

INFLUENCE OF HUMAN RESOURCE MANAGEMENT STRATEGIES IN CONSTRUCTION PROJECTS

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CHAPTER 1: INTRODUCTION

1.0 Introduction

In the dynamic landscape of project management understanding the significant relationship between human resource management functions and project health has become an essential aspect. This research has invested in a primary quantitative investigation focused on the INDIAN construction sector through which the relationship between human resource management functions and project health would be analysed and their contribution to enhancing project success rate would also be evaluated. With the growing emphasis on efficient resource utilisation and project Optimisation, the study would help into the impact of HRM practices on project teams. Scrutinisation of HRM Strategies and their Correlation with Project Success, this research has aimed at offering significant insights that can revolutionise HRM approaches within the construction sector that can ultimately enhance project health and ensure high success rates in INDIAN construction projects.

1.1 Background of the study

In the contemporary landscape of project management, the relationship between human resource management functions and project outcomes has been regarded to be significant. Statistics from the project management institute have indicated a concerning trend where only about 44% of global projects have been completed in budget in 2020 which has reflected the struggle of this industry with financial management (Shaban, 2019). Furthermore, a recent report by Borg and Scott-Young (2022), has highlighted that approximately 20% of the projects have been failing outright. From the cases of several companies, the challenges of HRM have been underscored.



Figure 1.1: Importance of HRM in the construction industry

(Source: Aghimien et al. 2023)

From the perspective of the above figure of the importance of HRM in the construction industry HRM is regarded to be significant in the recruitment training and development and resolving project conflicts. For example, the failure of “The Airbus A380 program” which has been attributed in part to workforce mismanagement has resulted in significant financial losses. On the other hand companies like Google which has been identified as a renowned organisation for its innovative HRM strategies have been consistently achieving project success as it can be observed in their seamless product launches and market dominance. Therefore, against this backdrop, the research aims to delve deeply into HRM practices and analyse successful cases like Google and study failures such as “The Airbus A380 program” The research would focus on highlighting the HRM strategies that can influence project health (Adepoju and Aigbavboa, 2021). Utilising rigorous quantitative methods, the study has aimed at extracting valuable insights.

1.2 Problem statement and research rationale

The INDIAN construction sector has been standing as a cornerstone of the economy of the country and it has been significantly contributing to employment and GDP. However, the industry has been experiencing formidable challenges including project delays, quality concerns and budget overruns. According to recent statistics from the construction industry training board, the sector has employed nearly 2.7 million people which has underscored its economic importance (Zhong et al. 2021).

Yet inefficiencies have been reported by several organisations such as a report by the Royal Institute of Chartered Surveyors has highlighted that nearly 77% of the construction projects have been exceeding their initial budget estimated in the INDIAN (Rane et al. 2021). Some major construction projects in the INDIAN have emphasised the urgency of addressing these issues. For example the major infrastructure projects like “Crossrail and HS2” have experience that result in increased cost due to workforce management challenges. The setbacks have not only affected project pipelines but it has also strained the budget and hindered stakeholder trust. Considering this backdrop the research has aimed at analysing HRM functions within the INDIAN construction sector comprehensively.

Investigating the influence of HRM practices on project teams the study would be able to strive to identify patterns, successful Strategies and trends (Gadzali et al. 202). Moreover, by integrating quantitative methods, the research would be able to provide data-backed recommendations for HRM Optimisation that can potentially revolutionise human resource management in the construction industry.

1.3 Research Aim and Objectives

Aim

The primary aim of this research can be regarded as systematically analysing the significant relationship between human resource management (HRM) functions and project health within the INDIAN construction sector. Conducting a quantitative investigation the research has aimed at uncovering the underlying factors and mechanisms through which HRM practices have been impacting project success rates. The ultimate goal of this research can be regarded as providing evidence-based insights that can guide the construction industry in the screen optimising HRM strategies thereby the construction industry can enhance project health and ensure high rates of project success.

Research objectives

- To investigate how HRM functions influence team cohesion, collaboration, and communication within construction project teams and analyze the role of effective team dynamics in enhancing project
- To examine the effectiveness of HRM-led training programs in enhancing the skills and competencies of construction project teams and assess how improved skills contribute to project success rates

- To investigate how HRM strategies, such as talent acquisition and retention, impact risk identification, mitigation, and response strategies within construction projects and assess the correlation between effective HRM and robust risk management
- To explore the impact of HRM practices on stakeholder engagement and communication strategies within construction projects and evaluate how effective communication fosters stakeholder support and positively influences project outcomes

1.4 Research questions

The main question is;

“How does the HRM functions impact the Project health and the improvement of Project Success rate?”

The associative questions are;

- How do Human Resource Management (HRM) functions influence team dynamics, collaboration, and communication within construction project teams in the INDIAN?
- To what extent do HRM-led training initiatives enhance the skills and competencies of construction project teams in the INDIAN?
- What is the relationship between HRM strategies, such as talent acquisition and retention, and risk management practices within the INDIAN construction sector?
- How do HRM practices influence stakeholder engagement and communication strategies within construction projects in the INDIAN?

1.5 Significance of the research

This research can be regarded to be significant for the INDIAN construction sector and the broader project management community. The meticulous examination of the relationship between HRM functions and project health the study would be able to offer actionable insights. The findings have the potential to revolutionise HRM strategies within construction projects that can result in enhanced team dynamics, robust risk management, optimized skills and improved stakeholder communication. Ultimately this advancement can significantly elevate project success rates. In a Sector which can be regarded to be significant to National infrastructure and economy, the research would be able to provide invaluable guidance and ensure efficient resource utilisation height and stakeholders satisfaction and time the project completion that would help the industry in fasting sustainable growth and innovation.

1.6 Research outline



Figure 1.2: Research outline

(Source: Developed by Author)

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The literature review chapter will delve into the foundation and knowledge surrounding human resource management in the context of construction projects. Exploration of historical development theoretical frameworks Global perspective than existing practices, this chapter would be able to provide a comprehensive understanding of the role of HRM in construction projects. It will critically analyse skills development stakeholder engagement risk mitigation and anticipate future Trends this would form the basis for the analytical framework of this research.

2.1 Historical Evolution of HRM in Construction Projects

The historical evolution of HRM in construction projects has been identified to be negative of adoption and innovation in response to the unique demands of the industry. The early construction endeavours have been marked by rudimentary labour management with the little emphasis on specialised skills and team dynamics. However, as construction projects have grown in complexity and scale the necessity for systematic agent practices became Apparent (Schotter et al. 2021).

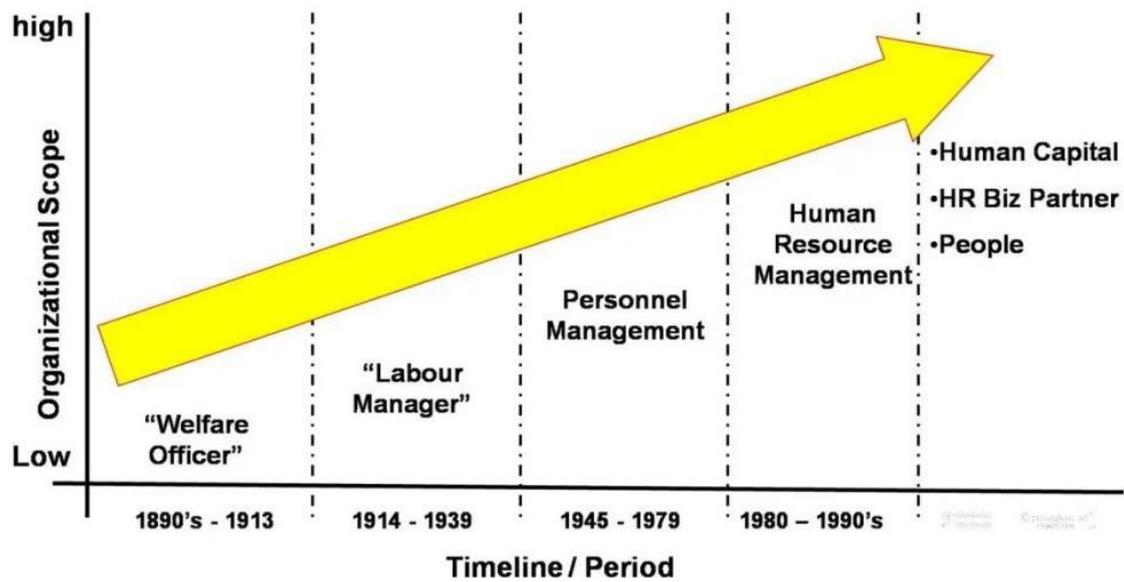


Figure 2.1: Historical Overview of Human Resource Management

(Source: Samimi and Sydow, 2021)

During the Industrial Revolution, the advent of large-scale construction projects created a necessity for the formalisation of HRM functions. Hierarchical structures and standardised Roles have emerged that have shaped early HRM frameworks. In the mid-20th century theories of organisation, I'll behaviour and Industrial Psychology have been observed to start influencing construction HRM. Concepts such as leadership styles, motivations and team dynamics have gained a fraction that provided significant guidance to HR and strategies to focus not only on task completion but also on enhancing worker satisfaction and productivity (Sarvaiya et al. 2021). In the latter half of the 20th century, the construction sector experienced the significant advancements in technology and globalisation that impacted construction HRM profoundly. A significant rise of project management to be aligned with project objectives that have emphasised specialised skills and cross-functional collaborations. Moreover increasing diversity in the workforce has resulted in HRM strategies that have promoted inclusivity and minimised cultural disparities that have helped the construction companies in fostering harmonious teamwork (Widyanty et al. 2020). In recent regards data, data- driven decision making and digitalisation have efficiently transformed HRM in construction. From sophisticated talent acquisition systems to predictive analytics for skills assessment Technology has potentially revolutionised the operations and functions of HRM. Moreover, the focus has shifted towards continuous learning and development which has reflected the need of the industry for adaptable and multi-skilled professionals (Schotter et al. 2021). Therefore this historical overview has highlighted the evolution of HRM from basic labour management to a strategic and Technology- driven discipline. Understanding this evaluation has been significant as it has provided the context for evaluating current HRM practices and envisioning future trends in the dynamic landscape of construction projects.

