of depression, stress, anxiety, and burnout. These levels are higher than in the general population of individuals, with several studies finding that over 70% of the workers experience significant mental health concerns.

Multiple factors create this situation. Compromised working conditions, little or no safety, long hours of work, low pay, job insecurity, lack of emotional support, and imbalances in work-life all contribute to stress. Workers in lower positions with less education and lower income are especially vulnerable. Ethnic minority workers face added challenges from migration components and several cultural adjustments.

Risky methods like substance use, self-blaming, and denial make things even worse. Adaptive coping shows very restricted benefit and may not be of help when not paired with specific stressors. Seeking practical support helps with work-family conflict and time pressure, while religious coping can help with physical workload stress for some workers.

The connection between physical and mental health is clear. Issues in breathing, poor sleep patterns and quality, and physical body pain are all strongly linked to psychological distress, showing that protecting physical health is essential for good mental health.

These patterns show that construction workers face multiple, overlapping stressors that require both individual coping strategies and workplace improvements. Individual coping alone cannot solve problems created by poor working conditions, unfair treatment, and inadequate support. Real solutions need changes at multiple levels.

Recommendations for future study

The future studies can follow workers over time to note how the stress develops and whether interventions help in the long-term. Research must examine how organizational changes and structural changes significantly reduce burnout and create healthier work environments. Studies that compare different countries may help identify what factors are universal versus which ones are culturally specific.

The unexpected finding about humor (Leung et al., 2017) needs closer examination. Research should expand to include more ethnic minority workers and examine how cultural backgrounds influence stress and coping, building on Ahmad and Chan's (2025) work. Studies should try to understand the complex interactions between the different stressors, stress levels, and coping behaviors.

Training and Support Programs

Workers need various types of training to be administered to regulate their stress levels. It must happen alongside improvements in the workplace. Employers must take initiative in informing the workers about the harm from disengagement, self-blame, and substance use, all while providing them with better alternatives.

The training provided should focus on proven strategies like instrumental support seeking. For ethnic minority workers, organizations must implement culturally appropriate programs that respect diverse backgrounds and beliefs and provide them with access to relevant support resources, including religious communities or spiritual communities when needed.

Programs based on sleep importance and fatigue management are crucial. Prevention of substance abuse and treatment should be intertwined into workplace health initiatives, identifying that workers may use substances as a way of coping when lacking better options.

Workplace Changes

Employers must make sure that there are reasonable schedules, better safety equipment, a safety culture, and pleasant and friendly work environments. Good treatment, rewards, and strong support from supervisors and coworkers must be followed as a standardized practice.

Better levels of pay and job security are major stress reducers. Noting the cost of living pressures and stability in employment requires adequate wages and career development opportunities. Workers who fall under the helper positions and laborer positions may need closer attention in comparison.

Work-life balance methods should focus on time pressure, lack of family time, and work-family conflict with the help of flexible scheduling, adequate rest, and policies respecting family responsibilities. Organizations should prioritize developing policies supporting cultural integration for ethnic minority workers.

Early Intervention and Screening

Regular mental health-based checkups and screening should be encouraged, with attention to depression levels and anxiety, due to their high prevalence rates. Early detection of workers with breathing difficulties or other physical health-related issues should aid both mental health and medical support.

Workers who are aged between 31 and 40 may often benefit from specific support addressing the combined pressures they face. Workers from lower socioeconomic backgrounds and those lacking formal education need accessible mental health resources shaped to their levels of literacy and cultural contexts.

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