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# EXPLORING THE IMPACT OF SUSTAINABLE HUMAN RESOURCES MANAGEMENT ON THE EFFICIENCY AND EFFECTIVENESS OF CONSTRUCTION PROJECTS: THE CASE OF IRAQ

Abbas Abdulameer Khalaf

Imam Alkadhum University College

abbas.alamir@iku.edu.iq

## Abstract

This study investigates the impact of sustainable human resource management (HRMM) on the performance of building projects in Iraq. Human Resource Management (HRM) is essential for the success of construction projects. This study examines sustainable HRM methods that might enhance the overall performance of organizations engaged in project management. Research indicates that implementing sustainable HRM practices can enhance employee engagement and productivity, elevate the standard of work, foster effective communication and collaboration within teams, so positively impacting the outcomes of construction projects. The study examines three construction firms operating in Iraq. A total of fifteen participants were interviewed in order to collect their perspectives on the Human Resource Management (HRM) practices that have been adopted in their business and the resulting effects on project performance. The qualitative methodology relies on conducting semi-structured interviews with individuals. The snowball sampling technique was employed to enlist participants, ensuring a thorough survey of HRM practices across various construction firms in Iraq. The findings suggest that the examined organizations apply diverse HRM strategies to attract, cultivate, and incentivize their personnel. Tangible instances of achievement encompass training and development programs, initiatives to maintain a healthy work-life balance, and mechanisms that acknowledge and reward exceptional performance. Nevertheless, the participants also acknowledged the presence of challenges, such as the administration of temporary agreements that can impact the stability and drive of employees. Enhancements are recommended, namely in regards to the exchange of information and openness inside organizations. To summarize, this study emphasizes the significance of implementing sustainable human resource management practices in the construction industry in Iraq. Implementing efficient human resource management (HRM) strategies can have a beneficial impact on project performance by fostering employee engagement and enhancing productivity. Nevertheless, it is crucial to tackle the highlighted obstacles and implement measures to continuously enhance HRM processes in order to fully capitalize on these advantages.

**Keywords:** Exploring, Sustainable Human, Resources Management, On the Efficiency, Effectiveness, Construction Projects, Iraq.

## **Introduction**

Sustainable human resources management encompasses not only the attraction and retention of talent but also the implementation of effective strategies for its development inside a business (Al Aina & Atan, 2020). Consequently, to guarantee the successful execution and conclusion of projects in the construction sector, contemporary firms must secure a skilled and high-performing personnel. The successful execution of projects and the efficacy of project teams can be attained by project managers and leaders, among other factors, through sustainable human resource management practices (Shaukat et al, 2022). Organizations in the construction industry prioritize sustainable human resource management by formulating and executing policies that accurately embody their vision and mission, while also conveying the guiding principles to the workforce to ensure alignment of individual goals with corporate objectives (Gara & La Porte, 2020). Amrutha and Geetha (2020) assert that sustainability has profoundly impacted multiple management areas, particularly human resource management (HRM). In Human Resource Management, personnel are viewed not merely as tools for achieving economic and financial goals, but as important assets that must be preserved and valued (Stahl et al., 2020). This viewpoint acknowledges that employees can benefit not only the organization but also their families and the broader community. Consequently, HRM practitioners now perceive HRM as serving a dual purpose: a means to achieve an organization's strategic objectives focused on sustainability, and as an objective in its own right. In the last fifty years, the construction sector in Iraq has exhibited significant dynamism. Despite the importance and labor-intensive characteristics of the construction sector as a worldwide economic activity, there has been insufficient emphasis on examining human resource management difficulties and potential solutions within the construction industries of developing nations such as Iraq (Hatem et al., 2021). This study examines the efficacy of the construction sector in Iraq, a developing nation, within the context of sustainable human resource management. The principal objective of this research is to analyze the influence of sustainable human resource management on the performance of construction projects in Iraq. Sustainable human resource management involves implementing effective management and leadership techniques customized for each organization to attract, retain, engage, and develop the workforce. Nonetheless, the examination of human resource management challenges within the construction industry has been neglected, despite its importance in the worldwide economy. Moreover, this domain of operation demonstrates many discrepancies, including regulations, health and safety norms, materials, and additional aspects. The construction sector in Iraq is viewed unfavorably about its human resource management practices and employee relations, leading to considerable difficulties (Abunaila, 2022). This problem is selected due to the dynamic transition from traditional human resource management to sustainable human resource management and its potential influence on the performance of construction projects in developing countries such as Iraq. A qualitative methodology was utilized to achieve the research objective. The methodology utilized involved an extensive review of current literature and semi-structured interviews with 15 participants from three different businesses in the construction sector in Iraq.

## **Methodological Approach**

### **Research Question And Objectives**

This study examines the influence of sustainable human resource management on the efficiency and effectiveness of building projects in Iraq. Unfortunately, there has been insufficient emphasis on investigating sustainable human resource management in poor countries. This study project aims to discover effective methodologies for analyzing the influence of sustainable human resource management on project performance within the construction sector of a developing nation like Iraq. The key question of this study is: "What is the effect of sustainable human resources management on the efficiency and effectiveness of construction projects in Iraq?" This issue is chosen due to the evolving paradigms from traditional human resource management to sustainable human resource management, and the possible influence of this transition on the performance of construction projects in developing countries such as Iraq. The main aim of this study is to understand the influence of adopting sustainable workforce management techniques in the construction industry on the efficiency and effectiveness of building projects. This study examines the management of human resources in Iraq's construction industry, a developing nation, within the context of sustainability. The primary aim of this study is to clarify the influence of sustainable human resource management on the performance of building projects in Iraq. Furthermore, it seeks to pinpoint particular strategies in sustainable human resource management techniques that might improve the efficiency and effectiveness of resource use in building project management firms.

## **Relevance Of the Research**

### **Social Relevance**

HRM is a modern model that has developed in reaction to changes in society, the labor market, and labor relations. It provides an innovative viewpoint on personnel management, highlighting the sustained development, revitalization, and replenishment of human resources. Conversely, conventional human resource management entails the employment of human resources (Mahapatro, 2021). The author posits that employee burnout, occupational stress, health complications, and work-life balance challenges are substantial impediments. Certain researchers contend that HRM could potentially mitigate these issues by reinstating a humanistic perspective. Construction poses distinct challenges. Won, Hwang, and Chng (2021) conducted research on human resource management in the construction industry, asserting that, although it employs a substantial segment of the global workforce, it remains one of the most perilous and complex sectors due to its intricate and dynamic industrial environments. They are contemplating the necessity of a skilled labor force governed by a structured framework for the construction project. This structure must synchronize several professional organizations, building firms, and suppliers, whose participation in the project fluctuates intermittently across time. The intricacy of the construction sector stems from the fragmentation and dynamism of its operations, together with the need to integrate many professional cultures. Therefore, it is essential to employ efficient human resource management strategies in this domain. This study could improve our understanding of how

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Human Resource Management and Development (HRMD) may favorably influence project delivery in this particular business.

### **Scientific relevance**

Fallah Shayan et al. (2022) assert that the need of sustainable development has become evident due to the rapid depletion of natural resources, concerns regarding financial inequality across communities, and the growing relevance of corporate social responsibility. Wojtaszczyk, Różańska-Bińczyk, and Syper-Jędrzejak (2024) assert that the concept of sustainable human resource management (HRMM) is emerging as a new paradigm resulting from the integration of sustainable development (SD) and human resource management (HRM). They claim that this issue has only lately attained acknowledgment as a research domain. Moreover, it underscores the growing focus on analyzing the role of human resource management (HRM) in fostering the long-term growth and performance of organizations, namely by improving societal welfare and addressing stakeholder interests. Specialists in this domain underscore the necessity of a holistic approach in assessing the sustainability of human resource management techniques. They also emphasize a lack of empirical study on this topic (Genari et al., 2022). They propose that research opportunities exist in the context of underdeveloped nations, as indicated by 45. Kanan et al. (2023) assert that there is insufficient theoretical and empirical evidence about the importance of human resource management processes and practices in fostering organizational sustainability. Madhavkumar (2023) indicates that extensive literature underscores the vital importance of the HRM function in achieving organizational performance, particularly with organizational and managerial behavior. Nevertheless, a limited subset acknowledges the context of 61 and the specific challenges presented by project-based industries. Additionally, there is a dearth of literature that has sought to record effective strategies for managing the HRM function within the construction industry, or to examine how these practices could be adapted to improve worker performance and job satisfaction in this sector. Minbaeva and Navrbjerg (2023) assert that there are various texts addressing the management of humans at both strategic and operational levels in the workplace. They contend that organizational behavior and human resource management (HRM) are well-established academic disciplines that have cultivated diverse methodologies and strategies to proficiently manage and develop individuals in accordance with the organization's strategic goals. Moreover, sustainable human resource management has recently garnered attention from both scholars and professionals in the construction industry. This is mostly due to the escalating adverse impacts of contemporary HRM practices on society, employees, and the environment (Budhwar et al., 2023). Nonetheless, there are two persuasive reasons that underscore the importance of examining sustainability in relation to Human Resource Management (HRM) within organizations. Firstly, HRM functions as a framework to direct employees' attitudes and actions towards achieving sustainability goals. Moreover, HRM systems can incorporate sustainability principles, thus promoting the long-term physical, social, and economic welfare of employees. In this framework, HRM is considered a definitive goal (Sitko, 2023). This research possesses scientific value due to the existing paucity of studies in this domain.