2.2 Critical Analysis of HRM Practices in Construction

The construction industry which has been characterised by multifaceted projects and a diverse workforce has been demanding strategic HRM practices. According to Cheng and Hackett (2021), one key challenge has been regarded as the historically hierarchical structure of the industry that has been hindering effective communication and collaboration among teams. The research by Wang et al. (2020), has highlighted that traditional HRM models which have been predominantly emphasising administrative functions have been observed to be no longer

efficient in the construction sector.

Critical gaps have emerged in areas such as scale development team integration and talent retention. Employee turnover especially among skilled workers has remained a significant concern that has been greatly impacting project continuity and quality. Additionally, the cyclic nature of the industry has been leading to jobs in security that have been greatly affecting employee morale and productivity (Zeng et al. 2021). However innovative approaches have emerged that have efficiently addressed these challenges. Agile HRM practices borrowing from Agile project management methodology have promoted flexibility and adaptability in the face of project uncertainties. Strategic talent acquisition focusing on not just qualifications but also cultural fit and soft skills has become significant.

Moreover, a growing emphasis on collaborative HRM has been observed in integrating HR professionals into project teams that have been ensuring alignment between project goals and workforce strategies (Ngoc Su et al. 2021). In recent years digital technology has been significantly revolutionising HRM in construction. The AI-driven tools assist talent acquisition and help in predicting workforce needs on the basis of project requirements. The learning management system has efficiently facilitated continuous upskilling that has enhanced workforce capabilities. Furthermore, a growing trend has been observed towards Holistic HRM that is focused on addressing not only professional growth but also well-being, inclusion and Diversity that have created a supportive work environment for employees (Cheng and Hackett, 2021). This critical analysis has underscored the shift of the industry from traditional HR in paradigms to more adaptive collaborative and Technology- driven practices. While challenges have persisted these evolving strategies have represented a significant step toward improving the construction efficacy of HRM that has ensured skilled and motivated teams and ultimately resulted in the enhancement of project outcomes.

2.3 Skills Development and Training Initiatives in Construction HRM

In the construction industry evolving project complexity and Rapid technological advancement have demanded a highly scaled workforce. Consequently, HRM practices have increasingly emphasised training initiatives and skill development. Historically skill training in construction has been task- specific and has been mainly focused on technical competencies. However contemporary research has highlighted a paradigm shift towards a more comprehensive approach (Shaban, 2019). Modern construction HRM has recognised the importance of not only technical proficiency but also soft skills such as leadership communication and problem-solving. The training initiative has encompassed a broad spectrum ranging from vocational training and apprenticeship programs to continuous professional development. Apprentice shape schemes which have been often in collaboration with industry bodies have emerged as significant condudes for transferring traditional craftsmanship while integrating contemporary techniques (Borg and Scott-Young, 2022).

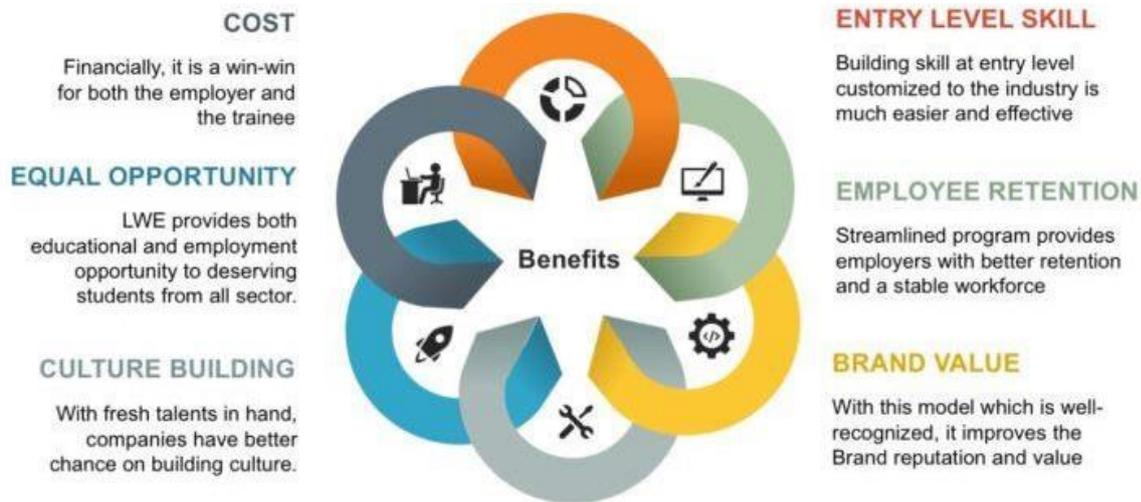


Figure 2.2: Benefits of skill development

(Source: Aghimien et al. 2023)

Similarly, the study by Adepoju and Aigbavboa (2021), has highlighted that Technology-based learning has become significant where virtual reality and Augmented reality have simultaneously enabled hands-on training in a safe environment that has replicated real construction scenarios.

Similarly, the e-learning platforms have offered flexible and on-demand courses that have enhanced accessibility to diverse skills enhancement programs. According to Shaban (2019), the emphasis has shifted towards upskilling the existing workforce. Personalised training plans and lifelong learning initiatives have successfully addressed skill gaps that have ensured employees have remained abreast of industry trends. Additionally mentorship programs for fostering knowledge transfer that have particularly from experience to novice workers that help the organisations in a culture of continuous learning. The research by Borg and Scott-Young (2022), has indicated the correlation between comprehensive skills development programmes and enhanced project outcomes. A skilled workforce has not only been beneficial in improving operational efficiency but it has also been significantly contributing to Innovation and problem-solving on construction sites and has many other benefits as highlighted in the above figure. Consequently, the focus of construction HRM on skill development and training initiatives has signified a strategic response to the evolving demands of the industry that has ensured an adaptable and Competent workforce that has been capable of meeting the challenges of Modern construction projects.

2.4 HRM Strategies and Risk Management in Construction Projects

In the intricate landscape of construction projects the integration of HRM strategies with risk management practices have been identified to be essential especially while ensuring project success. Historically HRM has focused primarily on workforce management while risk management has mainly focused on financial and operational aspects. However contemporary literature has underscored the symbiotic relationship between HRM Strategies and risk management in construction projects (Zhong et al. 2021). Effective HRM strategies such as strategic talent acquisition and skill development have medicated the risk related to inadequate competencies and workforce shortages.

Skilled employees who have been identified to be well-versed in safety protocols and project requirements in the construction industry have potentially minimised accidents and errors that have ultimately resulted in the reduction of legal and financial liabilities (Nevmerzhitskaya, 2021).

Furthermore, HRM practices have significantly contributed to a proactive risk identification approach. Regular feedback mechanisms and performance assessments have enabled organisations in the early detection of competency gaps that have allowed them to target skill enhancement and training programs. This pre-emptive approach has minimised the risk of task-related errors and project delays (Rane et al. 2021). Similarly, a study by Gadzali et al. (2023), has highlighted that cultural alignment with drivers project teams that has been mainly facilitated by HRM has fostered a Cooperative atmosphere that has been beneficial in reducing conflicts and misunderstandings. Improve communication which has been regarded as the Hallmark of effective HRM has ensured that risk associated with miscommunication and lack of clarity has been mitigated, which has been potentially helped in enhancing project coordination and stakeholder satisfaction. Therefore, the section has highlighted the Synergy between HR and Strategies and risk management in construction projects and the significance of this relationship. The role of HRM in talent acquisition communication training and safety protocols has a direct influence on risk management outcomes. Therefore, recognising and optimising these correlations can be crucial for mitigating a wide area of risk as it can ensure project resilience and maximise overall project success.

