

Alleviate Job Burnout in Construction Workers in China

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Burnout is at all-time highs across modern professions. As a typical labor-intensive industry, the high-pressure and task-driven nature of the construction industry makes construction workers more prone to burnout. It is still unclear whether increasing the professionalization level can lessen the many harmful consequences of job burnout on construction workers' employment.

job burnout

construction worker

professionalization level

1. Introduction

Due to the high levels of stress and its task-driven environment, the construction industry is considered as one of the most hazardous and unhealthy industries ^{[1][2]}. Construction projects are often large-scale, complex, integrated, and involve multiple stakeholders. Practitioners are always exposed to a high level of risk and are required to cope with a lot of complex tasks in a limited time ^{[3][4]}. In addition, there are always complicated work relationships under a demanding and stressful work environment during the whole project life cycle ^[5]. Prolonged work under great stress can continuously and rapidly deplete the physical and psychological resources of workers, harm their health and potentially lead to job burnout ^[6].

Job burnout has been a significant problem for the workforces of modern society ^[7]. Excessive stress, insecurity, undervaluation, and alienation in the workplace can all trigger psychological problems among workers for whom job burnout may develop ^{[1][7]}. In the construction sector, there is also a need to be careful about job burnout. Previous research has shown that job burnout, an important attrition factor in the Job Demand-Resource (JD-R) model, not only has a negative impact on practitioners' health and well-being but can also lead to unsafe behaviors and affect project performance ^[8]. Therefore, it is critical to address the burnout that Chinese construction professionals are experiencing.

Around 220 million people worldwide are employed in the construction industry, which is labor-intensive, with non-nationals and migrant workers making up a sizeable part of this workforce ^[9]. This tendency is particularly noticeable in China. In the rapid process of industrialization and urbanization, migrant workers have emerged as a unique product of China's dualistic economic system ^[10]. They usually have a rural household registration, but work in non-agricultural industries in the city, with the ambiguous status of "half-agricultural and half-worker" ^[11]. Due to the low entry barriers and few technical requirements, the construction industry has attracted a huge amount of rural labor, making it a primary choice of profession for less-skilled migrant workers ^[10]. According to the '2021

national migrant workers monitoring survey report' released by China's National Bureau of Statistics, the construction industry accounts for 19.0% of migrant workers' employment, second only to the manufacturing industry, with predominating physical labor works. Migrant laborers are the front-line workers and direct finishers of building products in the construction industry. They have greatly assisted China's urbanization and social development. However, compared to the industrial workers in developed countries with high technical quality, stable positions, high social status, and legal labor security rights, migrant workers in China's construction industry also have many problems, which hinders the sustainable development of the construction industry [12]. On an individual level, the common stereotypes of migrant workers include being uneducated and lacking vocational skills; on an organizational level, the unprotected working environment, high mobility of personnel, and lack of safety training all pose great challenges for organization management, which may even affect construction safety [11][13]. In addition, migrant workers in the construction industry suffer from low social status, difficulties in protecting their legal rights and interests, and often are without a sense of belonging, all of which have a negative impact on the healthy development of the industry [14]. Therefore, it is urgent to promote migrant workers for professional transformation in the construction industry of China.

Job burnout is often caused by excessive job demands [15]. In contrast, according to the professionalization and JD-R theory, an increased professionalization level can create quality employment and an improvement in the job conditions for construction workers, as evidenced by a reduction in job demand and an increase in job resources. It is thus reasonably presumed that a higher level of professionalization might better balance the relationship between job demands and resources and thus alleviate workers' job burnout. Numerous factors have been linked to job burnout during the past few decades. The key contributors to burnout include perceived workload, role ambiguity, role conflict, physical discomfort, emotional demands, job instability, and work–family conflict as job demands [5][16][17]. In addition, the factors influencing job burnout are not completely isolated from each other but are rather interactive and reciprocally embedded [5].

Many academics have studied approaches for reducing construction workers' job burnout. Most existing studies on job burnout have paid attention to exploring the causality of job burnout, and much research on antecedent variables has examined the effect of one or a few variables on job burnout based on the conservation of resources (COR) theory. However, few studies have analyzed whether the transition of migrant workers to industrial workers in the construction sector has improved their job burnout in a systematic way. Moreover, few studies have conducted in-depth research on the interactions between the main factors that contribute to job burnout. To address the research gaps, researchers developed a theoretical model based on the COR theory to explore the interactions among professionalization, workload, work–family conflict, and job burnout from the perspective of professionalization. Structural equation modeling (SEM) was used for empirical data analysis.

2. Job Burnout

Job burnout is considered to be an occupational psychological syndrome [18]. Maslach and Jackson [19] conducted research on this topic among individuals who engage in “people-work” of some kind and proposed three dimensions of it, including emotional exhaustion, depersonalization, and personal accomplishment, which was

supported by the research of Yang et al. [20]. In recent years, many studies have been undertaken to analyze the antecedent variables of job burnout based on Maslach's theory. Yue et al. [21] suggested that job burnout stems from the dual pressures of task goals and communication/coordination. In contrast, Tong et al. [22] proposed that it is a psychological syndrome experienced by employees after prolonged exposure to negative emotional and interpersonal stressors at work.

