Cape Peninsula University of Technology

FACTORS MOTIVATING TEAM PERFORMANCE TO MITIGATE CONSTRUCTION PROJECT FAILURE AT A SELECTED CONSTRUCTION SITE IN GEORGE

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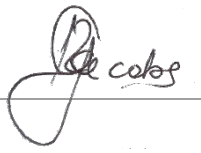
DECLARATION

I, Rual Jacobs, declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.



Signed 15/07/ 2022

Date

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"Be the reason someone believes in good people" - Unknown Author

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DEDICATION

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"Work for it – don't wish for it"

ABSTRACT

The production capacity of the human element cannot be measured continuously with absolute accuracy. The human element cannot be standardised nor calibrated to specific expectations. Most construction projects with high failure rates are managed by highly qualified and experienced engineers and tradesmen from the industry. The operational staff comprise well-trained artisans and technicians who know exactly what is needed and how these tasks should be executed. In the presence of such expertise among the various project practitioners, the expectation is for the execution processes to be smooth and efficient; yet, the failure rate of construction projects remains exceedingly high.

This study aimed to establish factors that motivate heavy-duty construction workforce to mitigate high construction project failure rates by meeting the requirements of the triple constraints in project management, namely, cost, time and performance/scope. The research question was formulated as follows: “What specific leader behaviour factors motivate project teams to perform well in executing construction project processes?”

A mixed method research methodology was followed to enable the research to be more complete. Both qualitative and quantitative research in the same study allows for an in-depth understanding of the phenomenon. The target population was identified as project practitioners involved at a selected public organisation in the Western Cape Province of South Africa. The data collection method was a survey. The data collection tool used was a structured questionnaire comprising three parts: demographics; Likert scale questions; open-ended questions.

In terms of ethical considerations, participation in the research was voluntary; all data collected will be kept strictly confidential for five years, where after the data will be destroyed. The significance of this research is that the outcomes of the study, i.e., the motivation factors, may be used to motivate the heavy duty construction workforce to mitigate high construction project failure rates through adopting the triple constraints, which are cost, time and performance/scope. Thus, the study will assist with the training of future project managers on team motivation.

The key findings and recommendations are outlined per research objective that subsequently addresses specific research questions. These findings and recommendations aim to bridge the gap that currently exists in the body of knowledge and address the alarming “gaps” between leaders and subordinates and the complete disconnection that exists within the construction industry where most projects fail to meet their objectives and succeed. The results obtained in answering the four research objectives indicate the different variables contained in

the different component groupings (see section 7.4 for a complete analysis of each of the behavioural patterns identified during the study).

The leader behavioural patterns that encourage employees positively to do their best during the project execution process include: organisational culture (esteem/social needs of employees); financial incentives/reward systems; semi-financial incentives; and leadership style.

Leader behavioural patterns that demotivate employees from exacting themselves to the fullest during project execution processes include: work performance related issues; financial incentives or reward system; site-specific related matters; external environment; and disrespect from co-workers or neglect with intent.

The type of relationship between the employee and the leader that affects their willingness to engage positively during project execution was found to have only two significant groupings that have a significant effect on employees' motivation: leader-subordinate style and member/employee engagements.

The key recommendations are: i) expand on the current research in less time-bound circumstances; ii) develop a framework or model of motivation for the construction industry; make recommendations to organisations to regularly perform employee performance measurements; iii) especially in the project space, the study can serve as a starting point for HR to identify current motivation awareness in the organisation; and iv) Improvement through policies, workshops and relevant training.

Keywords: Motivation, productivity, behaviour, performance, construction industry, triple constraints.

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KEY CONCEPTS AND DEFINITIONS

Motivation	The force that triggers behavioural changes which direct an individual or individuals towards the achievement of specific goals for sustained periods, resulting in the attainment of certain performance levels (Hellriegel et al., 2008:265).
Performance	Sheikh et al. (2016:33-46) define performance as the competency of an individual or team in effectively and/or efficiently executing a given task and meeting the set goals within the prescribed period and specifications.
Employee engagement	Lockwood (2007:1-11) asserts that employee engagement is the driver of organisational success. Retention of experienced personnel and the presence of intellectual knowledge encourage employees to participate and engage positively in organisational operations.
Team	Adnan et al. (2013:277-281) define a team as a group of people working towards a common goal with different skills and/or competencies that complement each other for the completion of a common or agreed-upon objective. Team skills help others to perform, making the whole greater than the sum of the values of the competencies.