2.5 Stakeholder Engagement and Communication in Construction HRM

According to Unegbu et al. (2022), effective communication and stakeholder engagement can be regarded as indispensable components of successful construction projects. HRM practices have been playing a significant role in ensuring harmonious relationships with stakeholders. The study has highlighted that historically construction projects have experienced challenges regarding miscommunication that have resulted in conflicts and project delays. However, the contemporary literature has emphasised the integration of HRM strategies that have helped the organisations streamline stakeholder engagement and communication processes (Chyhryn et al. 2019).

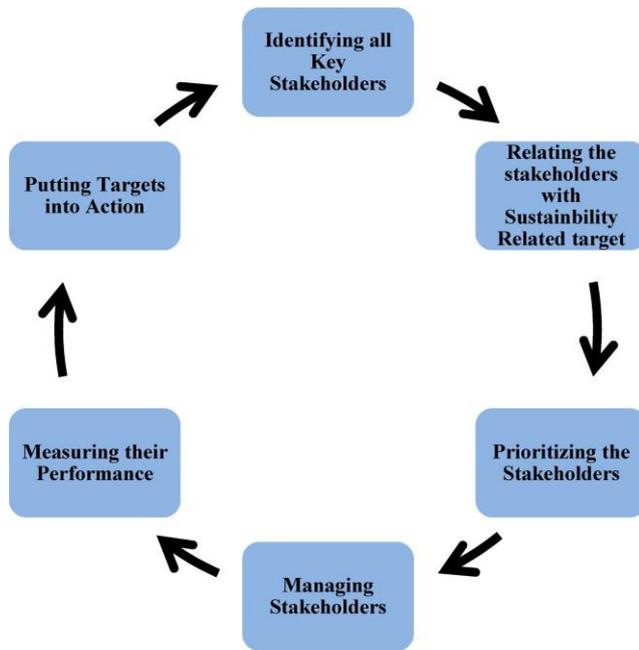


Figure 2.3: Project Stakeholder Engagement Process for Sustainability

(Source: Rane et al. 2021)

Strategic HRM has been well aligned with employee roles and responsibilities with project objectives that ensure that employees have a clear understanding of their contributions to the overall project. This clarity has enhanced internal communication and helped the organisation in first adding a cohesive team that can effectively engage with external stakeholders. HRM practices such as employee training in conflict resolution and interpersonal skills have equipped project teams to efficiently navigate the challenging stakeholder interactions diplomatically (López-Concepción et al. 2021). Moreover, the study by Unegbu et al. (2022), has highlighted the contribution of HRM into stakeholder identification and analysis which has been regarded as a critical step in effective engagement. According to the study, understanding the interests, concerns and Expectations of stakeholders can enable organisations to tailor communication strategies. HRM professionals have facilitated transparent and timely communication channels that have ensured that stakeholders have been informed about the project changes, progress and challenges. Furthermore, HRM Revenue diversity and inclusion initiatives have potentially enhanced stakeholder engagement. Inclusive teams which have been representing diverse backgrounds and perspectives have been identified to be better equipped to address and understand the needs of a wide area of stakeholders. HRM has also been supporting the creation of stakeholder engagement plans that have been efficiently outlined communication frequency methods and responsible parties that have ensured a systematic approach to stakeholder interaction (Chyhryn et al. 2019). Therefore, the research has indicated that projects with robust HRM-driven communication strategies have been experiencing higher stakeholder satisfaction and reduced conflicts. Effective HRM practices have empowered construction project teams to be engaged with stakeholders proactively and enable them to address concerns promptly and foster enduring relationships that have ultimately enhanced project outcomes and stakeholder trust.

2.6 Challenges and Future Trends in HRM for Construction Projects

Challenges:

According to the study by Budhwar et al. (2019), the construction industry has been experiencing persistent HRM challenges. The high turnover rate that has been averaging nearly 21.8% globally has significantly hindered project continuity and knowledge retention. Workforce diversity which has been regarded as a crucial aspect has been often observed to result in cultural clashes and communication gaps. Moreover, the cyclical nature of

construction projects has resulted in job insecurity that has been greatly affecting employee productivity and morale. Real-life examples such as the delays in the construction of the “Berlin Brandenburg Airport” due to workforce shortage have emphasised the tangible impact of the challenges (Przytuła et al. 2020).

Future Trends:

Embracing digital HRM tools has become a definite trend. The use of artificial intelligence in candidate screening has reduced the hiring time and enhanced quality. Similarly, Augmented reality and virtual reality have aided in immersive training experiences that have the potential to enhance skills and safety. Predictive analytics have anticipated skills demand and optimised workforce planning according to it. A company such as Bechtel has employed virtual reality training modules that have potentially improved safety awareness among workers and helped the company in reducing accidents (Cooke et al. 2020). Additionally fostering a culture of continuous learning has been regarded as a future-oriented Trend. Companies have been investing in the professional development of employees and as companies have been reported to have higher retention rates and enhanced project performance. The Holistic well-being programs as observed initiatives of the company, Skanska; have not only enhanced employee satisfaction but also helped the company in reducing absenteeism which has ultimately resulted in increased overall productivity (Arslan et al. 2022).

Moreover, a growing emphasis on Sustainable HRM has also been observed in contemporary organisations. Eco-friendly practices in HR such as green recruitment events and reduced paper use have resonated well with the environmental focus of the industry. For example, Balfour Beatty has efficiently reduced paper usage by 90% through digital HR processes. Addressing these challenges and embracing these trends can be crucial for the construction industry especially while navigating the Complex HRM landscape successfully as it ensures a skilled, motivated and diverse workforce for future projects.

2.7

Theoretical Framework

2.7.1 HRM Theory: Expectancy Theory

Expensive theory that has been regarded as a prominent HRM theory has asserted that individuals have been motivated to act in a certain way if they expect their actions to result in a desirable outcome. The theory has highlighted that employees have been motivated when they believe their efforts would result in good performance which would be rewarded and that the rewards have been valuable to them (Talwar et al. 2021).

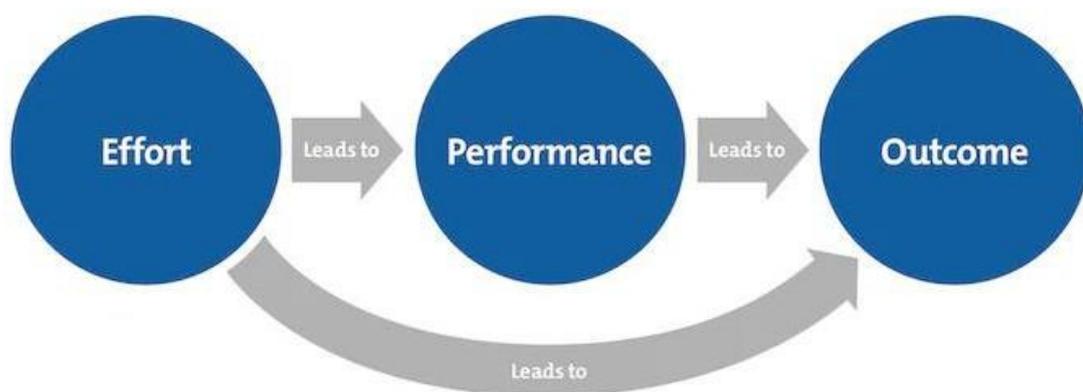


Figure 2.4: Expectancy theory

(Source: Chopra, 2019)

In the context of the research, expectancy theory has been serving as a guiding principle of HRM strategies. Ensuring that construction project team members perceive a direct correlation between their efforts and meaningful rewards and project performance, project managers have been able to enhance motivation and productivity among workers. This theory has emphasised the importance of clear communication regarding performance Expectations and project goals as it can potentially link individual efforts to project success (Mitchell, 2021). Aligning HRM practises with the Expectations and aspirations of the workforce construction projects should be able to foster a motivated and engaged team that can potentially enhance overall project health and success rates.

2.7.2 Project Management Framework: Lean Project Management

Lean Project Management which has been derived from Lean manufacturing principles has emphasised maximising value while minimising waste. This framework has focused on continuous improvement and emphasised empowering teams for the delivery of high-quality results efficiently. Lean project management has promoted collaborative decision-making relentless elimination of non- value-adding activities and flexibility (Cruz and Alves, 2020).