In the construction industry, researchers have noticed that job burnout not only has a serious impact on the everyday life and work performance of workers, but also on the organizations in which they work [15][21]. Hence, many studies have been conducted on this topic. Particularly, construction workers are more likely to suffer from job burnout as a result of high workload, long working hours, and high safety risks [21]. The constraints of time pressure, coupled with limited resources, role conflict, and role ambiguity, make construction professionals have a high level of job burnout [23].

3. Professionalization

More and more industries are becoming professionalized following the continuous refinement of labor division, and professionalization has become an indicator of the industry's maturity [24]. The current research on professionalization mainly focuses on three perspectives: characteristic factors, process theory, and rights theory. Most researchers generally agree that the process theory perspective most closely resembles the concept of professionalization, which is seen as the evolution of a profession from a completely unstructured job to a fully developed one [25][26]. Furthermore, according to Wilensky [25], professions generally undergo the following stages: creating full-time jobs, establishing training schools, founding professional associations, developing relevant laws and rules, etc.

Migrant workers are a special social phenomenon during the period of social transformation in China, so achieving their transformation into industrial workers has become an inevitable requirement and a strategic task to promote the industry and its development [27]. In line with previous research is defining the dynamic process of professionalization in relation to the intellectual skills, professional, ethics and social status of the employee [28]. Furthermore, some psychological driving factors such as perceived behavioral control, subjective norm, and behavioral attitude have been shown to influence the development of construction workers' professionalization [11]. The professionalization of construction workers is therefore a process of improving job skills, developing vocational qualities, observing professional norms, and acquiring appropriate status and security in the modern construction sector [25][29].

4. Workload

Some researchers have focused on the concept of workload as the number of tasks per unit of time [30]. Jones & James were early proponents of the idea of role overload, which they defined as the degree to which performance is impacted by inadequate resources, training, and time to perform one's role [31]. The workload can refer to

different yet related constructs such as job demands and job overload. The two interrelated structures of job demand and job overload are related to workload [30]. MacDonald [32] categorized the demand factors impacting workload as physical, sensory, central processing, psychomotor, and affective. Jobs become stressful when people are required to carry out more work than they have resources for, which will further negatively impact burnout, anxiety, and depressive symptoms. This is compatible with the COR theory's perspective [33][34]. Moreover, current studies generally believe that workload will consume individual physiological and psychological resources [35]. As for construction workers, workload imposes both a physiological and psychological drain on them due to the high-intensity, dangerous, and complex work they carry out for an extended time, which may further result in exhaustion [36]. In a word, the workload depends on the job demand and ability of workers, and when the work is too heavy or the difficulty of the task exceeds workers' ability, it will have both psychological and physiological impacts on them.

5. Job Insecurity

Job insecurity was earlier defined as an individual's perceived inability to preserve desired continuity in a threatening employment position [37]. Similarly, Zhang [38] and Yi et al. [39] argued that job insecurity is a lack of security in terms of job continuity or aspects of work. More simply, insecure workers are aware of the possibility of losing their jobs [40]. Indeed, for many people, sustained employment provides a source of income, friendship, a sense of belonging and social status, and access to the above material or psychological resources can be threatened when workers anticipate that their employment may not be sustainable [37][41]. Issues such as temporary forms of employment and low contracting rates make construction workers highly fluid and unprotected. Hence, construction workers tend to be more insecure about their jobs. Job insecurity in this research therefore can be qualified as a concern of job instability and the absence of labor rights protection [11]. This can have a serious negative impact on their psychology and behavior. Previous research has confirmed that job insecurity can contribute to more job withdrawal and poorer task performance among construction workers, which in turn reduces job performance [40][42].

6. Work–Family Conflict

Work–family conflict is a product of economic development and urbanization in the post-industrial era. This concept was initially proposed by Kahn et al. [43], while Greenhaus and Beutell's notion of work–family conflict [44], based on role theory and the scarcity hypothesis, is widely accepted as a role conflict arising from role incompatibility between work and family. In other words, work–family conflict refers to the fact that the pressure arising from an individual's involvement in work (family) activities makes it difficult to fulfil the other role. The sources of work–family conflict include strain-based conflict, time-based conflict, and behavior-based conflict [44].

As a labor-intensive industry, the construction sector absorbs a large amount of surplus rural labor, and the collective mindset drives workers to sacrifice more time to work for a better household in the long run [45]. Furthermore, workload, task-related stress, and flexibility in scheduling all have an impact on work–family conflict [46]. Based on the aforementioned findings, this research viewed work–family conflict as a role conflict caused by

employment characteristics and industry features that make it impossible for construction workers to combine work and family life, mainly in terms of the effects of work on the family. In addition, work–family conflict is also regarded as a two-way concept, with both directions related but not identical (i.e., family interference with work is distinct from work interference with family) [\[47\]](#).

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