### **Methodological Approach**

This study uses qualitative, inductive methods. Researchers use deductive, inductive, and abductive methods (Proudfoot, 2023). Hypothesis importance distinguishes deductive and inductive methods. Deductive reasoning proves hypotheses, but inductive reasoning creates new ideas. Abductive research analyzes intriguing facts or puzzles to explain them. Deductive reasoning analyzes assumptions, while inductive reasoning creates new ideas and generalizations (Stephens et al., 2020). Abductive research begins with identifying and explaining a succession of puzzling facts or situations (Kimpimäki, 2023). To avoid organized approach restrictions, the research was inductive. It finds unusual patterns in raw data. Inductive reasoning begins with empirical evidence and proceeds to explain it (Wiltshire & Ronkainen, 2021). Field behaviors help researchers understand larger phenomena. From specific to broad. Examine how sustainable human resource management affects Iraqi construction projects. Investigative study. Exploratory research seeks deep understanding and new perspectives by studying a topic. Use it for qualitative research that covers all qualities. Qualitative research clarifies real-world issues. Unlike quantitative research, qualitative research does not collect data or intervene. Instead, it generates ideas and analyzes numbers. Qualitative research integrates individuals' thoughts and actions. He answers 63 "why" and "how" questions instead of "how much". It can be used in mixed-methods or qualitative research (Hall, 2020). Quality research creates conceptual frameworks to understand social processes in real, non-experimental environments. This method emphasizes all parties' interpretations, experiences, and perspectives (Levitt, 2021). Qualitative field research uses narratives and verbal accounts. Information from observations, documents, interviews, photographs, and videos is qualitative. Qualitative research offers several benefits. Effective qualitative data gathering yields complete data and better understanding. It deepens understanding of the topic. Qualitative research helps create hypotheses (Kohn & Christiaens, 2014). Human behavior patterns are hard to measure, yet qualitative research reveals them. Qualitative methods allow participants to express their thoughts, feelings, and experiences at specific moments or during major occurrences in their natural environments (Azungah, 2018). Qualitative research has pros and cons. Erroneous analyses due to uncontrolled variables influencing the collected data; subjectivity, as the researcher determines the relevance of data during analysis, leading to potentially divergent interpretations of identical data; and restricted generalizability due to the frequent use of a limited sample size to gather in-depth data on specific contexts, which, despite thorough analytical methods, may yield biased results that do not accurately represent. Despite data management and recording technologies, data analysis sometimes requires manual verification or execution. This qualitative study examines sustainable human resource management in Iraqi construction by asking participants "how, why, and where" (Azungah, 2018). Qualitative field research includes text and narratives. Interviews, observations, document analysis, photos, and videos produce qualitative data. Qualitative research has several benefits. Complete qualitative data collecting improves situational comprehension. It enhances explanations for the phenomenon. Hypotheses come from qualitative study (Levitt, 2021). Qualitative study better explains human behavior than quantitative. Participants can express their thoughts, feelings, and experiences naturally (Ataro, 2020). Statistics don't



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accurately depict experiences, attitudes, and behaviors. Qualitative research has pros and cons. Uncontrolled factors reduce data reliability and inject subjectivity as the researcher decides significance, resulting in different interpretations of similar data. The frequent use of a small sample size to acquire comprehensive data on specific settings limits generalizability, making it difficult to draw conclusions despite thorough analysis approaches. In this qualitative research, participants answer "how, why, and where" questions about sustainable human resource management in Iraqi construction (Buchanan, 2021).

### **Research Design**

The research design intended a study-friendly environment. The research strategy chosen during research design affects how a study gathers data (Hennink, Hutter & Bailey, 2020). This study was effective due to its descriptive research approach and comprehensive framework (Nilsen, 2020). The many subjects researched are described via descriptive research. This method emphasises the "what" of the issue over the "why" Descriptive research focusses on demographics rather than causes (Pandey & Pandey, 2021).

#### **1. Data collection through semi-structured interviews**

Data was acquired via semi-structured interviews. The researcher collects personalized information from the subject using a semi-structured interview. Interview guides help (Ruslin et al., 2022). The semi-structured interview guide collects qualitative data from research participants using open-ended, customizable questions. Topics or concerns frame the study inquiry (Roberts, 2020). This study's research question and goals shaped this guide's creation, review, and validation. This guide offers eleven open-ended questions concerning how sustainable human resources management influences Iraqi building projects' efficiency and effectiveness. Semi-structured interviews dominate qualitative research. Semi-structured interviews follow a guide with questions and themes. Interviewers can order questions, but they follow a format. Follow-up questions may be asked to ensure the researcher covers the relevant topics. This casual, interactive interview gathers details. Researchers employ semi-structured interviews to understand a topic and its reactions (Ruslin et al., 2022). This study employs semi-structured interviews with three Iraqi construction workers. Interviews were used to collect participant habits, beliefs, and opinions (Harrell & Bradley, 2009). Free-form interviews were conducted (Harrell & Bradley, 2009). Zoom videoconferencing and phone conversations were used for interviews in January–March 2022. In ethical interviews, the researcher and subjects participated. Participants signed a consent form and learned about the study's goals before the interviews. Most participants agreed, however some preferred written remarks over recorded ones (Harrell & Bradley, 2009). To do this, the researcher manually recorded interview observations in a notebook. This helped the researcher swiftly record participants' significant ideas, facial expressions, and gestures. We transcribed Arabic interviews in English.

#### **2. Study Population and Sample Composition**

This study explores how sustainable HRM affects Iraqi construction firms A, B, and C project performance. The three firms were chosen for their Iraqi building, project, and HR

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management experience. This study examined operational, project, and strategic management staff from these three organizations. Probability and non-probability choose most samples. Probability sampling selects representative samples equally from the population. This strategy is used in quantitative research (Rahman et al., 2022). Non-probability sampling is common in case studies and qualitative research. We study real phenomena, not population statistics, with small samples. No representative or random sample is needed, but specific cases or persons must be explained (Campbell et al., 2020). Quality and exploration make non-probability sampling ideal for this study. This approach conceals the sampled population member. Selection is subjective, population unity is unattainable, and study results cannot be generalized. Database-based data collection is slower, more expensive, and less convenient than non-probability sampling (Casteel & Bridier, 2021). We selected 15 guys from three Iraqi construction firms, five apiece. Individual questions are asked to 15,68 persons. We boosted waterfall or snowball sampling participation. It finds more participant recommendations utilizing original ones (Akinbaleye, 2021). Volunteers from Company A, B, and C participated in the study. Interviewers employed various convenience and availability approaches. Zoom videoconferences, phone calls, and video were used. These methods are as reliable as face-to-face and economic interviews since they reduce travel costs, improve time management, and improve communication (Rowen et al., 2022). Jet lag, inadequate Internet, and a lack of smartphones, tablets, and computers may have hampered these efforts. Setting appointments around participants' availability was difficult. We contacted project managers, HR managers, design executives, and field technicians. On average, interviews lasted 45 minutes. Everyone attended one meeting. Before being interviewed, participants were informed of the study's goals, ethics, and informed consent. Work culture, motivation, worker-employer interactions, recruiting-to-now performance review, and HR sustainability are interview topics.

### **3. Data analysis**

This study used descriptive theme analysis, either pooled or group. Thematic analysis analyzes qualitative data on participants' viewpoints, attitudes, knowledge, experiences, and values (Kiger & Varpio, 2020). Word or phrase counts are not thematic analysis. It involves finding and summarizing implicit and explicit data themes (Morgan & Nica, 2020). In theme analysis, researchers study interview transcripts for patterns and contrasts. Patterns are found and data is classified. This ensures study outcomes meet goals. Analytical and logical thinking help researchers uncover data patterns, connections, and trends (Cooksey, 2020). Careful thematic data analysis is needed. Researchers must find patterns, correlations, and themes. This demands ongoing analysis and logic to understand information (Mezmir, 2020). The data in this study was qualitatively analyzed using descriptive thematic analysis. The researcher analyzed transcripts and notes for patterns and differences. Themes and categories organized the content. The researcher could thoroughly analyze participant perspectives and identify significant data pieces using this analytical strategy.

## **Results**

### **Analysis of Results and Discussion**

This paper analyses a study on how sustainable human resource management (SRM) affects Iraqi building projects. The paper emphasises semi-structured interview data from fifteen participants from three construction organisations. The results reveal the HRM strategies used by the analysed companies to recruit, develop, and reward employees. Training and development programmes, work-life balance initiatives, and recognition programmes demonstrate sustained human resource management success. The outcomes are analysed using this data to determine how HRM practices affect building project performance. The findings demonstrate how sustainable human resource management improves employee engagement, productivity, work quality, and team communication and collaboration. This study emphasises both successes and challenges, such as managing temporary agreements that might affect employee stability and motivation. To overcome challenges and maximise the benefits of sustainable human resource management to Iraq's construction sector, HRM techniques are suggested. This study analyses the research data and highlights the links between HRM practises and building project performance. It also suggests ways to maximise these techniques' benefits in Iraq.

#### **Work Experience and Role of Iraqi Construction Workers**

This study introduces selected companies and participants. Companies will be labelled A, B, and C, and participants 1–5 to maintain anonymity. Example: "A1" refers to Company "A" Participant 1.

