Evaluating the Importance of Motivation Among Workers and Its Impact on Productivity in The Indian Construction Sector: A Critical Analysis

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SCHOOL OF BUSINESS NATIONAL COLLEGE OF IRELAND

A dissertation submitted to the National College of Ireland

In accordance with the requirements of the MSc in Management course In the School of Business (NCI)

AUGUST 2024

Abstract

This study examines in detail the impact of worker morale on productivity within the Indian building and construction sector. Despite its rapid growth, the Indian construction industry still faces problems with productivity and job satisfaction among employees. A primary qualitative approach was used for the research where extensive interviews were carried out on supervisors as well as workers in this field. The key findings show that there is a significant relationship between output levels and motivation among staff members. The main causes of de-motivation were identified as long working hours, lack of work-life balance and financial instability. Task oriented approach to job design, flexible scheduling was shown to be effective methods of increasing motivation and productivity according to this investigation. The study concludes with suggesting that it could be better for enterprises if they considered some factors which would motivate their employees more especially those working in Indian construction industry while at same time also looking into task-based approaches towards works achievement. Financial security may also need to be provided for these people who may not have any other alternative source income apart from this one; Additionally, it is important that employers come up with programs designed at making sure every employee's life outside work does not suffer because she has invested all her time into such an organization i.e., they should provide necessary support systems which will enable them achieve balance between these two areas. Finally, researchers believe that more needs done so as improve knowledge base on what motivates people engage themselves in tasks related buildings since doing this will lead higher output levels thus meeting growing demand within Indian Building & Construction Sector.

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Acknowledgments

I want to express my gratitude to everyone who has helped me along the route in every way possible. It would not have been possible without their help.

I want to thank my colleagues, professors, and other National College of Ireland staff members, especially my supervisor **Colin Harte**, for their advice and expertise during the entire process of my dissertation.

I am extremely thankful to my parents, my sisters, and my friends (Dr. Ved Prakash Tiwari, Vandana Tiwari, Swati, Shruti, Sakshi, Ankit, Aditya) for their continued support, help, and encouragement during my entire academic career. For the chats, tears, and laughs we have had together during these months.

Last but not least, without the participants who had participated in the Interviews and the NCI library personnel, this dissertation would not have been feasible. I want to express my gratitude for their time and assistance throughout this process.

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Chapter 1:

1.1 Introduction

The construction sector, a pillar of the economy, plays a vital role in creating the essential infrastructure and homes that drive progress and wellbeing in the societal workforce (Garg et al., 2018). In India, this industry holds importance by contributing to the nations GDP and providing employment opportunities for a large part of the workforce (World Bank, 2023). Despite its position, the Indian construction field faces hurdles such as low worker efficiency, frequent turnover of staff and an imbalance between work and personal life. These challenges are exacerbated by the industry's setup and heavy reliance on labour (Ahmed et al., 2021). A critical aspect influencing these obstacles is the motivation levels of construction workers.

Motivation, also known as drive, plays a role in guiding an individual's actions and endeavors (Robbins & Judge, 2018). It is vital for enhancing performance and productivity at work. Within the construction field, understanding and applying these factors can lead to increased job satisfaction, efficiency, and employee retention rates (Loosemore et al., 2017). This research aims to explore the importance of employee motivation and its impact on productivity within the construction industry in India.

The infrastructure and prosperity of India rest on the rapidly growing construction sector. However, these are known to be among the toughest work environments with long hours and low wages being their main characteristic (Economic times, 2023). As this traditional management techniques in this sector fails to provide sufficient incentives for dealing with such problems which further reduces productivity hence leading to lower job satisfaction and high rates staff turnover.

This thesis aims to address these disparities by looking into the effect that time-based work culture has on construction productivity. In conducting this research, a qualitative analytic approach will be used whereby thematic analysis and interviews will be conducted to explore how flexible working arrangements affect employee satisfaction as well as their productivity levels within the construction industry. In addition, through investigating impacts brought about by time-based work cultures the study seeks to offer useful perspectives towards enhancing worker motivation and overall project performance.

The construction sector, in India plays a role in the country's progress providing numerous job opportunities and making a significant contribution to the GDP (Invest India, 2023). This industry encompasses activities such as building buildings, residential properties, industrial facilities, and infrastructure projects (Invest India, 2023). Factors driving the sectors expansion include urbanization trends, growing investments in infrastructure and government support, for housing and development initiatives (IBEF, 2023). However, despite its significance the Indian construction industry encounters obstacles that hinder its ability to reach its capacity (IBEF, 2023).

The demanding nature of construction work involving tasks, in challenging environments poses a significant challenge (IBEF, 2023). Construction workers frequently endure hours without breaks leading to both physical fatigues and mental stress (IBEF, 2023). These tough working conditions contribute to job satisfaction turnover rates among employees and occasional issues, with insufficient compensation and job security (IBEF, 2023). The situation is further compounded by the structure of the industry dominated by medium sized enterprises (SMEs) that often lack standardized human resources practices (IBEF, 2023).

The challenge of productivity remains an obstacle, in the construction industry in India. Criticisms have been directed at the sector for its output compared to industries attributed to various factors such as outdated building techniques, ineffective management practices and insufficient investments in education and training (IBEF, 2023). Employee motivation emerges as a factor, in addressing these productivity issues as it is known to drive individuals towards achieving their objectives ultimately influencing their job performance and success. A deeper understanding of worker motivations stands to benefit the construction sector at large by enhancing productivity levels, job satisfaction and overall work performance (Dodanwala & Shrestha, 2021).

1.2 Research Problem

In many researches, the connection between motivation and productivity has been established, however, the exact nature of this link within the Indian construction sector is largely unexplored. Given the features of India's construction industry and its specific socioeconomic context, a comprehensive study on motivational tactics is essential (Dodanwala & Shrestha, 2021). Conventional management methods in construction companies may occasionally fail to meet employees' motivational requirements resulting in

dissatisfaction and disconnection, among workers (Dodanwala & Shrestha, 2021).

Additionally, a comprehensive assessment of the possibility of transitioning from the time driven work environment, in the construction industry to an adaptable task-oriented approach is still ongoing. Task oriented work environments which prioritize completing assigned tasks over schedules have demonstrated benefits in various industries by increasing productivity and employee satisfaction (Choudhury & Rajan, 2019). Yet its relevance and impact, within the construction sector are yet to be understood. It is crucial to examine how such a cultural change can be effectively introduced to address challenges related to motivation and efficiency (Choudhury & Rajan, 2019).

1.3 Rationale and Significance of the Study

The study's rationale lies in the necessity to enhance job satisfaction and efficiency among workers, in the construction industry. By pinpointing and comprehending the motivational elements impacting construction workers this research strives to offer insights that can enhance employee involvement and managerial strategies. This investigation holds importance due to the role of the construction sector in fostering India's economic advancement along, with its capacity to create employment opportunities and promote infrastructure development (Mishra, 2021).

Lawmakers, employers, labour unions and various other parties involved in the construction sector should pay attention to the findings of this research. Employers who grasp what drives their workers can create tailored plans to boost job satisfaction and efficiency (Agarwal & Ferraro, 2021). Employees who are motivated are more likely to be committed deliver higher quality work and stay with the company for periods ultimately reducing turnover rates and associated expenses. The insights gathered from this study can help policymakers design rules and measures that enhance the wellbeing of construction workers and working conditions (ILO, 2019). By using this information to back policies that address employees' motivational needs and improve their quality-of-life labor unions can also gain from this research (ILO, 2019).

The study will also explore the idea of incorporating a task-oriented work environment as it could offer an employee centric approach, to overseeing construction projects. Its objective is to assess the viability and potential advantages of this approach to offer suggestions for its integration within the construction

industry in India. Implementing a task-oriented work culture may help address challenges encountered by construction personnel, such as working hours an imbalance between work and personal life and physical fatigue (Garg & Jain, 2018). If successful this strategy could result in improvements, in efficiency and employee satisfaction ultimately benefiting the sector.

The foundation of this research is based on established motivation theories. We will be examining and analyzing the factors that impact construction workers through the lens of three theories: Maslows Hierarchy of Needs Herzbergs Two Factor Theory and Vrooms Expectancy Theory (Robbins & Judge, 2019). By delving into Maslows theory we aim to understand the needs of employees while Herzbergs theory will help us differentiate between factors that contribute to job satisfaction and those that lead to dissatisfaction (Robbins & Judge, 2019). Vrooms theory will provide insights, into how employees expectations for rewards can influence their productivity levels. Through the utilization of these theories our study aims to explore motivation, within the construction industry (Robbins & Judge, 2019).

1.4 Aims and Objectives

The main objective of this research is to investigate the impact of motivation, on the efficiency of construction workers in India. The study aims to: -

- Identify the factors that drive motivation among construction workers, in India.
- Explore how these motivational factors influence employee performance.
- Assess the feasibility and effectiveness of creating a task-oriented work environment to improve productivity and maintain a work life balance.

1.5 Research Questions

To achieve our objectives, we will explore the following research questions: -

- What drives the motivation of construction workers, in India?
- How does motivation influence the productivity of construction workers?
- What are the potential benefits and challenges associated with implementing a task-oriented work environment, in India's construction sector?

Evaluating the Importance of Motivation Among Workers and Its Impact on Productivity in The Indian

Construction Sector: A Critical Analysis

Chapter 2: Literature Review

2.1 Introduction

This literature review focuses on how motivation is related to work-life balance and productivity in the

construction industry. Numerous recent researches have underscored the role of fair pay, job security and

good managerial practices in enhancing labour productivity. Among these studies are those conducted by

Hamza et al. (2022) and Abdu et al. (2023) which can serve as starting points for investigating specific

issues or opportunities within Indian construction sector.

