THE IMPACT OF HUMAN RELATIONS

ON THE PERFORMANCE OF CONSTRUCTION WORKERS

BY

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DECLARATION

I, Ojo Emmanuel Olakunle, hereby declare that this research work titled "Impact of Human Relations on The Performance of Construction Workers" is the result of my research and it has not been submitted to another higher institution for the reward of a degree. All opinions and views of other researchers quoted have been duly recognized and acknowledged in the text.

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CERTIFICATION

This is to certify that this research was carried out by OJO EMMANUEL OLAKUNLE with matriculation number 17CB023085 and is approved in partial fulfilment of the requirement for the award of bachelor of science (B.Sc. Hons) degree in Building Technology of the Department of Building Technology, College of Science and Technology, Covenant University, Ota, Ogun State under my supervision

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EXTERNAL EXAMINER _____

Signature & Date

DEDICATION

Firstly, I dedicate this research work to God Almighty by whose power I was kept and preserved throughout the course of this project.

To my parents Dr. Olusegun Edward Ojo and Mrs. Oluwafunmilayo Ojo for the love and never-ending support they have shown all through my life.

I also want to dedicate this research work to my pastor; John Oluwadare for his ceaseless prayers, spot on counsel and labour of love over me.

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ABSTRACT

Communication is a fundamental part of a construction project. Like any fundamental piece, it must be done in an effective way to ensure the success of the project. Due to the development of information and communication technologies (ICTs) in the world and its implementation in Nigeria, there has been improvement in communication but still not big enough to affect the country's construction industry on a bigger scale. When modern communication tools are involved in the communication processes, they help improve teamwork and lead to better and more efficient collaboration in the project. Given its significance, this research aims to investigate how these communication technologies are being used in Nigeria's construction sector. To do this, it would be necessary to assess the efficiency of the communication channels now in use in the Nigerian construction sector. This thesis, therefore, has a main objective to examine ways to improve the utilization of communication tools in the Nigerian Construction Industry. The thesis will answer the following questions: What are the communication tools primarily used in the Nigerian construction industry? Which factors influence the choice of communications tools utilized in the Nigerian construction industry? How are these issues resolved, and what procedures and resources are used? What can be done to make the construction business in Nigeria better at using communication tools? To solve these questions, research was carried out in two parts. The first section examined the body of knowledge about communication techniques used in the Nigerian construction sector. The second half made use of a cross-sectional survey study methodology, and 84 construction professionals in the Federal Capital Territory who use or have used any kind of communication technology were given a questionnaire. The dataset was analyzed using SPSS v.23, and statistical tools including mean score test, percentages, frequencies, and one-way analysis of variance (ANOVA) test were used. The results of the thesis show that voice calls over landline and cell phones, in-person meetings, and drawings (for architectural, structural, mechanical, electrical, and services were the most frequently used communication tools in the Nigerian construction industry. The poll also reveals that the most crucial elements influencing the communication method choice The study also showed that the most prevailing benefit associated from utilizing the communication tools would be an increase in worker productivity and efficiency, Real time collaboration between different stakeholders, and establishes clear line of communication. Lastly, the study showed that the construction professionals believed that making communication clear, concise, and timely, establishing a formal communication chain, and selecting the right platform and appropriate method of communication were the most effective ways of improving the utilization of communication tools used during the construction process.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The success of a construction project depends largely on the performance of its work force (Saraf, 2013) and for every organization's efficient outcome, the workforce is an asset of inestimable value; this is especially true in labour-intensive industries like the construction industry. However, it has long been observed that the human workforce in an organization is also the most difficult resource to manage when compared to any other resources required for the successful completion of a project. Human relations refers to how people engage with one another on a daily basis, as well as how they deal with their requirements in their immediate surroundings, which could include a sector/industry, an organization, corporation, association, or group, among other things. (Arthur-Aidoo, 2015)

It's cliché to mention that the construction business has long been seen as one that requires a lot of labor. This type of manufacturing is characterized by massive size, open job sites, and substantial process fragmentation. As a result, the construction industry has long been viewed as a "very inefficient" industry (Dacy,1965). Due to the industry's relatively subpar productivity growth as compared to other sectors like manufacturing, clients and decision-makers are worried about its performance. This industry's production is heavily reliant on its employees' performance throughout the course of their employment.

Workers, who do the labor for an organization, may significantly affect a business's or the construction industry's profitability. In light of this, businesses should give their employees greater respect and put more emphasis on internal interpersonal ties. (Oasama 1995). According to research, employees who have a feeling of loyalty to their organizations and have

great connections with both their coworkers and superiors perform better. Therefore, productive human resource management would increase the output of construction workers Human behavior is crucial and difficult to control. Dealing with people requires situational leadership, as opposed to technical solutions, which include entering data into different equations to handle certain situations. (Osama 1995)

Poor performance cannot be resolved or eliminated by engineering control alone. Employees must also be aware of engineering controls to lessen their effects, and human relations techniques will bring about this understanding. Human personality may have a large positive impact on job performance in an organizational context since people each have their own ideas, attitudes, and qualities. If managed incorrectly, they may substantially impede organizational growth and jeopardize a company's sustainability. (Arthur-Aidoo, 2015).

Since its relatively recent invention in the 1920s by Elton Mayo and his associates—commonly referred to as the Mayo group in human relations literature—the "human relations" technique, which was originally created in the industrial setting, has penetrated far-reaching horizons. In what started as an illumination experiment and ended up being "the most extensive and influential study ever conducted in industry," Elton Mayo, who is frequently referred to as the "Father of the Human Relations" approach, led a team of men at the Chicago-based Hawthorne plant of the Western Electric Company. The findings usually showed that men are social creatures with both social and material demands, as opposed to typically individualistic and materialistic individuals. (Korajczyk and Korajczyk 1961)

Throughout history, countries' construction sectors have been deeply worried about poor productivity due to poor performance of workers. Poor performance of craftsman is one of the most difficult challenges that construction businesses, particularly those in developing nations, encounter. (Alinaitwe, 2007). The building industry is crucial to every country's development.

The pace of a country's economic expansion can be measured in a variety of ways, including physical infrastructure such as buildings, roads, and bridges. Without a question, how well construction employees perform has a big impact on how well projects are completed, how well the sector as a whole does, and ultimately how well a country does. Conclusively we can say the performance of construction workers is directly tied to human relation practices. The purpose of this research study is to analyze and offer a thorough evaluation of the impacts of human relations practices on the performance of construction employees in project delivery.

1.2 STATEMENT OF RESEARCH PROBLEM

Human behaviour has caused several conglomerate and project crises in the construction industry, and it appears that human relations practices have the ability to reduce poor performance of construction workers in the construction industry than any other management strategy.(Ifediora, 2020) Humans are nearly indispensable in the whole building process from start to end; if humans are such an important part of the overall construction industry and its integrated processes, they must be given the attention they require to guarantee that they complete all tasks.

Human relations involve communication between humans back and forth, inaccurate information is a negative effect of the project team's lack of communication skills. Because the construction sector is made up of people from various professional and cultural backgrounds. As a result, efficient communication is critical for the project engineer and construction workers to create a positive connection. To attain their objectives, all parties participating in the building project must be coordinated, both their abilities and efforts. Effective communication implies a well-coordinated procedure based on correct data throughout all phases of the project due to proper human relation practices. This would in turn greatly influence project success. (Othman, 2018)

Poor human relations practices are a widespread issue in construction projects, and the consequences cannot be overstated because they have an impact on project success. A lack of communication between construction workers and employees causes several problems in the construction sector. Negative effects on construction employees' performance and crucial project performance factors including scheduling, money, and quality have been related to poor human relations practices. Reworks are commonly required owing to poor construction worker performance as a result of bad human relations practices.(Othman, 2018) Through this research it is important to find solutions to these problems, by the application of human relation practices in regard to construction workers.

1.3 RESEARCH QUESTIONS

1. What human relation practices can be applied/employed to help construction workers perform better?
2. What factors contribute to poor human relations practices in Nigerian construction industry?
3. What effects does human relations have on construction employee's performance?
4. What strategies can be adopted to see to the improvement of human relations amongst construction workers?

1.4 AIM AND OBJECTIVES

This study's objective is to assess how human interactions affect construction employees' productivity in order to raise their efficiency in completing projects.

1. To examine the human relations practices used on construction sites.
2. To identify the factors contributing to poor human relations on a building site.
3. To evaluate the human relations' effect on construction employees' performance.

4. To examine the ways to make improvements human relations of building site employees.

1.5 SIGNIFICANCE OF THE STUDY

Corporate success requires maintaining positive employee interactions. Therefore, effective employee relationships are necessary for both high production and human satisfaction.

The purpose of this study is to clarify the necessity of human relations practices in the Nigerian construction industry. The study's findings will inform all construction personnel, including builders and workers, about the critical role that human relations play throughout the entire construction process.

Arthur-Aidoo's (2015) emphasized that human relations are concerned with preventing and addressing difficulties with individuals that may develop out of or impact work. A healthy and safe work environment is essential for developing strong human relationships. The single most important component of creating any work environment is the strategy that links all employees and managers with several channels of communication. Good communication is often referred to be a necessary component of healthy human relationships. Fitting individuals into work conditions in order to inspire them to work together happily is an example of a healthy human interaction. Fitting together should improve corporate effectiveness while also bringing employees financial, psychological, and social fulfillment. Human relations is the study of how our beliefs, attitudes, and behaviors may cause interpersonal conflict in both our personal and professional life. It encompasses all interactions between people, including arguments, cooperative activities, and group relationships. Integration is also facilitated through human relationships in a workplace. This is characterized as the coming together of people from many ethnic origins, groups, and affiliations to work cooperatively and efficiently while using

financial and psychological tools, such as social pleasure, and the philosophy of motivation in the workplace. (Arthur-Aidoo, 2015)

Humans are more than the egoistic, utilitarian economic animals of conventional economics; instead, they have other, (high-level) psycho-social needs, and their social relationships at work play a significant role in their productivity, according to Elton Mayo, sometimes referred to as the "Father of Human Relations," and his collaborators. (Bruce, 2011) Due to the high level of performance of construction employees, the research and use of effective human relations techniques will further lead to projects being completed at a quicker pace in the construction sector while preserving quality.

1.6 SCOPE AND LIMITATION OF THE STUDY

This study concentrates on the relationships between construction workers, site engineers and other stakeholders, as well as how it might promote greater job performance on the part of construction employees throughout the project delivery process. This research will be conducted in one of Nigeria's main cities, where inept supervisors, absenteeism, poor communication, teaching time, and inspection delays have been identified as some of the most important issues influencing construction workers' performance. Lagos, located in the south west area of Nigeria, is known as the country's most industrialized state. Lagos State is chosen due to the high number of ongoing and completed construction projects. The study location has a lot of construction firms registered within the state and has a high exposure to the practice of human relations. Due to the survey aspect of this research, questionnaires will be used on several locations with construction experts.