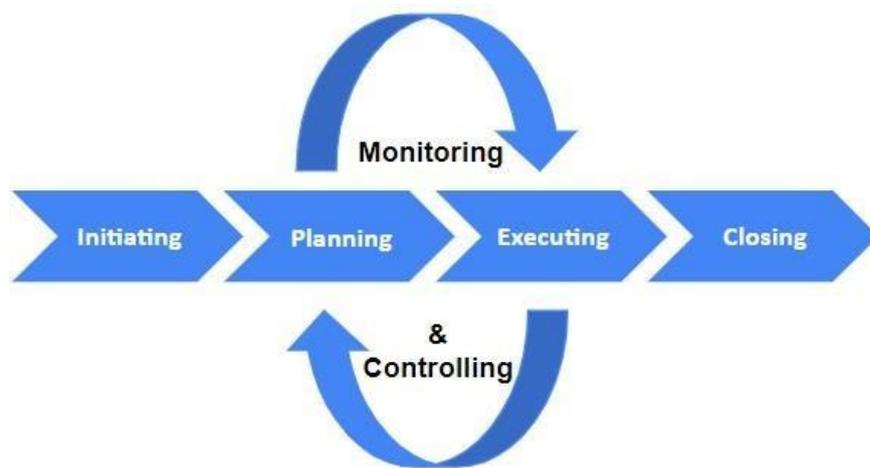


Figure 2.5: Lean Project Management

(Source: Cesarotti et al. 2019)

Incorporating lean project management principles into the research has fostered efficiency and effectiveness. Emphasising wasteful HRM practices such as redundant training modules and excessive administrative procedures has resulted in resources being allocated to initiatives directly enhancing project team skills and stakeholder communication. Additionally, lean principles have encouraged iterative feedback loops that have allowed HRM strategies to evolve with respect to the real-time project necessity (Lalmiet al. 2021). Moreover, the emphasis of lean management on empowering cross-functional teams has been aligned with the collaborative nature of HRM within construction projects. Therefore, streamlining processes and promoting continuous learning has enabled lean project management to enhance HRM efficiency which has ultimately resulted in significant contributions to improved project health and success rates in the construction sector.

2.8

Conceptual Framework

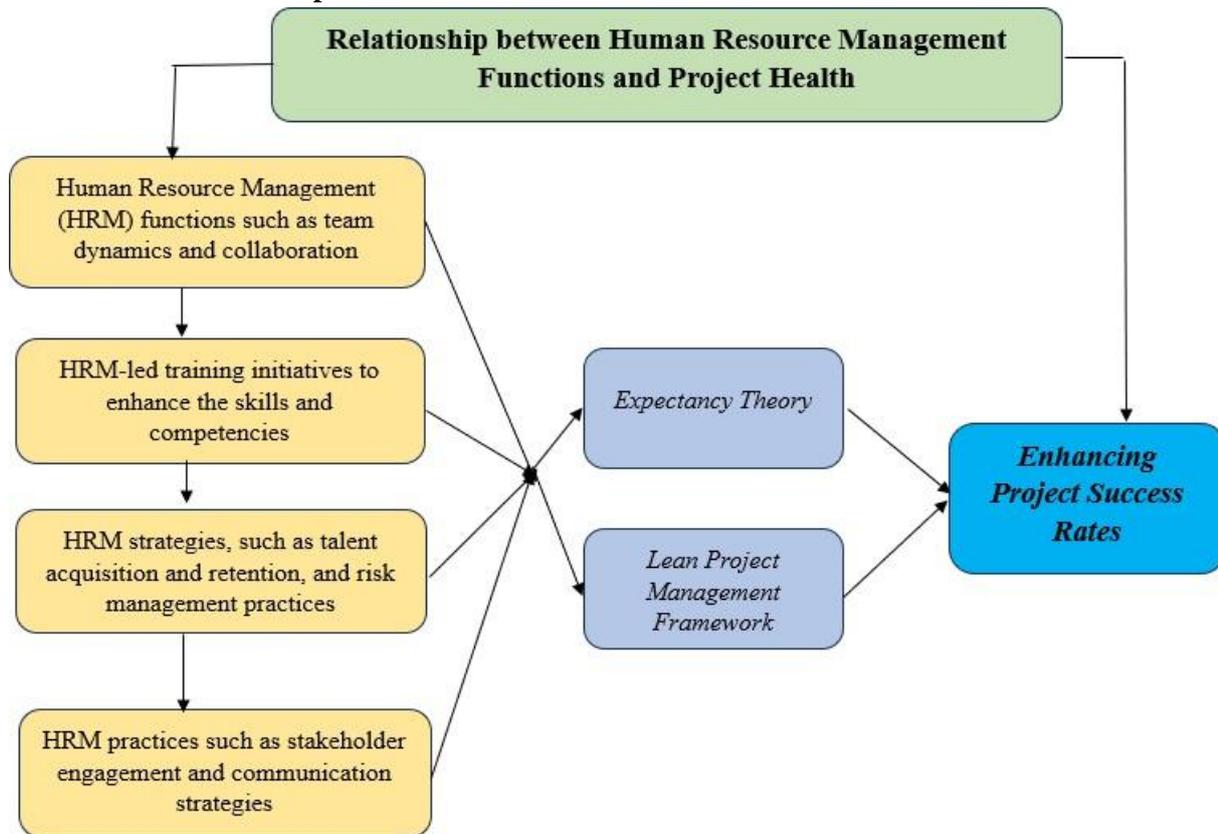


Figure 2.6: Conceptual Framework

2.9

Literature gap

(Source: Developed by Author)

The existing literature in the field of HRM and construction projects has primarily focused on individual aspects such as team dynamics, stakeholder engagement and skill development. However, a noticeable gap has been observed in comprehensive quantitative studies specifically examining the integrated impact of various HRM functions on overall project health and success rate within the INDIAN construction sector. Most exciting studies like a Holistic approach and often examine singular HRM components in isolation. Therefore, this research has aimed at bridging this gap by conducting a primary quantitative investigation that will provide a significant understanding of how different HRM functions have been synergically contributing to project health and will offer a more holistic and practical perspective for project managers and HR professionals.

2.10

Chapter Summary

The literature review chapter has meticulously examined HRM in the INDIAN construction sector. It

has traced the historical evolution from basic labour management to technology-driven strategic practices. Challenges such as high turnover rates have been mitigated through innovative methods such as digitalisation and Agile HRM. Risk management skill development, effective communication and stakeholder engagement have emerged as key focal points. Future Trends have spotlighted continuous learning digital tools and sustainable HRM practices. Moreover, the integration of expectancy theory and Green Project Management principles into HRM strategies has been explored in this chapter. This chapter has highlighted a significant gap such as the absence of comprehensive quantitative studies addressing the Holistic impact of HRM functions on construction project success. Therefore this research has aimed at filling the gap and offering vital insights for industry professionals.

CHAPTER 3: METHODOLOGY

3.1 Research Philosophy

Research theory is one of the most important parts of a study's technique. It affects the methods that are used and the overall direction of the research. In this field, people try to figure out what reality is and how to perceive and understand it. Choosing a research theory is very important because it shows what the researcher really thinks and believes about the data they will gather, analyse, and use (Savin- Baden and Major, 2023).

Some popular theories are positivism, which says that knowledge should be gained through science, interpretivism, which says that questions are subjective, and realism, which says that we should try to find a balance between the objective and the subjective. There are different ideas in each philosophy about how knowledge is created. Positivism focuses on data that can be seen and measured, interpretivism on how people understand and interpret things, and realism on the existence of a reality that is separate from people's thoughts and beliefs.

As the goal of this study is to look into people's emotional experiences and views in the INDIAN building sector, interpretivism was chosen as the research method. This theory backs up the idea that reality is not set in stone, but is instead changed by people's experiences and the situations they find themselves in. The interpretive method is great for looking into the complicated relationships between project health and human resource management functions because it lets the researcher understand the complicated social roles and organisational contexts through interview data. Positivism, on the other hand, might not give us the depth of understanding we need for the subjective parts of project success in the building business (Rajasinghe et al., 2021). Interpretivism lets us look closely at the meanings and readings that professionals in the field give to project health and management practises. This makes sure that the study results are accurate for the complicated nature of the field.

3.2 Research Approach

The technique of a dissertation is built on top of a research approach, which lists the steps that were taken to answer the research question. Such a plan lays out the steps that will be taken to gather and analyse data. The approach makes a big difference in the direction of the study because it affects the tools used and how the results are interpreted.

In the academic world, there are two main ways to do research: rational and inductive. The deductive method starts with a hypothesis that is based on an established theory (Gilgun, 2019). The study then tries to test this hypothesis through direct observation. On the other hand, the inductive method includes gathering data and coming up with an idea based on that data. There is also a third way to draw conclusions called abductive reasoning. It starts with an observation and looks for the easiest

and most likely answer.

The method used in this study is inductive, which works well for exploratory research where the goal is to come up with new ideas and theories. Unlike the deductive approach, which tests existing hypotheses, the inductive approach allows for the discovery of patterns and theories that emerge from the data itself (Casula et al., 2021). This is vital for the research at hand, which seeks to enhance understanding of project health within the INDIAN construction sector, a field where preconceived notions may not fully account for the realities faced by professionals.

The inductive technique fits well with qualitative interviews as the major data collecting method. Interviews reveal the intricate relationship between HRM roles and project results. This technique can help construction professionals establish a grounded theory based on their lived experiences by using participant data to understand the components at play. This technique allows participants to express their experiences and viewpoints in their own words, highlighting subtleties that quantitative data may miss. The inductive technique, operationalized through qualitative interviews, helps achieve research goals and improve sector project success rates.