2.1.1 Understanding the concept related to the research

Motivation

Employee motivation is essential in helping staff members to achieve both personal and organizational

goals through heightened efficiency at workplace (Ganta, 2014). Effective strategies of motivating

employees increase commitment levels; this drives up production while different generations have

different motivation needs; independence and work life balance are valued most by X generation whereas

Y looks for purpose & development with Z being concerned about technology and financial security

(Mahmoud et al., 2021). Managers should therefore consider these generational differences when

designing reward systems to enhance employee involvement.

Maslow's Hierarchy of Needs

Maslow's Hierarchy of Needs, which includes safety needs, social belongingness needs esteem needs self-

actualization needs among others, arranges human desires into a pyramid-shaped order. Lower level

requirements must be met first before higher ones can act as primary motivators according to Maslow's

theory (Mustofa, 2022). This model provides insights into understanding people's behavior as well as

what drives them thereby making it an important tool for effective management & personal development.

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Herzberg's Two Factor Theory

Herzberg's Two Factor Theory distinguishes between various factors that influence job satisfaction versus dissatisfaction. Hygiene factors prevent unhappiness but do not create it while motivators push individuals towards contentment with their jobs (Thant & Chang, 2021). Focusing on motivators increases motivation levels at work and taking care of hygiene issues helps reduce discontentment among employees.

Vrooms Expectancy Theory

Vroom's Expectancy Theory posits that three variables namely instrumentality valence expectancy jointly determines the strength of motivation. When individuals believe that their efforts will lead to desired outcomes, they become more motivated (Min et al., 2020). Managers can use this approach to make employees see how what they are doing aligns with organizational goals also, where performance is directly linked to rewards there should be clear connection between them so as to enhance worker drive through valuable incentives.

Linking Theoretical Insights to Practical Implications

For these motivational theories to be applicable in practical contexts one must have a good grasp of them. The next part will discuss impact of these theories on work life balance and productivity especially within construction industry. Bridging theoretical concepts with empirical evidence would facilitate assessment of how various motivational factors affect employee performance in different situations such as Indian construction sector.

2.2 Examining the Impact of Motivation on Work-Life Balance and Productivity in Indian Construction Workers

In their Study, Ram Anjana & Dr. Hemant Parmar investigate connections between worker performance at a construction firm and motivators. They classify incentives into two groups namely money-based ones and non-financial ones then examine which kind has greater impact on output level. It was found out that inner motivation such as health care provision or autonomy together with external motivation like collaborative working environment plus job security enhances performance greatly while "self-motivation" emerged as the most significant driver for working hard (Anjana & Parmar, 2022).

According to Herzberg's Two Factor Theory, external factors such as regular rise in income and job security are important which are also known as hygiene factors. The author also brings up Maslow's Hierarchy of Needs and McClelland's Need Theory in order to show that motivation should come from intrinsic as well as extrinsic sources (Steel & König, 2006; Neubauer & Martskvishvili, 2018).

This study finds that there should be a balance between internal and external motivation for increased worker productivity and organizational effectiveness (Alshmemri et al. 2017). Researchers suggest that incentive systems need to be tailored according to individual needs and characteristics The proposition that motivation bears no connection with performance was tested through surveys using Pearson correlation analysis coupled with linear regression techniques (Jayaweera, 2015).

Abdu et al. (2023) researched the motivational factors affecting construction workers' productivity where they identified income, job security, safe working conditions, recognition of achievement/skill development opportunities as well good communication among management staffs as the key components. These findings indicate how creating an excellent workplace requires both types of motivators.

In their investigation into what influences labour productivity within the construction industry Hamza et al. (2022) brought out the complex relationship between worker skills technological advancements managerial approaches environmental considerations for them any strategy towards improving efficiency must consider all these aspects.

To conclude this research underscores the fact that if we want to enhance work-life balance alongside achieving higher levels of output it is necessary to deal with both intrinsic and extrinsic motivators. Putting employees' health first can greatly increase their productivity while at work thus raising job satisfaction which eventually leads to overall success for a business entity (Anjana & Parmar, 2022).

2.3 The Impact of Employee Engagement and Motivation Practices on Performance in the Indian Construction Sector

In order to increase the productivity of construction firms, (Roy et al., 2019) investigated employee engagement strategies and motivation. The construction industry is plagued by low productivity, high employee turnover rates, and unequal project completion percentages. This research therefore sought to

establish how effective engagement and motivation strategies could help alleviate these challenges while enhancing productivity.

To gauge motivation levels among their respondents who were drawn from different parts of India, the researchers used instruments such as Work & Well-being Survey as well as Goodman & Svyantek Performance Survey (Roy et al., 2019). According to findings there was direct relationship between staff involvement and performance but it was observed that majority of construction companies lacked formal policies or procedures for raising employee engagement which negatively affected success in projects (Osborne and Hammoud, 2017).

The most powerful incentives identified in this study were growth opportunities; autonomy over one's job; recognition given for effort put into work done (Roy et al., 2019). It was found out that when employees feel valued their commitment towards tasks assigned becomes stronger hence resulting into higher outputs External rewards including security at workplace through having permanent employment contracts; pay rise based on individual performance appraisal ratings achieved during specific period under review plus working environment characterized by positive interpersonal relationships were also key motivators. These discoveries are in line with Herzberg's Two-Factor Theory (Ghosh et al., 2013) which categorizes factors that enhance satisfaction at work versus those that prevent dissatisfaction among people.

The research examined how various motivational theories can be used by employees within the construction industry to sustain their drive towards work. Among them were McClelland's Theory of Needs; Maslow's Hierarchy of Needs; Expectancy Theory. Maslow's hierarchy outlines a person's progression from basic needs satisfaction up until self-realization while Herzberg theory distinguishes hygiene factors from motivators according to McClelland achievement power affiliation Expectancy links effort performance reward together (Bal et al., 2015).

For worker motivation and engagement to be enhanced in the construction sector, study stressed on need for customized HRM practices that are well suited to this kind of setting. By focusing on these drivers' companies can improve project outcomes as well as labour efficiency. Therefore, subsequent

investigations should consider such attributes like age among others while at the same time exploring compensation packages within different levels of work experience. Also, employee involvement needs to be looked into especially in emerging economies (Roy et al., 2019).

Ramalingam et al (n.d.) demonstrated significance of systematic productivity measurement through work sampling. Efficiency levels within an organization can be identified using this method which in turn enables management make better decisions on staffing by reducing idle time thus improving overall project efficiency within businesses. Such an approach reflects how data driven decision making could increase employee productivity in the construction industry (Ramalingam et al., n.d).

2.4 Construction Labour Productivity in India: Key Influences and Practical Solutions

An in-depth analysis by Anu V. Thomas and J. Sudhakumar in 2014 delves into the factors that affect construction labour efficiency in Kerala, India. With a focus on addressing the lack of research on the socio-economic landscape of India the researchers set out to pinpoint the critical aspects influencing productivity at construction sites within this particular setting. Conducting a survey using questionnaires aimed at project managers, site engineers, supervisors and craftsmen allowed for an exploration of various productivity determinants. This approach enabled a grasp of the realities and obstacles encountered by construction professionals, in Kerala (Thomas and Sudhakumar, 2014).

The survey results show that strikes (hartals) material deliveries, from suppliers' timely availability of drawings at the worksite frequent revisions of drawings and designs. It leads to additional work or rework and repeated modifications of drawings and designs are the five key factors that have a significant impact on productivity (Olawale and Sun, 2010). These findings underscore the importance of supplier performance, political conditions and efficient material management in sustaining high levels of production. For instance, delays in material deliveries can halt work progress. Extend project timelines while political strikes may disrupt schedules and hinder overall productivity. Constant design changes could also lead to misinterpretations and rework which is detrimental, to production efficiency (Thomas and Sudhakumar, 2014).

To address the challenges, with productivity the research emphasized the importance of enhancing project planning and coordination. Implementing strategies for managing materials can significantly boost

production rates (Sacks et al. 2010). This involves ensuring availability of materials and fostering relationships with suppliers. Additionally, construction firms should develop contingency plans to mitigate the impact of strikes and other disruptions. To avoid delays and mistakes it is crucial to provide, on site workers with updated plans and designs. By tackling these logistical hurdles construction companies can enhance efficiency reduce project delays and minimize cost overruns (Thomas and Sudhakumar, 2014).

The research primarily looks at the operational aspects. It subtly highlights the importance of considering the human factor in production. For instance, employees might feel frustrated and demotivated by design changes and delays impacting their job performance (Sweis et al. 2017). This feature is related to how time-based organizational culture influences the efficiency of an employee and his work-life balance. There is a lot that Thomas and Sudhakumar's study has covered, but further research can be done to support these findings through looking at what effect various methods of scheduling such as overworking, flexitime and fixed shifts have on staff motivation as well as productivity. Building upon all these studies' outcomes will enable construction firms come up with measures favourable for higher outputs within them logistically demanding situations while also considering supportive working environments. (Thomas and Sudhakumar, 2014).

2.5 Understanding Labor Productivity in India's Construction Industry: Key Influencers and Solutions

Raising productivity is seen by Dharani and Rathan Raj in their study of 2015 as the most important factor which should be considered in improving labor efficiency in India's construction sector given its impact on the economy and society (particularly in developing countries with limited resources, high inflation rates and unemployment levels). The research showed through a comprehensive survey questionnaire and literature review that among others; labour experience; supervisor – worker interaction; standard of site management were found to influence worker's efficiency greatly as they are vital for enhancing project profitability, productivity and operational efficiency.

Workers' performance was evaluated based on different aspects including facilities available at work place such as accommodation; Health & Safety measures adopted by employers; Wage rates paid by employers to workers against set minimum wages act provisions among other issues On this note again we see Tamil

Nadu being used as an example area comprising cities like Chennai, Trichy, Coimbatore and Madurai where both employer surveys were done together with employee surveys looking at working conditions, training opportunities provided or withheld from staff members depending on their job descriptions. With reference to Sakhare & Chougule (2019), these attributes were assessed using techniques like Likert scale assessments and relative importance index (RII).