Some limitations of the research include: Time constraints, Illiteracy of construction workers, Egocentric engineers on site, Poor transportation routes in city, Poor traffic conditions in city, High level of insecurity in city, High cost of printing questionnaires.

1.7 DEFINITION OF KEY TERMS

Some of the keywords used in this study require definition and clarification for this work to be easily understood. These terms include:

- **Human relations:** Human relations (HR) is concerned with how individuals integrate in a work-like setting. Later, establishes a work group (team) with a purpose and works to efficiently accomplish specific objectives.
- **Human relation:** Human relations refer to a person's association or bond with another person. It describes the connections or relationships between two men or women.
- **Construction Workers:** Construction personnel (also known as construction labourers). They supervise a range of on-site tasks include garbage removal, scaffolding construction, loading and unloading building materials, and helping with heavy equipment operation. They carry out a range of tasks on construction sites as part of a team, many of which require physical labor.
- **Impact:** The influence or effect of one person or object on another.
- **Performance:** The manner in which someone or something functions or operates.
- **Communication:** The exchange of information for the purpose of improving understanding is referred to as communication. It may be done orally, in writing, visually, or in a nonverbal manner.

Key words: Human relations, Human relation, Impact, Construction Workers, Performance, Communication.

CHAPTER TWO

LITERATURE REVIEW

2.1 PREAMBLE

The existing literature is reviewed in this chapter and may be found in books, journals, conference proceedings, and other online or offline sources. An overview of the Nigerian building sector might be found in the literature. human relations within the industry, practices of human relations on construction sites within the industry, factors causing poor human relations on construction sites within the industry, the impact of human relations on construction workers' performance and safety within the industry, and strategic.

Human relations can be defined as an environments that are cordial within a system in which people are respectful of one another's needs, perspectives, values, and personalities in all communication, action, interaction, and transaction in order to improve motivation and morale at all levels of an organization, as reported by (Chand, S., 2014). Every company must have a goal, whether it is to manufacture things or to provide services. This might be for profit or for a good cause. An organization must have the required production components to generate goods and services. The human resource is the most important factor in production. Careful management of this asset is critical to the company's success. (Dessler, 2008).

Human relations investigate the numerous facets of how individuals interact at work. Human relations, then, refers to how workers engage with one another as well as with their employers. This type of engagement might be official or informal. It involves every facet of management, such as labor relations, participation and engagement within the workforce, employee communications, and workplace politics. Strong (2008) The purpose of this study is to ascertain how much interpersonal interactions have an impact on worker performance in the construction industry.

2.2 OVERVIEW OF THE NIGERIAN CONSTRUCTION INDUSTRY

In a lot of developing countries, construction is one of the primary industries, and it's important since it sets the stage for future economic growth (Ebekozien, 2020). It is customary to refer to an economy's "physical infrastructure sector" as its "organizational backbone" (Jallow, Renukappa, & Suresh, 2020). Due to its role in wealth generation, maintaining social order, and providing a structural support system for economic activity, the construction sector is a vital part of our daily life. (Weber & Alfen, 2016).

The development of our country's economy depends heavily on the building sector. The physical foundations that are strengthened by development activities include, for example, roads, dams, irrigation systems, schools, and other such structures. Usually, the formation of gross fixed capital is divided by the output of building by around 50 percent. The construction sector will contribute almost 4% of our nation's GDP in 2022, according to current estimates. (G.D.P).

The national bureau of statistics conducted a brief evaluation of the Nigerian construction industry, which revealed that organized building in Nigeria started in the early 1940s with a few foreign enterprises. This information comes from a report that was carried out by the bureau. Since that time, foreign companies have held a dominant position in the industry, particularly throughout the 1960s and 1970s, thereby providing the government with revenue and the people with employment opportunities. On the other hand, these occurrences have been known to have some negative side effects, such as the fact that the majority of corporations, if not all of them, have been known to import resources and even skilled workers, as opposed to employing locally sourced materials and promoting local content.

The contemporary building business was born out of the needs of the people in our nation. These demands included making it necessary for people to have a place to live, overcoming

barriers, using energy, creating public places, and safeguarding people from natural catastrophes. The basic requirements of people have not altered throughout time, despite the complexity of the techniques that the designer and contractor use to carry out their work. We are now able to go further, climb farther, and move heavier loads than ever before because to developments in design and material technology.

The construction sector in Nigeria has been a key source of employment for 70 percent of the country's workforce, therefore it has a tight grip on capital and labour resources, which has cost consequences. The proper management of these resources is a critical part of every project; it impacts the overall success of the project to a considerable extent. The Nigerian construction industry is currently facing poor worker performance and project delivery challenges; the sector is plagued by insufficiently skilled workers, a lack of advanced technology knowledge, and insufficient productivity growth (Bogue, 2018), all of which contribute to the country's GDP decline. The available records of project failure in building and infrastructure construction projects demonstrate the magnitude of this performance difficulty.

According to Gann (2000), building contributes around 7% of the GDP in most OECD nations, up to 12–14% in Japan and Korea, while in developing nations (according to Dharwadker 1979), investments in construction projects might account for up to 50%–60% of national budgets. In the 1980s, the construction sector in Nigeria contributed the majority of the country's GDP, or around 70% of the GDP (Planning Committee on the National Construction Policy, 1989). Due to this, the sector became very important to Nigeria's development efforts. But sadly, throughout the years, the sector has been plagued by a mix of low demand, persistently low production, and subpar performance. (Olomolaiye, 1987; Aniekwu, 1995; Okuwoga, 1998; Adeyemi et al.; 2005).

As a result, it made up only 1% of the GDP in the country's economy in 2002 (AfDB/OECD, 2004). An organized official sector and an unorganized informal sector make up the industry. Foreign and domestic businesses that operate in the formal sector are divided into small, medium, and large size organizations based on their degree of capitalization and yearly revenue. The few huge corporations, the most of which are foreign, dominate around 95% of the construction industry, leaving the small enterprises with just a 5% market share. These few large firms account for about 5% of all contractors in the formal sector.

In most developing nations, construction projects perform poorly. This underperformance may be attributed to the underuse of project management best practices, project performance indicators, and essential success variables, which together make up the multivariate that affects construction projects. By extension, this also involves a lack of comprehension of the connections between these multivariate variables, even if they may not be immediately apparent. Additionally, (Chen et al. 2012) noted that the majority of these factors are interrelated and impact one another, making it crucial to comprehend the dynamics of these interactions for efficient management, resource allocation, and control.

The Nigerian construction industry has grown and expanded over the years due to increased demand for real estate and housing, the need for infrastructure to accommodate a growing population, and the necessity of opening up towns and communities to facilitate interstate and interregional trade and transportation. This allowed even tiny local enterprises to engage, albeit in a limited manner, in the development of commercial and non-commercial real estate.

There is little question that the operational environment in Nigeria is subject to significant limitations from a political and policy perspective. In recent years, the building industry in Nigeria has been through both boom-and-bust phases. It should not come as a surprise, taking into account the significant part played by government spending, that the trajectory of the

industry has paralleled that of the federal government. It's likely that these developments are the result of policy, the economy, and, most recently, the infrastructure plan that the government has been working on.

Additionally, a review of the past 10 years showed that, due directly to poor performance, customer satisfaction with the developed facilities has been declining. The Nigerian construction sector is also plagued by ongoing problems with schedule and expense overruns. In order to improve the quality of construction processes and the level of client satisfaction that results from them, the industry has had to drastically change its practices. To do this, a methodology for assessing the quality performance of the contractors has been developed in order to help construction clients choose quality-oriented businesses that will provide higher-quality services and products within budget and on schedule. In order to increase the caliber of construction processes and the degree of customer pleasure that results there, this has forced a fundamental shift in industry practice.

The actual growth rate of the construction industry in the second quarter of 2020 was recorded at -31.77 percent (year on year), which is lower by -32.43 percent points than the rate that was recorded the year before. The data was gathered from the National Bureau of Statistics. Its contribution to the total real GDP in the second quarter of 2020 was 3.23 percent, which was lower than its contribution of 4.45 percent in the same quarter of the year before and lower than its contribution in the most recent quarter, which was 4.08 percent. The effects of the Covid-19 Pandemic all over the world could be attributed to the precipitous decline. These effects included global lockdowns, which brought most or even all construction work to a halt. This resulted in indefinite delays in the project completions and put small construction companies out of business. Despite the fact that data from the National Bureau of Statistics have shown a rapid return in growth rate of the construction sector and an increase in its contribution to the

real GDP from the same quarter of the previous year from 4.08 percent to 4.12 percent, the growth rate of the construction sector has been slowing down recently.

It is believed that the next decade or two would be crucial to the development of Nigeria's infrastructure. We emphasize the accomplishments that have been meticulously recorded throughout time. One of them is the notable growth in domestic cement manufacturing output, which has reduced imports of cement to around 30% of total consumption in 2010 (from 72 percent in 2005) as well as the planned initiatives that are currently being carried out to further boost regional production capacity (Dangote cement and Lafarge). The increase in cement production is a sign of "better days ahead" for the building industry, which has traditionally been hampered by high material costs from imports (cements and steel in particular). This is because of the local construction industry's history of being plagued by high material prices from importation.