### **Business Profile**

**Company "A"** makes building industry electrical and electronic equipment since 2010. Through retail and bespoke modules, the company offers many products and services in Iraq. The company includes a branch in Basrah, Iraq's second-largest city, and headquarters in Baghdad. Companies "A" design, install, and maintain residential and commercial HVAC, lift, and escalator systems. Increase consumer value and improve the future. To dominate the Arab electronics industry, particularly in the subregion, the company creates long-term connections with renowned clients and service suppliers. The company needs engineers. Its company culture values customer satisfaction and quality products and services. Engineers, technicians, and HR managers make up the 31-person Baghdad branch. With 13 years of expertise, they completed 60 customer projects. Employees are recruited, trained, and motivated by human resource management to retain and satisfy them.

**Company "B"** was founded in 2004 and provides consulting services in architecture, structural engineering, electrical engineering, mechanical engineering, interior design, master planning, urban design, technical assistance, supervision, and project management. The skilled workforce oversees design and construction, including pre- and post-contractual work. Over the past two decades, the organization has partnered with local and international architectural firms and designers. The country's many rehabilitation projects are boosting public sector activities, which are valued. The organization recently added private sector



services. The company employs 27 design engineers, architects, project managers, and HR professionals. After winning contracts, companies form operational teams.

**Company "C":** This tiny Baghdad civil engineering firm has expanded since 2006. This company became a multipurpose consulting firm in 2013. Construction management, supervision, and civil/structural engineering are its specialties. Concrete, construction, structural analysis and design, investigations, assessments, rehabilitation, non-destructive testing, architectural, sanitary installations, mechanical, electrical, plumbing, and infrastructure are covered. Public and private services help the organization. To attract more clients who appreciate its services, the corporation will deploy cutting-edge technology and resources to compete locally. About 27 full-time staff work at the head office and project sites. Most employees are engineers and design, structural analysis, and concrete technology experts. Several part-time senior expert partners and consultants in structural engineering help the organization expand its competence. The company's HR management encourages teamwork to deliver high-quality services on time and within budget. The firm prioritizes local environmental conditions. For safety, employees and on-site workers are educated routinely. We teach and develop our personnel to better performance.

**Presentation of the participants and their professional experience**

In this section, we will explore the participants' work experience in the three companies A, B and C construction sector in Iraq, as well as their function. We will also look at their involvement in construction projects to better understand their contribution to the overall performance of these projects.

Table 1: Profile of participants and their functions in the company A

<b>Participants</b>	<b>Seniority (years)</b>	<b>Function</b>
A1	5	Human Resources Department
A2	4	Project design engineer
A3	3	Design engineer
A4	10	Recruitment coordinator
A5	5	Sales manager

Table 2: Profile of participants and their functions in the company B

<b>Participants</b>	<b>Seniority (years)</b>	<b>Function</b>
B1	6	Architectural and engineering consulting
B2	6	Coordinator and monitoring manager
B3	9	Technical Support Manager
B4	5	Structural Engineer
B5	5	Human Resources Professional

Table 3: Profile of participants and their functions in the company C

Participants	Seniority (years)	Function
C1	5	Team Leader
C2	10	Assistant Project Manager
C3	8	Site Manager
C4	6	Engineer
C5	5	Field technician (plumbing).

Each organization includes technicians and executives from the building industry. The participants have years of construction experience and dedicated service to their company. Civil engineers, architects, site managers, project managers, plumbers, and foremen are among the participants. The participants' years of experience in enterprises A, B, and C show a consistent approach to employee retention. A prior study, "Factors affecting workforce turnover in the construction sector: A systematic review," found similar results (Bolt, Winterton & Cafferkey, 2022). Employment stability and other factors affect construction employee turnover, according to the systematic review. Our analysis found that most participants in enterprises A, B, and C have 5–10 years of seniority. These organisations can keep a stable personnel for a long time, which can help project continuity and teamwork. According to the benchmark study, job satisfaction, career prospects, and organisational culture can affect construction personnel retention. Seniority may indicate that the firm is solid, but other aspects related to human resource management and employee happiness must be examined to properly understand employee turnover in these companies. Overview of organisation members' responsibilities Participants have different roles and responsibilities in their organisations. Civil engineers and architects plan and develop projects, while site managers oversee their execution. Project managers manage and organise all project aspects, while experienced labourers do practical duties on site.

Table 4: Job description of participants within companies

Company	Participants	Task
A	A1	I am involved in career management, talent management, compensation and benefits, training and development, compliance and occupational safety
	A2	I work as a builder or mechanic of elevators and escalators.
	A3	I am involved in the conception, design and installation of heating, ventilation and air conditioning systems in commercial and residential buildings.
	A4	As a Construction Recruiter, I am responsible for finding talent and filling various positions for our company
	A5	I promote the company's products, acquire new customers and achieve revenue growth goals by keeping our company competitive and innovative.
B	B1	Consultant in architecture and engineering. I offer advice on architectural design, safety standards, construction techniques, aesthetics and professional development.
	B2	As a Construction Project Coordinator, I plan, organize, direct, control and evaluate construction projects from start to finish according to schedule, specifications and budget.

	B3	I am responsible for technical support. In my job, I am responsible for managing projects from start to finish, ensuring that the proposed plan is on schedule, on budget and on scope.
	B4	As a structural engineer, my work includes writing various information structures, using computer-aided design software, preparing material and project cost estimates based on technical specifications, among other things.
	B5	I work as a human resources staff. Part of my job is to determine the composition of the workforce needed to achieve our company's strategic objectives, prepare for the recruitment of our workforce, develop it and monitor its progress and evaluate its performance.
C	C1	I work as a team leader. I am responsible for building a team to carry out the work involved in a particular project and in accordance with the architectural plan.
	C2	My job includes managing supervisory staff and assigning tasks. In this role, I coordinate the activities of the contractors and prepare the daily progress report and monthly reports.
	C3	As the site manager, I organize the work on site by means of equipment, manpower and materials.
	C4	I am a design engineer; I am mainly interested in the design and construction of buildings and structures that are safe and able to withstand the elements to which they will be exposed.
	C5	Among other things, I carry out the installation of piping systems in buildings for the distribution and use of drinking water and the removal of waterborne waste.

This table presents different career profiles in the construction industry, covering a wide range of roles and responsibilities within Companies A, B and C.

### **Involvement in construction projects**

Participants actively engage in building projects, leveraging their skills and commitment to ensure the successful completion of each project. Their individual endeavors and collaborative cooperation contribute to the attainment of project goals.

### **Evolution Of the Construction Sector in Iraq**

The building sector in Iraq has experienced substantial advancements over time, specifically in reaction to the economic and political transformations inside the country. In order to comprehensively assess the effects of sustainable human resource management on the performance of construction projects in Iraq, it is crucial to analyze the historical background of the sector, recent significant changes, their impact on construction projects, and the necessity of incorporating these developments into human resource management.

### **Historical Background of the Construction Sector in Iraq**

Iraq's building industry has boosted its economy. Oil income and infrastructure investments drove construction industry expansion before conflict and political turmoil. Semenova and Al-Dirawi (2022) said that Iraq's building sector was vital to its GDP and provided many

jobs. To meet population growth, the Iraqi government has invested heavily in infrastructure, housing, education, and health. Iraq used the oil windfall to fund these massive projects, making building a key part of its economy (Waheeb & Andersen, 2022). However, civil wars and political upheavals have changed the country in recent decades. Construction projects have stalled, reducing investment and job possibilities. Construction workers must respond to unpredictable and uncertain conditions due to fluctuating conditions.

### **Major Transformations in The Last Two Decades**

Iraqi building has changed significantly during the previous 20 years. Political and civil wars and economic turmoil have influenced construction project design and implementation. Financial uncertainty, operational upheavals, and hiring and retaining top talent have plagued companies. The study participants noted that these changes have affected work methods and decision-making. Unexpected events have forced organisations to adopt more agile methods. Human resource management strategies must be changed to manage teams and projects in a changing environment. Participant B3 said industry developments have forced us to rethink our operations. Before the conflict, things were stable and predictable. However, we must be flexible to negotiate the regular changes. Thus, proactive human resource management is needed to ensure timely skill acquisition. To properly manage projects, we must be open to new ideas and eager to try new methods. Political and economic events have changed Iraq's building industry during the past 20 years. The 2014 rise of ISIL and its control of areas of Iraq caused instability and anxiety. This affected the entire economy, including construction. The construction sector had to adapt to the gradual economic recovery after the revolution (Fadhil & Burhan, 2021).

### **Impact of these developments on construction projects**

Participants say political and economic turmoil has affected Iraqi construction projects. Project delays, funding, and security were major issues. Due to the country's instability, some projects have been abandoned. C3 participant: "Political unrest caused many problems for me as site manager. We prioritise safety and have taken extra steps to protect our employees at work. Policy changes and resource shortages often delay projects. The country's economic uncertainty has stalled several projects indefinitely. Participants also remarked that sector changes have affected labour relations and construction team dynamics. Effective stakeholder communication is essential for project success in the face of challenges. Participant A2: "The construction industry has advanced, forcing us to work together on sites. Engineers, labourers, and other project stakeholders must communicate well to coordinate and resolve issues. We meet regularly to discuss project progress, challenges, and solutions. After the 2014 rise of ISIS, Iraq's building industry has been heavily impacted by political and economic developments. This caused the seizure of some Iraqi regions, causing instability and adjustment in various sectors (Hasan, 2023).