Among the findings made during this research include but not limited to low living standards brought about by things such as poverty resulting into inadequate utilities supply thereby affecting productivity negatively due to lack of basic needs satisfaction while being engaged at work place. It also came out clearly that majority businesses (72%) preferred automation processes over manual ones aimed at improving labour output yet surprisingly only 57% employees felt satisfied with their own level of productivity besides according ILO (2020), 68% projects exceeded three years completion timeline mainly because wage disbursements were delayed leading high turnover rates coupled excessively long working hours thus lowering production levels.

The study done by Barg et.al.,(2014) provides insight into motivational methods for construction workers by highlighting the importance of understanding individual needs among other things. Motivation according to them is achieved through various means which include financial incentives; non-financial benefits like recognition programs etc; team dynamics where members are encouraged to work together towards common goals as well effective supervision through proper communication channels but not forgetting situational leadership style within this industry since it involves different people working on different tasks at a given time depending on what stage a project is and who is involved.

Funso et.al.,(2016) carried out a study in Lagos, Nigeria which shows that motivation has direct impact on output. This research established positive relationship between employee motivation and output whereby competitive pay; job security/employment stability; good work environment/nice place of work; opportunities for career progression/advancement were identified as key motivators among others mentioned in their report. They recommend funding comprehensive staff motivation schemes covering both material & psychological needs as this can help improve completion rates for various projects besides overall organisational performance.

Dharani and Rathan Raj (2015) highlight the need to address worker socio-economic challenges, living conditions, training opportunities and management approaches if labor productivity in construction industry is to be improved. Until these foundational problems are corrected, the sector will continue under utilizing its potentiality in terms of generating employment opportunities while also contributing significantly towards national economic growth Therefore, the authors provide some practical suggestions aimed at assisting relevant stakeholders including policy makers as well contractors achieve better results during implementation stages based on findings from their study

2.5 A Motivation and Time Management: Key Drivers of Productivity in Indian Construction

These projects are crucial for the advancement of the economy because they have a huge impact on productivity and efficiency, said Tushar T. (2017). According to a study by Sathe, Patil and Waghmare (2017), employee motivation drives organizational efficiency; therefore, this process needs various incentives. Comparing results with established norms leads to the conclusion that incentives should be given not only for short term but also long-term motivation as well as fostering commitment and cooperation. It is good to have effective incentive programs which reinforce desired behaviors while aligning them with business objectives.

Talib et al. (2011) suggest that worker's motivation in construction industry can be improved through addressing Total Quality Management issues within the project sites. The report emphasizes on resourcefulness in providing safe affordable building materials moreover, India's growing infrastructure needs calls for skilled labour and management in its construction sector. With over 83% being labourers there is high diversity among customers served by this company hence unstable labour markets are experienced frequently. Therefore, success of the business also depends on maximizing productivity per unit time taken or per unit cost incurred during completion of any given task at hand.

In constructions financial incentives play an important role towards raising levels of employees' motivation. On their part this study looks into different kinds of incentives used by both local and international contracting organizations whereby it is noted that foreign companies give more cash rewards

than Indian ones – higher amount paid, more number days off given together with year-end bonus played out. External factors are emphasized here while showing how motivation can improve performance at work and overall efficiency within organization.

Abdullahi et al., (2022) stress intrinsic as well extrinsic motivators when investigating motivating strategies effects on employee performance in Nigerian construction firms located at Abuja. It is important to use motivational techniques that take into consideration culture specificities as well socio-economic realities of developing countries. This research therefore suggests using subtle worker's motivation tactics so as to address diverse local variables and worker expectations.

Time-oriented work methods are important; therefore, a lot of rewarding incentives should be put in place in the construction business. Combining these two studies can create a framework for time management based rewards which will increase project effectiveness and staff satisfaction. By organizing space with money and creating positive vibes around it, which encourages effective staffing also supports sector growth (Sathe et al.,2017)

2.6 A Framework for Labor Productivity Assessment in the Indian Construction Sector: Emphasizing Flexibility and Safety

This research aims to develop a framework that examines the connections, between factors affecting productivity focusing on assessing labour productivity in the construction industry in India. The study identifies four areas and 14 specific factors that have an impact on productivity Tushar T. (2017). Key factors such as project characteristics, timely availability of resources, safety measures and effective management techniques are emphasized. Understanding these factors is essential, in the context where challenges like limited resources and increased safety concerns are prevalent. The findings demonstrate the importance of evaluating labour productivity to improve project outcomes reduce costs and enhance industry productivity. Through the utilization of the Decision-Making Trial and Evaluation Laboratory (DEMATEL) method this research effectively explores the connections, among productivity elements (Permadi et al. 2019). Provides insights into their varying degrees of importance.

The results suggest that to mitigate the impacts of project challenges on workforce efficiency it is crucial

to establish robust Safety Management Systems (SMS) and tailored disaster preparedness protocols. These recommendations align with existing studies emphasizing the significance of preparedness and safety in enhancing employee productivity and reducing incidents. Additionally practical strategies such, as implementing quality management practices, thorough training initiatives and efficient knowledge management approaches are proposed (Kim et al. 2012). These tactics aim to enhance production levels within the construction sector by prioritizing disaster response efforts and enhancing project coordination. This study suggests a shift, towards an adaptable work environment that allows workers to complete tasks at their own pace rather than adhering to strict schedules. Embracing this approach, where employees can leave once their work is finished can lead to a balance between work and personal life (Chaturvedi, Thakkar, and Shankar, 2018). This change reflects workforce trends that emphasize autonomy and job satisfaction. Previous research has shown that workplaces promoting flexibility have an impact, on employee morale leading to productivity (Chaturvedi, Thakkar, and Shankar, 2018).

The study's findings go beyond boosting productivity; they also bring about socio economic benefits. Creating a flexible work setting can aid the construction field in drawing and retaining employees thus lowering turnover rates. These adjustments are especially vital, in India, where the construction industry holds importance in terms of employment opportunities and economic growth. By implementing work schedules not can projects be completed faster but there is also the potential for delivering superior outcomes that meet the industry's rising demands, for both efficiency and innovation (Chaturvedi, Thakkar, and Shankar, 2018).

In essence this research delves into the workings of labour efficiency, in the construction industry in India offering insights for professionals and policymakers. It presents a blueprint for enhancing both organizational effectiveness by tackling the factors that impact productivity and promoting a flexible work environment. The findings contribute to the growing body of knowledge on labour efficiency in construction underscoring the importance of exploration and validation of strategies, through diverse decision-making approaches. Ultimately this study sets the stage for inquiry to refine these findings and develop methods to boost productivity in the construction sector (Chaturvedi, Thakkar, and Shankar, 2018).

2.7 Boosting Labor Productivity in Indian Construction: Analysing Key Factors and Cultural Shifts

The aim of this research is to analyze what causes labor productivity in India's construction industry; this sector is vital for the country's GDP and provides many jobs. However, despite being important, there are some challenges that reduce its efficiency such as bad management practices and inability to adapt quickly with changes. In an attempt to encourage flexibility within work systems this research identifies key drivers of construction productivity using the Relative Importance Index (RII) method (Genc, 2023). According to the study, design capability, frequency of rework, contractual disputes, scope clarity and resource availability were found to be among the most significant factors affecting labour productivity. Resource availability had the highest score of 0.801 on RII thus indicating its great influence towards promoting conducive working environment where many outputs can be realized. Contractual conflicts (RII = 0.799) highlight the negative consequences of disputes that could obstruct progress and lower output. The clarity of project scope (RII = 0.790) and design capability (RII = 0.785), in addition to frequent design adjustments and rework (RII = 0.776), further illustrate common difficulties faced by construction projects (Dixit et al., 2019).

Data was collected through a structured questionnaire survey which targeted 201 prominent participants from various sectors within Indian construction industry; these included consultants, architects, contractors' developers as well project managers among others. Reliability analysis conducted on collected data showed high level exceeding 0.95 hence making it reliable enough for use in drawing conclusions from this study. These findings propose suggestions for transforming organizational culture by stressing need for more elastic arrangements that allow employees complete tasks at their own pace; such type of flexibility would align with modern work systems which promotes individuality while raising morale and output (Dixit et al., 2019).

Apart from identifying these important factors, the report also indicates that strategic changes should be made in management approaches if efficiency levels are to increase across different sections of construction industry. It is necessary to shift focus towards implementing best practices and motivating staff so as to foster higher levels of production. Furthermore, National Productivity Council of India is credited with having contributed greatly towards quality improvement among companies through its initiatives aimed at creating productivity-oriented culture within them (NPC India, 2023); Nonetheless,

measuring productivity in building sector remains complex due to unique nature of each project involved. Therefore, the research stresses that specific challenges should not be tackled alone but rather addressed comprehensively since multi-level analysis which takes into account activity level up-to industry wide perspectives can help understand dynamics associated with this concept better. Such broad approach becomes essential when one considers that potential factors affecting productivity may vary significantly across different sizes or settings. For example, safety procedures adopted throughout entire industries coupled with flexible work cultures might have substantial impacts at industry level while resource availability becomes critical at project level (Gander et al. 2011). In addition, there is need for technical innovations alongside efficient methods used during assessment process aimed at enhancing worker output; Project management software combined with data analytics facilitates real time decision making thereby improving planning which eventually streamlines operations while better safety measures do not only protect employees but also reduce accident related down times thus boosting production (Dixit et al., 2019).