3.3

Research Strategy

Research strategy is the blueprint for the collection and analysis of data, tailored to address the specific questions at the heart of a study. It is the methodological path researchers tread to explore, understand, and interpret their findings within the scope of their chosen approach and philosophy (Dibley et al., 2021).

Academic inquiries encompass a diverse array of research strategies, each with its distinct mode of operation and focus. Among these are experiments, surveys, case studies, action research, grounded theory, ethnography, and archival research. Experiments are controlled and manipulable, whereas surveys collect data from samples to infer population characteristics. Case studies provide an intensive examination of individual contexts, action research involves iterative problem-solving, grounded theory generates theories from data, ethnography immerses in cultural contexts, and archival research examines historical records (Williams, 2019).

The chosen strategy for this dissertation is the case study approach. This strategy is particularly effective in exploring the intricacies of a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. The case study approach enables an in-depth, multi-faceted exploration of complex issues in their real-life settings, making it ideal for this research, which seeks to understand the relationship between human resource management functions and project health in the construction sector.

This technique is chosen because it enables for a complete study of research problems in limited systems like building projects. This technique helps you understand project management procedures and results and how they affect project health by concentrating on a few situations. Case studies provide extensive, contextual, and thorough data for novel study fields or questions with little literature. They are particularly beneficial for the exploratory phase of this research, which seeks to comprehend INDIAN construction human resource management (Iannaci, 2021). Interviews will be used to acquire qualitative data for the study, which will help reveal real-world intricacies and dynamics that quantitative data may miss.

3.4

Data Collection Techniques

Data collecting underpins research analysis and findings. These methods allow researchers to obtain data to answer their queries. Researchers can use surveys, experiments, interviews, focus groups, and observations to obtain data. Qualitative approaches provide in-depth insights into participants' attitudes, behaviours, and experiences, whereas quantitative methods collect data that can be statistically analysed (Bleiker et al., 2019).

Semi-structured interviews were used to obtain data for this study on INDIAN construction's human resource management and project health. This qualitative approach is ideal for studying complicated phenomena with rich, comprehensive data from open-ended replies. The researcher can explore further into issues that arise during semi-structured interviews, while the structure guarantees that all important topics are addressed.

The justification for choosing semi-structured interviews lies in their ability to facilitate a comprehensive

understanding of the subjective experiences and perceptions of professionals in the construction industry. Unlike surveys or questionnaires, which may limit responses to predefined options, interviews provide the opportunity for participants to express their thoughts in their own words, thereby uncovering nuances that may otherwise be missed. The interpretivist theory and inductive approach of the research are both in line with this method because it lets themes and patterns come up straight from the data (Mezmir, 2020). Interviews are great for getting to the heart of the complicated tasks of human resource management and how they affect the success of a project because they let you look at specific cases in their natural settings. This method will be used to collect qualitative data that is needed to answer the complex research questions that were asked in this study. A set of steps will be taken in order to conduct semi-structured conversations. There will be an interview guide with a list of open-ended questions meant to find out more about the link between project health and human resource management tasks. The workers in the INDIAN building industry who are being interviewed will be able to choose when and where they want to be interviewed. With each participant's permission, an audio recording of each session will be made to make sure that the data collected is correct. Each interview will last between 30 and 60 minutes, which will allow for a full conversation while also respecting the interviewees' time limits (Olliffe et al., 2021).

3.5 Development of Instruments

Making tools for qualitative research is a very careful process that starts with having a good idea of the research questions and goals. The interview guide is the tool for this study. It was carefully made to make sure that it gets information that is useful for understanding how human resource management works in the building industry's project health. A thorough study of the literature was done as part of the development process to find key themes and holes in previous research. This review helped us come up with open-ended questions that were meant to get people to give detailed, well-thought-out answers. The questions were meant to be clear, fair, and open to different interpretations, which was in line with the interpretivist theory of the study (Cornelissen et al., 2021). The reasons why the questions in the interview guide were picked are because they can help people learn more about the study topic. The purpose of the questions was to find out what the exact roles of human resource management are, how successful people think they are, and how they affect the health of projects. In addition, the questions were meant to find out what the workers knew and thought about the things that help or hurt project success. This method makes sure that the interview guide is a complete tool that makes it easy to gather a lot of useful information that can then be analysed to draw useful conclusions about how human resource management affects project success in the INDIAN building industry.

3.6 Sampling Technique and Samples

This research recruits experienced INDIAN construction experts, notably project managers and HR specialists. These professionals are selected for their direct project execution and HR management experience, which provides unique research insights.

A purposive sampling strategy is used to pick people with the most relevant and rich information for the research. This non-probability sampling strategy is justified because it allows for the purposeful selection of persons with specialised knowledge or experience needed to grasp the key phenomenon under inquiry (Mweshi and Sakyi, 2020). Since the study is qualitative, it focuses on the quality and relevance of the participants' input rather than the sample size or population representation.

The number of participants targeted for this study is set between 5 and 6. This range is chosen to ensure a manageable yet sufficient volume of data to perform a thorough analysis while achieving data saturation. Data saturation is the point at which no new information or themes are observed in the data (Braun and Clarke, 2021). This range also accounts for potential dropouts and non-responsive participants, ensuring that the study can still proceed effectively even if some participants do not complete the interview process.

3.7 Research Ethics

Ethical considerations are paramount in this study, ensuring that the research is conducted with integrity and respect for the participants. The institutional review board has accepted an ethics form that describes the study plan, possible risks, and ways to reduce those risks. This forms a formal framework for ethical behaviour.

Consent forms are an important part of research ethics because they tell people who are taking part in the study what their rights are and why the study is being done. Participants will be kept anonymous and their information will only be seen by the study team. Pseudonyms will be used to protect their names, and any information that could be used to identify them will be kept safely. It is also made clear to them that they can quit the study at any time without any negative effects. The permission form makes it clear that participation is optional, making sure that people are doing it of their own free will and have been fully informed about what it means to participate. Furthermore, the form outlines how the data will be used, who will have access to it, and the measures taken to safeguard the participants' information, adhering to data protection laws and regulations (Hoofnagle et al., 2019).

3.8 Reliability and Validity of Your Data

Systematic methods are used during the data gathering and analysis stages of this study to make sure that it is reliable and accurate. We can improve reliability by using a uniform interview process and an interview guide to make sure that all participants are asked the same questions. This makes the data we collect more consistent. Triangulation methods will also be employed, comparing data from different sources to confirm the findings, thus reinforcing the study's credibility (Lemon and Hayes, 2020).

For validity, which concerns the accuracy and truthfulness of the findings, participant validation or member checking will be conducted, where participants are invited to review the transcribed interviews and the researcher's interpretations to ensure the results accurately reflect their views. A full audit trail will also be kept, which will record the research process and choices. This will allow for openness and close examination of the study's methods, which will improve its validity.

3.9 My Approach to the Analysis of Data

The method used to look at the data in this study is called theme analysis, and it lets you find trends in the data, analyse them, and report on them. It lets you analyse different kinds of qualitative data in a variety of ways, which makes it good for studies that use interpretivist theories.

The first step in the research process is to transcribe the interview recordings. This is followed by a careful reading of the transcripts to fully understand the information. The first codes will be made by going through the whole set of data in a planned way and coding the parts of the data that are important to the research questions. These codes will be collated into potential themes, which will be reviewed and refined to ensure they accurately reflect the coded data and the entire data set. A thematic 'map' of the analysis will be created, and narrative analysis will be employed to explore the relationship and significance of the themes in relation to the research questions. To enhance trustworthiness, the analysis will include a reflexive account of how the researcher's perspectives and interactions with the data may have influenced the interpretation of the themes (Shufutinsky, 2020).

CHAPTER 4: RESULTS

4.1 Introduction

This chapter presents the findings of qualitative interviews conducted with construction industry professionals from the United Kingdom. Every one of the four primary objectives of the research is represented in the findings. The discipline of human resource management exerts a substantial impact on the dynamics of teams, training initiatives, communication processes, risk mitigation strategies, and the engagement of stakeholders. The participants' opinions regarding the use of HRM services in construction projects are pertinent.

4.2 Theme 1: HRM Influence on Team Cohesion and Effective Team Dynamics

This study focuses on teams within the construction sector in the INDIAN. Its objective is to provide insight on the impact of HRM on team cohesion and dynamics. The cohesion and proficiency of a team in collaborating and communicating are essential for the success of any project. The interviews provide light on the impact of HRM practices on these aspects.