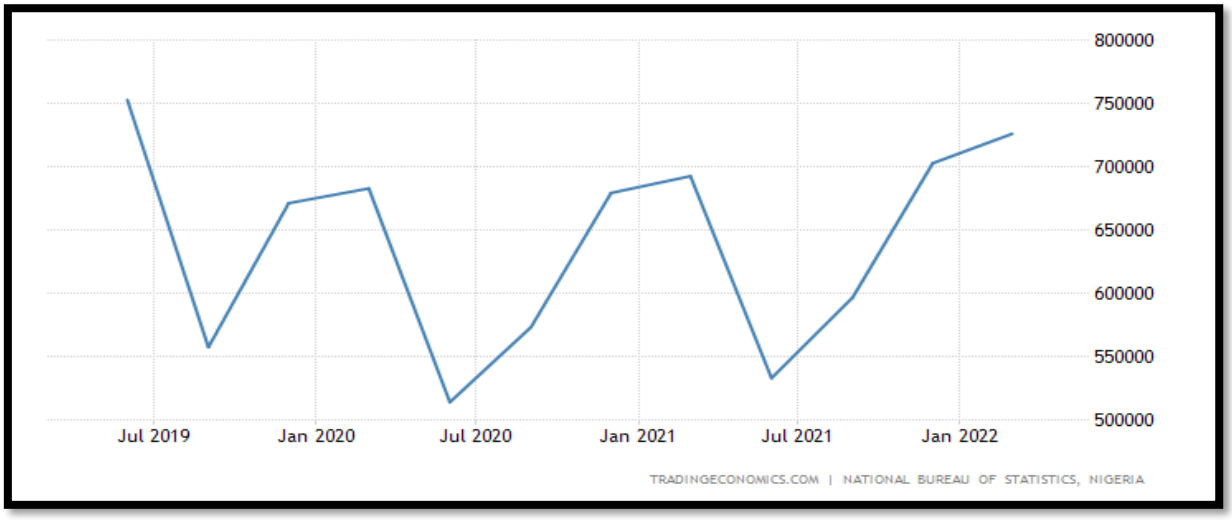

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Figure 2. 1: Nigeria GDP from Construction

Source: National Bureau of Statistics, Nigeria

Second, our confidence is bolstered by the fast-growing attention that has been paid to public-private partnerships (PPPs) during the last five years. Examples of projects that are opening up major new opportunities for building work in Nigeria include the Lekki Free Trade Zone and Eko Atlantic City. At the very least, the idea of creating an artificial island in Nigeria ten years ago would have been inconceivable to most people. Despite the fact that we acknowledge that the bottlenecks are still there, we believe that over the course of the next decade or so, Nigeria's construction industry will have access to a number of promising new prospects. As a result, we place an emphasis on the solid potential that the construction industry offers over the long run

2.3 HUMAN RELATIONS IN THE CONSTRUCTION INDUSTRY

The interaction of persons, in particular in a business context, is what is meant to be understood when referring to human relations. It is a fundamental component of one's professional success and relates to the manner in which individuals are dealt with while on the job. The human relations theory is seen as a systematic procedure whose goal is to assist workers in behaving appropriately so that at the end of the day, both the employees and the company are obvious winners. The theory's name comes from the fact that its goal is to assist workers in behaving appropriately.

One of the most distinctive features of the construction business is that it is a sector that significantly depends on the contribution of human labor. The workers are a crucial component in the building process. As a result, efficient resource allocation, higher individual productivity, and enhanced interpersonal relationships may all contribute to performance and productivity gains in the construction industry. Human relations in the workplace go beyond only fostering connections between co-workers to also promote extraneous factors that boost performance and efficiency. A corporation must have a strong relationship with its employees if it wants to succeed in this competitive environment. The management of the firm serves as a

representative of it and works hard to forge enduring bonds with its staff. The most valuable resource for the business is its workforce. (Oasama 1995)

To improve relations, it is necessary to meet the needs of each employee, to make available chances for training, and to find solutions to problems that arise in order to boost employee morale and establish a cohesive culture in the workplace. It is essential for a business to cultivate relationship skills since doing so helps the business attain better levels of efficiency and productivity. Personal qualities such as self-esteem, attitude, and traits are intricately connected to an individual's skills. Conceptual abilities, counseling skills, negotiation skills, decision-making skills, communication skills, leadership skills, organizational skills, the ability to multitask, conflict management abilities, and problem-solving abilities are all examples of human relations talents. (Alinaitwe, 2007).

In the context of the construction industry, human management is seen as the industry's backbone, and human relations are an essential component of human resource management (HRM). One of the most important aspects of the Construction industry is the fact that it is considered to be a labour-intensive industry. This is due to the significant and crucial roles that labor performs throughout the construction process. This was supported by Moselhi and Khan (2010), who claimed that the efficient execution of engineering, procurement, and construction projects depends greatly on labor productivity.

The construction business has been described as a fragmented sector, in which different types of workers (both skilled and unskilled) are gathered together to do a specific function as part of a team. These workers, working together in a group or team, establish a standard unit, and the productivity of the company is impacted by their behaviour and conduct. Because of this, the interpersonal relationships between an employer and their employees have a big influence on the attitudes, emotions, and prejudices that employees show (labour). Because of the

nomadic character of the construction business, it is prone to hiring people from a diverse range of racial and ethnic backgrounds, as well as groups and cultural environments, in order to ensure that employees are able to work together effectively and efficiently. This incorporation of human relations serves an extremely important purpose in each and every organization, as well as at each and every level of human endeavour. Performance is impacted by one's interactions with other people (Rivera 2002).

Employees have various demands, not all of which can be addressed by monetary compensation. Within a company, groups and teams have a significant amount of power and influence. Although it is not a brand-new field of study, the behavioral science of teams and groups in the workplace does draw on sociological and psychological theory and research. This was first recognized by Hawthrone in as early as 1927. On the other hand, there hasn't been much study done on the human relations side of human resource management or how productivity may be attained via relationships between people. Employees do not give their jobs their utmost effort when they are unhappy with management, the government, or even their coworkers, according to research by Blyton (2008). The relationships between the people who work there must be carefully handled and kept in good standing if a firm is to succeed.

2.4 HUMAN RELATIONS PRACTICES USED ON CONSTRUCTION SITES

The links between the different people resources in a company are referred to as human relations. It considers interactions between workers and management as well as interactions amongst workers themselves. Additionally, it covers the connections that exist between the human resources department of the company and other parties (such as clients, suppliers). One of the most valuable things that a corporation possesses is its human resource. As a result, having positive interactions with other people leads to enhanced productivity and efficiency. In addition to this, it plays an essential part in the development and achievement of the company. The goal of the human relations approach is to improve the effectiveness of

organizations by focusing on the psychological factors that influence organizational functioning. It refers to the process of integrating man-to-man relationships as well as man-to-organizational relationships. (Falk, S. et al 2001Using human resources via knowledge and an awareness of their behaviors, attitudes, feelings, and interrelationships at work is the study and practice of human relations, according to MacFarland. Human relations are the study and practice of using people as resources via knowledge and a comprehension of their actions, attitudes, emotions, and interrelationships.

The phrase "human relations" can be used in its most general meaning to refer to the interactions that take place between individuals in all spheres of life, including households, businesses, governments, and other institutions such as schools and universities. But when we talk about "human relations in the construction industry," we are referring to the relationship that ought to exist between the human beings who are engaged in the construction industry. This is a broader definition of what we mean when we talk about "human relations in the construction industry." However, in actual practice, the term refers to the relationship that should be cultivated and practiced by an employer or a supervisor with his or her subordinates or by subordinates with his or her fellow subordinates. Subordinates should also cultivate and practice positive relationships with each other. In point of fact, human relations refer to the skill of getting along with others on an individual or communal level, depending on the context. Maintaining positive relationships with one's co-workers is one of the most efficient ways to inspire employees to work toward the accomplishment of individual as well as organizational objectives. (Davis & Scott 1961) Communication, teamwork, active listening, and negotiation are only few of the human relations techniques that may be utilized on a construction site. Other human relations practices include emotional intelligence.

2.4.1 Communication

Communication is the act of conveying information from one location, person, or group to another. It is a fundamental human interaction activity in which I facilitate the passage of information between a sender and a receiver. (SKILLS YOU NEED. 2011). Akinradewo, Ojo, and Oladunjoye's (2019) assertion that communication is crucial for the management of activities in the construction business is accurate. This is because effective communication plays a key role in completing projects successfully, on schedule, with excellent quality, at a fair price, and with 100% customer satisfaction. The construction industry is a complex and dynamic one. As a consequence, it is identified by a number of challenges that develop over a project. In the construction industry, there are many different types of stockholders, each with its own objectives, cultures, and areas of specialization. They work together on a variety of levels to complete the project's objectives. According to Calvert, Bailey, and Coles (2003), construction professionals and non-professionals rely on each other to do a variety of client-focused duties. As a result, communication is a crucial instrument for passing information from one stakeholder to another. Effective communication only happens when the process is successfully finished; communication is essential at every stage of the project's lifecycle, from the creation of a design through the end of the construction process and even during the handover and commissioning of the project. Since it may affect a project in a positive or bad way, effective communication is crucial. Poor communication is a common issue in the construction industry and a primary reason why projects fail. (Ahmed, Othman, Gabr, and Hussien 2018).

2.4.2 Teamwork

The term "**Teamwork**" refers to a procedure in which people cooperate to carry out a number of tasks and activities that are necessary to achieve a certain objective. The term "teamwork" describes a situation in which people work together to accomplish common goals (Dinsmore and Brewin 151).People are able to share helpful components that are important for the attainment of the organizational goals when they are working together as part of a team. For instance, the staff is given the opportunity to discuss many topics, including facts, opinions, and practical suggestions. The overall performance of a group is enhanced as a result of this. The level of productivity achieved by the workers is greatly raised when they operate together. Utilizing all of the available human resources to their full potential is the primary focus of human resource management. People who are actively involved in group work make up many of the organizations that are part of the tourist and hospitality business. As a result of the increasing complexity and specialization of many professional functions, there is a growing demand for employees to collaborate successfully both within their own teams and beyond the teams in which they are employed (Kusluvan 693). The responsibility of ensuring that the organization achieves its goals using its human resources effectively lies with the managers of those resources.

2.4.3 Active listening

To actively listen means to be attentive to the speaker, their words and body language, and to provide appropriate feedback to show that you hear and understand what they said**.** (Wikipedia Contributors. 2019)

One of the most important components of successful communication is active listening. Listening enables one to form connections that are sincere and authentic. People will be

compelled to communicate with you, which will allow them to consistently cooperate or create if the process is carried out correctly. People have a tendency to be passive listeners, which means they pay attention to what is being said but do not respond to it or interrupt the speaker. Active listening, on the other hand, strengthens connections and is a very useful communication skill, despite the fact that it may not come readily to certain people. (WomensMedia, 2022)

2.4.4 Negotiation

Disagreements are not only unavoidable sometimes but also a normal part of the interpersonal dynamic that develops between individuals over time. However, if these disputes and confrontations are allowed to fester without being resolved, they may waste significant amounts of your time and energy and can harm your bottom line as a result of missed productivity. In order to keep things amicable and conducive to collaboration, many individuals make it a point to steer clear of arguments wherever possible. However, if you can train yourself to perceive these circumstances as chances for learning and to respond to them in a way that is both acceptable and professional, you may learn a great deal from individuals who hold beliefs that differ from your own. In point of fact, studies have shown that successfully resolving arguments and problems with co-workers or in one's personal life ultimately results in increased mutual respect and a more pleasant connection between the parties involved. Every day at work consists of a series of negotiations, regardless of what position you hold in the organization you work for. The ability to apply all-win negotiation abilities may make all the difference in your negotiating success, and it is crucial to influence others and create agreements in order to achieve your goals. (Story, 2019)

Therefore, **negotiation** is a strategic dialogue that results in a solution that is agreeable to both sides. Each side in a negotiation attempts to convince the other to see things from their point of view. (Kenton, W. 2021)

2.4.5 Emotional intelligence

Emotional intelligence refers to the ability to perceive control and evaluate emotions. Daniel Goleman, a psychologist, is credited with popularizing the concept of emotional intelligence, which may be described as our ability to be aware of, to manage, and to communicate these emotions. Because of this, we are able to navigate our interactions with other people with wisdom and compassion. According to Peter Salovey and John Mayer, emotional intelligence is the capacity to "watch one's own and other people's emotions, to distinguish between various emotions and accurately name them, and to utilize emotional information to drive thought and behavior." (Mayer, J. D., & Salovey, P. 1993).