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### **Importance of taking these developments into account in human resources management**

Iraqi construction human resources management must adapt to changing conditions. Participants advised firms to prioritise flexibility and resilience to overcome political and economic uncertainty. Participant A4 said their organisation has had to adapt quickly to Iraq's political and economic instability. We must adjust our strategy and act quickly to manage unexpected events. We can easily mobilise and reassign teams based on project needs thanks to human resources management. Staff training is essential for improving competence and adapting to changing work methods. Companies should also encourage open and honest communication to help teams collaborate on different projects. Participant testimony shows its importance. B2 stresses the necessity of training and development for competitiveness in a changing sector. To help our workforce learn new skills and adapt to new work methods, we've invested in training. This has allowed us to maintain our skills and offer creative solutions to clients. Participant C3: "Our industry relies on good communication, especially for complex projects with multiple teams. We meet frequently to discuss project progress, challenges, and solutions. We can synchronise our efforts and quickly handle field difficulties. Clear communication is essential for project success. Piwovar-Sulej (2021) found that construction industry advances affect human resource management in construction organisations. Construction companies must be flexible to manage political and economic unpredictability, according to the study. According to these authors' research, sustainable human resource management can help building projects succeed in tough settings, like Iraq's construction sector development. These advancements can help companies manage teams and projects in a changing environment. Organisations can overcome Iraq's construction industry challenges and improve project efficiency by using adaptive and environmentally friendly human resources management solutions.

### **Sustainable Human Resource Management in Construction Companies in Iraq**

Construction businesses in Iraq have significant hurdles due to the country's political and economic instability, making sustainable human resource management particularly vital. This section will examine the existing human resource management methods in these firms and assess their compatibility with sustainable concepts. The sub-themes that will be presented are recruiting and selection, training and development, work-life balance, communication and transparency, and recognition and awards.

### **Presentation of current human resource management practices**

Construction firms in Iraq employ several human resource management strategies to attract, cultivate, and retain skilled personnel. We conducted an analysis of the participants' responses in order to comprehend the prevailing practices inside these companies.

#### **1. Recruitment and selection**

Recruiting and selecting qualified workers who fit the company's culture is crucial. Iraqi construction firms conduct extensive interviews and reviews to choose candidates. Participants said these methods attract the best candidates who share the company's values. Al-Tamimi and Al Anssari (2022) found that successful recruitment boosts productivity and



organisational performance in Iraq's construction sector. Participant A1 says his company mostly used newspaper and billboard job ads. However, it is exploring digital techniques to attract more skilled workers. Technical expertise and personal traits are used to choose candidates, with a focus on construction experience. Participant B2 says his company recruited candidates using an outside agency. The major goal is to assess candidates' learning and development skills and job requirements. Business culture and organisational values are important during choosing. The C4 Participant said his company's main goal is to acquire top construction personnel. To retain employees, the organisation offers good working conditions, competitive pay, and continual training. Employee performance, communication, fairness, and work-life balance are considered during the selection process.

## **2. Training and development**

Employee development is essential for career advancement and skill improvement. In their paper "Human resources development as an element of sustainable HRM - with the focus on production engineers," Mukhuty, Upadhyay, and Rothwell (2022) claim that staff training and development are essential to sustainable HRM. The research emphasises that organisations, particularly construction firms, offer internal and external training to improve employees' technical and behavioural skills. These programs improve their efficiency and adaptability in a changing workplace. Audi makes a compact executive automobile called the A4. His company usually trains employees internally to improve their careers. "I had the privilege of participating in a training program focused on sustainable building practices." This has allowed me to contribute more to the company's eco-friendly projects. Participant B3 emphasises that his company prioritises staff training on new technology and construction approaches. The corporation funds external training and courses to improve employee skills. Training is essential for maintaining performance and market competitiveness. Participant C5 said his employer offers compensated work training. The participant believes these trainings foster employee engagement and a supportive workplace. The company also prioritises worker safety and gives field training to protect personnel.

## **3. Work-life balance**

Iraqi construction workers worry about balancing work and life. To help workers balance personal and professional obligations, companies are offering flexible work hours and remote employment. This method improves employee happiness and work-life balance. Participant A1 said his employer values work-life balance. The company offers flexible work schedules and work-life balance policies. She understands the importance of a good work environment for employee satisfaction. Participant B2 supports his company's work-life balance rules. Employees receive time off and other benefits to help them balance work and life. The company prioritises employee wellbeing and work-life balance. The C4 participant said his firm values work-life balance. To retain staff, it offers flexible work hours and attractive benefits. Work-life balance boosts motivation and career success, according to the organisation.

#### **4. Communication and transparency**

Management-employee communication and transparency are prioritised in the examined organisations. Staff gather periodically to discuss issues and opinions. This transparency facilitates employee participation in organisational decision-making and efficient problem-solving. Participant A3 emphasises that his firm values communication, promoting transparency across hierarchies. "We hold routine meetings to deliberate on the projects and obstacles we encounter." We may collaborate to find and implement solutions. This creates a transparent workplace and helps employees understand each other's goals. Participant B2 emphasises the importance of communication in his organisation since it helps him build trust with colleagues. The company regularly updates its performance, projects, and job opportunities. Transparency makes employees feel included and motivates them. C4 participant emphasises that their firm values open communication. All employees are informed about the company's goals, challenges, and successes by management. This technique encourages inclusiveness and unity in the firm by helping employees understand their roles and how they contribute to its success.

#### **5. Recognition and rewards**

Iraqi construction companies motivate their workers with recognition and awards. There are formal and informal programs to recognise outstanding employee performance. This method boosts job satisfaction and engagement. Participant A1 says his company values employee recognition. They receive incentives, privileges, and job advancement for their outstanding performance. Employees are inspired and more dedicated by this recognition. Participant B1 says the company honours employees' accomplishments and contributions. Team gatherings and special events highlight accomplishments. These incentives boost team morale and productivity. Participant C1 says acknowledgement is part of their company culture. Incentives, rewards, and professional development recognise and reward exceptional performance. This method motivates employees to work hard and contribute to the company's success. Human resources management in construction firms requires recognition and prizes. The participants' stories show that official and informal recognition boosts employee engagement, motivation, and performance. According to Naz et al. (2020), business employee retention and engagement are driven by these characteristics. The essay emphasises that recognition and prizes boost employee loyalty and engagement. Participants' recognition methods, such as bonuses, perks, career progression opportunities, and incentive schemes, match the article's guidelines for a dynamic and fulfilling workplace. Recognising and incentivising employees can improve employee satisfaction, commitment, and performance for construction companies. Recognition methods create a positive, collaborative environment that promotes productivity, cooperation, and company goals. A study of Iraqi construction companies' human resource management practices shows a considerable shift toward sustainability. A, B, and C are highlighting how to improve staff training and professional development as part of sustainable human resource management. Participants A4, B3, and C1 stressed their companies' commitment to employee training. This orientation improves workers' technical and behavioral skills, boosting building project productivity. Offering training and development, these organizations recognize the impact

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competent and well-prepared staff can have on high-quality project completion. Businesses A, B, and C practice sustainable human resources management through training and professional development. These companies invest in their employees' long-term skills, enabling professional growth and employee retention. These sustainable human resource management practices can also boost employee loyalty to their company. A, B, and C offer development opportunities. Companies invest on employee welfare and career progress. Recognizing and helping workers can boost their confidence and encourage them to participate in building projects. Interview excerpts from subjects A4, B3, and C1 accurately portray the analyses. Participant A4: "My company strongly promotes and supports training and professional development." We have the opportunity to participate in frequent training programs that enable us to acquire new skills and remain current with the latest technology breakthroughs. Moreover, we provide opportunities for professional advancement, which motivates us to continuously seek training and development in our respective disciplines. Participant B3 indicated that their organization prioritizes the training and professional development of its staff. They offer tailored training programs that address our individual requirements, facilitating the acquisition of essential skills for success in our roles. Additionally, we provide opportunities for internal rotation, allowing exploration of different fields and advancement in our career paths. Participant C1: "Training and professional development are essential components of our company." They support our progress by offering us specialized training and professional development courses. This allows us to demonstrate our skills and stay current in the sector. Thank you, my firm, for this opportunity to learn and grow professionally. A detailed assessment of Iraqi construction companies' human resource management methods shows a shift towards sustainable, training-focused approaches. Saleem et al. (2022) noted that training improves construction worker performance and productivity. To help employees balance work and life, companies have adopted more flexible regulations. As participants A2, B4, and C2 demonstrate, flexible work hours and remote work improve employee well-being, engagement, and productivity. Attendee A2: "My employer values work-life balance. Their flexible schedules help me balance work and family. For paid and sick leave, we offer generous pay, which helps achieve work-life balance. Our organisation values work-life balance, said B4. Remote employment lets us manage our schedules and avoid long commutes. Our office childcare amenities make working parents' lives easier. C2 Participant: "Our company understands the importance of work-life balance for employee development and well-being. It offers flexible scheduling and sabbaticals. Our wellness programme fosters work-life balance through sports and stress management. Human resource management methods in Iraqi construction firms show a commitment to work-life balance. To address employee well-being, companies have adopted flexible work hours and remote work options. Work-life balance is important in construction, according to Kotera, Green, and Sheffield's (2020) research. Sustainable HRM requires open communication and openness. Businesses recognize the importance of clear communication between executives and employees to build trust and foster a positive work environment. Effective communication enhances employee engagement and involvement in organizational decision-making, resulting in heightened motivation and commitment, as evidenced by participants A3, B1, and C5. 92 Participant A3: "The level of communication within our