Person 1, a project manager, emphasized the need of efficient recruiting and team development in order to get highly competent people and foster a harmonious team, both of which are vital for the project's success. This statement underscores the importance of strategic recruitment in constructing harmonious and proficient teams. Both site supervisors and the second individual discussed the impact of Human Resource Management (HRM) on areas such as dispute resolution and safety training. They mentioned, "On-site safety training and conflict resolution are vital. Ensuring everyone knows safety protocols and works well together is key." This insight reflects the necessity of HRM in addressing

on-site challenges and promoting a collaborative environment. Person 3, an HR Specialist, discussed the broader impact of HRM on employee engagement and retention. They noted, "Employee engagement and retention strategies are critical. Keeping the team motivated and reducing turnover rates drive project success." Their comment indicates that HRM's role extends beyond the immediate project team to the overall organisational context, influencing the long-term success of projects (Yang et al., 2018). The Quality Assurance Engineer, Person 4, emphasized performance management and its effect on team dynamics. They stated, "Performance management and development training are essential. We need skilled staff who continuously improve their capabilities."

4.3 Theme 2: Effectiveness of HRM-led Training Programs

This research will also examine the effectiveness of training programs led by HRM in enhancing the skills and abilities of construction project teams. The respondents who dedicated their time to completing the survey provided specific information on how these training programs enhance the productivity of building projects.

According to the project manager, the implementation of a mentorship program enabled the younger personnel to enhance their abilities, resulting in a reduction in errors and delays. By employing HRM training, the results of projects and the technical skills of the team may be improved. According to the second site supervisor, conflict resolution training resulted in a reduction in the occurrence of disagreements within teams, as well as an improvement in workplace collaboration and efficiency.

The objective of this case study is to demonstrate the potential of team dynamics training in enhancing workplace cohesion and productivity. According to an HR specialist, the project had a successful and seamless beginning due to a customized training program that facilitated the assimilation of newly recruited employees into the organization (Davila and Pina-Ramirez, 2018). Personalized training programs are essential for new team members to rapidly familiarize themselves with a project, as this is clear. Person 4, the engineer in charge of quality assurance, stated that conducting effective

performance evaluations revealed issue areas, leading to improved quality control and a reduction in rework. This interview demonstrates how the quality of construction projects may be improved via human resource management (HRM) guided training and performance reviews. Person 5, who serves as the Procurement Officer, explained that a deliberate change in how we assign our workers enabled us to effectively handle a problem in the supply chain, thereby avoiding any project delays. By employing strategic abilities such as crisis management and resource allocation, we successfully surmounted challenging project obstacles. Person 6, a construction consultant, concluded that leadership development sessions led to improved decision-making, resulting in favorable effects on project deadlines and stakeholder satisfaction. Senior leadership training, guided by HRM, may have an influence on project management and relationships with stakeholders.

4.4 Theme 3: HRM Strategies in Risk Management

The third segment focuses on the application of human resource management practices to mitigate risks in building projects. The interview process illuminates the vital role of HRM in the construction sector in relation to risk evaluation, reduction, and reaction.

Project Manager (Person 1) stated that the participation of HR in the early stages of talent acquisition is essential for forming a team with a wide range of talents, which is necessary for successfully predicting and handling project risks. This approach considers HRM as a strategic instrument for constructing teams that are capable of managing risks. The Site Supervisor (Person 2) noted that the implementation of efficient Human Resource Management (HRM) practices in training and communication has resulted in faster and more synchronized reactions to on-site hazards. As a result, there has been a decrease in both downtime and accidents. The job of human resource management is vital in developing a workforce that is both adaptable and well-equipped. An HR professional, who is not directly involved, noted the following: "We have incorporated risk management into our training programs, resulting in a notable increase in staff's awareness and preparedness for potential risks." The cultivation of a risk-conscious mindset should be encouraged among all employees, and Human Resource Management (HRM) plays a vital role in facilitating this endeavour (Muteswa, 2019). The HRM department is responsible for ensuring quality and safety standards. "HRM has been instrumental in maintaining quality and safety standards, which are crucial for mitigating risks." Considering this, it is evident how the continuous advancement of HRM contributes to the prevention of errors and catastrophes. Person 5, the procurement officer, asserts that effective HR policies play a significant role in ensuring that we have the appropriate personnel to handle supply chain risks. Their statement clearly demonstrates their understanding of HRM as a strategic approach that aligns HR requirements with risk management demands. Person 6, the construction consultant, stated that HRM's efficient change management practices have helped us successfully handle project scope adjustments, hence minimizing the risks involved with such transitions. The role of human resource management in reducing risks associated with change is acknowledged.

4.5 Theme 4: HRM Practices and Stakeholder Engagement

The fourth challenge centres upon the impact of human resource management practices on the involvement and communication of stakeholders in building projects. The interview results offer valuable understanding on how human resource management may improve communication with stakeholders and increase project completion rates. The project manager, referred to as Person 1, noted that the Human Resource Management (HRM) department's emphasis on team professionalism and ethics has greatly enhanced our contacts with clients, resulting in increased trust and satisfaction on their part. Creating a team that can effectively promote the program to all of its stakeholders necessitates meticulous human resource management planning (Belcourt et al., 2022). The Site Supervisor, Person 2, stated that the team has improved their ability to interact with site visitors and subcontractors and create a cooperative atmosphere as a result of the communication training offered by HR. In order to promote active involvement of all parties involved, it is of utmost importance to emphasize the significance of Human Resource Management (HRM) in enhancing the effectiveness of team communication. The HR Specialist stated that they have established HR strategies that stress effective and consistent communication with stakeholders,

resulting in better alignment of expectations and smoother execution of projects. The findings indicate that the implementation of HRM practices has the potential to enhance stakeholder communication (Stahl et al., 2020). As per the fourth individual, who is a quality assurance engineer, HRM indirectly enhances stakeholder trust in project deliverables by ensuring consistent quality and reliable staff.

HRM may maintain elevated internal standards to enhance the organization's perception among stakeholders. The procurement officer's testimony affirms that HR's adept management of internal issues has successfully averted their escalation, therefore safeguarding the ties with suppliers and partners. Indeed, human resource management does enhance internal dynamics, hence influencing stakeholder relationships. Regarding the remark made by Person 6, a Construction Consultant, it is said that the implementation of Human Resource Management (HRM) techniques, namely in the area of leadership development, has enhanced the abilities of our project leaders to successfully interact with stakeholders. This includes the ability to adapt to the different demands and expectations of these stakeholders. This statement highlights the importance of human resource management in facilitating CEOs' interactions with various stakeholders.

4.6 Summary

The purpose of this chapter is to demonstrate how human resource management (HRM) influences the effectiveness of a project by synthesising interviews with construction specialists from the United Kingdom. The findings center on the influence that human resource management has on the cohesion and dynamics of teams, as well as on training programs that are led by HRM, risk management strategies, and the engagement and communication of stakeholders. Across all of these concerns, the comments emphasized the significance of human resource management in building project management. HRM practises were essential to the success of the project, including the formation of a powerful team, the training of skills, the management of risks, and the involvement of stakeholders. These insights contribute to the advancement of the field by highlighting the varied roles that human resource management plays in the construction of successful projects.

CHAPTER 5: DISCUSSION

5.1 Introduction

The objective of Chapter 5 is to establish a connection between the primary interview data and HRM research on construction project management. Chapter 1 establishes a connection between theoretical notions and actual evidence, and then examines the primary challenges faced during the inquiry. By categorising the data into the same four groups as in Chapter 4, a more focused and uniform analysis can be conducted. It accomplishes its study objectives by data analysis, inference drawing, and highlighting the most noteworthy findings. Hence, we may meticulously analyse the findings of the study to ascertain their influence on trade expertise. This chapter sought to contribute to the scholarly discourse on the significance of human resource management (HRM) in achieving project success by offering valuable insights to professionals in the construction industry.

5.2 Theme 1: HRM Influence on Team Cohesion and Effective Team Dynamics

The effect of HRM on cooperation and communication inside construction sites is one facet of the issue at hand. According to Borg and Scott-Young (2022), it is essential for novice project managers to have the opportunity to get guidance from experienced mentors. In addition, they recognise the significance of human resource management in relation to project management and team dynamics. Interviewees from the construction sector identified team building, education, and conflict resolution as key HRM activities that promote a more peaceful work environment. The study conducted by Adepoju and Aigbavboa (2021) examines the skills gap in the construction industry and emphasizes the need of efficient human resource management in bridging this gap to ensure team cohesion and project success. The Site Supervisor (Person 2) emphasizes the need of safety training and dispute resolution in managing interactions between AI and human personnel. Effective human resource

management practices are essential in such circumstances to ensure team cohesion and goal achievement. Person 3, a Human Resources Specialist, concurred with Cooke et al.'s (2020) findings about the transformation of HRM in the face of pandemics like as COVID-19, specifically emphasizing the enhancement of teamwork. The pandemic has emphasized the importance of adaptable human resource strategies and transparent communication as fundamental elements of effective collaboration.

Cheng and Hackett (2021) conducted a comprehensive analysis of HRM algorithms, revealing that the sixth individual in the construction consultant position places a high emphasis on developing potential leaders and assisting employees throughout organizational structural changes. The proposals highlight the need of project team leadership and adaptability, considering the ever-changing nature of HRM practices, technology breakthroughs, and project scopes. The study conducted by Widyanty et al. (2020) revealed that the implementation of strategic HRM provides Indonesian construction enterprises with a competitive advantage in the market. This assertion was supported by demonstrating a positive correlation between HRM practices and team cohesion. The current study demonstrates that the implementation of strategic human resource management approaches enhances team dynamics and project outcomes.