To sum up, this study identifies the key factors that affect worker productivity in the Indian construction industry and stresses on the need for a flexible working environment. According to investigations, job satisfaction and output quantities can be increased by allowing workers complete tasks at their own speed. With these findings in mind, interested parties are advised to adopt proactive measures of overcoming barriers while taking advantage of opportunities for improvement. Besides acting as bases upon which further investigations can be conducted; these findings also point towards operational strategies aimed at improving efficiency within such an important sector (Dixit et al., 2019).

2.8 Understanding Motivation: Impacts on Engineer Performance in India's Construction Industry

This research investigates how the motivation of engineers is related to their performance in the construction industry with specific reference to the Central Public Works Department (CPWD) in India (Gov, 2023). The building sector is a major contributor to India's economy and understanding what affects efficiency is key to improving productivity. The study identifies main drivers of motivation as well as demotivators so that project outcomes can be enhanced and staff satisfaction achieved. All these are significant aspects because motivation greatly impacts productivity.

The study used mixed methods design where 100 civil engineers working under CPWD were interviewed using semi-structured questionnaires (Gov, 2023). According to Darko et al., (2019), this approach involves Analytic Hierarchy Process (AHP) which systematically ranks factors that affect motivation among engineers. Besides job completion success other positives were seen to be; opportunities for professional growth, rewards system, recognition programme, incentives scheme and effective training package. These elements support well-known theories of motivation such Maslow's hierarchy of needs which state that addressing higher level needs leads to increased output and job satisfaction.

Also revealed by this survey were certain negative factors referred to as de-motivators like poor working conditions; ineffective administrative procedures; lack of communication among employees and unequal distribution of rewards/recognition within an organization. Companies aiming at creating positive work environment should tackle these issues since they hinder employee involvement thus achievement corporate goals become difficult. Vroom's expectancy theory & Herzberg's two factor theory are widely applied motivational theories in construction industry according research findings. Such concepts help firms understand psychological forces behind employee engagement thereby enabling targeted responses.

These suggestions include special incentive programs meant for engineers such as career development opportunities; improved communication strategies or appreciation campaigns for them within organisations should also involve staff members more often during decision making processes since it can enhance their sense ownership towards company affairs thus boosting motivation levels among workers always recommended keeping incentives alive through continuous evaluation coupled with ongoing systems approach designed sustain motivation.

The construction sector in India, like many other industries, is inefficient and unproductive. Van Tam (2021) argues that motivating factors which include work life balance; career growth prospects; job satisfaction as well as recognition greatly influence productivity levels among individuals hence overall performance improvement. Another critical point is creation of positive organizational cultures which leads to reduction project delays (Arditi et al., 2017).

To put it briefly, this study identifies the factors that enable or hinder engineers in the construction industry

of India. These findings are important because they can be used to increase general efficiency, employee retention rates, work-life balance as well as job satisfaction levels among others. Moreover, through this information future studies should seek to promote more job creation opportunities while at the same time developing skills within an ever-changing workforce context.

2.9 Addressing Productivity Challenges in Indian Construction: The Role of Employee Motivation and Work Flexibility

The report presents a holistic strategy for improving efficiency in the Indian construction industry. Through linear regression analysis and Pearson correlation, it has been established that there are some major determinants of productivity such as changes to the scope of work, modifications on drawings and alterations in the sequence of making responses. These findings show how complex building projects can be and why stakeholder participation is important (Dixit, 2018).

Low productivity leads to poor performance, cost overruns as well as time slippages thereby adversely affecting project management. The fact that construction industry accounts for substantial employment creation opportunities and economic growth stimulation calls for urgent measures against inefficiencies. This research underscores the need of assessing and enhancing effectiveness within construction sector and related fields (Dixit, 2018).

A model has been provided by this study which uses regression to improve performance at work sites; it also considers different variables like workforce size, infrastructure development level achieved so far among others. Stakeholders' recommendations aim at enhancing project production and performance (Bal et al., 2013). Additionally, various factors that influence motivation in the workplace have been examined with application of Maslow's hierarchy theory on needs, Vroom's expectancy theory as well as Herzberg two factor theory within construction companies. Understanding these psychological aspects concerning employee engagement can therefore increase drive towards higher levels of output (Dixit, 2018).

To address productivity concerns it may be necessary to foster a flexible working environment. Offering training opportunities improves morale while recognition should be given for achievements made; involvement of staff members in decision making can help raise spirits too. Rewarding employees through

giving meaningful jobs or tasks will encourage them work harder towards career advancement thus fulfilling their potentialities this is what was found out from this research (Dixit et al., 2018).

2.10 Examining the Impact of Labor Motivation on Construction Productivity

The current study looks into the worker enthusiasm vis-à-vis productivity in the construction industry but mainly centers on bricklaying and ceramic work environment within Egypt. Five key requirements are identified by this research from a pool of 14 motivational factors such as success, salary, incentives, recognition and favorable working condition; production is evaluated against these drivers using Multiple Linear Regression (MLR) method as well as Artificial Neural Networks (ANN) approach where it has been found out that non-linear relationships between motivation and productivity can be better captured through ANN predictions (Hosny, Abdel-Aziz & Hossny, 2022).

What boosts employee productivity most are accomplishment, recognition, and happy work atmosphere. These aspects bring out the significance of both sanitary considerations (working environment) and motivators(recognition) for employee satisfaction and motivation which supports Herzberg's two factor theory as well Maslow hierarchy needs. In other words, according to these findings it is important for us to know what drives individuals at work because this impacts how much output they produce (Hosny et al., 2022).

One implication here could be that construction firms need to have all-rounded incentive strategies that take care of externalities factors too. For example, this may involve coming up with growth programmes or even reward schemes which should include bonuses alongside competitive pay packages among others; areas like these should also be given much attention by companies so as to increase levels of staff output since friendly environments greatly enhance productivity (Hosny et al., 2022).

It also underlines different motivational techniques in project management while providing real data on various drivers' impact on performance. This experiment provides strong basis for future investigations into construction industry personnel motivation by incorporating specific motivational variables within advanced analytic methods like ANN together with MLR (Hosny et al., 2022).

Summary of Literature Review

The Indian construction industry lacks productivity despite being a significant driver of the nation's economic growth and job creation. A number of researches show that worker productivity is majorly affected by management strategies and motivational factors. This study also underlines the need to have both internal and external incentives such as pay rise or job security with personal development and job satisfaction. Another key area is through creating opportunities for professional advancement while fostering other effective methods of engagement which are geared towards increasing output.

Several factors like labour disputes, design changes and scope creep affect production greatly thus requiring proper planning controls. Therefore, (Thomas and Sudhakumar, 2014). recommend more efficient allocation of resources together with improved techniques for managing them in order to overcome these challenges among others according to their findings. Additionally advanced analytics can reveal subtle connections between motivation and productivity as indicated by (Hosny, Abdel-Aziz, and Hossny, 2022) work using Artificial Neural Networks (ANN).

Enhancing safety protocols as well as establishing flexible working conditions remains critical in addressing barriers towards productivity. According to studies; financial rewards coupled with chances for professional growth alongside supportive environments enable employees become highly motivated hence increasing their output levels too. Application of such strategies might help to address construction company's problems related with efficiency while supporting industry expansion too.

In summary, there has to be varied tactics employed towards raising employee performance within Indian building sector. It involves giving equal attention on motivating factors during this process; bettering management skills where necessary; designing spaces that allow for easy modifications among other things so as to enhance flexibility at work places which will eventually contribute into sustainable gains realization within the industry as well monitoring them continuously in order not lose sight of what needs adjustment over time when seeking promote wider growth throughout the entire field.

Literature Gap

There has been a lot of research about the worker productivity in Indian construction industry, however many issues regarding complex relationship between productivity, motivation and management style still persist. The availability of resources, clarity of scope and safety measures are some of the major factors that have been found to influence productivity through a number of studies (Dharani & Rathan Raj, 2015; Sathe et al., 2017). Yet integrated frameworks encompassing all these elements as one strategy are lacking.

Prior studies mainly concentrated on individual motivators or specific management strategies without critically analyzing how these dimensions relate to each other in order to influence productivity even further. Time management and motivational incentives were indicated by Dharani and Rathan Raj (2015) as well as Sathe, Patil, and Waghmare (2017) among others; however, there is limited information on their interplay in intricate world of Indian infrastructure development projects. Owing to absence of an integrated approach it becomes difficult to apply sophisticated human resource management policies towards improving production capacity.

Moreover, while some studies (Hosny et al., 2022) have investigated advanced analytical methods such as Artificial Neural Networks (ANNs), few have focused specifically on the application of these techniques on broader contexts. Further research is therefore needed in this area combining complex data analysis tools with qualitative insights into organizational practices and employee attitude towards work. Doing so will help develop better data-driven strategies for success as well as enhance understanding concerning what drives overall efficiency.

The literature also reveals that much is still needed concerning flexible schedules at work that affect productivity. Chaturvedi et al.'s study (2018) showed that flexibility could improve job satisfaction and performance levels simultaneously. However, empirical research regarding flexible work arrangements' effect on productivity within Indian construction sector is limited.

To address these gaps requires a comprehensive consideration involving both new analytics and behavioural theories integrating flexible working environments. Such investigation would provide meaningful information about the multiple factors which affect productivity in India's construction industry and, thus, aid in designing more effective management strategies for motivation.

The relationship of motivation with productivity in the construction industry is very complex, as has been identified through the literature review. Though a number of key motivational factors and their various impacts have been identified, further research is needed in several areas. Future research should also look into the long-term effect of different motivation strategies on productivity, the role of technology in the process of motivating workers in construction settings, cross-cultural comparison of motivational factors in various construction environments, and the effect of new work arrangements on labor productivity in the construction industry. Discussion of such knowledge gaps may help the construction industry to more effectively motivate its workers and hence improve their productivity.

In conclusion, it is necessary to conduct more serious research which will include among other things a reflection on the nature of working conditions as they influence business performance, especially when combined with modern data tools and theories of motivation. This sort of investigation would offer better insights into understanding complexities behind how productivity operates within the country's infrastructure sector.

