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CONFLICTING SITUATIONS AFFECTING PERFORMANCE OF CONSTRUCTION WORKERS AT SITES

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ABSTRACT

The construction industry is labour-intensive, and any conflict involving workers affects the project's overall performance. The present study identified potential conflicting factors and assessed the relative influence of those factors on the performance of workers. A total of nine conflicting factors were identified based on relevant literature. A questionnaire survey was prepared, and responses were collected from workers by visiting four construction sites in India. The data was then analysed using descriptive statistical methods. It was found that payment delay and overworking were the most influential conflicting factors on worker performance. Inadequate resources, lack of communication, lack of education/training, time pressure, and factors related to workplace environments such as noise and dust were also identified as contributing factors to worker conflicts. In contrast, lack of safety and low-risk perception were identified as the least impactful on performance. Addressing these conflicting factors can improve worker performance and job satisfaction, improving the project's overall performance. The study's findings can serve as a guide for employers and managers to create a positive work environment and address the difficulties faced by construction workers at job sites.

Keywords: *Conflict; Conflicting Factor; Construction Sites; Construction Worker.*

1. INTRODUCTION

The construction industry is regarded as the backbone of the global economy due to its significant contribution to global gross domestic product and employment (Tariq & Gardezi, 2022). The construction industry has a substantial impact on job creation. Globally, the construction industry employs more than 220 million people (International Labour Organization [ILO], 2020). Infrastructure development, an output of the construction sector, is a vital indicator of a country's success and global reputation, as it helps fulfilling the population's social demands. The importance of the construction industry to any economy is well documented in the literature (Carvajal-Arango et al.,

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2021; Durdyev & Ismail, 2012; Tariq & Gardezi, 2022). Hence, any issue affecting the construction industry's progress would impact the global economy.

Furthermore, Carvajal-Arango et al. (2021) argued that due to the large amount of manual work involved in the construction industry, it is considered to be a labour-intensive industry. The execution of a construction project takes place at construction sites, which employ human resources at every level. The project managers, site supervisors, safety managers, and construction workers are all essential for the completion of the project within the planned time, cost, and quality. The performance of these critical human resource contributors is determined by their knowledge, experience, skills, and decision-making ability (Hussain et al., 2020) which in turn increases work productivity, quality, and safety.

Although knowledge, experience and communication are essential skills to possess by the individuals at the site, the performance of a project can be hugely impacted by certain conflicting situations (Assaf, 2006). These conflicting situations that occur between the construction personnel at a personal or professional level have a negative impact on project deliverables. Construction sites are often characterized by dynamic and complex work environments requiring workers to navigate competing demands. This can lead to a range of conflicts that workers experience daily. Conflicts arise due to issues in certain aspects of a project, such as time, money, employment, payment, the quality of work, communication, administration, and management (Tariq & Gardezi, 2022). It may be due to differences in individual perspectives, approaches, objectives, and goals. In addition, as the construction industry is a complex and competitive environment in which workers with diverse perspectives, talents, skills, and knowledge collaborate, they set their goals and expectations to maximize their personal and professional benefits in their way. The growing number of workers from diverse cultural backgrounds in the construction value chain means more interactions and disagreements, whether contractual or social, increasing the number of construction disputes (Kumaraswamy, 1998). This can affect work relationships and mutual trust, lowering overall performance (Tariq & Gardezi, 2022) and resulting in adverse outcomes such as project delays, cost overruns, and poor quality of construction. Therefore, it is important to establish a conflict management process in a pre-project planning phase (Yang et al., 2014) that encompasses a wide range of activities, including communication, problem-solving, dealing with emotion, and understanding (Pondy, 1992; Putnam & Poole, 1987; Tinsley & Brett, 2001).

This study addresses the subject of conflict among construction workers through the following two research questions:

- What is considered a conflict for a worker on construction sites?
- How influential is each conflicting factor in impacting construction workers' performance?