company is highly transparent and accessible." The management holds regular meetings to communicate information about corporate objectives, financial performance, and current projects. Furthermore, they cultivate a culture of inquiry and feedback by aggressively prompting employees to ask questions and provide opinion during these meetings. This allows us to stay informed and actively influence the direction of the company. Participant B1: "Our company adheres to a policy of complete openness and disclosure." Employees are provided with all crucial information, ranging from strategic decisions to financial performance. Furthermore, we own internal communication solutions that streamline the exchange of information among teams. This methodology enables us to collaborate and reach well-informed conclusions. Participant C5: "Our company prioritizes effective and reciprocal communication." Managers are open to feedback and recommendations from employees, and we have established internal communication systems to facilitate this process. Moreover, we conduct regular meetings to share updates on project progress and address the challenges we face. It improves our team's unity and promotes more effective collaboration. Effective communication and transparency are essential for executing sustainable human resource management strategies in construction firms operating in Iraq. The examples given by participants A3, B1, and C5 illustrate how transparent communication between management and employees may foster trust, increase motivation, and create a positive work environment. This approach corresponds with the results of the research conducted by Gamil and Abd Rahman (2023), which highlights the causes and effects of miscommunication in the construction industry. Recognition and awards are essential for the sustainable management of human resources in the analyzed organizations. Organizations have implemented recognition systems to evaluate and acknowledge exceptional performance and encourage both individual and collaborative efforts. Participants A1, B4, and C2 have noted that adequate recognition of employees not only motivates them but also enhances their sense of belonging to the firm. Participant A1: "Formal acknowledgment at our company is demonstrated through annual awards programs, when personnel are publicly acknowledged for their exceptional accomplishments". Outstanding employees are recognized at exclusive gatherings attended by the entire staff. It significantly augments our motivation and commitment to the organization. Participant B4: "We have established an unofficial system of acknowledging and appreciating each other's efforts within our work team." We hold weekly meetings to convey appreciation and gratitude for outstanding achievement. This may emerge as either a simple round of applause or a letter of appreciation. This method fosters a positive work atmosphere and strengthens our sense of team belonging. C2 Participant: "Our organization has implemented a structured recognition program to commemorate the exceptional accomplishments of our employees". Certificates and prizes are awarded to them during specific events. Additionally, we encourage informal recognition among colleagues. Managers might convey appreciation by dispatching thank-you notes or offering informal rewards to acknowledge notable accomplishments of team members. This cultivates a positive work environment where all individuals feel valued and inspired. Recognition and rewards are essential components in the companies analyzed within the context of sustainable human resource management. Both formal and informal recognition methods play a role in rewarding employees' outstanding accomplishments and bolstering their commitment to the

firm. Participants A1, B4, and C2 assert that appropriately recognizing employees, whether through formal ceremonies, team meetings, or informal expressions of thanks, significantly impacts their motivation and sense of belonging to the organization. The results obtained from these testimonies correspond with the conclusions of the study conducted by Kurdi and Alshurideh (2020), which underscore the importance of motivational factors in employee retention and engagement within organizations. Organizations endeavor to create a positive work atmosphere, boost employee motivation, and foster a culture that appreciates and supports both individual and collective achievements through effective recognition and incentive strategies.

### **Assessment of the impact of these practices on project performance**

1. Sustainable human resource management solutions significantly impact the overall performance of construction projects in Iraq. Investments in training and professional development augment staff proficiency, resulting in enhanced job quality, reduced errors and delays, and increased operational efficiency of projects, as indicated by participants A4, B3, and C1. The following are the precise excerpts corresponding to each theme.

#### **2. Training and professional development**

(Impact on employee competence and quality of work) Participant A4 "We have a continuous training program to develop the skills of our employees, which allows us to have a highly qualified team that produces quality work." Participant B3: "The training we receive regularly helps us to be more competent and to avoid costly mistakes in our projects." Participant C1: "The training has helped me improve my professional skills, and this is reflected in the quality of my work and the speed with which I complete the assigned tasks."

#### **3. Work-life balance**

A balance between work and personal life mitigates employee stress and burnout, leading to enhanced staff retention and improved productivity on projects. Content and balanced employees are generally more interested in their work and exert additional effort to accomplish project goals (Yu & Wu, 2021). Participant A2: "The fact that the company offers flexible working hours allows me to better manage my time and find a balance between my work and personal life, which has a positive impact on my productivity." Participant B4: "The ability to work remotely has allowed me to better balance my family responsibilities with my work duties, which has improved my job satisfaction." Participant C2: "The policy of additional leave for important family events shows that the company cares about the well-being of its employees, which has a positive effect on our commitment and motivation in projects."

#### **4. Communication and transparency**

Effective communication and openness enhance project team cohesion and foster improved collaboration among members. Transparent communication facilitates more efficient problem and conflict resolution, hence enhancing collaboration and overall project performance (participants A3, B1, C5). Participant A3: "Regular meetings allow us to freely



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share ideas and solve problems quickly, which improves coordination between project teams." Participant B1: "Transparency in decision-making gives us a sense of ownership and trust in the company, which pushes us to work more effectively together." Participant C5: "Open communication facilitates collaboration with other departments, which strengthens the overall performance of our projects."

## **5. Recognition**

Both formal and informal recognition incentivize employees to sustain their dedication and thrive in their responsibilities. Recognition methods enhance the organization's performance-driven culture and foster both individual and collective contributions towards project accomplishment (participants A1, B4, C2). Participant A1: "Receiving recognition for my work motivates me to give my best and to be more involved in the company's projects." Participant B4: "The informal recognition from my superiors makes me feel appreciated, and it makes me want to continue to invest more in my work." C2 participant: "Recognition programs encourage us to be competitive and work together to achieve project goals." The examination of contemporary Sustainable Human Resources Management (SRM) practices in businesses A, B, and C indicates substantial alignments with the conclusions of Nagabhaskar, M. in his 2020 study "Motivational Factors of Employee Retention and Engagement in Organizations." This study by Roopavathi and Kisshore emphasizes essential factors that drive employee retention and engagement in firms. Through the examination of the experiences of respondents A1, A2, A3, A4, and A5 within Iraqi construction firms, correlations with the notions articulated in the study by Roopavathi and Kisshore (2020) may be discerned. Investment in training and professional development is a prominent aspect of the HRM practices of organizations A, B, and C. Participants assert that these activities enhance staff competencies and job quality, aligning with the concept of professional development articulated by Roopavathi and Kisshore (2020). Organizations that provide opportunities for learning and development typically maintain employee engagement and motivation, fostering more significant contributions to the entity. Furthermore, work-life balance, identified by respondents as a human resource management technique, is correlated with less employee stress and enhanced productivity, as articulated by Roopavathi and Kisshore (2020). An improved work-life balance fosters a conducive work environment, positively influencing employee happiness and engagement. The respondents' emphasis on transparent communication aligns with the findings of Roopavathi and Kisshore (2020). Transparent communication enhances project coordination and efficacy, fostering a clearer comprehension of goals and expectations. This fosters a corporate culture in which employees perceive themselves as heard and valued, a significant factor in engagement as emphasized in the study by Roopavathi and Kisshore (2020). The respondents' emphasis on both formal and informal acknowledgment aligns with the findings of the Roopavathi and Kisshore (2020) study. Acknowledging and praising employees' accomplishments significantly influences their engagement and motivation to perform at a high level. It enhances their sense of affiliation with the organization and their confidence in leadership. In conclusion, the findings from the analysis of HRM practices in businesses A, B, and C support the conclusions of Roopavathi and Kisshore (2020) concerning the determinants of

motivation and employee engagement. These techniques enhance the overall performance of construction projects in Iraq by cultivating a work environment that promotes the retention of skilled staff. To fully leverage these advantages, it is imperative to consistently modify and enhance HRM procedures to address the unique requirements of each organization.

### **Concrete examples of successes or challenges related to sustainable human resources management**

Participants provided specific instances of achievements and obstacles concerning sustainable human resource management inside their organizations. Participant B3 reported a favorable experience with Company B's recognition and rewards initiative. He received recognition for his outstanding performance on a challenging construction project, which inspired him to maintain his high standards of work. This official acknowledgment also motivated him to generate innovative concepts and to engage more actively in the company's initiatives. Participant B3: "My company provides diverse rewards and compensation for outstanding employees, fostering a culture of positive competition." It can significantly enhance morale and motivate me to totally commit to my task. I feel appreciated, which strengthens my dedication to the organization. Participant A5 outlines the difficulties associated with the annual employee performance evaluations, the execution of short-term contracts, and the non-renewal of contracts for individuals exhibiting subpar performance. He indicates that establishing a yearly assessment procedure poses challenges, as it necessitates time and resources to assess each employee individually. Moreover, designing a fair and objective evaluation system to accurately assess performance, productivity, and work satisfaction can be challenging. Short-term contracts pose a difficulty for human resource management. These contracts may engender ambiguity for employees over their future employment, thereby impacting their motivation and loyalty to the organization. Moreover, it may result in instability within work teams, as certain employees can lack the opportunity to renew their contracts due to inadequate performance. The non-renewal of contracts for underperforming employees may be viewed as a performance metric, although it can also generate stress and strain inside the organization. Employees may experience stress due to the apprehension of job loss if they fail to meet expectations, which can impact their well-being and motivation in the workplace. Participant A5: "We implement an annual evaluation program for employers to assess employee performance, productivity, and job satisfaction." Contracts are executed on a temporary basis, and the corporation will not extend the contracts of employees exhibiting subpar performance. To address these problems, it is essential for the organization to implement a more comprehensive approach to human resource management. This method entails more frequent and systematic evaluations throughout the year, offering employees ongoing performance assessment and constructive feedback. Furthermore, contemplating extended contracts or professional development initiatives may enhance stability and employee engagement. A strategy that emphasizes enhancing employees' skills and well-being can foster a more supportive workplace conducive to sustainable organizational performance. These specific instances underscore both the achievements and difficulties associated with sustainable human resource management in construction firms in Iraq. Recognition and awards serve as potent mechanisms to enhance

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employee motivation and engagement (Rizzo, 2019). The assessment of employee performance is a significant concern that can affect their well-being, motivation, engagement, and productivity (Salas-Vallina, Alegre & López-Cabrales, 2021). By considering these instances in the study, firms can pinpoint areas for enhancement and chances for progress in sustainable human resource management.