5.3 Theme 2: Effectiveness of HRM-led Training Programs

The second phase of the research will examine the efficacy of HRM-led training programs in enhancing the competencies of construction project teams. Adepoju and Aigbavboa (2021) emphasize the necessity of addressing the knowledge and skills deficit in the construction industry, given the ongoing advancements in technology and procedures.

The mentoring programmes, conflict resolution training, and tailored onboarding have been demonstrated to improve the team's competences and project outcomes, as evidenced by the interview responses. In order to fully achieve their highest capabilities, young project managers require specialized educational opportunities and mentorship programs, as stated by Borg and Scott-Young (2022). The significance of human resource management in fostering a conducive environment for employee learning and growth is underscored via the implementation of development training and mentorship initiatives. Furthermore, these programs help teams in acquiring the necessary skills to achieve exceptional performance. Person 4, a Quality Assurance Engineer, concurs with Cheng and Hackett (2021) about the need of performance assessments and training in quality assurance. The authors thoroughly analyze HRM algorithms and contend that training programs can only achieve success through a combination of human participation and technology resources. The project team benefits from state-of-the-art, customized training due to this equilibrium. In their study, Cooke et al. (2020) accurately examine the strategic training, particularly in the areas of crisis management and resource allocation, as affirmed by Person 5, the Procurement Officer. Based on their research on the COVID-19 pandemic, it is crucial for human resource management strategies to be strong and flexible, particularly in the areas of training and development, in order to effectively address unforeseen challenges.

5.4 Theme 3: HRM Strategies in Risk Management

The third section focuses on the application of human resource management approaches to control risks in building projects. Construction projects depend on effective risk management to remain on schedule and complete within the designated timeframe. Through the conducted interviews, we are able to validate and further elaborate on the findings of the prior investigations. The Project Manager, Person 1, is engaging in proactive talent acquisition to anticipate and mitigate risks, a strategy that is

endorsed by Unegbu et al. (2022). Researchers investigating construction project success metrics have shown that the implementation of strategic human resource management (HRM) facilitates the formation of teams equipped with the necessary abilities to effectively handle risk management.

During the training session focused on prompt and synchronized risk responses, the Site Supervisor highlighted the significance of Human Resource Management (HRM). According to Cruz and Alves (2020), this is consistent with their findings about the significance of agility in project management. According to the paper, if human resource management tactics are more precisely designed, team members may have an improved ability to predict and respond to emerging hazards.

Furthermore, HR professionals assert that including risk management into HR education programs is essential, as demonstrated by Gadzali et al. (2023). They discovered that risk management abilities in human resources practices are crucial in corporate digital transformation plans, particularly when handling settings and technology that are susceptible to change. Person 4, who serves as the Quality Assurance Engineer, agrees with the findings of Zhong et al. (2021) that frequent training on safety and quality is essential. Their research on COVID-19 HR problems revealed that robust HRM processes are crucial for maintaining high standards in high-risk scenarios. Ngoc Su et al. (2021) supports the notion that Person 5, who holds the role of Procurement Officer, examines strategic HRM within the framework of an emergency situation. Their research on HRM strategies in Vietnam to enhance crisis resilience demonstrates the critical role of HR practices in managing complex situations such as disruptions in supply chain operations.

5.5 Theme 4: HRM Practices and Stakeholder Engagement

The communication techniques and stakeholder participation in construction project stakeholder networks are significantly influenced by human resource management approaches, which is vital due to the complexity of these networks. A comprehensive understanding of human resource management and stakeholder management may be achieved by juxtaposing interview data with the existing literature on the topic.

The project manager (Person 1) emphasized the significance of Human Resource Management (HRM) in establishing trust with stakeholders via the enforcement of professional and ethical behavior among team members. López-Concepción et al. (2022) argues that engaging with stakeholders in corporate social responsibility (CSR) firms is essential for achieving adherence to the Sustainable Corporate Governance Standards (SCGS). The fulfillment of these business goals necessitates a strong focus on professionalism and ethics in human resource management. According to Sarvaiya et al.'s (2021) study, the Site Supervisor (Person 2) utilizes HR communication training to enhance stakeholder participation. According to their research, CSR programs should utilize human resources (HR). HRM-backed methods for internal communication can help enhance engagement from external stakeholders. Person 3, an HR Specialist, discussed HR techniques for maintaining consistent and open communication with stakeholders based on the research conducted by Rane et al. (2021) on green supply chain stakeholder engagement. Stakeholder communication, which is a component of HRM, may be beneficial for effectively managing complex project networks, as suggested by their recommendations. Respondent 4, who is the Quality Assurance Engineer, concurs with Shaban's (2019) evaluation of Green HRM, stating that HRM plays an indirect role in establishing confidence with stakeholders through its dependability and excellence. High-quality human resource management practices indirectly enhance stakeholders' perspectives, particularly in ecologically sensitive activities, as revealed by this study.

5.6 Summary

This chapter analysed the outcomes of the study within the perspective of the existing literature on construction HRM. Numerous studies have examined the impact of human resource management (HRM) on factors such as team dynamics, cohesion, HRM-led training programs, risk management, and stakeholder involvement. The study revealed that the implementation of human resource management functions enhances team connections, communication, and cohesion, hence contributing to the success of a project. The construction teams effectively

addressed talent shortages and achieved success through training sessions conducted by the Human Resource Management department.

The significance of human resource management in risk management, encompassing prediction, prevention, and reaction, was further underscored. The nature of building projects is inherently volatile and constantly evolving, making it a crucial aspect to take into account. For effective stakeholder engagement, it is imperative to adhere to ethical standards, employ conflict management strategies, and maintain strong communication. Stakeholder involvement is significantly influenced by the tactics employed in human resource management. Human resource management (HRM) is a crucial component of construction project management. This chapter elucidates the utilization of human resource management (HRM) in the construction industry and substantiates the significance of HRM by amalgamating empirical findings with prior experiments. These findings have significant implications for both the academic community and the corporate sector.

Chapter 6: Conclusion

6.1 Introduction

At the end of the paper, the final chapter is intended to relate the research objectives with the findings. The paper discusses how experts investigate how human resource management works in the building industry. It helps to show how this HRM affects different parts of project management. Various results show that HRM can be greatly useful in collaborating and assessing risk in different aspects of life, school and community work. This was possible because we did a lot of interviews and carefully looked over all the important information. This study gives an in-depth but brief overview of the main findings, with a focus on how they relate to the issue problem.

6.2 Link to Objective 1

The main goal of this study was to find out more about how human resource management (HRM) can help build teams that work well together. To sum up, the study found that handling human resources is important for getting people to work well together. The best things about the new technology are that it can settle arguments, provide ongoing training, and help with targeted hires. After these HRM changes were made, things got better at work and with the team and in general. The project can't go forward or stop without all of these. The upbeat and cooperative work environment that grew showed that human resource management (HRM) was helpful. It stressed how important HRM is for teams to work well together and, by extension, for finishing projects on time. This helps the main point of the study, which was to show how HRM can help build and keep good team relationships in the construction business.

6.3 Link to Objective 2

The study was also going to check up on the development teams working on building projects after they had gone to training workshops paid for by HRM. The results show that this training did make a difference in the end result. The current study says that mentoring and other personalised training classes are needed to fill in skill gaps and encourage a growth mindset. The team's professional skills, project management skills, and ability to adapt were all greatly enhanced by the work led by HRM. Improving the professional skills of building teams is a big part of human resource management, which helps make sure that big projects are finished on time. The stated goal of this study is being met. Because of these results, it seems likely that well-planned HRM training courses can greatly improve the skills of teams, which in turn raises the chances of an effective project completion.

6.4 Link to Objective 3

Another goal of the study was to look for HRM methods that might make construction areas safer. Finding dangers, judging them, and taking action on them are all very important parts of HRM, as shown by the study. Stressing the value of open communication and working together were the best ways for human resource managers to find and lower project risks. Hiring the best people was also very helpful. The project was better because these HRM practices helped the builders identify and handle a wider range of risks. Building project teams need to know how to handle risks well in order to finish the job. Now is the time when human resource management really shines. The findings show that HRM tactics might help workplaces be more alert and adaptable when it comes to spotting and dealing with risks.

6.5 Link to Objective 4

The fourth goal is to look into how human resource management affects the involvement of partners in building projects. According to real-world studies, using Human Resource Management (HRM) methods might make it easier for stakeholders to talk to each other and work together. To get team members to believe in the cause and work with us, we put in a lot of work to improve their morals, teamwork, and ability to settle disagreements. Keeping an eye on how well teams are doing within a company is a key part of managing relationships with outside partners. People who work in human resources are needed for this. This means that their goals will be more in line with the project's goals. The results of the study show that HRM is more than just managing HR internally. It also means making sure that everyone working on a project feels like they own the final result. The study also showed how important HRM methods are for making sure that everyone involved in a construction job is happy. Human resource management training in stakeholder management helped team leaders better handle expectations and have productive talks with a wide range of stakeholders. Aligning internal HR skills with external customer expectations is clear from this approach. It shows how important human resource management is for making it easier for project teams and stakeholders to talk to each other. It really helped me finish the project's talks and results.