The answers to the above-mentioned research questions will lead to identifying the conflicting factors and how each factor affects worker performance. The present study does not explore the issue of workplace conflict from the management perspective, such as considering the perception of managers on worker conflicts or exploring the effects of worker conflict on top management. Instead, this study focuses on identifying factors based on relevant literature and assessing them using the workers' opinions. Interpreting the influence of potentially conflicting factors for a worker will allow the construction

industry to identify the shortcomings and further implement remedial steps to improve the performance of the construction workforce. For example, an organization can use the findings of this study to pre-plan and mitigate possible conflicts among workers. This will benefit project managers to keep running the projects on time by mitigating the conflicts among construction workers amicably.

2. LITERATURE REVIEW

2.1 CONFLICT

Conflict is defined as 'to be in opposition to one another'. It refers to disagreements between people or members of an organization. Such disagreement is inherent in relationships between all human beings (Thakore, 2013). Rauzana (2016) defined conflict as a dispute between elements or opposite thoughts in a project. Further, Brown (1993) highlighted that doubt, questioning, opposition, incompatible behaviour, controversy, antagonistic interaction, and disputes constitute a conflict. The impacts of these conflicts on workers can be significant, leading to adverse outcomes such as reduced job satisfaction, stress, and burnout (Jaffar et al., 2011). In addition, conflicts can also have broader impacts on construction projects, such as delays and cost overruns. Addressing these conflicts requires a proactive approach that involves understanding the root causes of conflicts, developing effective communication and conflict resolution strategies, and creating a culture that prioritizes worker safety and well-being.

Conflicts can be internal or external. Internal conflicts arise when workers experience conflicting goals or values within themselves (Aubert, 1963). For example, workers may struggle to balance their safety with job responsibilities, leading to anxiety and stress. Similarly, workers may experience conflicts between their values and work demands, such as when asked to cut corners on safety procedures to meet project deadlines. On the other hand, external conflicts arise when workers experience conflicts with others within their work environment. This can include conflicts with supervisors, co-workers, clients, or the general public. For example, workers may experience conflicts with supervisors over working conditions or safety procedures or with clients over project timelines or specifications. Workers may also experience conflicts with the general public, who are impacted by construction activities, such as noise or disruptions to traffic.

Although conflicting situations in a workplace inhibit the performance of at least one of the parties involved, Rauzana (2016) proposed that conflicts also have certain advantages. One suggested advantage is that conflict can provide information and new ideas, ultimately improving decision-making quality. Furthermore, it can force the parties involved to think about and reconsider their perspectives while bringing previously interred problems to the surface, allowing the leadership to assist in finding the best solution for the project. Lastly, it can also teach mutual understanding and respect for differing viewpoints.

2.2 CONSTRUCTION WORKER PERFORMANCE

As mentioned, the construction industry's major problems are declining productivity and a lack of performance standards for construction workers (Shehata & El-Gohary, 2011). The numerous factors that affect worker performance can be classified into three types: factors related to the industry, factors related to management, and factors related to workers. Design factors include repetition and complexity, building codes, construction

technology, laws and regulations, job factors (job duration, size of the job, and type of job), environmental factors (adverse, uncertain weather and seasonality), and site location are all industry-related factors. Next, management-related factors include planning and scheduling, leadership, motivation, and communication. Lastly, labour skills, motivation, and availability are all worker-related factors. Workers must have the ability and knowledge to perform the task skilfully, and the unavailability of a trained workforce will undoubtedly affect labour productivity (McNally & Havers, 1967).

Improvements in project performance due to advances in labour skills have long been sought after in the construction industry. It is well accepted that project performance is predicated on the capabilities of the labours during project execution, whose talents and abilities can affect project progress to varying degrees. A study by Tabassi et al. (2019) analyzed how conflict resolution can improve performance in such contexts by mediating the level of team collaboration. As conflicts among workers impact their ability to perform well, it is essential to analyze worker conflicts with the aim of enhancing worker performance at sites.