Chapter 3: Methodology

3.1 Introduction

The methodology chapter of the research is efficient for the implication of the stages by which the study is created. The chapter has focused on several methodological components and has discussed the justification for selecting those components for the present research development. In the present study, Saunder's research onion is used for the evaluation of the layers so that values for the study are developed (Saunders et al. 2016).

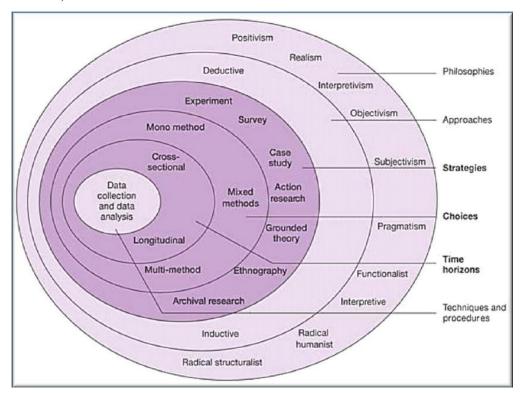


Figure 1: Research onion

(Source: Saunders et al. 2016)

The section has highlighted the data collection method and the method of analysis by which the result from the research is developed. The ethical considerations are also followed in the research for extensive values in the future implication and for retaining the ethical importance in the study.

3.2 Participants

Six of the construction industry participants were randomly picked for this study. Their selection for the research was based on having different backgrounds and job titles to ensure diversity of perspectives.

These are some of the positions that people held:

- Two Site Supervisors They oversee daily activities and manage staff on site.
- Two General Workers These employees perform manual tasks and are directly exposed to work environments as well as motivational strategies.
- A single site engineer Handles technical aspects of construction as well as project coordination.
- One Crew Leader Responsible for managing specific teams and ensuring that tasks are completed in time.

The researcher's four-year experience working in construction greatly influenced who got selected among these individuals. During such moments, it happened that he interacted with several persons struggling with their work-life balance and productivity. This background knowledge therefore enabled him to choose interviewees who understood what goes on at ground level within the building industry. What these respondents shared about their personal challenges met while working under different capacities within actualizing projects was quite insightful.

3.3 Interview Questions

To ensure that they were relevant and comprehensive, the interview questions were prepared with inputs from research supervisors who wanted to touch on many aspects of productivity and motivation. To include both personal and managerial experiences, the questions sought after those things which affect work-life balance; job satisfaction and work schedules being among them.

Ouestions for First-Line Workers/Labourers

- Work-Life Balance: How do you feel about the balance between your work and personal life?
- Typical Workday: Can you describe a typical workday for you, including the start and end times?
- Rest and Personal Time: Do you feel you have enough time for rest and personal activities outside of work hours? Why or why not?
- Ideal Work Schedule: If you could change your work schedule, what would be your ideal work hours?
- Flexible Work Schedule: How would you feel about a shift to a more task-based or flexible work schedule instead of fixed hours? What do you see as the benefits or challenges of such a change?
- Impact on Family Time: How does your work schedule impact your time with your family or loved

ones?

Questions for Managers/Supervisors

- Perception of Work-Life Balance: How do you perceive the current work-life balance of the labourers under your supervision?
- Challenges Faced: What do you think are the major challenges labourers face due to their current work schedules?
- Correlation with Productivity: Have you noticed any correlation between the labourers' work schedules and their productivity or job satisfaction? Can you provide examples?
- Flexible Work Schedules: What are your thoughts on implementing more flexible or task-based work schedules for labourers? What benefits or challenges do you foresee?

3.4 Research Design

The type of qualitative research shall be in-person interview with the aim of understanding the nature of the complex relationship between motivation and productivity. It is most suitable for obtaining rich details of the participant's experiences at work place and the environmental factors. The qualitative design provides easier ways of assessing the multiple factors contributing to the construction industry and how productivity is impacted.

3.5 Data collection method

Data were collected by means of individual interviews and various communication channels. Specifically, these are among the things that have been done:

- Skype Calls: Two participants were interviewed via Skype and this allowed them to talk in real time as well as have deeper conversations.
- WhatsApp Voice Calls: For this part, two participants were also involved but they used WhatsApp voice calls because it is convenient.
- Voice Notes through WhatsApp: The rest of the participants received their interview questions through voice notes on WhatsApp which they answered whenever they had time.

The reason behind choosing a multi-modal approach was to make sure that people from different places could be interviewed without any problems and at the same time consider what each person prefers and

logistical issues too.

3.6 Sampling

The research is incorporated with the purposive sampling strategy by which the targeted participants are selected from the construction industry. A sample size of 6 people is selected among which 2 are supervisors from the construction sector and the remaining 2 are workers of the same industry and one is site engineer and the rest is crew leader. The recruitment of these participants has been done through emails and social media such as WhatsApp. Every participant that is selected knows the researcher well since they have worked in the same field. These individuals are selected for their relevant attributes or experiences to the study subject. Since it targets a specific population, purposive sampling provides thorough and full information. The research carefully selects persons who might provide relevant information regarding motivation in the Indian building sector to gather data and comprehend the situation. The sample size that is selected is large enough to identify recurring themes and patterns but still small enough to investigate each person's experience (Lohr, 2021). The participants are projected with open-ended questions by which the efficiency of the construction sector is identified with the specific implication of data that has evaluated the facts like the work-life balance in the sector and the working environment of the participants.

3.7 Data Analysis Method

This research analyses qualitative data acquired from interviews conducted with industry professionals in the building sector, using thematic analysis. Thematic analysis is a reliable method of identifying, examining and summarizing patterns or themes in qualitative data (Baltes & Ralph, 2022). Transcribing recorded interviews constitutes an important initial step during analysis as it ensures that participants' responses are captured sufficiently together with their tone and other nuances (Mezmir, 2020). Once this has been done the researcher reads through the transcriptions carefully to understand what was said by whom under which circumstances so as to get comfortable with the information.

Next, the researcher uses these categories as labels for grouping related bits of text into larger segments called themes. These broader groupings represent major findings or patterns which have emerged from the data-set. It is necessary to review and refine selected themes for their accuracy and relevance; this may entail going back over data again or even changing them altogether to better reflect what participants were

saying.

Finally, names are given to these themes together with definitions that provide brief explanations of their significance and meanings. This systematic process guarantees that results are both valid and connected back into interview-based on insights gained earlier. In conclusion, there will be a comprehensive report produced which summarizes all identified themes supported by example-filled quotes taken directly out of interview materials themselves. Such an approach offers holistic understanding about relationship between motivation and productivity while giving valuable recommendations towards enhanced production within construction industry setting

3.9 Ethical Considerations

To protect participants and their privacy, we followed strict ethical rules. Once it was made known that they could quit the study whenever they wanted without any negative impacts on them all subjects gave their consent. Every transcript or recording is kept in a secure place where no one else can access them except those who have permission to do so, also, every piece of personal information about a person who took part in our research has been replaced with some random numbers this way nobody can know who exactly was involved into it if they don't have direct contact with participants themselves. (Dave et al., 2023). All ethical aspects were considered very carefully because it was important for us not only to respect rights of participants but also ensure validity and reliability throughout whole research process (Pietilä et al., 2020).

3.10 Limitations

There is a problem with the research because voice notes were used in some interviews. Even though this technique was flexible, it might not have produced as deep answers as direct communication would have done so. Nonverbal cues could be absent due to absence of face-to-face contact and this may affect the amount of information gathered. The discussion section of the report will explain more about these points. In addition, narrow target group could limit applicability of findings across broader construction sector.

3.11 Research Timeline

Research Activities	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Formulating the aims and objectives							
Writing the literature review							
Collection of secondary data							
Data analysis							
Conclusion and recommendat ions							
Final review and submission							

Evaluating the Importance of Motivation Among Workers and Its Impact on Productivity in The Indian

Construction Sector: A Critical Analysis

Figure 3.11: Research Timeline

Source: Self-developed

3.12 Chapter Summary

It is summarized from the chapter that methodological importance is the crucial part of the research that has the evidential justification of the methodological tools for the study. The chapter has focused on the different components of the research onion based on which the whole study is developed. The data collection process and the data analysis method are also evaluated in the chapter for an extended understanding of the process. The study has also followed the ethical considerations so that no ethical issues evolved from the research development process.

Chapter 4: Result and Findings

4.1 Research Findings

This section presents the final findings of the study in respect to the experiences of workers working within the construction industry in India. It also provides the findings in relation to the challenges of the existing work schedules of workers and the potential for putting in place more flexible or task-based systems of work. Important objectives of the research were to get a clear elucidation for the concept of work-life balance in the Indian construction industry, and the study has therefore elaborated on various advantages and disadvantages of current practices. The interview was forwarded to multiple participants who were working as labourers or supervisors in the construction industry in India and the response rate was high with detailed insights provided by both groups. The findings of the study shall be compared with the findings of the literature review mentioned earlier in the chapter 2.

Overview of the interviewee

Participants table	Designation	Age	Gender	Work Ex. In construction Industry
Participants 1	Site Engineer	29	M	10 years
Participants 2	Site Supervisor	44	M	6.5 years
Participants 3	Crew Leader	37	F	8 years
Participants 4	Head Carpenter	51	M	21 years
Participants 5	Site Supervisor	31	M	9 years
Participants 6	Worker	29	M	5 years

Table 4.1: Overview of The Interviewee

(Source: Self-Created)

After analysing the findings of interviews conducted with Indian construction workers and supervisors regarding their primary challenges and issues within this industry, the main themes were identified and are detailed in this chapter.