Emotional intelligence is comprised of four main components: Self-Awareness: The capacity to notice the influence of your emotions, as well as your strengths and flaws, on your performance and relationships. Self-management: The ability to control one's impulses and emotions, both positive and negative, and to be adaptive and flexible when called for. Social Awareness is the capacity to empathize with others, negotiate politics, and network proactively. Relationship Management is the capacity to influence others via persuasion, motivation, relationship formation, and dispute resolution. (Thompkins, 2020)

2.5 HUMAN RELATIONS PRACTICES WITH CONSTRUCTION WORKER

2.5.1 Construction workers

Who exactly is a construction worker? Construction workers are defined as individuals whose principal duties on the job involve physical labour. Operating concrete mixers, jackhammers, saws, drills, and other heavy machinery, clearing and preparing the site, installing temporary scaffolding, barricades, bracing, and other structures, and more may all be required. On any given construction site, workers may be called upon to perform everything from the mundane to the extremely complex and potentially life-threatening. Most jobs don't call for a lot of

specialized knowledge and may be rapidly taught, though training and experience are usually required for some tasks. (Rivera, 2002).

Given that the labour performed by construction employees can range from the routine to the very complex and even deadly. Construction companies would do well to focus more on the interpersonal relationships among their staff members. In fact, using human relations well would support safety programs and teach staff to always work safely. The degree of a worker's commitment to safety is strongly tied to how they feel about the business, their coworkers, and management, according to study done on pipeline construction and maintenance teams in Dhahran, Saudi Arabia. Employees who felt a feeling of camaraderie with their coworkers and bosses had better safety records.

2.5.2 Abraham Maslow

It is obvious that employees have needs, as evidenced by several studies. Abraham Maslow, a renowned psychologist, is considered as one of the founding fathers of human psychology and human motivation (Mulwa, 2008). Maslow developed his hierarchy of needs theory in 1943, proposing that humans are driven by five levels of wants (Onah, 2015). See Figure 2.1 below

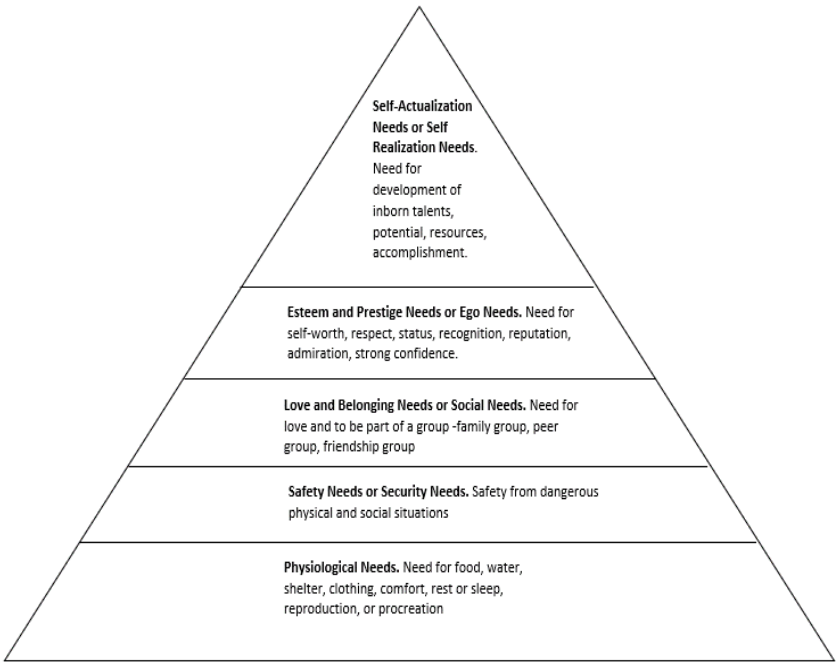

Figure 2. 2: Abraham Maslow's Hierarchy of Needs 1943

Source: Lester, D. (2013).

Physiological needs, (2) safety needs, (3) belonging needs, (4) esteem needs and (5) self-actualization needs.

Physiological Needs: necessities such as air, food, water, shelter, clothing, and sleep are necessary for human existence.

Safety Needs: Living in a secure place, medical insurance, job stability, financial reserves, excellent health, and protection from danger are all needs that involve a person's sense of security.

Belongingness and Love (Social) Needs: When a person's basic requirements are addressed, higher level motivators emerge. Friendship, a feeling of family and community, and intimacy are examples of social needs that can be met. Humans require them so that they do not feel alone, lonely, or sad.

Esteem Needs: Esteem needs are the desire for self-respect and esteem, and they can include: External Motivator and internal motivators such as recognition, attention, social status, and accomplishments.

Self-Actualization: The pursuit of one's full human potential leads to the pinnacle of Maslow's motivation theory. Unlike lower-level desires, this one is never completely met; as one grows psychologically, new prospects for growth arise.

2.6 FACTORS CONTRIBUTING TO POOR HUMAN RELATIONS ON CONSTRUCTION SITE.

The global social and economic growth of nations is significantly influenced by the building sector. It is, nevertheless, fraught with difficulties and complexity. To achieve the fundamental objective of project success, people from many cultures and professions work in various ways. Poor human connections are one of a building project's biggest obstacles. The field of study known as human relations examines the ways in which individuals interact with one another in social settings, particularly the workplace, with the goal of enhancing individuals' capacities for communication and sensitivity to the emotions of others. Human relations, in the words of Keith Davis, "deal with motivating people in organizations to develop teamwork that effectively fulfills both their objectives and that of the organization" (Davis, K. 1967).

The process of effectively inspiring individuals in a setting to accomplish a balance of goals that will both promote human satisfaction and serve the purposes of an organization is what we mean when we talk about human relations. The scientific management perspective, which prioritizes optimizing the output and revenue of individual manual workers and separating the mental and physical labor of management and employees, is opposed by the human relations movement. In contrast, the construction sector has come under fire for having bad human relations from proponents of such relations in various nations.

The introduction of new procedures or technologies may be a required but not sufficient condition for improving human connections, which is a management problem. There should be a need to establish methodologies, improve training programs, increase worker motivation, improve strategic management, and improve procurement management in order to improve human interactions at the building site. (Aigbavboa. 2017).

The following are some of the factors that may contribute to poor worker morale on a construction site, according to Gupta and Kansal (2014): a delay in site management inspections, a lack of sufficient motivations, a lack of training provided to workers, poor site management and labor communications, complex construction methods, labor supervision, a lack of construction manager leadership, a delay in payment or remuneration, a lack of thorough recruitment processes,

2.7 IMPACT OF HUMAN RELATIONS ON PERFORMANCE OF CONSTRUCTION WORKERS

The most valuable resource in the construction sector is labor. The effectiveness of the workforce plays a critical role in the timely completion and success of a construction project. Nigeria's building sector is labor-intensive. Unfortunately, the majority of empirical investigations have shown that the industry's production is rather low when compared to many industrialized nations. The term "performance" often refers to the completion of work in accordance with specifications stated in a contract. Performance standards may include moving the project forward in accordance with the program, finishing the project by the deadline, meeting quality, health, and safety standards, adhering to legislation, reporting necessary information, following instructions, and paying suppliers. One of the industries with the highest labor requirements is construction. According to research, the cost of construction employees may account for between 30 and 50 percent of a project's entire cost. This means that the cost

of construction workers accounts for a significant amount of a project's overall cost. (Kalsum, Zulkifli,, Hanid, Zakaria, Yahya & Lia,. 2010)

Improvement of construction worker performance should be a major and ongoing concern to achieve the project objectives because labor costs make up a significant portion of the cost of construction and labor hours spent performing a task are more susceptible to management influence than are materials or capital. The efficiency and success of a building project are significantly influenced by the performance of the construction personnel. (Kalsum, et al 2010)

The performance of a construction project determines its success, which is determined by the project's timely completion, cost-effectiveness, adherence to quality standards, and customer satisfaction. There are often no established standards for assessing the performance and success of projects in the always changing industry of construction, where project managers aspire to produce successful projects. The success of a project has been determined and the project's performance assessed by various clients over time. While some use the traditional performance measures, such as time, quality, and cost of the project, other clients turn to non-traditional measures, such as stakeholders' interests, environment, health and safety, etc.

The effectiveness of a project's delivery depends on the performance of the construction personnel. Organizational performance does exist in the context of performance. One element that consistently seems to be linked to successful firms is an effective organizational culture.

Now a man named Elton Mayo carried out the Hawthorne Experiment in 1927 (Korajczyk 1961) The Hawthorne Studies was a study project that Elton Mayo and his associates ran from 1927 to 1933 at the Western Electric Plant in Cicero, Illinois. The Hawthorne Plant's management requested Mayo and his team of researchers to assist in boosting worker satisfaction and overall production. Prior to this, there was a great deal of discontent among the 30,000 workers in the Hawthorne plants in Chicago in the early twenties of the last

century. Mayo interested in how changes in work environment would impact productivity. Their findings asserted that employee morale and productivity improved when workers were allowed to interact, and an overseer was present.

The more attention given to someone, the more likely their behaviour will change. The Hawthorne tests conducted by Professor Elton Mayo showed that relationships had the most impact on productivity. The researchers came to the conclusion that connections and being a member of a team that supported one another led to higher productivity. The researchers also discovered that the employees' enhanced motivation and productivity as a consequence of the greater attention they got is known as the Hawthorne Effect. People want to feel like they belong and matter while also being treated with respect and worth, according to research on human relations in the workplace. When you treat a worker with respect and appreciation, their productivity and quality rise, supporting the organizational team. Looking at how if it was the influence of the changing of environmental factors that influenced the performance on construction workers or if it was relationships

The study goes to determine the effect of changing environmental conditions on the productivity level of the different construction worker. The conclusions was that the construction workers were more productive not because of the environmental conditions but rather because they were working together. So, what impacts performance and productivity of construction workers the most is relational other than physical environmental conditions. Thus, the need for human relations. (Korajczyk, R. 1961).