2.3 CONFLICT IN CONSTRUCTION

Assaf (2006) conducted a questionnaire study that identified the causes of delays in a construction project. Payment delays, change of orders and suspension of work by the owner were a few direct situations that reduced the efficiency of workers, causing the delay. Some indirect problems faced at the worker level were the nationality of workers, personal conflicts among workers, low productivity level among workers, labour shortage, and lack of skilled workers. Some external factors involved were effects of subsurface conditions, delay in obtaining permits from the municipality, hot weather effect on construction activities, rain effect on construction activities, unavailability of utilities on site, the effect of social and cultural factors, traffic control at the job site and accidents during construction.

The high cost of conflict resolution in projects is a critical characteristic of the construction industry. Ng et al. (2007) discussed the dynamic nature of conflicts in terms of their evolution and escalation within a project and the interaction between conflicts and dispute avoidance and resolution techniques. The study explored conflicts under two broad categories – organizational and uncertainty, which were further split into the process and people involved. In the process category, various situations observed were due to performance, quality, payment, and poor communication. In the people category, misunderstandings, culture, language, communication, work habits, and lack of team spirit were identified as the major conflicting situations. Some uncertain areas were further divided into external or internal factors. Social impacts, weather, and unforeseen site conditions were considered external factors. In contrast, the workmanship was considered a source of internal conflict.

Carvajal-Arango et al. (2021) discussed the aspect of the workplace well-being of construction workers, as it has proven to be precarious during the construction process. Most approaches to construction workplace well-being have been top-down, objective rather than subjective, and excluded perceptions and opinions of workers about their work. Construction workers were observed to be more socially and economically vulnerable due to their work-life imbalance, increased risk of accidents on site, long hours of repetitive work, occupational diseases, and, ultimately, poor quality of life (Carvajal-Arango et al., 2021). Moreover, it was suggested that manual construction is intensely

physical and fatigue-inducing. This can lead to muscle and joint pain and poor working posture creating ergonomic risk and ultimately resulting in poor productivity and efficiency. The main reasons for these unfortunate but avoidable outcomes are lack of supervision and inadequate safety conditions on site. This generates a potential risk of accidents and deterioration of physical and mental health. Some work sites conditions like noise and air pollution, unhygienic environment, continually changing climatic conditions, and poor eating habits lead to alcohol/drug use, putting workers' health at risk. In addition, other factors like excessive workload, inadequate salary, and disinterest in work lead to conflicts. In interviews conducted by Carvajal-Arango et al. (2021) with construction workers, one of the statements was, *"I have to work in construction, but I don't like it. My colleagues also think that because they have to, not because they want to, as they say"*. Therefore, most workers' opinions regarding their sense of work are negative, mainly due to the lack of choice to work in sectors other than construction.

3. RESEARCH GAP

In summary, the literature review indicates that although conflicting situations involving workers considerably affect their performance, only a limited number of studies have evaluated conflict-oriented factors in construction. Few studies assessed conflict outcomes at the management level in construction but not at the workers' level (Alazemi & Mohiuddin, 2019). In addition, some studies that identified conflicting situations at the workers' level are based on theoretical constructs (Thakore, 2013). Furthermore, data-based studies on conflicting factors, specifically at construction sites, involve the perception of managers and engineers rather than the opinions of site workers, which poses a significant research gap. This study attempts to address the research gap by identifying the conflicting factors for workers and evaluating the impact of those factors on worker performance by involving the construction workers and gathering their insights. As a result, the effect of workers' conflict on project performance can be thoroughly understood for the project to be executed under the given constraints.

4. RESEARCH METHOD AND ANALYSIS

4.1 IDENTIFICATION OF CONFLICTING FACTORS

Scopus and Google Scholar repositories were used to select research articles for a literature review. A three-level keyword screening structure method (Cong et al., 2022) was adopted to search for the relevant studies: the first-level context keywords defined the search context, i.e., the construction sector; the second-level topical keywords narrowed the scope, i.e., conflict and related terms; and the third-level subject keywords limited the search to target subjects, i.e. workers.