- Long work hours and resultant fatigue
- Work-life imbalance
- Relationship between productivity and job satisfaction
- Feasibility of task-based and flexible scheduling
- Economic and workplace issues
- Management and workers' communication
- Work schedules and their effects on personal and family life
- Safety issues of extended work hours
- Various benefits and related issues with new work systems

4.2 Long Working Hours and Work Fatigue

In the construction sector workers and supervisors often mention the prevalence of work hours. Typically, construction labourers put in about 12-hour shifts that begin early, in the morning and stretch till late, at night. This prolonged schedule not drains their mental stamina but also intrudes upon their personal time leading to persistent fatigue. Participant 3 noted "These long hours are taking a toll on the guys. They're not only physically exhausted but mentally drained as well. Exactly. It's hard to stay sharp and focused when you're that tired, especially when it comes to safety protocols. That near-miss last month was a wake-up call. We can't keep pushing them like this. It's not safe. We need to find ways to reduce those long shifts and prioritize rest for everyone's sake."

Workers feel so drained that they can barely muster the energy for anything, beyond eating and sleeping making it challenging for them to juggle work and personal life. While working in construction poses its challenges supervisors and site engineers have raised concerns, about the impact of work hours on their team members. They recognize that the current 12-hour shifts may be pushing workers far. The situation

is exacerbated by the nature of schedules, which allow for last minute demands for hours or shifts. Participant 5 remarked, "They're working themselves to the bone, putting in 12-hour shifts or more, day in and day out. It's back-breaking work, and by the time they drag themselves home, they're completely spent. There's just no energy left for anything else, not even for their families." This level of exhaustion not compromises safety by affecting workers physical coordination and mental sharpness. Also increases the likelihood of accidents at the worksite. Moreover, enduring demanding schedules over time can result in health issues like weakened systems and mental health conditions such, as depression and anxiety as noted by Participant 2: "The long hours are definitely a major challenge. It leads to fatigue, which can impact safety and productivity on the site."

4.3 Work-Life Imbalance

In interviews it was found that the extensive work hours common, in India's construction industry have influenced workers ability to balance work and personal life. Workers often expressed frustration about struggling to juggle their demanding work schedules with their family responsibilities. The impact of this imbalance is most noticeable during interactions within the family. Workers shared their disappointment at missing meetings or their children's extracurricular activities due to workdays.

They often prioritize work, over family commitments leading to feelings of guilt and frustration. As Participant 2 noted, "A task-based schedule could be a potential solution. Assigning specific tasks for the day and allowing them to finish and leave on time could improve their work-life balance. This might actually lead to increased productivity, as motivated and well-rested workers tend to perform better." Besides family connections many workers struggle to find a balance, between work and personal life impacting their ability to enjoy hobbies and leisure activities.

A large number of employees end up using their time for chores or catching up on sleep leaving room for recreational pursuits or self-improvement. The construction industry poses challenges in achieving work life balance due to schedules. Participant 4 added, "They usually work 10 to 12 hours, which is already a lot. But sometimes, things happen – equipment breaks, bad weather, or rush jobs – and they have to work even longer. It's really hard to have a life outside of work when that happens." Workers often face uncertainty, about the duration of their employment making it difficult to plan events or personal commitments. Managers and supervisors are worried, about how these new work setups will impact their

employees personal lives and the sustainability of these practices in the run. When workplaces are consistently imbalanced it can result in turnover rates, lower job satisfaction and health issues for staff members. Based on the interviews conducted it was evident that adjustments were required in the work systems utilized by the construction industry. Providing workers with schedules and personal time could enhance their efficiency and dedication to the organization even when the workload is demanding. As Participant 3 stated, "They're putting in crazy hours, and it's really impacting their personal lives. It's like they're constantly choosing between work and spending time with their loved ones. Family dinners, birthdays, hanging out with friends - it all gets pushed aside to meet deadlines. They're missing out on so much." This ongoing disparity underscores the necessity for company changes as it can hinder development strain relationships, with colleagues and reduce overall enjoyment outside of work.

4.4 Productivity and Job Satisfaction

The relationship between working hours, productivity, and job satisfaction turned out to be a complicated and an important theme in both interviews. workers and supervisors shared views about how work under today's work settings in the Indian construction industry compromises these essential pieces of work exposure significantly.

The link between the number of working hours and the level of productivity was apparent. Though employers may consider this ideal as facilitating a higher output, the interviews show that in most cases, long hours usually bring diminishing returns or extra output that can hardly be noticed. According to Irfan Husain, "They'll be excited to go home and spend time with their families, which could actually lead to increased productivity during their work hours." Workers noted a significant decline in the efficiency and the quality of their output as the shift wore on past the expected hours, especially during the late hours of the extended day. Such output deterioration was related to physical and mental fatigue that resulted in a lack of concentration, poor judgment, and general weakness.

Supervisors concurred with these comments and added for instance that as employees grew tired after many hours of work, they became far more error-prone, worked more slowly or produced lowlier quality results toward the end. This served to demonstrate the conventional approach of extended work weeks did not invariably result in the greatest productivity and occasionally proved negative in fact.

High job satisfaction went hand in hand with the ability to balance a work life relative to a personal life. Those who felt overwhelmed by work and almost rarely participated in personal activities or stayed around their families were less satisfied with their job. In this context Participant 2 states that, "The long hours are definitely a major challenge.. They also miss out on important personal time, which can lead to stress and decreased job satisfaction." This was usually expressed with low motivation, feelings of burnout, and sometimes even considering other employment options. However, in the same context, Kiranpreet kaur added, "If they can finish their tasks and leave on time, they would have more time for personal life, which could lead to increased job satisfaction and overall well-being".

Interestingly, the interviews found that the level of job satisfaction and, importantly, performance or productivity clearly increased over periods of more balanced work schedules or when workers felt in control of time. It was also found that workers would be more energetic, focused, and committed to their tasks provided they are well-rested and had enough personal time to recuperate between shifts.

The relationship between working hours, productivity, and job satisfaction is very complex in the construction industry. Long working hours do give in rapidly to diminishing returns, with sharp declines in productivity from the later hours of long shifts. It can be observed from the response of Participant 4, when he says, "When the labourers know they have a realistic chance of finishing their work within the scheduled hours, it makes a world of difference. You can see the shift in their attitude and work ethic. They are more motivated, they work with a sense of purpose, and they are excited to tackle the tasks at hand. It's like they can see the light at the end of the tunnel, and that makes all the difference." Fatigue results in increased errors, a slower pace of work, and lower quality of output potentially negating the perceived benefits of longer work hours. Intrinsic to the ability of workers to sustain a healthy work-life balance is job satisfaction. Workers who feel more in control of their time and have an effective work-to-personal life balance showed an increase in motivation, commitment, and general job satisfaction. That means that adoption of balanced work scheduling would generally lead to a more involved and productive workforce, which would provide benefits to both the worker and the industry as a whole.

4.5 Task-Based and Flexible Scheduling

The responses gathered from the participants helped understand important insights about task-based and flexible scheduling within the Indian construction sector. Information gathered from Participant 1 highlighted both the advantages and disadvantages of this method. He stated, "If they finish their tasks earlier, they'll be happy and more likely to stay with the job". This highlighted that when employees are able to complete their tasks efficiently this could help increase their morale at the workplace and help retain employees in the organisation.

During his interview, Participant 2 helped the researcher by sharing his viewpoints about task-based scheduling. He finds this approach to be advantageous and commented "Assigning specific tasks for the day and allowing them to finish and leave on time could improve their work-life balance". From his response, it could be said that construction workers need to be assisted with a well-organised framework which could help them to maintain a balance in their work and personal life. Mr Patel also added, "The system would need to be flexible enough to accommodate unforeseen circumstances". Thus, the researcher was able to ascertain the fact construction workers in India need help from their respective organisation. They could be helped with flexible scheduling. Flexibility will help construction workers to increase their work efficiency.

A similar kind of response was also heard from Participant 3. She made a statement that "Knowing exactly what needs to be accomplished each day could help them plan their work more efficiently". From this response, the researcher has ascertained that task-based scheduling is beneficial for Indian construction workers. With these workers can become more productive and it helps them in better formulation of work plans. Additionally, she also highlighted that equitable distribution of job roles is important. When done properly, this will lead to better workplace coordination. Additionally, transparent communication will also avoid any kind of stress among employees and can save them from burnout.

Participant 6 also provided additional aid to this research in the context of task-based and flexible scheduling. His perspective helped the researcher to look at this issue from a labourer perspective. Harikesh added, "If I could focus on getting tasks done instead of just putting in hours, I could probably get more done in less time". Thus, the researcher can understand that Indian construction workers want

flexible work hours. Thus, with a task-based approach, organisations can help construction workers to become more productive. Furthermore, when individual labourers get to decide when they can choose to work, it gives them a sense of authority. This helps them grow positive sentiments about their workplace and adds to their job satisfaction. Thus, with task-based and flexible scheduling organisations can increase their overall output in the Indian construction sector.

While it is true that both task-based and flexible scheduling provide solutions that are anticipated, challenges exist in establishing such a system in the construction industry. Unforeseen work or delays in any project may throw off an exclusively task-based system. In this context, Participant 5 said, "If we could give them more flexibility, like letting them choose their hours or focusing on getting specific tasks done instead of working a set number of hours, it could make a huge difference". The transparency on the communication front and equity regarding workload distribution would be primary conditions for any flexible system to work. However, the potential benefits are huge. It would significantly boost morale and job satisfaction if workers were given more control over tasks and time. Any new scheduling system would clearly have to be flexible to accommodate the inherently uncertain nature of construction work. Such balancing could bring flexibility with structure to bear on improvements in worker well-being while simultaneously improving project productivity and outcomes.

4.6 Financial and Workplace Challenges

Participant 6 highlighted the job related struggles experienced by construction workers, in India. They noted that a large number of workers are forced to put in hours due to limitations causing a significant disruption in their work life balance. As he described, "It feels like my life revolves around work. By the time I finally drag myself home, I'm so worn out that I barely have the energy to do anything but grab a bite to eat and collapse into bed." The exhaustion and strain, from workloads negatively impact the construction sector by resulting in decreased morale and productivity levels.