2.7.1 Welfare and Safety of Construction workers

We may explore the influence of human relations on the welfare and safety of construction workers, which will in turn affect performance and productivity, as we become more aware of the significance of human relations and their impact on the performance of construction

workers. Human behavior is significant and difficult to manage, as was already said. Handling people requires situational leadership, as opposed to technical solutions, which include plugging data into different equations to tackle certain issues. It is impossible to address and get rid of hazards just via engineering control. Employees who will lessen their impacts need to be aware of them as well. (Osama, M. 1995)

Accidents are brought on by a mix of risky activities and unsafe environments, or by one of these unsafe environments that may be rectified and regulated utilizing engineering guidelines and standards. But unlike a computer, human behavior cannot be designed. A successful application of human relations would enhance safety initiatives and instill safe behavior in employees. The employees of a sizable construction firm in Dhahran, Saudi Arabia, who were engaged in pipeline building and maintenance operations as employees, were the subject of a research study. The research study's goal was to throw some light on and pinpoint some of the variables that have a big impact on how well construction workers perform in terms of safety. Workers in four divisions of the pipes department participated in a survey.

The safety performance of each worker was evaluated using a De Reamer-recommended overall injury frequency rate. The number of overall workplace accidents divided by one million hours worked by employees is the rate. "All work injuries" refers to any injury that needs medical care or first assistance. Each employee's overall injury frequency rate was calculated by inquiring how long they had worked for the pipes department and counting up all the job injuries they had sustained during that time. Mathematically, the total injury frequency rate is given by the following: (total injury frequency rate = number of all work injuries x 1,000,000 / number of employee hours worked.) The safety performance of each worker was evaluated using a De Reamer-recommended overall injury frequency rate. The number of overall workplace accidents divided by one million hours worked by employees is the rate. "All work injuries" refers to any injury that needs medical care or first assistance. Each

employee's overall injury frequency rate was calculated by inquiring how long they had worked for the pipes department and counting up all the job injuries they had sustained during that time.

It was discovered that the employees who worked in smaller teams, got along well, and shared their personal issues with one another were the ones who were the safest. This suggests that a cordial environment among crew members enhances safety. The results of the study also showed how important it is for safety that employees and their supervisors get along. The safety records of employees were better when their suggestions were taken seriously by management and when they were also recognized for their hard work. The management's attitude toward employees' welfare may also be very important in encouraging safe workplace performance and safe worker behavior. The employees who believed that their company cared about them and who said that they would want to work in the same department even if alternative possibilities were offered were the ones who felt the safest. The more secure employees said that they would remain in their current departments till retirement. Finally, this research demonstrated how factors such as worker competitiveness, weariness, and working under pressure significantly impacted safety. Workers who work long hours, compete with other crew members, and face unattainable deadlines are more likely to have accidents. (Osama, M. 1995)

2.8 STRATEGIES TO IMPROVE HUMAN RELATIONS OF WORKERS ON CONSTRUCTION SITES.

One of the strategies that can help improve Human relations of workers on construction site is the setting of the organizational structure and design as a boundaryless organization and also adapting collectivism cultural dimension. A boundaryless organization behave more like an

organism that encourages better integration among employees They seek to eliminate the chain of command; span of control and it helps in replacing departments with empowered teams.

2.8.1 Adoption of Boundaryless Contemporary Organizational Structure

First of all, a boundary is a limit that has been established, but a boundaryless space is unlimited, open, and fixes the boundaries. An organization that employs boundary management is more likely to adhere to a rigid system, such as bureaucracy, and to limit the divisions within its departments, so that only the top management can make plans and decisions, offer suggestions, and communicate only face-to-face and in accordance with the organization's established levels of hierarchy. This is referred to as communication restriction.

Boundaryless organizations, on the other hand, do away with the inflexible bureaucratic structure, the restriction of divisions, and departments in favor of empowering teams, an unrestricted range of control, and the flexibility to sometimes accept changes. It also facilitates open communication and networking among professionals, who these days are much more focused on project collaborations and who communicate with one another by email, phone, video conference, and messenger rather than face-to-face. Organizations without boundaries are quite similar to open systems biology, except that the concept is more flexible and adaptive. (Goh, L. 2022).

"The boundaryless organization acts more like an organism, promoting greater departmental integration and deeper ties with partners like suppliers and clients." (Ashkenas. 2008) If the construction site has a boundaryless organization structure it will improve human relation between its workers which will help improve teamwork between workers. This organization will lead to cross fertilization of ideas that can be effective in a construction site in that a construction worker is not limited only to his role or work but is given free access to contribute

his ideas to another department on the same site. The four dimensions of a boundaryless organization are vertical, horizontal, external, and geographic.

Vertical boundaries Separate management from the workforce and management levels from one another. Do the various levels communicate clearly?

Horizontal boundaries Separate departments and divisions within an organization. Do various functional domains collaborate or compete with one another?

External boundaries Differentiate a business from rivals throughout the value chain. How successfully does a business work with its clients and vendors? Does it adopt a "us versus them" mentality or does it believe that collaboration and teamwork among the participants in its value chain would increase everyone's bottom line?

Geographic boundaries represent a unique kind of horizontal barrier. How successfully is a corporation able to bridge the cultural and national barriers that separate its multinational operations from one another and from markets abroad? (Falk, S., & Weber, D. 2001) Adherents to boundarylessness argue that the key metrics by which businesses must evaluate themselves have changed from size, role clarity, specialization, and control to speed, flexibility, integration, and innovation. This is based on the premise that the pace of change in our time has accelerated.

Accordingly, the central tenet of the literature on boundaryless organizations is that these firms will be quicker, more adaptable, better able to channel their resources into goods and services (this is the integrative dimension), and consequently better able to generate, harness, and profit from new ideas. (Falk, S. et al 2001)

2.8.2 Adoption of Collectivism Cultural Dimension

Cultural dimensions, also known as value constructs, are primarily psychological factors that may be used to characterize a particular culture. These are often used in research based on cross-cultural and intercultural communication. They function more on how employees think and how their thought patterns affect their actions. A researcher named Hofstede conducted research on 50 branches of the company. He discovered six dimensions of culture one of which is Individualism vs Collectivism dimension of culture which we will focus on.

The degree to which members of a society are incorporated into groups is the individualism vs. collectivism feature of culture. It is individuality if they are not included into organizations. If so, it would be collectivism. Under individualism, people may stand alone, while in collectivism, people prefer to band together. Privacy, speaking your mind, having strong opinions, one person, one vote, the language of "I" is essential, and tasks take priority over relationships are some traits of individualism. The "We" awareness, harmony, predefined views and votes are traits of collectivism. Avoiding the use of the pronoun "I," emphasizing relationships over tasks, and being born into extended families that would protect them in return for loyalty.

The effectiveness of a project's delivery depends on the performance of the construction personnel. Organizational performance does exist in the context of performance. One element that consistently seems to be linked to successful firms is an effective organizational culture. (Ibrahim Mohamed Irfan, M. 2016) If collectivism is adopted construction workers will focus more on team and collective efficiency rather than individual efficiency.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 PREAMBLE

This Section discusses the theories and justifies the methodology that was used to collect data. The purpose of the study was to evaluate the effects of human relations practices on the productivity of construction employees. Additionally, it provides information on the study's subject, tools, data gathering process, and statistical analysis of the results. It provided an overview of the study plan, methodology, technique, choice of questionnaires, kind of data analysis, ethical issues, and project research constraints.

3.2 RESEARCH DESIGN

The research design for this analysis is the Cross-sectional survey research design. This study is an example of observational research in which data from a sample population is analyzed at a certain point in time. It involves the recording of responses to human relations in the construction industry by its workers, also analysis, and the presentation of the present level of human relation practices adopted on construction site the impact, strategies, problems posed with necessary improvements and recommendation. A cross-sectional study is a sort of survey that is sometimes referred to as a transverse study, prevalence study, or cross-sectional analysis. Cross-sectional surveys are commonly used by academics to better understand outcomes in a variety of sectors, with participants picked based on particular criteria of interest, despite the fact that they do not include executing experiments. While this kind of survey may be used to identify participant characteristics, it cannot be utilized to establish causal connections between various variables. (Mahmutovic, J. 2021, November 16).

Research data collected instrument is important to meet the set objectives of this study. Data collected were done through questionnaire, this is done for their ability to meet objectives. The design was made to be unique within qualitative and quantitative methods of inquiry that provides specific direction and answer soliciting the population's opinions and attitude toward human relation practices. This was done in order to adequately assess the impact of human relation practices on the performance construction workers.

Calderon (1993) defined descriptive research as "the approach of inquiry that depicts and interprets what it is." It concerns the state of existing connections, effective behaviour, attitudes, continuing processes, impacts, or trends. Descriptive research, on the other hand, is a sort of study that concentrates on the detailed description of the current situation, its nature or state, and its magnitude.

The researcher in this study uses this method of research considering the objectives to acquire first-hand data from the end-user. It involves the recording of responses to human relations in the construction industry by its workers, also analysis, and the presentation of the present level of human relation practices on construction site the impact, strategies, problems posed with necessary improvements and recommendation. The descriptive technique is advantageous for the researcher since it is straightforward, and when choosing the instrument for data collection, either qualitative or quantitative data, or both, may be employed.

The research study is based on the use of structured questions used to assess the impact of human relation practices on the performance construction workers. This was in the form of questionnaires because a qualitative questionnaire requires you to choose an answer from a list or on a scale, such as strongly agree to strongly disagree, the qualitative technique is utilized. The research was focused on the construction industry based on the diverse number construction workers that are found in it. The goal of the survey study is to assess the current level of human

connection practices used on construction sites and to characterize the extent of the influence of these practices on the performance of construction employees. The impact, strategies, problems posed with necessary improvements that can be made and to recommend refined practices and approaches to increase construction workers performance in project delivery. (Aigbavboa. 2017)

3.3 AREA OF STUDY

For the purposes of this study, the research was directed at practising construction professionals in the industry at various construction sites in Lagos state, Nigeria.