With the help of the screening method, a set of 21 peer-reviewed English language articles were obtained. Initially, 25 factors were identified as potential 'conflicting factors' based on a thorough review of the articles. A discussion on the 25 factors was carried out with four experts, including two academicians and two construction managers, each having more than 15 years of experience in construction. The discussion aimed to check the appropriateness of the identified factors and ensure no significant factors were left out. Many factors were identified during the discussion as repeated or depicting the same meaning, which were omitted or grouped to make one factor. For example, training, illiteracy, and education were clubbed together under the same factor, *lack of training*. At

the end of the discussion, the 25 identified factors were narrowed down to 12 conflicting factors that were exhaustive, and the experts suggested no further changes.

Subsequently, the 12 factors were classified into internal and external conflicts based on the characteristics of a conflict (Aubert, 1963; Thakore, 2013). An internal conflict is a conflicting situation that arises within an individual (I1), whereas an external conflict is a conflict that occurs between multiple parties (E1). The four experts who narrowed down 25 factors to 12 conflicting factors have further categorized the 12 conflicting factors into internal and external factors. The experts have set the parameters, based on the outcome of the conflict, for categorizing the factors into internal and external conflicting factors. Three parameters – affects well-being (I2), work constraints (I3), and lack of clarity (I4) – were identified for internal conflict. On the other hand, two parameters – opposition to one another (E2) and motive to frustrate (E3) – were recognized for external conflict. A factor should satisfy at least one parameter to be classified as an internal or external conflict. When a factor satisfies parameters under both the internal and external classifications, the number of satisfying parameters is counted. If a factor satisfies more parameters under internal than external, the factor is classified as an internal factor, and vice versa. If the factor satisfies the same number of parameters under internal and external classifications, the factor is termed an internal-external conflicting factor. In addition, if the factor does not satisfy any of the parameters, that factor is removed for further analysis. Using a brainstorming approach, all the experts have classified all the 12 factors into internal, external, and internal-external factors based on the developed method. The results of the classification are shown in Table 1.

Table 1: Classification of conflicting factors

Sl. No.	Conflicting Factors	Internal			External		Source(s)
		I2	I3	I4	E2	E3	
1.	Payment delay[2]	✓			✓	✓	(Assaf, 2006; Carvajal-Arango et al., 2021)
2.	Inadequate resources[1]		✓	✓	✓		(Tariq & Gardezi, 2022)
3.	Lack of communication[3]		✓	✓	✓	✓	(Ng et al., 2007)
4.	Lack of training[1]		✓	✓			(Barriuso et al., 2021)
5.	Workplace environment[3]	✓				✓	(Choi et al., 2021)
6.	Overworking[2]	✓			✓	✓	(Carvajal-Arango et al., 2021)
7.	Time pressure[3]	✓	✓		✓	✓	(Assaf, 2006; Mashwama et al., 2019)
8.	Low-risk perception[3]		✓		✓		(Wong et al., 2020)
9.	Lack of safety[3]	✓				✓	(Wong et al., 2020)
10.	Uncertain site conditions						(Ng et al., 2007; Mashwama et al., 2019)
11.	Unsafe behaviour						(Zhang et al., 2023)
12.	Labour strikes						(Mashwama et al., 2019)

[1]internal conflict, [2]external conflict, and [3]internal and external conflict

Table 1 shows that out of 12 factors, only nine were classified under internal, external, or internal-external factors. The three factors – *uncertain site conditions*, *unsafe behaviour*, and *labour strikes* – were identified as an outcome of a conflicting situation rather than a

conflicting factor by itself. Therefore, based on the discussion, nine 12 potential factors were retained as conflicting factors for further analysis.