Participant 5 shed light on issues related to irregular wage payments, adding to workers' stress. He stated "And to make matters worse, sometimes their paychecks are late. It's like a constant worry hanging over their heads, adding even more stress to their already difficult lives. It's hard enough trying to make ends meet on a tight budget, but when you're not even sure when your next paycheck is coming, it just makes

everything so much more difficult. It's a real shame because these guys work so hard, and they deserve to be paid on time." The absence of security leads to decreased motivation, which in turn hampers the effectiveness and profitability of the organization.

Participant 2 highlighted the effects of work hours, on the mental and physical health of employees. He mentioned, "Many of them work 12-hour shifts, and sometimes even longer if there's a tight deadline. By the time they get home, they're exhausted and have little time for family or relaxation. The challenging work atmosphere becomes more burdensome due, to this lack of balance and fatigue leading to an effect, on one's overall health.

Participant 4 mentioned the unpredictability of work schedules during the conversation stating, "The biggest challenge is definitely the unpredictability. They often come to work unsure of how long they'll be there, which makes it hard to plan their personal lives." The doubt, causing stress and anxiety, along, with wages makes it harder for workers to balance their personal and work lives. The strenuous nature of construction works extended hours and financial instability all lead to a decreased quality of life for employees.

Participant 3 highlighted the importance of employees feeling appreciated and well rested as it leads to increased engagement and productivity stating, "When these guys are well-rested and feel like they're valued, it's amazing how much more they bring to the table. They're not just going through the motions, they're actively engaged in their work. They take ownership of their tasks, they're proactive in solving problems, and they really care about the details. It's a win-win situation for everyone." Employers and leaders are starting to recognize the value of enhancing the harmony, between work and personal life in boosting staff loyalty, efficiency and work excellence. Implementing these enhancements amidst project demands poses a challenge underscoring the significance of striking an equilibrium for the progress and development of the construction sector, in India.

4.7 Summary

The analysis chapter is focused on the in-depth review of the challenges in work-life balance faced by construction workers working within the Indian construction industry. What emerged as the major themes from the in-depth interviews with workers and supervisors included extremely long working hours and ensuing severe fatigue, a considerable work-personal life imbalance, and the interplay between work scheduling, productivity, and job satisfaction. It has been shown that while very common, longer working hours usually result in marginal productivity but have a negative impact on worker well-being. Possible solutions that would involve more flexible or task-based scheduling are discussed, underpinning the need of industry to balance project demands with worker welfare if growth is to be sustainable and the outcomes improved.

Evaluating the Importance of Motivation Among Workers and Its Impact on Productivity in The Indian

Construction Sector: A Critical Analysis

Chapter 5: Discussion

5.1 Linking with research questions

Linking with research question 1

The data analysis addresses the research query by highlighting elements influencing the drive of Indian construction workers. The motivation of these workers is intricate and influenced by external factors. Adequate compensation stands out as an incentive as evidenced by the analysis and interviews. Employees voiced a need, for pay commensurate with the strenuous nature of their work aligning with broader research indicating the significance of monetary rewards, in motivating employees especially in physically

demanding fields.

Motivation goes beyond money. Having a predictable income is a human need and job security is another key factor. In industries, like construction, where work is project based and subject to changes offering job security can significantly boost an employee's dedication and performance. The survey also highlighted the importance of acknowledgment and a supportive workplace environment. When employees feel valued and respected, they tend to be more motivated and involved. This aligns with Herzbergs Two Factor Theory, which emphasizes the impact of working conditions and recognition, on an employee's job satisfaction level.

The study also highlighted the importance of stability and punctual payments, as motivating factors. Delays in payments or unstable finances can cause stress leading to a decrease in motivation. Financial worries often hinder employees concentration and performance capabilities. Hence when construction companies ensure payments and establish a financial environment their workforce is more likely to feel motivated.

To sum up Indian construction workers find motivation through a combination of nonmonetary aspects. It's essential to offer compensation, financial stability, job assurance, acknowledgment and a pleasant working environment. These results address the research query. Illustrate the intricacies of worker motivation, within the construction sector.

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Linking with research question 2

The results of the study indicate without a doubt that motivation among Indian construction workers is related to productivity. According to this study, employees tend to produce more when they feel like they have control over their working hours and can spend time with family members; such staff also report higher levels of job satisfaction. These finding backs existing theories which establish a connection between self-rule for workers and increased output. For example, Self-Determination Theory posits that autonomy greatly fosters inner drive thus resulting into higher productivity levels. People become better at managing time hence protecting themselves from burning out if they are skilled in both personal and professional time management skills.

Nevertheless, it was observed through this research that longer working hours may lead to reduced efficiency at work. The analysis showed that while many people work extra hours so as to achieve more productivity, there tends to be diminishing returns from doing so frequently. Employees' mental healths get affected negatively by having fixed mentalities towards always being at work which eventually lowers their level of output. This corresponds with Yerkes-Dodson law where one needs less energy/stress inorder perform better; maximum performance can only be attained after some reduction in effort below an optimal arousal threshold (stress). The impact of overworking on employee wellbeing cannot be overstated because fatigue sets in leading not only impaired concentration but also compromised safety within workplaces thereby lowering overall performance.

The main point made in the study is that motivation greatly influences productivity. Employees who believe they are fairly compensated for their services, those whose jobs allow them to strike balance between work and life as well organizations fostering supportive cultures will always remain motivated thereby producing beyond targets set by respective employers. However sometimes long days worked which were meant increase output per worker may end up doing opposite by undermining both these aspects i.e., Long Work Days decreases Productivity also affects employees' welfare adversely too. Such an understanding about relationship between these two variables suggests that any program aimed at enhancing efficiency should take into account factors driving motivation while at the same time focusing on raising levels of productivity within Indian building sector.

Linking with research question 3

The research findings, on the advantages and challenges of implementing a task oriented work environment offer insights into the feasibility of this approach within the construction industry in India. Some individuals have proposed that organizing work based on tasks could enhance the integration of work and leisure activities while also improving productivity. In this system employees are assigned tasks to accomplish than adhering to fixed working hours. For instance participant 2 spoke positively about task based scheduling highlighting its role in helping employees achieve a balance between their professional commitments. This viewpoint reinforces the notion that empowering workers with autonomy, over their tasks can lead to productivity and job satisfaction.

However the study also highlighted issues, with this strategy. One significant concern is the uncertainty surrounding construction projects. Irfan Husain brought up the idea that unexpected tasks can emerge suddenly requiring attention. In organizations structured around tasks this unpredictability can create tension as employees might end up working than intended disrupting their work schedules. This issue underscores the importance of adaptability in any task driven approach. Without mechanisms to handle tasks or changes, in workload a task oriented system could result in employee stress and discontent of the anticipated benefits of improved efficiency and work life balance.

In addition the success of a project focused workplace relies on planning and clear communication. Construction projects are inherently intricate, with collaborators and interconnected tasks. To facilitate a task driven approach it is crucial to have an outlined plan with defined goals, timelines and contingency measures for tasks. Regular communication, between supervisors and employees is essential to maintain project oversight and prevent staff from being overwhelmed by alterations.

The discoveries indicate that although having a task focused work environment can bring advantages such, as work life balance and enhanced efficiency introducing it in the construction industry will require planning and adaptability. The strategy should be flexible enough to account for the changing nature of construction projects well as include measures to handle unexpected tasks and prevent employee exhaustion. Hence despite the nature of the idea it will need examination and potential adjustments to tackle the specific hurdles faced by the company before being implemented within the Indian construction

sector.

5.2 Compare and contrast of the findings

The building industry, in India plays a role, in the countrys growth yet it encounters various challenges concerning employee motivation, efficiency and work life balance. Addressing these issues is crucial to enhance employee happiness and ensure the sectors viability and efficiency. To fully understand these aspects our study focuses on three research questions: What drives the motivation of construction workers in India? How does motivation influence the productivity of construction workers? And what are the potential benefits and challenges associated with implementing a task-oriented work environment in India's construction sector?

1. What drives the motivation of construction workers in India?

Literature Review: Various elements, such, as compensation, job stability and effective managerial techniques play a role in influencing employee motivation according to research (Abdu et al., 2023; Hamza et al., 2022). Theories such as Maslows Hierarchy of Needs and Herzbergs Two Factor Theory highlight the significance of external incentives, in enhancing productivity and job contentment. Additionally, studies underscore the role that leadership plays in fostering a workplace environment (Barg et al., 2014).

Thematic Analysis: Thematic analysis provides insights, into how these key factors play out in the world. For example, when employees feel they are not fairly compensated or lack job security it shows in their dissatisfaction with work hours and financial instability. Some participants, including Participant 5 have highlighted the idea that stress caused by pay can dampen motivation. The perspectives shared by participants 2 and 4 suggest that effective management skills and internal motivators like feeling appreciated and having autonomy over work schedules are crucial, for boosting motivation and productivity.

2. How does motivation influence the productivity of construction workers?

Literature Review: The study delves into how productivities influenced by theories such, as Vrooms Expectancy Theory and McClelland's Theory of Needs. It suggests that employees tend to excel and feel more satisfied in their jobs when their desires for achievement and

acknowledgment are fulfilled (Vroom, 1964; McClelland, 1961). The findings highlight the importance of management strategies and fair compensation, in enhancing employee effectiveness.

Thematic Analysis: The theme analysis indicates that workers who feel valued and maintain a good work life balance tend to be more productive. For instance, Participant 2 noted that those who have control, over their schedules and achieve a work life equilibrium exhibit productivity levels. This aligns with the literatures argument that motivation plays a role in enhancing productivity. Conversely the analysis also reveals that excessive work hours and financial struggles can reduce productivity by draining workers energy and motivation. This finding supports the notion, in the literature that poor working conditions and financial instability can lead to decreased productivity.