Nigeria is home to 36 states and one Federal Capital Territory – Abuja. Southwest Nigerian state of Lagos state. It is the most populated and the smallest in size among the 36 states. The state, named after Lagos, the most populous metropolis in Africa, was created on May 27, 1967, from the Western Region and the previous Federal Capital Territory. Large building projects can be seen all across Lagos since the state government is working hard to extend the city's infrastructure, and there has also been a rise in the number of housing complexes around the state. As a direct consequence of this, it is home to the headquarters of a great number of global construction and real estate development enterprises. Because it is home to the headquarters of a variety of construction and engineering institutes and bodies, Lagos is an ideal place for carrying out this study because of its convenient accessibility. The current metro area population of Lagos in 2022 is **15,388,000**, a **3.54% increase** from 2021 (2022 by Macrotrends)

3.4 POPULATION OF STUDY

Population in research can be defined as a sum of individual persons, objects or items from which samples are taken for statistical measurement. According to Polits and Hungler (2013), population relates to a collective or totality of targets, subjects or members that conforms to a

set of location. The population of this research includes both professionals working on-site and professionals working off-site. It is not necessary for these construction professionals to be registered with a professional organization because it is sufficient for them to have knowledge with the construction process. In Lagos, Nigeria, there will be a survey conducted of people who work in the construction industry in the fields of labor, architecture, building, civil engineering, mechanical, electrical, and plumbing engineering, quantity surveying, and related ones.

3.5 SAMPLING TECHNIQUE

Sampling techniques are selected on the basis of probability and non-probability. Probability techniques involves all elements in the population, giving opportunity of being included in the sample. The probability sampling technique can be further divided into stratified sampling, cluster method and simple random sampling. However, non-probability is selected based on their availability. It can be divided into convenience, judgemental or purposive and quota method.

Quota-purposive sampling is a non-probability sampling approach that was utilized for this study. It allows researchers to produce a sample of people who accurately reflect a population. These people are chosen by researchers based on certain characteristics or attributes. They make decisions and set quotas to ensure that the market research samples are effective in gathering data.

3.6 SAMPLE SIZE

This study is making use of the quota-purposive sampling technique to pick the sample size for this study. By applying this combination of the two non-random sampling techniques, a total of 120 construction professionals were selected as the sample size from the research region –

Lagos. The 120 construction professionals consisting of construction workers and other construction specialists.

3.7 DATA COLLECTION INSTRUMENT

This study makes use of both primary data (data collected in real time) and secondary data. Both types of data are described below (past data). Primary data are data that are obtained by the researcher themselves from first-hand sources and experiences. It would be necessary for the researcher to have a significant hand in the data gathering procedure. Examples include employing surveys, questionnaires, personal interviews, experiments etc. A standardized questionnaire will be utilized for the purpose of this study activity to gather data from construction professionals on the human relations techniques employed both on site and off site, as well as the factors that made them chose these methods. The creation of this questionnaire would follow the purposes, questions, and objectives of the study, with the gathering of trustworthy data serving as the main goal. The questionnaire is divided into five (5) sections, each of which is labelled with a letter: sections A, B, C, D, and E. In section A, it acknowledges the credentials and experience of the construction specialists. It is anticipated that Sections B and C will be utilized to determine the human relation practices that are most frequently utilized by the professionals during the building process and the impact that were obtained from utilizing these practices throughout the construction process. Sections D and E will be utilized to determine the factors that influenced the choices of human relation practices that were being most utilized in the construction process and to determine the efficient ways of improving their utilization in the Nigerian construction industry. This will be accomplished by determining the factors that influenced the choices of human relation practices that were being most utilized in the construction process.

On the other hand, secondary data refers to the information that is used in a research project but would have previously been gathered by someone else, most likely from previous works.

Due to the fact that these data already existed, collecting and gathering them is a relatively quick and painless process. Secondary sources of information include things like government websites and publications, academic journals and articles, and so on.

3.8 METHOD OF DATA ANALYSIS

Descriptive and sstatistical examinations were used in investigating and analyzing the data gathered, the utilization of Statistical Package for Social Sciences (IBM SPSS) version 26 also proved useful in helping to develop the data entries. The illustrative ensured the analyst compute the recurrence dispersion of variables and their individual percentages. The field survey results will be provided as frequency tables, visual charts, and data scored on a 5-point Likert scale with a relative relevance score in order to give a fuller picture of the findings. The mean scores will be used to quantify the goals.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSION OF RESULTS

4.1 PREAMBLE

In the previous chapter, both a general strategy or approach for carrying out the inquiry, as well as a particular research method that is going to be used, were described in detail. In order to improve the performance of construction workers in completing projects, the goal of this study is to assess how human interactions affect that performance. This chapter discusses the findings and details the data analysis performed using information gathered from the survey that was detailed in the questionnaire. The data analysis was acquired from the data that was collected from the survey that was specified in the questionnaire. The surveys were distributed to professionals working in the construction industry, and the replies received from those individuals were gathered. For the purpose of analysing the demographic information contained in the data, frequencies, percentages, and cumulative percentages were utilized. Mean scores and ranking index were utilized for the purpose of analysing the objectives.

4.2 DATA ANALYSIS AND DISCUSSION OF FINDINGS

This section presented the results of the data analysis performed on the dataset obtained for this investigation. The data analysis was performed with SPSS version 26. In this section, we examined the background information as well as the goals. In order to collect a wide range of perspectives and results, the questionnaire was personally distributed at a number of construction sites where a number of different active projects were seen. As a result of the survey, there were 97 people who participated in the distribution, and their responses were included in the study.

4.2.1 Background Information

The characteristics of the respondents included in this survey were analysed in this study. The background information about the construction professionals surveyed is summarised in Table 4.1. The features of construction professionals from various companies were collected and reported in Table 4.1. In Table 4.1, the study showed that there were 58 (59.8%) male construction professionals and 39 (40.2%) female construction professionals that participated in this study. These workers worked in different construction organizations. Table 4.1 showed that 3 (3.1%) worked in consulting firms, 53 (54.6%) worked in contracting firms, 36 (37.1%) worked in client organization and 5 (5.2%) were private developers. The educational background amongst the construction professionals showed that 38 (39.2%) had Senior Secondary School Certificate Examination (SSCE), 18 (18.6%) had National Diploma degree (OND/HND), 37 (38.1%) had Bachelor's degree (B.Sc./B.Tech/B.Engr.), 3 (3.1%) had Master's degree (MSc/MBA/MPM/M.Eng.), 1 (1.0%) had a Doctorate degree (Ph.D.). The survey carried out showed that 40 (41.2%) are Construction workers, 50 (51.5%) are Construction professionals, 7 (7.2%) are Store keepers, Admin officers, HR personnel etc. The study showed that amongst those surveyed 8 (8.2%) work in an organization with a size of 1 – 20 persons, 8 (8.2%) work in an organization with 21 – 50 persons, 65 (67.0%) work in an organization with a size of 51 – 100 persons, 16 (16.5%) work in an organization of 101 – 200 persons. The study also showed that 37 (38.1%) have 1 – 10 years' work experience in the construction industry, 56 (57.7%) have 11 – 20 years' work experience in construction industry, 4 (4.1%) have 21 – 30 years' work knowledge of the construction sector. The research revealed that31 (32.0%) have had disagreements with their colleagues on site while 66 (68.0%) have never had disagreements with their colleagues on site. The study also showed that 31 (32.0%) would fear speaking up when their other colleagues are wrong and 66 (68.0%) would not fear speaking up when their other colleagues are wrong. The provided background data

demonstrated that all construction professionals surveyed have formal education and would therefore be familiar with the survey instrument employed in this study. In addition, the scope of the study encompasses construction companies of various sizes and types.

Table 4. 1: Summary of Background Information

Background Information	Frequency	Percent	Cumulative Percent
Gender			
Male	58	59.8	59.8
Female	39	40.2	100.0
Academic Qualification			
SSCE	38	39.2	39.2
OND/HND	18	18.6	57.7
BSc/B.Tech/B.Engr.	37	38.1	95.9
MSc/MBA/MPM/M. Eng.	3	3.1	99.0
Ph.D.	1	1.0	100.0
Type of Organization			
Consulting	3	3.1	3.1
Contracting	53	54.6	57.7
Client organization	36	37.1	94.8
Private Developer	5	5.2	100.0

Profession			
Construction worker	40	41.2	41.2
Construction professional	50	51.5	92.8
Others	7	7.2	100.0
Industry Experience			
1 – 10 yrs.	37	38.1	38.1
11 – 20 yrs.	56	57.7	95.9
21 – 30 yrs.	4	4.1	100.0
Size of Organization			
1 – 20	8	8.2	8.2
21 – 50	8	8.2	16.5
51 – 100	65	67.0	83.5
101 – 200	16	16.5	100.0
Disagreements on site			
Yes	31	32.0	32.0
No	66	68.0	100.0
Fear of speaking up			
Yes	31	32.0	32.0
No	66	68.0	100.0

4.2.2 Human Relations Practices Used in Construction

The research evaluated the prevalent human relations techniques used in Nigeria's building sector. Table 4.2 was presented using mean score test. In Table 4.2, the study showed that Team work had a mean score of 4.49, Accountability had a mean score 4.47, Equality/Fairness had a mean score of 4.42, Health and Safety had a mean score of 4.39, Negotiation had a mean score of 4.28, Surveys/Feed Mechanism had a mean score of 4.26, Bonuses had a mean score of 4.22, Social Integration had a mean score of 4.15, Conflict Resolution had a mean score of 4.14, Written Communication had a mean score 4.11, Written Communication had a mean score of 4.11, Valuation and recognition of employees had a mean score of 4.09, Constructive criticism had a mean score 3.97, Induction had a mean score 3.75, Non-verbal communication had a mean score of 3.65. Team Work, Accountability and Equality/Fairness ranked 1st, 2nd, and 3rd, respectively as the most commonly used human relations practices in the Nigerian construction industry.

Table 4. 2: Human Relation Practices Used in Construction

Human Relations Practices	Mean Score	Std. Deviation	Ranking Index
Teamwork	4.49	.694	1st
Accountability	4.47	.678	2nd
Equality/Fairness	4.42	.788	3rd
Health and Safety	4.39	.701	4th
Negotiation	4.28	4.007	5th

Surveys/Feed Mechanism	4.26	2.073	6th
Bonuses	4.22	.780	7Th
Social integration	4.15	.727	8th
Conflict resolution	4.14	.520	9th
Written communication	4.11	.643	10th
Valuation and recognition of employees	4.09	.614	11th
Constructive criticism	3.97	.637	12th
Induction	3.75	.596	13th
Non-verbal communication	3.65	.804	14th

4.2.3 Factors Contributing to Poor Human Relations Practices in Nigeria Construction Industry.

The research looked at a number of variables that affect the human relations practices in the Nigerian construction sector. Table 4.3 presented the mean score test on the factors that contribute to poor human relations building industry in Nigerian practices. In Table 4.4, Inadequate Facilities had a mean score of 4.44, Lack of trust in employees had a mean score of 4.39, Corrupt and unethical practices had a mean score of 4.36, Pandemic had a mean score of 4.33, Ignorance had a mean score of 4.30, Staff shortage had a mean score 4.27, Economy had a mean score of 4.23, Climate had a mean score of 4.02, Non-involvement of employees in

decision making processes had a mean score of 3.84, Need for budget cuts had a mean score of 3.82, Language had a mean score of 3.40, Religion had a mean score of 3.26. Inadequate Facilities, Lack of trust in employees, Corrupt and unethical practices ranked 1st, 2nd, and 3rd, respectively as the most contributing factors to poor human relations building sector in Nigerian practices.