4.2 DATA COLLECTION USING SURVEY

The data was collected from construction sites in and around Guwahati, India, through purposive sampling. The sampling unit considered for this study was construction workers. Before circulating the questionnaire among all the workers, the language and understanding of the question statements were pilot-tested at the site with three construction workers. Four construction sites were visited, and 50 workers (semi-skilled and unskilled) were surveyed from January to March 2023. The construction workers primarily belonged to one of the three trades: bar benders, carpenters, or masons. Most of the surveyed workers were male, and only four were women. 56% of the workers were between the age of 18-24 years, 40% were between the age of 25-35 years, and only two workers were above 40. Over 75% of the workers had a site experience of 1-5 years, and 16% had an experience of 5-10 years working at sites. Two workers had an experience of less than one year and more than 15 years, respectively. All the workers involved in the study were working 10-hour shifts. Since most of the workers were unlettered, the respondents were assisted in filling out the questionnaire by their supervisors in the presence of the authors. This was done to ensure effective communication of the survey questions, even in the local language.

A two-part self-administered questionnaire was used as the survey instrument to collect data on the impact of the conflicting factors on workers' performance. Part 1 consisted of demographic data such as age, experience, and gender. Part 2 consisted of statements based on the conflicting factors to measure their impact on worker performance using a 5-point bipolar Likert scale. The responses in Part 2 were measured on a scale of 1 to 5, where 1 = strongly disagree and 5 = strongly agree. An option of 'no opinion' was also provided so that the workers do not feel compelled to answer a question if they do not understand it. This helps to avoid nonresponse bias in the data. The question statements were framed starting with the conflicting factor (along with a description, for example, if necessary), followed by "…affects my performance at the site." For instance, for the conflicting factor *payment delay*, the statement was "Untimely or inadequate payment of wages affects my performance at the site." Similarly, another conflicting factor is the *lack of communication*; the statement was, "Improper communication with management and co-workers affects my performance at the site." An extract of Part 2 of the questionnaire is shown in Figure 1.

Please select an option to rate the following conflict factors with respect to their impact on your performance as a worker on construction sites. Ratings are to be given on a 5-point bipolar Likert scale from 'strongly disagree' to 'strongly agree'.

S. No.	Conflict factors ("…affects my performance at site")	Strongly disagree	Disagree	May or may not agree	Agree	Strongly agree	No opinion
		1	2	3	4	5	
1	Untimely or inadequate payment of wages						
2	Unavailability of proper resources to carry out my job						
3	(Statements based on factors as given in Column 2 of Table 1)						

Figure 1: Extract of Part 2 of the questionnaire

4.3 DETERMINATION OF RELATIVE WEIGHT OF CONFLICTING FACTORS

This study used the median to measure the data's centrality. It is considered a more accurate measure for relatively smaller data sets due to its resistance to outliers (Karakhan et al., 2021). Furthermore, the standard deviation values were generated to measure the agreement of the responses, that is, to check whether the responses were within an acceptable level of dispersion. According to a study by Karakhan et al. (2021), a standard deviation value of 1.64 was adopted as the permissible limit. If the standard deviation of a conflicting factor is 1.64 or below, it is considered that the responses are in consensus. Table 2 shows the nine conflicting factors' median and standard deviation values.

Table 2: Influence of conflicting factors on construction worker performance (n = 50)

Sl. No.	Conflicting Factors	Level of Influence		Relative Weighting Factor
		Median	Standard Deviation	
1.	Payment delay	5	1.13	1.66
2.	Overworking	5	0.54	1.66
3.	Lack of training	4	1.03	1.33
4.	Inadequate resources	4	0.83	1.33
5.	Lack of communication	4	0.82	1.33
6.	Workplace environment	4	0.62	1.33
7.	Time pressure	4	0.62	1.33
8.	Lack of safety	3	0.95	1.00
9.	Low-risk perception	3	0.85	1.00

Based on the values in Table 2, it can be observed that consensus was reached for all of the factors. In addition, the relative weighting factor (RWF) (Karakhan et al., 2021) was used as the metric to assess the level of influence of conflicting factors on worker performance. The RWF for a factor is calculated by dividing its median value by the lowest median value among all the factors. This value gives the level of influence of a factor relative to other factors on a worker's performance at construction sites. The last column of Table 2 reveals the values of RWF for the conflicting factors. In this study, a factor with RWF of 1.00 is considered as moderately influential, and factors with RWF of 1.33 and 1.66 are considered highly and extremely influential factors, respectively.