3. What are the potential benefits and challenges associated with implementing a task-oriented work environment in India's construction sector?

Literature Review: Based on the study findings it appears that work settings focused on tasks and offering schedules can enhance both work life balance and productivity. Research suggests that enabling employees to finish tasks at their speed could lead to output and job satisfaction (Dixit et al., 2019). Nonetheless the research highlights the importance of implementation of these strategies to prevent any consequences.

Thematic Analysis: The analysis of the theme offers a perspective, on this proposed solution. While Participant 2 Favors task-oriented scheduling to enhance efficiency and work life balance some participants voice worries about its nature and the likelihood of unplanned tasks. This contradictory feedback underscores the complexities involved in implementing systems. Stresses the importance of managing scheduling flexibility cautiously to prevent exacerbating already challenging situations. The study indicates that task-based scheduling could benefit employees. It should be implemented thoughtfully to address challenges and prevent escalating existing workplace stressors.

Overall Comparison and Insights

A strong understanding of the research issues is apparent when comparing the analysis and

literature review. Improving productivity and job satisfaction among workers, in the construction industry involves tackling instability utilizing motivational strategies and fostering a healthy work life balance. These key points are highlighted in both parts. The thematic analysis sheds light on implications and real-world insights while the literature review lays down the groundwork.

By connecting these findings to the research topics, it is evident that effective methods to boost productivity and motivation consider both concepts and practical scenarios. The Indian construction sector stands to benefit from a productive and satisfied workforce by carefully addressing financial challenges improving working conditions and implementing flexible scheduling options.

5.3 Research Implications

The findings have significant implications for the Indian building industry. They highlight the fact that one needs to adopt an integrated approach to worker management, addressing both financial and non-financial motivators. The research indicates that policies and practices designed to enhance work-life balance and provide support within the working environment could lead to higher levels of productivity. It, however, also considers that change, be it toward a task-oriented work environment or otherwise, has to be meticulously planned and implemented in a flexible manner. The study in this regard highlights the need for continuous assessment and improvement of the motivational strategy so as to keep pace with dynamic worker needs and projects.

Chapter 6: Conclusion and Recommendation

6.1 Linking with research objectives

Linking with Research Objective 1

The findings have successfully addressed the research objectives. In trying to identify the factors that drive the motivation of construction workers in India, the research highlights a complex interplay of elements that include fair remuneration, job security, recognition, supportive work environments, and skill development opportunities. As is established by the study, both financial and non-financial motivators are very important.

Linking with Research Objective 2

The place of motivational factors in terms of their influence on employee performance is investigated, and the findings clearly show that there is a relationship between motivation and productivity. Those workers who felt valued and appreciated at work, with better work-life balance and job satisfaction, were reported to be more focused and productive. Further, negative factors such as long working hours and financial instability were found to lessen motivation and, as a consequence, productivity.

Linking with Research Objective 3

The findings present significant views on the feasibility and effectiveness of developing a task-oriented work environment. On one hand, there was a belief that task-based scheduling may aid in improving work-life balance and increasing productivity. This research revealed a number of issues that might impede its implementation. In other words, while the adoption of a task-oriented approach may work well in general, its implementation in the Indian construction sector calls for proper consideration of context and specific challenges.

6.2 Overall summary

This research attempts to explain the factors that determine the motivation, productivity, and work-life balance of construction workers in India. Through a literature review and thematic analysis of interviews to provide an in-depth insight into the challenges and opportunities of the sector in the country. It identified several key motivations driving Indian construction workers. These reflect fair salary, job security, recognition, enabling working environments, and skill-building opportunities. Most important were the financial stability and timely payments, since it has been thematic in the analysis of how the impact of financial instability on workers' well-being and productivity is direct.

The findings of the study clearly indicated a strong correlation between motivation and productivity: workers who felt more in control with regard to time use, had better work-life balance and job satisfaction were reported to be more focused and productive. Yet, the study also pointed out how common industry practices like extremely long working hours tend to yield rapidly diminishing returns and compromise worker well-being. In the exploration of a task-oriented work environment, a number of potential benefits and challenges were raised. Some participants felt this approach to task-based scheduling would be good for work-life balance, allowing a worker to be more productive, while others brought out the potential pitfalls around how to deal with unplanned work. This suggests that while a task-oriented approach holds potential, careful planning and flexibility would be required in its implementation.

The research study underlined the complexity of the problems of Indian construction workers: extremely long working hours, work-life imbalance, and continuous financial instability are some of the major issues. Notably, it brought to light the concerns regarding safety and how fatigue induced by long working hours might compromise strict adherence to safety standards. Equally important was the need for a holistic approach toward productivity and work-life balance among construction workers. It, then, said that effective strategies need to take account of both the macro issues like industry trends and broader economic conditions and the micro issues in individual experiences and motivations of workers. Future research areas also emanated from the study, including the role of technology in improving work-life balance and productivity in India's construction sector and the effect of age groups within the workforce on different motivational strategies and work scheduling techniques.

Consequently, it provides valuable insights to help develop more effective policies and practices within the Indian construction industry. The fact that these challenging factors have been addressed and the motivational factors built upon can offer very valuable insights into the possibility of creating a more productive, satisfied, and sustainable workforce. This can contribute to the holistic growth and development of the construction industry in India and finally aid the bigger goals pertaining to the economy and infrastructure of the country. The findings emphasize the need for flexible and adaptive approaches since strategies that are effective in one context may not work in another. They also emphasize that motivational strategy will further need constant evaluation and improvement in order to cope with the developing needs of workers and projects. On the whole, this research adds valuable input to our

understanding of the complex dynamics at play within the Indian construction environment and provides a platform from which the development of more effective workforce management strategies can take place.

6.3 Recommendations

Recommendation 1: Implement Fair Wage and Timely Payment Policies

The primary information gathered by the researcher highlights that the Indian construction industry labourers are suffering from timely distribution of their wages and they are not paid fairly. This has become a significant issue in the workplace. Thus, in order to deal with this issue and make this industry more productive, organisations need to bring certain changes (Davis and Sinha, 2021). Clear payment schedules are to be established. It is important for them to make their workers financially stable (Manjenje and Muhanga, 2023). This will reduce the stress of the employees; their job satisfaction will increase and they could contribute more to their organisation without working long shifts. Additionally, regular audits could ensure that organisations are in compliance with the payment policies and they pay their labourers fairly (Sparks et al. 2022). Furthermore, organisations also can arrange for financial literacy programs. This will ensure that labourers can plan and manage their earnings better, improving the overall well-being of the labourers. Furthermore, when organisations can guarantee timely payment this will build a relationship of trust and make the workers more focused towards their organisation.

Recommendation 2: Implement Flexible and Task-Based Scheduling

This research also found the importance of flexible and task-based scheduling in the context of the Indian construction industry. Thus, it would be ideal for organisations in this industry to put more focus on implementing these changes in their workplace for the betterment of the managers and construction labourers. With flexibility in the workplace managers and labourers both could find time to balance their professional and personal life (Wöhrmann et al. 2020). This will increase their job satisfaction and ultimately make them more productive at the workplace (Judge et al. 2020). However, this research also found that the construction industry often comes across several uncertainties in the workplace. Therefore, with additional training organisations also need to ensure that managers and labourers are able to make effective utilisation of flexibility to deal with this uncertainness (Kossek et al. 2021). When construction labourers and their respective would be comfortable about their job roles this will increase their job

satisfaction and output. The industry could benefit from their increased productivity.

Recommendation 3: Enhance Safety and Working Conditions

Organisations operating in the context of the Indian construction industry could also gain added benefits from improving their workplace safety protocols as well as the overall working conditions during any construction project (Ranasinghe et al. 2023). When during any emergency situation employees choose to work for long hours this makes them prone to burnout and it can easily cause accidents (Maslach and Leiter, 2022). Thus, it is important for the organisations to implement strict safety protocols. Furthermore, managers and construction labourers are to be provided with regular safety training (Hussain et al. 2020). The organisations also need to regularly check the heavy machinery that is often used at the construction site for any sign of wear and tear. This can help reduce the chances of accidents to a great extent and make the workplace safe for everyone (Duarte et al. 2021). Furthermore, a safer workplace will increase the goodwill of the organisation This will help them to draw talented individuals for the organisation which can give them a competitive edge in the face of fierce market competition.

6.4 Research limitations

The research has a few limitations that need to be highlighted. Firstly, the approach to the research was of a qualitative nature, focusing on interviews as a means of primary data collection. Although this has ensured rich and in-depth insights, it does bring a limit to the generalizability of the findings. Most importantly, a mixed-method approach that also integrates quantitative data could provide a more panoramic view of the issues. The sample size was relatively small and thus may not be entirely representative of the varied experience across India's construction sector. The study was confined to one geographic area, which might have overlooked regional variations in working conditions and other motivating factors. This study was also essentially based on self-reported data, which is subject to bias. The participants may have been swayed into their responses by social desirability or recall bias. A longitudinal study may have captured changes in motivational factors and productivity more clearly across different phases of the project or economic conditions.

6.5 Future scope

The limitation of this research could be overcome in future research and extend the present findings. A mixed method approach, in which qualitative interviews were supplemented by quantitative surveys, will

greatly help in clarifying issues. This may be further enhanced by longitudinal studies that trace changes in motivation and productivity. Besides, regional variations across India might provide insights into how cultural and economic differences affect worker motivation. Further research may also be aimed at examining the role of technology in improving work life balance and productivity in the construction industry. Research into generational differences in motivation and reactions to alternative work scheduling strategies would also be helpful. Other studies concerning the practice and effects of task-based work environments would help give appropriate recommendations for the industry.

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