## **The Influence of Sustainable Human Resource Management on The Performance of Construction Projects in Iraq**

### **1. Summary of results on sustainable human resource management practices**

The findings indicate that construction firms in Iraq, namely companies A, B, and C, have used sustainable human resource management techniques aimed at improving employee well-being and promoting their active participation in projects. These practices include rigorous recruitment, extensive training and development, promoting a healthy work-life balance, encouraging transparent communication, and offering recognition and awards for outstanding performance. Participants in the events expressed a positive opinion of these practices and highlighted their impact on motivation, productivity, and job satisfaction.

### **2. Analysis of the influence of these practices on project performance**

The relationship between sustainable human resource management methods and project performance shows how they improve Iraqi building projects. Companies that invest in personnel training and development deliver better work with fewer errors and project delays. Improved staff skills improve resource management and project execution (Chakraborty & Biswas, 2020). Adopting work-life balance policy is also beneficial. These rules promote job satisfaction and project dedication by balancing employees' personal and professional life. Balanced and fulfilled employees are more driven, which boosts productivity and project commitment (Chakraborty & Biswas, 2020). Effective and transparent project team communication is essential for success. Effective communication improves collaboration and speeds up dispute resolution. Team cooperation improves decision-making and project implementation when communication is flexible (Buengeler et al., 2021). Formal and informal employee appreciation motivates workers to perform well and contribute to projects. Employees are more likely to perform well when they feel appreciated. Recognition improves performance-driven organisational cultures and pushes teams to meet project goals (Badi, 2024). The investigation proves that sustainable human resource management can affect Iraqi building project performance. To improve operational efficiency and effectiveness in executing construction projects, companies should invest in training and professional development, implement work-life balance rules, encourage open and honest communication, and recognise staff contributions.

### **3. Identification of key success factors or potential obstacles**

Numerous literary sources support the findings of sustainable human resources management (HRM) in Iraq's construction industry. Abunaila (2022) studied "Motivational factors of employee retention and engagement in organisations." "Does happiness promote career success?" was another publication. Al-Aloosy, Mirvalad, and Shabakhty (2024) confirmed

the findings. Motivators help companies retain and engage employees, according to Sepahvand and Bagherzadeh Khodashahri (2021). This study found similarities in Iraqi construction companies A, B, and C's HRM methods. Gelle-Jimenez and Aguilung (2021) found that management's commitment to Human Resource Management (HRM), the creation of policies and procedures that meet employees' needs, and the organisational culture that promotes professional and personal growth are crucial. As noted in earlier studies, incentives and job satisfaction are important, and participants' official and informal recognition reflects this. KIRPIK (2020) provides a compelling perspective on happiness and job success. The study shows that employee happiness might affect career success. Comparing this discovery with the analysis of businesses A, B, and C suggests that HRM policies that promote work-life balance can boost employees' satisfaction, devotion, and career success. According to the studies, HRM in Iraq's construction sector has major success criteria and potential obstacles. Errida and Lotfi (2021) include management commitment, appropriate rules and practices, and effective communication as success factors. Many organisations struggle to use HRM strategies due to reluctance to change and cost constraints. We can strengthen our conclusions about HRM practices in the Iraqi construction industry and emphasise the importance of motivators, job satisfaction, and key success factors in sustainable HRM practices by incorporating these relevant literature references. Sustainable human resource management helps improve Iraqi building projects. Companies that prioritise employee well-being and performance see increased productivity and quality. To fully benefit from these strategies, it is necessary to overcome obstacles and execute the success elements that promote sustainable human resource management in Iraq's construction business.

### **Future Prospects for Sustainable Human Resource Management in Iraqi Construction Companies**

The growth of Iraq's building industry depends on sustainable human resource management. Companies realise the importance of human resources in their success as they improve performance and efficiency. This study discusses Iraqi construction businesses' sustainable human resource management opportunities and challenges. Through examination of participants' views, recommendations, and specific initiatives to improve human resource management sustainability, we may develop Iraq's construction business.

#### **1. Analysis of the perspectives identified by the participants**

Participants saw diverse perspectives on sustainable human resource management in Iraqi construction enterprises. They stressed the importance of improving processes and applying new tactics to boost employee well-being, engagement, and performance. Training programs tailored to the construction industry should emphasise technical and managerial skills, according to several participants. Other participants suggested adding advantages like dedicated time off or flexible work schedules to work-life balance rules. Participants also proposed prioritising internal communication to improve project team cooperation and decision-making efficiency.

## **2. Recommendations to improve sustainable human resource management**

The researcher provided recommendations to improve sustainable human resource management in Iraqi construction businesses, informed by participant perspectives and best practices in the literature.

- a) Enhance management commitment: It is imperative that corporate management demonstrates unwavering dedication to sustainable human resource management. This entails exhibiting robust leadership in employee development, acknowledging employee accomplishments, and adopting a transparent and ethical approach to personnel management.
- b) Implement specialized training programs: Companies should offer industry-specific training initiatives designed to meet the needs of the construction sector, focusing on technical proficiency, site safety, project management, and leadership skills. These programs seek to augment staff competencies and maximize their effectiveness in projects.
- c) Promote work-life balance: It is essential for organizations to implement work-life balance policies that offer benefits such as flexible work schedules, discretionary leave, and extensive employee assistance programs. This will allow employees to more efficiently manage their work-life balance, thereby improving their motivation and productivity.
- d) Foster a culture of open and transparent communication: It is essential for organizations to cultivate open and transparent communication across all management tiers and within project teams. This will promote improved collaboration, accelerated problem resolution, and more effective decision-making.

## **3. Proposal for concrete measures to further integrate sustainability into human resource management**

To enhance sustainability in human resource management, construction firms in Iraq should adopt the following measures. Establish sustainable development objectives:

- a) Organizations should define specific goals for sustainable human resource management, including reducing employee turnover, improving job satisfaction, and promoting diversity and inclusion.
- b) Quantify and assess the impact of sustainable management practices: Organizations should implement methods to measure the effect of their sustainable human resources management practices on the overall success of projects. This will facilitate the formulation of informed decisions and, if necessary, the execution of critical adjustments.
- c) Engage stakeholders: Organizations should actively involve stakeholders, including as employees, customers, suppliers, and local communities, in the implementation of sustainable human resource management practices. To ensure the effectiveness and relevance of the adopted actions, it is essential to consider their perspectives and requirements.

## **4. Importance of business and stakeholder engagement**

Successful implementation of sustainable human resource management methods in Iraq's construction sector necessitates effective cooperation from businesses and stakeholders. When companies exhibit steadfast commitment to promoting employee welfare, developing their skills, and recognizing their contributions, it fosters a positive and productive work environment. Similarly, the involvement of stakeholders, such as employees, customers,



suppliers, and local communities, ensures that sustainable management practices effectively meet the needs and expectations of all parties involved. The proficient management of sustainable human resources is a vital factor in the success of building projects in Iraq. Organizations can improve employee engagement, commitment, productivity, and overall performance by integrating sustainable practices into human resource management. Achieving success in these projects requires steadfast commitment from management and the active collaboration of all stakeholders.

## **Conclusion**

### **Summary of the main findings and articulation with the literature**

This study thoroughly analyzed the substantial influence of sustainable human resource management on the performance of construction companies in Iraq. The interviews with participants from companies A, B, and C highlighted critical issues that emphasize the importance of sustainable human resource management in Iraq's construction sector. Participants highlighted that firms implementing sustainable management techniques to attract and retain highly talented workers has a significant competitive advantage in talent acquisition and retention. These practices include the execution of professional development initiatives, the offering of attractive benefits, and the creation of a conducive work atmosphere. The results correspond with the study by Roopavathi and Kisshore (2020), which highlighted the importance of motivational factors in enhancing employee retention and engagement. Organizations that thrive in attracting and retaining highly skilled workers are better positioned to execute superior construction projects and improve their overall performance. Moreover, our research indicated that firms that emphasize employee satisfaction and well-being have elevated levels of employee engagement and productivity. Organizations that emphasize work-life balance, provide opportunities for career advancement, and recognize employee achievements foster a stimulating and energizing work environment. The findings correspond with the study by Goestjahjanti et al. (2020), which demonstrated a correlation among employee participation, work satisfaction, employee engagement, and staff productivity. Therefore, the satisfaction and well-being of employees are essential for improving the effectiveness of construction projects in Iraq. Moreover, our research demonstrates that firms utilizing flexible methods in reaction to market and regulatory changes can attain and maintain maximum performance, even amidst unforeseen circumstances. These companies promote clear communication, encourage teamwork, and emphasize agility in addressing unexpected situations. These findings correspond with Omran's (2016) research, which highlighted the positive effect of training programs on employee performance within Iraq's construction sector. Effective team and project management is essential for addressing issues and enhancing the performance of construction projects. Our research corroborated and augmented current knowledge by correlating our principal findings with the literature review. We examined the influence of sustainable human resource management on the performance of construction firms in Iraq. The studies by Roopavathi and Kisshore (2020) and Goestjahjanti et al. (2020) have provided a robust foundation for understanding the determinants of employee motivation, satisfaction, and engagement. Our research findings reveal the significant impact of these characteristics

on improving the performance of construction projects in Iraq. Aljamee and Naeem (2020) underscored the importance of training strategies in improving employee performance within the Iraqi construction sector, which corresponds with our investigation on the efficacy of team and project management. By analyzing our study's findings and contextualizing them within the existing literature, we can formulate specific suggestions for construction enterprises in Iraq. These principles aim to optimize human resources management and improve project efficiency within a dynamic economic and political environment.