5. FINDINGS AND DISCUSSION

The study identified the conflicting factors affecting the performance of construction workers at the site. Table 2 shows that the relative weighting factor (RWF) value for the two factors – *payment delay* and *overworking* – is 1.66, which is the highest. This indicates that these factors have an extreme influence on workers' performance at the site. It also shows that the influence of *payment delay* and *overworking* on worker performance is 1.66 times that of factors such as *risk perception* and *lack of safety*, which have an RWF of 1.00. From Table 2, it is evident that along with the two factors: *payment delay* and *overworking*, five conflicting factors have a high influence on worker performance: *inadequate resources, lack of communication, lack of education/training, workplace environment,* and *time pressure*. The following paragraphs provide a detailed discussion of the identified conflicting factors.

Payment delay (RWF = 1.66) is identified as an extremely influential conflicting factor for workers. Delay in payment or inadequate wages is a stressful situation for workers as it is their primary source of income. It places the workers in a conflicting situation with themselves and their employers. The uncertainty of payment date and compensation amount makes it unsettling for workers; hence, they cannot put in their best effort during work. Workers may feel unvalued or disrespected if wages are consistently delayed. This can lead to conflicts if workers doubt management's intentions or think they are being mistreated, which can motivate their frustration. A possible solution to this would be to contractualise the employment of workers with proper clauses highlighting the details of compensation for delay in payment.

Furthermore, *overworking (RWF = 1.66)* leads to physical and mental fatigue, which increases the risk of accidents and injuries. Hence, overworking is a factor of undue influence that workers must be relieved of to improve their performance. Overworked workers experience stress, anxiety, and other adverse health effects, which lead to conflict with their employers. Overworking makes it difficult for workers to balance their work and personal lives. It leads to burnout, a state of emotional, mental, and physical exhaustion caused by prolonged stress. Workers who are experiencing burnout become demotivated and thus less productive. To counter this, employers should set realistic targets for workers and expand the workforce by hiring more diverse and skilled workers. In case overtime is unavoidable, specific incentives may be offered.

It was further found that *inadequate resources (RWF = 1.33)* highly influence worker performance. Shortage or unavailability of resources required to carry out a task puts the worker in an idle position which may lead to internal and external conflict. The worker will then have to either work overtime or increase the work pace, which compromises the safety and quality of the project. When resources are scarce, workers may be forced to prioritise specific tasks over others. This can create conflicts if the tasks are all important and require immediate attention. When resources are limited, workers may be forced to cut corners or compromise on quality to complete tasks. To mitigate this, resources should be prioritised based on critical tasks, and managers should have contingency plans in case resources are unavailable. The schedule of workers may also be decided based on the resource schedule so that the majority of workers can be engaged in tasks. Communication is a crucial part of a project, and lack of it leads to delays, errors, and poor-quality work. The results show that worker performance is highly influenced by a *lack of communication (RWF = 1.33)*. For example, if workers do not communicate effectively about hazards or safety requirements, it can lead to accidents and injuries. Poor communication can lead to mistakes in the construction process. For instance, if workers are not communicated effectively about the specifications or requirements of a particular task, they may end up making mistakes that could have been avoided. Some workers stated that their supervisors briefed them about the work once at the beginning and then were unavailable during the entire task. In addition, if workers do not understand their responsibilities, it can lead to disputes among themselves over who is responsible for specific tasks. Thus, poor communication not only leads to conflicts between the workers and management but also among the workers as well.

Similarly, workers who do not receive feedback or recognition for their work may feel undervalued and demotivated. Lack of communication is closely associated with *time pressure (RWF = 1.33),* another highly influential factor on performance. Workers experience a lack of clarity when they are given conflicting priorities, such as being asked

to complete multiple tasks simultaneously. Furthermore, *lack of training (RWF = 1.33)* was acknowledged by workers to be highly influential on their performance. Workers who lack the necessary education or training lack the skills to perform their job effectively. This makes them less aware of standard procedures and safety concerns at the site, making them less competent. Workers not trained in proper safety procedures are at a higher risk of accidents or injuries, which can create conflicts if these incidents impact other workers or management. Lack of education or training also limits growth opportunities for workers as they will not have the necessary knowledge and skills to advance in their careers. This can create internal conflict if workers feel they are being held back or not given opportunities to grow.