Table 4. 3: Factors Contributing to Poor Human Relations Practices in Nigeria Construction Industry

Factors	Mean Score	Std. Deviation	Ranking Index
Inadequate Facilities	4.44	.661	1st
Lack of trust in employees	4.39	.622	2nd
Corrupt and unethical practices	4.36	.562	3rd
Pandemic	4.33	.838	4th
Ignorance	4.30	.580	5th
Staff shortage	4.27	.685	6th
Economy	4.23	.621	7th
Climate	4.02	1.090	8th
Non-involvement of employees in decision making processes	3.84	.731	9th
Need for budget cuts	3.82	.479	10th
Language	3.40	.874	11th

Religion	3.26	.857	12th

4.2.4 Impact of Human Relations on The Performance of Construction Workers in Project Delivery in The Nigerian Construction Industry.

The study examines how human relations practices affect the productivity of construction employees and the completion of projects in the Nigerian construction sector. Table 4.4 showed the mean score test on the impact of human relations practices on the performance of construction workers on project delivery in the Nigerian construction industry. In Table 4.4 Increased work flow had a mean score of 4.53, Welfare of workers 4.50, Cash flow of project had a mean score of 4.42, Ethical practices had a mean score of 4.40, Effective useful life of facilities (EUL) also had a mean score of 4.40 Involvement of workers had a mean score of 4.34, Knowledge of workers had a mean score of 4.30, Upward and downward communication had a mean score of 4.12 Cost over-run had a mean score of 4.03, Time over-run had a mean score of 3.78. Increased work flow, welfare of worker, and cash flow of project ranked 1st, 2nd, and 3rd, respectively, standing out as the most impacts associated with human relations practices on the performance of construction workers in the Nigerian construction industry.

Table 4. 4: Impact of Human Relations Practices on The Performance of Construction Workers in The Nigerian Construction Industry.

Impact	Mean Score	Std. Deviation	Ranking Index
Increased work flow	4.53	.561	1st
Welfare of workers	4.50	.649	2nd
Cash flow of project	4.42	.626	3rd

Ethical practices	4.40	.571	4th
Effective useful life (EUL) of facilities	4.40	.589	5th
Involvement of workers	4.34	.538	6th
Knowledge of workers	4.30	.598	7th
Upward & Downward communication	4.12	.545	7th
Cost over-run	4.03	.684	9th
Time over-run	3.78	.599	10th

4.2.5 Strategies to Improve Human Relations of Workers on Construction Sites During the Construction Process.

The study identified strategies that can be employed in improving human relations of workers on construction sites during the construction process. Table 4.5 presented the strategies to improving human relations of workers on construction sites during the construction process. In Table 4.5, Educating workers on importance of teamwork had a mean score of 4.24, Education of stakeholders on the importance of human relations had a mean score of 4.23, Provision of adequate facilities had a mean score of 4.22, Provision of first aid on construction site had a mean score of 4.22, Involvement of workers in decision making processes had a mean score of 4.22, Offer benefits to support well-being of workers had a mean score of 4.19, Provide support on mental health had a mean score of 4.18, Evacuating corrupt leaders had a mean a mean score of 4.13, Educate workers on hygienic living had a mean score of 4.08, Providing translators in

order to bridge language gap had a mean score of 4.02 Educating workers on importance of teamwork, education of stakeholders on the importance of human relations, and education of stakeholders on the importance of human relations ranked 1st, 2nd, and 3rd, respectively as the most effective strategies to improving human relations of workers on construction sites during the construction process.

Table 4. 5: Strategies to Improve Human Relations of Workers on Construction Sites During the Construction Process.

Strategies	Mean Score	Std. Deviations	Ranking Index
Educating workers on importance of teamwork	4.24	.428	1st
Education of stakeholders on the importance of human relations	4.23	.421	2nd
Provision of adequate facilities	4.22	.505	3rd
Provision of first aid on construction sites	4.22	.544	4th
Involvement of workers in decision making processes	4.22	.462	5th
Offer benefits to support well-being of workers	4.19	.565	6th
Provide support on mental health	4.18	.540	7th

Evacuating corrupt leaders	4.13	.471	8th
Educate workers on hygienic living	4.08	.553	9th
Providing translators in order to bridge language gap	4.02	.562	10th

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 PREAMBLE

The study was aimed at evaluating valuate the impact of human relations on the performance of construction workers in an effort to enhance construction employees' performanceon project delivery. The study examined the various factors that contribute to poor human relations building sector in Nigerian practices, assessed the effect of human relations practices on the performance of construction workers on project delivery in the Nigerian construction industry, and identified strategies for improving human relations of workers on construction sites. The results and broad suggestions related to this research are reached in this section.

5.2 CONCLUSION

The following conclusions can be reached from the study carried out:

1. The human relation practices mostly used in the Nigerian construction industry were Team Work, Accountability and Equality/Fairness.
2. The main factors that contribute to poor human relation practices in the Nigerian construction industry were Inadequate Facilities, Lack of trust in employees, Corrupt and unethical practices.
3. The study showed that the main impacts on construction workers performance in project delivery gotten from human relation practices were Increased work flow, welfare of worker, and cash flow of project.
4. The study revealed the strategies that can be employed in improving human relations of workers on construction sites during the construction process were Educating workers on importance of teamwork, Education of stakeholders on the importance of human relations, and education of stakeholders on the importance of human relations

5. The research found that certain of the human relations techniques employed in the Nigerian construction sector differed significantly.
6. The research found that several of the variables causing bad employee relations practices in the Nigerian construction business, such as inadequate facilities, a lack of confidence in workers, corrupt and unethical activities, ignorance, pandemic, and staff scarcity, differed significantly from one another.

5.3 RECOMMENDATION

Following recommendations are made for the private sector, government sector, educational sector, and the Nigerian construction industry as a whole based on the study's findings:

1. According to the results of this research, a lack of suitable facilities has negatively impacted the working relationships between experts and employees in the Nigerian construction business, which has had a knock-on effect on project delivery rates. This demonstrates how employees' material surroundings may impact their non-physical need, such as psychological, social, and esteem needs. Employers and other stakeholders in the Nigerian construction industry need to put up the same level of effort as the West in providing their employees with first-rate facilities and working environments if these problems are to be solved.
2. Institutes such as the Council of Registered Builders of Nigeria (CORBON) and the Nigerian Institute of Building (NIOB) should organize workshops to raise awareness in both the public and private sectors about the benefits of human relation practices and skills in the process of delivering projects smoothly.

3. 3. The private sector, the public sector, and the educational sectors should collaborate in order to train and equip students and entry-level staff in the industry with human

relations skills in order to prepare them for the future of work. This will allow the students and entry-level staff to be better prepared for the workforce of the future. And protect the industry's prospects for the future.

4. Lastly, construction employees and professionals entering the workforce, as well as those already employed, require training through a continuous professional development (CPD) programme. Companies in the construction industry that can afford to train their employees should do so to improve human relations. This may cost the firm money in the near term, but it will have a favourable influence on the company in the long run, as the data acquired indicates an improvement in work flow and cash flow of the project, as well as an increase in worker welfare throughout the project delivery process.

5.4 AREAS OF FURTHER STUDIES

The scope of this study was limited to the state of Lagos; consequently, additional research could be conducted to determine the level of human relation skills possessed by construction specialists employed in Nigeria's construction sector, as well as how those professionals' skills could be improved to match those of construction professionals working in western countries. In addition, more research may be carried out to find the best ways in which human connection practices might be implemented during the building process in the Nigerian construction sector in order to get better results. This study concentrated primarily on the influence of human connection skills; practices utilized in the Nigerian construction sector, as well as the ways in which the application of these practices might be enhanced.

REFRENCES

Ahmed, F. (2019). Performance management in construction projects. Hochschule für Technik und Wirtschaft Berlin University of Applied Sciences

Aiyetan, A. O., & Olotuah, A. O. (2006, September). Impact of motivation on workers' productivity in the Nigerian construction industry. In *Proceedings 22nd Annual ARCOM Conference* (pp. 4-6).

Alinaitwe, H. M., Mwakali, J. A., & Hansson, B. (2007). Factors affecting the productivity of building craftsmen-studies of Uganda. *Journal of Civil Engineering and Management*, *13*(3), 169-176.

Alvesson, M., & Kärreman, D. (2011). Organizational discourse analysis-well done or too rare? A reply to our critics. *Human relations*, *64*(9), 1193-1202.

Arthur-Aidoo, B. M., Aigbavboa, C., & Thwala, W. D. (2015). The extent to which human relations in the construction industry contributes to productivity.

Arthur-Aidoo, B. M., Aigbavboa, C., & Thwala, W. D. (2015). The extent to which human relations in the construction industry contributes to productivity.

Ashkenas, R. (1995). The Boundaryless Organization: Breaking the Chains of Organizational Structure. The Jossey-Bass Management Series. Jossey-Bass, Inc., Publishers, 350 Sansome Street, San Francisco, CA 94104..

Babatunde, O. K., & Low, S. P. (2013). Chinese construction firms in the Nigerian construction industry. *Habitat International*, *40*, 18-24.

Barg, J. E., Ruparathna, R., Mendis, D., & Hewage, K. N. (2014). Motivating workers in construction. *Journal of Construction Engineering*, *3*(2), 21-35.

Bruce, K., & Nyland, C. (2011). Elton Mayo and the deification of human relations. *Organization studies*, *32*(3), 383-405.

Dalibi, S. G. (2016). Resultant Effects of Poor Supervision in Construction Projects in Nigeria. *6th Building and Construction Economic Round Table, Abuja FCT, Nigeria*.

Dantata, S. (2007). *General overview of the Nigerian construction industry* (Doctoral dissertation, Massachusetts Institute of Technology).

Dinsmore, P. C., & PMP, F. (2018). Project Resource Management. *The AMA Handbook of Project Management*.