### **Attracting and retaining qualified talent**

Construction companies gain advantages by using human resources management strategies that prioritize the recruitment and retention of highly skilled personnel. These methods encompass the execution of professional development programs, ongoing education, and the supply of appealing perks. By cultivating a dynamic work environment and offering prospects for professional growth, organizations can effectively allure top-tier personnel in the industry and ensure their long-term retention. The writings of Roopavathi and Kisshore (2020) highlight the significance of motivators in promoting employee retention and engagement, hence reinforcing the importance of this advice.

#### **1. Promoting employee satisfaction and well-being**

Employee satisfaction and well-being should be given special consideration. Companies derive advantages from promoting work-life balance, offering ideal working conditions, and acknowledging employees' endeavors. By cultivating a constructive and inspiring work atmosphere, firms may enhance employee involvement and efficiency. The research conducted by Aljamee and Naeem (2020) supports these findings by demonstrating a positive correlation between employee participation and both job satisfaction and productivity.

#### **2. Adopting flexible approaches to managing teams and projects**

Given the ongoing challenges and fluctuations in the market and policy landscape, construction companies are required to implement adaptable strategies for overseeing their teams and projects. Effective communication, cooperation among teams, and adaptability to unforeseen circumstances are crucial for achieving optimal performance in the face of uncertain environments. The works of Hadi, Samikon, and Rahim (2021) also emphasize the favorable impact of training tactics on employee performance in the Iraqi construction sector, so reinforcing the significance of this suggestion.

#### **3. Invest in training and skills development**

Investing in the training and skills development of personnel is advantageous for companies as it enables them to adapt to the evolving requirements of the construction sector in Iraq. These investments will enhance employees' expertise and flexibility in response to evolving work methods and upcoming technologies. Continual training ensures that personnel remain informed about the latest industry standards, leading to enhanced project performance as a whole. Alkinani's (2014) works emphasize the significance of training programs in enhancing employee performance within the Iraqi construction industry.

#### **4. Promote communication and employee engagement**

Effective and clear communication is crucial to promote cooperation and synchronization across teams engaged in distinct tasks. Companies are expected to promote employee engagement by actively engaging people in decision-making and acknowledging their contributions. Enhanced employee engagement results in heightened motivation and amplified production. Tijani, Osei-Kyei, and Feng (2022) have demonstrated that enhancing work-life balance leads to enhanced employee performance in the construction business. Our research has shown that sustainable human resource management significantly influences the performance of construction firms in Iraq. Organizations can improve their competitiveness, efficiency, and overall performance by adopting human resource management techniques that emphasize talent acquisition and retention, employee satisfaction and well-being, and efficient team and project management. The recommendations provided are based on the principal findings of our study and the insights gathered from the literature review. By employing these tactics, construction businesses in Iraq may thrive in a dynamic environment and significantly contribute to the industry's sustainable growth in the country. These guidelines provide clear direction for businesses aiming for success in the construction industry in Iraq and lay a solid foundation for future research and initiatives aimed at improving human resource management in this vital sector of the Iraqi economy.

#### **Contributions Of Research to Understanding the Influence of Sustainable Human Resource Management on The Performance of Construction Projects in Iraq**

This study offers significant insights into the influence of sustainable human resource management on the efficiency and effectiveness of construction projects in Iraq. It underscores the growing importance that construction firms are placing on sustainable human resource management, particularly regarding skill development, recognition, and the preservation of a good work-life balance. Moreover, it highlights the significant relationship between sustainable human resource management practices and project performance. Organizations that invest in developing employee abilities, recognize their accomplishments, and cultivate a positive work environment typically attain greater results in their pursuits. This research highlights the challenges that construction firms may face in adopting sustainable human resource management practices, such as resistance to change and inadequate resources. This enables firms to identify potential obstacles and encourages them to adopt effective strategies to overcome them.

#### **Limitations Of the Study and Future Prospects**

It is essential to acknowledge the constraints of this investigation. The limited number of companies and participants inhibits the ability to generalize the findings. To obtain more representative results, it would be beneficial to increase the sample size by incorporating a larger number of construction firms in Iraq. This study focused on the application of sustainable human resource management practices inside construction companies in Iraq. Future investigations could improve the analysis by examining supplementary variables that influence project performance, including economic, political, and environmental factors. This study neglects to account for cultural variances and regional specificities that may

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influence human resource management practices in the construction sector in Iraq. Future investigations should therefore explore these aspects to improve understanding of regional dynamics. This study, despite its limits, provides useful insights into the importance of sustainable human resource management in Iraq's construction business. It also establishes a foundation for future study to improve our understanding of the critical relationship between human resource management practices and project performance.

## **References**

1. Abunaila, A. S. H. (2022). Improve the competitive advantage through human resources management practices in the Iraqi Banking sector. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 7(6), 9.
2. Akinbaleye, K. O. (2021). *Agile Methodology Implementation Toward Project Delivery and Employee Performance in the Workplace: S Qualitative Study* (Doctoral dissertation, Northcentral University).
3. Al Aina, R., & Atan, T. (2020). The impact of implementing talent management practices on sustainable organizational performance. *Sustainability*, 12(20), 8372.
4. Al-Aloosy, K. F. Q., Mirvalad, S., & Shabakhty, N. (2024). Evaluating the impact of internet communication quality in human resource management on the productivity of construction projects. *Heliyon*, 10(7).
5. Al-Frijawy, J., Militaru, C., & Tonoiu, S. (2019). Planning Human Resources Management, Development and Training of Staff, and Their Impact on Organizational Performance, in the Iraq Oil Companies Sector. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 55(1), 121-138.
6. Aljamee, H. K., & Naeem, S. M. (2020, March). The benefits of applying project management methodology on project delay: A study in construction projects in Iraq. In *IOP Conference Series: Materials Science and Engineering* (Vol. 745, No. 1, p. 012155). IOP Publishing.
7. Alkinani, H. (2014). *Models of training needs assessment for the Iraqi construction industry*. University of Salford (United Kingdom).
8. Al-Tamimi, S. A., & Al Anssari, M. A. (2022). Implementation of the comprehensive management control system package to enhance the overall control system effectiveness in IRAQI industrial sector companies. *International Journal of eBusiness and eGovernment Studies*, 14(3), 61-75.
9. Amrutha, V. N., & Geetha, S. N. (2020). A systematic review on green human resource management: Implications for social sustainability. *Journal of Cleaner production*, 247, 119131.
10. Ataro, G. (2020). Methods, methodological challenges and lesson learned from phenomenological study about OSCE experience: Overview of paradigm-driven qualitative approach in medical education. *Annals of Medicine and Surgery*, 49, 19-23.
11. Badi, S. (2024). Relationship between organisational culture and collective coping strategies in project teams: an exploratory quantitative study in the UAE construction industry. *International Journal of Productivity and Performance Management*, 73(3), 794-816.

12. Bolt, E. E. T., Winterton, J., & Cafferkey, K. (2022). A century of labour turnover research: A systematic literature review. *International Journal of Management Reviews*, 24(4), 555-576.
13. Buchanan, M. C. (2021). A Qualitative Exploration of Ways Generation Z Is Influencing Corporate Culture around Employee Lifecycle Management (Doctoral dissertation, University of Colorado Colorado Springs).
14. Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G. J., Beltran, J. R., ... & Varma, A. (2023). Human resource management in the age of generative artificial intelligence: Perspectives and research directions on ChatGPT. *Human Resource Management Journal*, 33(3), 606-659.
15. Buengeler, C., Situmeang, F. B., van Eerde, W., & Wijnberg, N. M. (2021). Fluidity in project management teams across projects. *International Journal of Project Management*, 39(3), 282-294.
16. Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., ... & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, 25(8), 652-661.
17. Casteel, A., & Bridier, N. L. (2021). Describing Populations And Samples In Doctoral Student Research. *International Journal of Doctoral Studies*, 16(1).
18. Chakraborty, D., & Biswas, W. (2020). Articulating the value of human resource planning (HRP) activities in augmenting organizational performance toward a sustained competitive firm. *Journal of Asia Business Studies*, 14(1), 62-90.
19. Chakraborty, D., & Biswas, W. (2020). Articulating the value of human resource planning (HRP) activities in augmenting organizational performance toward a sustained competitive firm. *Journal of Asia Business Studies*, 14(1), 62-90.
20. Cooksey, R. W. (2020). *Illustrating statistical procedures: Finding meaning in quantitative data*. Springer Nature.
21. Errida, A., & Lotfi, B. (2021). The determinants of organizational change management success: Literature review and case study. *International Journal of Engineering Business Management*, 13, 18479790211016273.
22. Fadhil, G. A., & Burhan, A. M. (2021). Investigating the effects of economic crisis on construction projects in Iraq. In *E3S Web of Conferences* (Vol. 318, p. 02005). EDP Sciences.
23. Fallah Shayan, N., Mohabbati-Kalejahi, N., Alavi, S., & Zahed, M. A. (2022). Sustainable development goals (SDGs) as a framework for corporate social responsibility (CSR). *Sustainability*, 14(3), 1222.
24. Gamil, Y., & Abd Rahman, I. (2023). Studying the relationship between causes and effects of poor communication in construction projects using PLS-SEM approach. *Journal of Facilities Management*, 21(1), 102-148.
25. Gara, G. L., & La Porte, J. M. (2020). Processes of building trust in organizations: internal communication, management, and recruiting. *Church, Communication and Culture*, 5(3), 298-319.