Additionally, construction sites are often noisy due to heavy machinery, tools, and equipment use. Exposure to high noise levels causes hearing damage and reduces workers' ability to communicate effectively, increasing the risk of accidents and mistakes. Noise also induces fatigue, stress, and irritability, negatively affecting workers' performance. Sites are also often dusty due to using concrete, cement, and other building materials. Exposure to dust causes respiratory problems such as asthma and bronchitis, which negatively affect workers' health and well-being. Dust also causes eye irritation, skin irritation, and other health issues. Therefore, *workplace environment (RWF = 1.33)* is also revealed to be a highly influential factor for worker performance at the site. Exposure to a harsh physical environment can distract the worker from the task, leading to lowered performance. This is being addressed by the rising safety concerns of project managers and the increasing awareness of site safety over the years, which has led some to preventive measures such as providing workers with PPE.

Lastly, workers do not receive adequate safety training and are not provided with the necessary safety equipment. This puts them at a higher risk of accidents or injuries. However, the results found that *lack of safety (RWF = 1.00)* does not impact workers' performance on construction sites. This can be alluded to the workers being comfortable and used to working without safety equipment. This may also be due to workers' lack of awareness of the importance of safety at the site. Moreover, workers who perceive high levels of risk tend to be more cautious and take appropriate safety precautions (Arezes & Miguel, 2008). In contrast, workers who perceive lower levels of risk are more likely to take risks and engage in unsafe behaviours. For example, one such behaviour is the non-usage of PPEs like helmets and gloves. This may be because the workers feel familiar with the work due to its repetitive nature; hence, their perception of risk associated with that task is reduced. Therefore, workers identified that *low-risk perception (RWF = 1.00)* could moderately influence their performance. Lack of training and communication are some of the causes of their low-risk perception of potential hazards.

6. CONCLUSIONS

The occurrence of conflicting situations at sites has an impact on project performance. The present study addresses two research questions: first, what is considered a conflicting situation for workers on construction sites? And second, how influential is each conflicting factor in impacting construction workers' performance? A thorough literature review was conducted, and nine conflicting factors were finalised using expert opinions. This step addressed the first research question. Next, a questionnaire survey was conducted with workers from four construction sites in Guwahati, India, to answer the second research question. The worker's responses were analysed, revealing three

conflicting factors based on the relative weighting factor: extremely, highly, and moderately influential on worker performance. It was found that payment delays and overworking are the most significant factors that can put workers in a conflicting situation with themselves. Inadequate resources, lack of communication, lack of training, workplace environment, and time pressure were identified as the moderately influential conflicting factors on worker performance. Further, the conflicting factors that least influenced worker performance were low-risk perception and lack of safety.

In conclusion, practitioners should target to provide solutions to the conflicting factors, especially those that have extreme and high influence on worker performance, as it leads to a much-improved performance of construction workers on site. Presently, these factors associated with workers are neglected by site managers as they believe it does not contribute much to the success of a project. As a result, workers cannot work at their full potential.

7. LIMITATIONS AND FUTURE RESEARCH

It is important to acknowledge certain limitations of this study. Firstly, the survey was conducted with a few workers in very few construction sites in one region. It may be possible that replicating the study in other geographical areas and with a larger sample can produce additional conflicting factors other than in the present study. Secondly, the results are based on the first-hand opinions of the workers rather than empirically measured data concerning the effect of conflicting factors on performance. The findings of this study will significantly benefit site managers and practitioners in gaining a better understanding of the conflicting situations that workers face at sites. This effort can also open avenues for further studies to explore the conflicting factors in other contexts, such as financial performance, schedule, cost, and working style of upper management.

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