Ebekozien, A., & Aigbavboa, C. (2021). COVID-19 recovery for the Nigerian construction sites: The role of the fourth industrial revolution technologies. *Sustainable Cities and Society*, *69*, 102803.

Falk, S. (2001). *Organizational evolution in a 'boundaryless' organization* (Doctoral dissertation, Massachusetts Institute of Technology, Sloan School of Management, Management of Technology Program).

Groeneveld, I. E., van Wier, M. F., Proper, K. I., Bosmans, J. E., van Mechelen, W., & van der Beek, A. J. (2011). Cost-effectiveness and cost-benefit of a lifestyle intervention for workers in the construction industry at risk for cardiovascular disease. *Journal of occupational and environmental medicine*, 610-617.

Hussain, A. M. A., Othman, A. A., Gabr, H. S., & Aziz, T. A. (2018). Causes and impacts of poor communication in the construction industry. In *2nd International Conference on Sustainable Construction and Project Management–Sustainable Infrastructure and Transportation for future Cities* (pp. 16-18).

Idoro, G. I. (2008). Health and safety management efforts as correlates of performance in the Nigerian construction industry. *Journal of Civil Engineering and Management*, *14*(4), 277-285.

Ifediora, C. O., & Keke, O. V. (2019). Human resources management practices and real estate project management success in Awka south LGA, Anambra State. *International Journal of Civil Engineering, Construction and Estate Management*, *7*(2), 1-15.

Irfan, M. I. M. (2016). Cultural dimensions of Hofstede and their impact on organizational performance in Sri Lanka. *Imperial Journal of Interdisciplinary Research*, *2*(10), 1160-1169.

Jannadi, M. O. (1995). Impact of human relations on the safety of construction workers. *International Journal of Project Management*, *13*(6), 383-386.

Kalsum, U., Hanid, M., Zakaria, N., Yahya, Z., & Lia, P. C. (2010). Assessing the performance of construction workers in Peninsula Malaysia. *International Journal of Engineering and Technology*, *7*(2), 47-60.

Martin, A. J. (2009). Motivation and engagement in the workplace: Examining a multidimensional framework and instrument from a measurement and evaluation perspective. *Measurement and Evaluation in Counseling and Development*, *41*(4), 223-243.

Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *intelligence*, *17*(4), 433-442.

Odediran, S. J., Adeyinka, B. F., Opatunji, O. A., & Morakinyo, K. O. (2012). Business structure of indigenous firms in the Nigerian construction industry. *International Journal of Business Research and Management*, *3*(5), 255-264.

Odhong, E. A., & Omolo, J. (2014). An analysis of the factors affecting employee relations in the flower industry in Kenya, a case of Waridi ltd, Athi River. *International Journal of Business and Social Science*, *5*(11).

Oyewobi, L. O., Ganiyu, B. O., Oke, A. A., Ola-awo, W. A., & Shittu, A. A. (2011). Determinants of unethical performance in Nigerian construction industry.

Pitroda, J. R., Makwana, A. H., & Prajapati, N. M. (2016). Analysis of Factors Affecting Human Resource Management of Construction Firms Using RII Method, IMP. I. Method and RIR Method. In *International Conference on:"Engineering: Issues, opportunities and Challenges for Development* (pp. 1-11).

Rose, N. (2005). Human relations theory and people management. *European Management Journal*, *34*, 43-62.

Saraf, D. D. (2013). Study of factors affecting performance of construction project. *International Journal of Science and Research*, *14*(5), 2319-7064.

Serpell, A., Barai, S. V., & Oladapo, A. A. (2005). An investigation into the use of ICT in the Nigerian construction industry.

Unegbu, H. C. O., Yawas, D. S., & Dan-asabe, B. (2020). An investigation of the relationship between project performance measures and project management practices of construction projects for the construction industry in Nigeria. *Journal of King Saud University-Engineering Sciences*.

Uysal, H. T., Aydemir, S., & Genc, E. (2017). Maslow's hierarchy of needs in 21st century: The examination of vocational differences. *Researches on science and art in 21st century Turkey*, *1*, 211-227.

APPENDICES

QUESTIONNAIRE

ASSESSMENT OF THE IMPACT OF HUMAN RELATIONS PRACTICES ON THE PERFORMANCE OF CONSTRUCTION WORKERS IN THE NIGERIAN CONSTRUCTION INDUSTRY.

Dear Respondent,

The aim of this study is to assess impact of human relations practices on the performance of construction workers in the Nigerian construction industry with a view to increase project success in the construction industry. This research questionnaire aims at collecting data for purely academic purpose. The information obtained through this medium will be treated absolutely as confidential.

Best regards,

Ojo Emmanuel

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APPENDIX I

SECTION A: BACKGROUND INFORMATION.

Please, kindly indicate as relevant☒

1) Gender: Male ☐[1] Female ☐[2]

2) Highest academic qualification attained: SSCE☐[1] OND/HND☐[2] BSc/B.Tech/B.Engr. ☐[3] MSc/MBA/MPM/M. Eng. ☐[4] Ph.D. ☐[5] Others (please specify) _____ ☐[6]

3) Type of organization you work for: Consulting ☐[1] Contracting ☐[2] Client organization ☐[3] Private Developer ☐[4]

4) Profession of respondent: Construction worker☐[1] Construction professional☐[2] Others (please specify) _____ ☐[3]

5) Industry experience of the respondent: 1-10yrs ☐[1] 11-20yrs ☐[2] 21-30yrs ☐[3] 31-40yrs ☐[4] 41-50yrs ☐[5] Above 50yrs ☐[6]

6) Size of organization: 1-20☐[1] 21 - 50☐[2] 51-100☐[3] 101 - 200☐[4] 201 and above ☐[5]

7) Have you ever had any disagreement with colleagues on your site? Yes ☐[1] No ☐[2]

8) Would you fear speaking up even when your other colleagues are wrong? Yes ☐[1] No ☐[2]

APPENDIX II

SECTION B:

EXAMINE THE HUMAN RELATIONS PRACTICES USED IN CONSTRUCTION.

Please, kindly tick (X) in the appropriate cell in the table below to indicate to what extent the following human relations practices that are engaged in your construction firm, using the following criteria: **Key: 5 = Very High, 4 = High, 3 = Moderate, 2 = Low, 1 = Nil**

S/No.	HUMAN RELATIONS PRACTICES	5	4	3	2	1
1.	Accountability	☐	☐	☐	☐	☐
2.	Bonuses	☐	☐	☐	☐	☐

3.	Conflict resolution	☐	☐	☐	☐	☐
4.	Constructive criticism	☐	☐	☐	☐	☐
5.	Equality/Fairness	☐	☐	☐	☐	☐
6.	Health and Safety	☐	☐	☐	☐	☐
7.	Induction	☐	☐	☐	☐	☐
8.	Negotiation	☐	☐	☐	☐	☐
9.	Non-verbal communication	☐	☐	☐	☐	☐
10.	Teamwork	☐	☐	☐	☐	☐
11.	Social integration	☐	☐	☐	☐	☐
12.	Surveys/Feed Mechanism	☐	☐	☐	☐	☐
13.	Valuation and recognition of employees	☐	☐	☐	☐	☐
14.	Written communication	☐	☐	☐	☐	☐

APPENDIX III

SECTION C:

EVALUATE THE IMPACT OF HUMAN RELATIONS ON THE PERFORMANCE OF CONSTRUCTION WORKERS IN NIGERIAN CONSTRUCTION INDUSTRY.

Please, kindly tick (X) in the appropriate cell in the table below, the impact of human relations in the Nigeria construction industry, using the following **Key: 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree**

S/No.	IMPACT	5	4	3	2	1
1.	Cash flow of project	☐	☐	☐	☐	☐
2.	Cost over-run	☐	☐	☐	☐	☐
3.	Ethical practices	☐	☐	☐	☐	☐
4.	Effective useful life (EUL) of facilities	☐	☐	☐	☐	☐
5.	Involvement of workers	☐	☐	☐	☐	☐
6.	Knowledge of workers	☐	☐	☐	☐	☐
7.	Time over-run	☐	☐	☐	☐	☐
8.	Upward & Downward communication	☐	☐	☐	☐	☐
9.	Work flow	☐	☐	☐	☐	☐
10.	Welfare of workers	☐	☐	☐	☐	☐

APENDIX IV

SECTION D:

IDENTIFY THE FACTORS CONTRIBUTING TO POOR HUMAN RELATIONS IN NIGERIA'S CONSTRUCTION INDUSTRY.

Please, kindly tick (X) in the appropriate cell in the table below to identify the factors contributing to poor human relations in Nigeria's construction industry using **Key: 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree**

S/No.	BARRIERS	5	4	3	2	1
1.	Climate	☐	☐	☐	☐	☐
2.	Corrupt and unethical practices	☐	☐	☐	☐	☐
3.	Economy	☐	☐	☐	☐	☐
4.	Ignorance	☐	☐	☐	☐	☐
5.	Inadequate Facilities	☐	☐	☐	☐	☐
6.	Lack of trust in employees	☐	☐	☐	☐	☐
7.	Language	☐	☐	☐	☐	☐
8.	Need for budget cuts	☐	☐	☐	☐	☐
9.	Non-involvement of employees in decision making processes	☐	☐	☐	☐	☐
10.	Pandemic	☐	☐	☐	☐	☐
11.	Religion	☐	☐	☐	☐	☐
12.	Staff shortage	☐	☐	☐	☐	☐

APENDIX V

SECTION E:

EXAMINE THE STRATEGIES TO IMPROVE HUMAN RELATIONS OF WORKERS ON CONSTRUCTION SITES.

Please, kindly tick (X) in the appropriate cell in the table below to identify ways by which the human relation practices in Nigeria's construction industry can be improved using.

Key: 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree

S/No.	STRATEGIES	5	4	3	2	1
1.	Education of stakeholders on the importance of human relations	☐	☐	☐	☐	☐
2.	Evacuating corrupt leaders	☐	☐	☐	☐	☐
3.	Educate workers on hygienic living	☐	☐	☐	☐	☐
4.	Providing translators in order to bridge language gap	☐	☐	☐	☐	☐
5.	Provision of adequate facilities	☐	☐	☐	☐	☐
6.	Provision of first aid on construction sites	☐	☐	☐	☐	☐
7.	Educating workers on importance of teamwork	☐	☐	☐	☐	☐

8.	Offer benefits to support well-being of workers	☐	☐	☐	☐	☐
9.	Provide support on mental health	☐	☐	☐	☐	☐
10.	Involvement of workers in decision making processes	☐	☐	☐	☐	☐