26. Gelle-Jimenez, M., & Aguilung, H. M. (2021). Leveraging human resources management (HRM) practices toward congruence of values. *International Journal of Research in Business and Social Science (2147-4478)*, 10(1), 85-94.
27. Goestjahjanti, S. F., Novitasari, D., Hutagalung, D., Asbari, M., & Supono, J. (2020). Impact of talent management, authentic leadership and employee engagement on job satisfaction: Evidence from south east asian industries. *Journal of Critical Reviews*, 7(19), 67-88.
28. Hadi, Z., Samikon, S. A., & Rahim, F. N. A. (2021). Enhancement of The Current Iraqi Construction Industry Performance (Time and Cost) By Building Information Modeling (BIM) Utilization. *Des. Eng*, 4, 1330-1358.
29. Hall, R. P. (2020). Mixing methods in social research: qualitative, quantitative and combined methods.
30. Harrell, M. C., & Bradley, M. (2009). Data collection methods: Semi-structured interviews and focus groups.
31. Hasan, R. A. (2023). The consequences of economic terrorism on the Iraqi political and security system after 2014. *The Scientific Review of the Iraqi Counter Terrorism Service*, 3(5).
32. Hatem, Z., Alsamarraie, M., Flaih, A., & Oda, A. (2021). Barriers to the adoption of industrialized building system in Iraqi construction industry. *Zanco Journal of Pure and Applied Sciences*, 33(3), 30-42.
33. Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.
34. Kanan, M., Taha, B., Saleh, Y., Alsayed, M., Assaf, R., Ben Hassen, M., ... & Tunsi, W. (2023). Green innovation as a mediator between green human resource management practices and sustainable performance in Palestinian manufacturing industries. *Sustainability*, 15(2), 1077.
35. Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical teacher*, 42(8), 846-854.
36. Kimpimäki, J. P. (2023). From observation to insight: Computational abduction and its applications in sustainable strategy research.
37. Kirpik, G. (2020). The concept of employee's happiness in human resources management: A systematic literature review. *Business & Management Studies: An International Journal*, 8(3), 2750-2775.
38. Kotera, Y., Green, P., & Sheffield, D. (2020). Work-life balance of UK construction workers: Relationship with mental health. *Construction management and economics*, 38(3), 291-303.
39. Kurdi, B., & Alshurideh, M. (2020). Employee retention and organizational performance: Evidence from banking industry. *Management Science Letters*, 10(16), 3981-3990.
40. Levitt, H. M. (2021). Qualitative generalization, not to the population but to the phenomenon: Reconceptualizing variation in qualitative research. *Qualitative Psychology*, 8(1), 95.
41. Madhavkumar, V. (2023). Human resource management practices as determinants of organizational performance. *Productivity*, 63(4), 465-477.
42. Mahapatro, B. (2021). *Human resource management*. New Age International (P) ltd..

43. Mezmir, E. A. (2020). Qualitative data analysis: An overview of data reduction, data display, and interpretation. *Research on humanities and social sciences*, 10(21), 15-27.
44. Minbaeva, D. B., & Navrbjerg, S. E. (2023). Strategic human resource management in the context of environmental crises: A COVID-19 test. *Human Resource Management*, 62(6), 811-832.
45. Morgan, D. L., & Nica, A. (2020). Iterative thematic inquiry: A new method for analyzing qualitative data. *International Journal of Qualitative Methods*, 19, 1609406920955118.
46. Mukhuty, S., Upadhyay, A., & Rothwell, H. (2022). Strategic sustainable development of Industry 4.0 through the lens of social responsibility: The role of human resource practices. *Business Strategy and the Environment*, 31(5), 2068-2081.
47. Naz, S., Li, C., Nisar, Q. A., Khan, M. A. S., Ahmad, N., & Anwar, F. (2020). A study in the relationship between supportive work environment and employee retention: Role of organizational commitment and person–organization fit as mediators. *Sage Open*, 10(2), 2158244020924694.
48. Nilsen, P. (2020). Making sense of implementation theories, models, and frameworks. *Implementation Science* 3.0, 53-79.
49. Pandey, P., & Pandey, M. M. (2021). Research methodology tools and techniques. Bridge Center.
50. Piwowar-Sulej, K. (2021). Human resources development as an element of sustainable HRM—with the focus on production engineers. *Journal of cleaner production*, 278, 124008.
51. Proudfoot, K. (2023). Inductive/deductive hybrid thematic analysis in mixed methods research. *Journal of Mixed Methods Research*, 17(3), 308-326.
52. Rahman, M. M., Tabash, M. I., Salamzadeh, A., Abdul, S., & Rahaman, M. S. (2022). Sampling techniques (probability) for quantitative social science researchers: a conceptual guidelines with examples. *Seeu Review*, 17(1), 42-51.
53. Rizzo, H. (2019). Reward and Recognition Strategies to Improve Employee Engagement. Carlow University.
54. Roberts, R. E. (2020). Qualitative Interview Questions: Guidance for Novice Researchers. *Qualitative Report*, 25(9).
55. Roopavathi, S., & Kisshore, K. (2020). Motivational factors of employee retention and engagement in organization. *Journal of Information and Computational Science*, 10(2), 1080-1085.
56. Rowen, D., Mukuria, C., Bray, N., Carlton, J., Longworth, L., Meads, D., ... & Yang, Y. (2022). Assessing the comparative feasibility, acceptability and equivalence of videoconference interviews and face-to-face interviews using the time trade-off technique. *Social Science & Medicine*, 309, 115227.
57. Ruslin, R., Mashuri, S., Rasak, M. S. A., Alhabsyi, F., & Syam, H. (2022). Semi-structured Interview: A methodological reflection on the development of a qualitative research instrument in educational studies. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(1), 22-29.
58. Salas-Vallina, A., Alegre, J., & López-Cabrales, Á. (2021). The challenge of increasing employees' well-being and performance: How human resource management practices

- 
- and engaging leadership work together toward reaching this goal. *Human Resource Management*, 60(3), 333-347.
59. Saleem, M. S., Isha, A. S. N., Yusop, Y. M., Awan, M. I., & Naji, G. M. A. (2022). The role of psychological capital and work engagement in enhancing construction workers' safety behavior. *Frontiers in public health*, 10, 810145.
  60. Semenova, T., & Al-Dirawi, A. (2022). Economic Development of the Iraqi Gas Sector in Conjunction with the Oil Industry. *Energies*, 15(7), 2306.
  61. Sepahvand, R., & Bagherzadeh Khodashahri, R. (2021). Strategic human resource management practices and employee retention: A study of the moderating role of job engagement. *Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies)*, 14(2), 437-468.
  62. Shaukat, M. B., Latif, K. F., Sajjad, A., & Eweje, G. (2022). Revisiting the relationship between sustainable project management and project success: The moderating role of stakeholder engagement and team building. *Sustainable Development*, 30(1), 58-75.
  63. Sitko, R. (2023). *Sustainable Human Resource Management: Using HRM to achieve long-term social, environmental and business goals*. Kogan Page Publishers.
  64. Stahl, G. K., Brewster, C. J., Collings, D. G., & Hajro, A. (2020). Enhancing the role of human resource management in corporate sustainability and social responsibility: A multi-stakeholder, multidimensional approach to HRM. *Human Resource Management Review*, 30(3), 100708.
  65. Stephens, R. G., Dunn, J. C., Hayes, B. K., & Kalish, M. L. (2020). A test of two processes: The effect of training on deductive and inductive reasoning. *Cognition*, 199, 104223.
  66. Tijani, B., Osei-Kyei, R., & Feng, Y. (2022). A review of work-life balance in the construction industry. *International Journal of Construction Management*, 22(14), 2671-2686.
  67. Waheeb, R. A., & Andersen, B. S. (2022). Causes of problems in post-disaster emergency re-construction projects—Iraq as a case study. *Public Works Management & Policy*, 27(1), 61-97.
  68. Wiltshire, G., & Ronkainen, N. (2021). A realist approach to thematic analysis: making sense of qualitative data through experiential, inferential and dispositional themes. *Journal of Critical Realism*, 20(2), 159-180.
  69. Wojtaszczyk, K., Różańska-Bińczyk, I., & Syper-Jędrzejak, M. (2024). Human resource management: A link between sustainable development and sustainable lifestyles. Traditional and systematic review. *Sustainable Development*.
  70. Won, D., Hwang, B. G., & Chng, S. J. (2021). Assessing the effects of workforce diversity on project productivity performance for sustainable workplace in the construction industry. *Sustainable Development*, 29(2), 398-418.
  71. Yu, J., & Wu, Y. (2021). The impact of enforced working from home on employee job satisfaction during COVID-19: An event system perspective. *International journal of environmental research and public health*, 18(24), 13207.