6.6 Limitations of the Research and Future Study Directions (450 words)

While the research is thorough, it does have certain limits. The results may not apply to other businesses or areas outside of the United Kingdom because the research only looked at the building industry there. The use of qualitative data collected from a small subset of experts on the subject also runs the risk of underrepresenting the breadth and depth of that community's collective wisdom. One can get a lot of useful information from interviews, but the replies might be skewed at times. These problems need to be talked about in order to put the study's results in context and set the stage for future research that could fill in these holes. People who want to use the study's results should be aware of its flaws, such as the fact that it used a qualitative method and only looked at a small area. Because this study only looked at the INDIAN building business, its results may not be applicable to other countries or fields. The results also couldn't be used to describe the whole business because the sample size was so small and the interviewers' answers were subjective. Because of these and other factors, it is important not to jump to conclusions too quickly and to repeat similar studies in different places to confirm the results and build on them.

Human resource management (HRM) methods in the building industry should be compared in the future in different parts of the world so that the results are more useful in a wider range of situations. It might be better to use mixed-method methods or quantitative methodology along with qualitative research to get a more complete picture and lessen the bias that comes with it. Future study should also look into the changes that were made to human resource management methods in response to these changes. This will help us learn more about how changes in the way people work together and better technology affect the performance of building projects. It might be useful to look into how the way human resources are managed affects the success of projects and the

health and happiness of employees over time.

6.7 Recommendations

This study gives people who work in building a good idea: use strategic human resource management methods that make working together and talking to each other better. It's important to stress how important it is to have training courses that teach both hard and soft skills, like how to communicate well and settle disagreements. Also, making risk management a part of HRM policies and training could make projects much more resilient. If human resources workers want their teams to effectively serve a wide range of stakeholders, they should focus on coming up with effective ways to involve stakeholders. Teams may be able to work together better, handle danger better, and stay connected to the people who matter most to them if they follow these rules. In the end, these skills are necessary to finish construction tasks efficiently.

In the building industry, it's very important to pay close attention to human resource management choices that encourage cooperation and include more parties. Long training classes are needed that cover both technical information and "soft skills" like how to calm people down and communicate clearly. A big focus should be on helping project managers improve their leading skills, as this has a direct effect on how well the project goes and how well the team works together. If HRM processes include training in risk management, teams may be better able to handle projects that aren't stable. Including partners should be at the centre of using human resource management techniques to improve communication and relationship management with different groups of people. Please use these tips to make yourself, your team, and the amount of work you do more efficient.

For HRM strategies and policies to work, construction companies should have clear HRM policies that are in line with their overall business goals. To stress how important it is to keep learning and adapting, clear criteria should be set for hiring, training, and teaching people about these rules. If these rules are looked at and changed on a regular basis, they should still be useful in the fast-paced building business. One thing that can help a project succeed is to have an attitude that supports honest comments and input from everyone involved. In an industry, groups can work together to set and follow best practices for human resource management. This will make things more consistent and efficient for everyone.

If you work in the building business, the following tips might help you: plan HRM methods that will help people communicate and work together better. Professional and "soft" skills, like how to communicate clearly and settle disagreements amicably, are very important. Training programmes that teach these skills are strongly suggested. Risk management could also make projects a lot more stable if it is taught and used in HRM training and strategies. People who work in human resources should try to include partners in a way that helps their teams meet the needs of different groups. When teams use these ideas, they will get better at managing risks, working together, and building stronger relationships with their partners. All of these are needed for building projects to end up being successful.

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Appendices

Appendix1: Questionnaire

1. How do you define 'project health' in the context of your work?
2. In your opinion, which human resource management functions are most critical to the success of a construction project?
3. Can you give an example of how effective human resource management has positively impacted a project you were involved in?
4. What are the most significant human resource challenges you have faced on construction projects?
5. How were these challenges addressed, and what was the outcome?

Appendix 2: Transcript

Question 1

Person	Response
Person 1 (Project Manager)	My definition of project health is how well a project is meeting its goals. It includes deadlines, budgets, product quality, and team morale. These factors must coincide and unanticipated difficulties must be dealt proactively for a healthy project.
Person 2 (Site Supervisor)	I define project health as on-site efficiency and safety. The absence of accidents or major delays indicates smooth operations. A healthy project has safe personnel, effective resource use, and met construction milestones.

Person 3 (HR Specialist in Construction)	HR links project health to workforce management. It's about effective communication, the appropriate people in the proper jobs, and little conflict and turnover. A healthy project has a cohesive, talented, and motivated crew.
Person 4 (Quality Assurance Engineer):	For me, project health is all about adherence to standards and specifications. It entails regularly fulfilling quality criteria throughout the project lifetime. A healthy project maintains high-quality workmanship, meets regulatory standards, and passes inspections without major issues.
Person 5 (Procurement Officer):	Project health in my view is measured by the efficiency of the supply chain and resource availability. A healthy project has no major disruptions in material supplies, manages costs
	effectively, and avoids wastage.
Person 6 (Construction Consultant):	As a consultant, I define project health by its stakeholder satisfaction and its ability to adapt to changes. A healthy project meets or exceeds client expectations, maintains good relationships with all stakeholders, and can flexibly adjust to new demands or challenges.

Question 2

Person	Response
Person 1 (Project Manager)	"Effective recruitment and team building are crucial to ensure we have skilled workers and a cohesive team for project success."

Person 2 (Site Supervisor)	"On-site safety training and conflict resolution are vital. Ensuring everyone knows safety protocols and works well together is key."
Person 3 (HR Specialist)	"Employee engagement and retention strategies are critical. Keeping the team motivated and reducing turnover rates drive project success."
Person 4 (Quality Assurance Engineer)	"Performance management and development training are essential. We need skilled staff who continuously improve their capabilities."
Person 5 (Procurement Officer)	"Strategic workforce planning and effective communication channels are the most critical for managing resources efficiently in projects."
Person 6 (Construction Consultant)	"Leadership development and change management. Leaders must be equipped to handle project dynamics and adapt to change."

Question 3

Person	Example of HRM Impact
Person 1 (Project Manager)	"We implemented a mentorship program which led to improved skill levels among junior staff, resulting in fewer errors and delays."
Person 2 (Site Supervisor)	"Introduction of conflict resolution training reduced team disputes, enhancing on-site collaboration and productivity."
Person 3 (HR Specialist)	"A tailored training program for new hires streamlined their integration into the team, accelerating project commencement and efficiency."
Person 4 (Quality Assurance Engineer)	"Effective performance reviews identified areas for improvement, leading to enhanced quality control and fewer reworks."
Person 5 (Procurement Officer)	"A strategic shift in workforce allocation allowed us to manage a supply chain crisis, preventing project delays."
Person 6 (Construction Consultant)	"Leadership development sessions resulted in better decision-making, positively impacting project timelines and stakeholder satisfaction."

Question 4

Person	HR Challenges
Person 1 (Project Manager)	"Managing workforce diversity and ensuring effective communication across multilingual teams has been a significant challenge."
Person 2 (Site Supervisor)	"Dealing with high turnover rates and the constant need to train new workers has been a persistent issue."
Person 3 (HR Specialist)	"Aligning the varying expectations of project stakeholders with the capabilities and interests of the workforce is challenging."
Person 4 (Quality Assurance Engineer)	"Ensuring consistent performance and maintaining quality standards across different teams has been difficult."
Person 5 (Procurement Officer)	"Balancing the demands of project deadlines with the well-being and work-life balance of the team is a tough challenge."
Person 6	"Adapting HR strategies to rapidly changing project
(Construction Consultant)	scopes and technologies has been a significant hurdle."

Question 5

Person	Response to HR Challenges
Person 1 (Project Manager)	"I implemented cultural sensitivity training and multilingual communication tools. This improved team collaboration and reduced misunderstandings."
Person 2 (Site Supervisor)	"I focused on creating a more engaging work environment and offered incentives for long-term employment, which reduced turnover significantly."
Person 3 (HR Specialist)	"I facilitated stakeholder workshops to align expectations and team capabilities, leading to more realistic project goals and satisfied stakeholders."
Person 4 (Quality Assurance Engineer)	"I introduced regular cross-team training sessions to standardize practices, which resulted in more consistent quality across different teams."
Person 5 (Procurement Officer)	"I advocated for flexible scheduling and mental health support. This led to improved team morale and productivity, with fewer absences."

Person 6 (Construction Consultant)	"I developed a dynamic HR strategy adaptable to changes. This approach improved our agility in responding to project shifts, enhancing overall performance."
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