CHAPTER 1: INTRODUCTION AND OVERVIEW OF STUDY

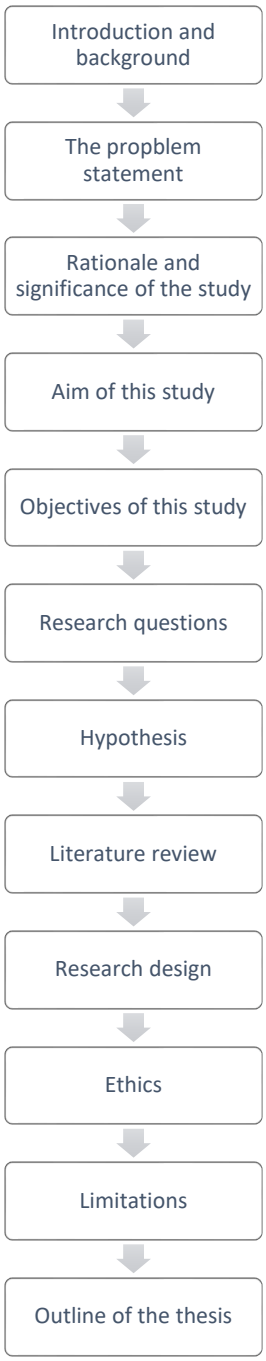

Figure 1.1: Layout of Chapter 1

1.1 Introduction and background

This study endeavours to make a positive contribution to the existing body of knowledge by identifying key motivation factors for team member performance in executing construction infrastructure projects gloabally, as employee motivation has lagged for decades in being a critical country development imperative compared to technological developments (Barg et al., 2014:1). While technological advances have helped with task operational efficiency, the successful performance of any business is tied to the effectiveness of the employees who work

to transform organisational objectives into tangible deliverables. Infrastructure development is pivotal and critical for the development of any economy, and by nature, these activities are in the form of projects.

On the other hand, the failure rate of project execution processes is disturbingly high, even in the presence of high technology and abundant resources (Joseph, 2015:62). Although there are well-developed technologies, techniques and tools that should enable effective and efficient execution of project tasks, the failure rate remains high. Thus, there is a need to identify the causal factors of this failure rate, which continues despite the abundance of tools and techniques. El Sayed and Demir (2015:91) are of the opinion that any organisation, regardless of the type of industry or operation, has one common critical factor that cannot be ignored—the people. Jowah and Laphi (2015:1-31) concur and opine that projects are conceptualised and executed by people, and are meant to benefit people. People are therefore the single most critical factor that threads through all successes and/or failures of any undertaking.

Although productivity is influenced by many other factors, management competence is the critical element that integrates all the other factors and directs them towards achieving the deliverables. Atkinson (1999, cited by Daniel & Daniel, 2018:184-197) refer to the iron triangle as the measure of successful project execution and indicate that many projects are never completed within the iron triangle. A successful operation is the result of efficient and effective integration of material, financial and human resources towards the attainment of the set objectives. According to Khan (2015:179), motivated employees have high productivity, and therefore one critical element of good project management is the ability of the project manager to motivate the team to perform. The rate of project failures in construction is uncomfortably high (Pinto & Winch, 2016:237-245) and accounts for almost 50% of all the construction projects executed. Ocran (2019:301-372) cites other authors on the unprecedented failures of construction projects on the continent, prompting the need to study more on causal failures for these critical requirements for the development of the continent. The study focuses on the identification of factors that can motivate the project team members to perform and meet the stipulated successful execution standards. In South Africa, only 89% of high-perfromance companies tend to complete projects successfully. Contrary to high-performing companies, low-performing companies only complete 36% of their projects succesfully. The constryction industry is expected to rebound over the course of the next year or so, with a forecast expansion of 9,1%. A report named “Construction in South Africa – Key trends and opportunities to 2025”, it expects the industry to stabilised at an annual average growth of 3,1% between 2023-2025.

1.2 The problem statement

The International Money Fund, a global organisation states that the absence of infrastructure on the African continent is largely responsible for the failure of the continent to develop (Lipscy, 2015:341-356). All of what can be classified as infrastructure is essentially the basic physical structures and facilities (e.g., buildings, roads, power supplies) necessary for the efficient operation and social as well as economic development of a society. South Africa needs to develop its infrastructure and the government has been talking about and planning for infrastructure as shown by the National Development Plan. There is a increasing need for capacity building in the the country to professionalise local government, Capacity building will improve the number of projects that are successfully planned and executed in the industry/country. The thrive for better leadership/key decision-makers (politicians) will steer the country into the right direction and acquire the necessary financial investments to take on major infrastructure projects, with key performance monitoring and control to achieve the essential set target/timeframes.

Of particular concern is the high failure rate of construction projects (Hughes et al., 2017:142-165), estimated at 48% on a global scale, not only in Africa. Researchers are involved in all aspects of research to determine the possible causes of failure in an era where advances in technology and techniques have increased the efficiency of operations, but with little effect on the failure rate. The common factor in all these projects is the human element—a demotivated employee will underperform (Al-Tkhayneh et al., 2019:77-102), while a motivated employee will perform well and is productive (Martin, 2020:910-953). The study therefore seeks to contribute to the existing body of knowledge and bridge the gap by idenfifying key factors that motivate team performance to mitigate the failure rate in the construction sector, which can be of benefit globally and locally.

1.3 Rationale and significance of the study

Rationale of the study: The high execution failure rate in the construction industry, which is meant to be the panacea for the development of economies, is cause for concern, hence the focus of this study.

Significance of the study: There is a need to continuously probe industry problems, with special emphasis on what needs to be done or put in place to increasingly mitigate the unprecedented execution failure rate of construction projects. The information gathered in this study may be used for training future project practitioners until the knowledge and the practice becomes the norm and enables effective and efficient project execution going forward. Research on this topic will greatly benefit the construction industry in one or more ways. It will enable others to also pursue interest in the topic, which has a specific focus on the human element, with the key motivating factors having an affect (positive/negative) on employees'

performance contribution to executing projects. Furthermore, it will enhance critical thinking and problem-solvings kills; new skills will be learned; mployees will challenge themselves in new ways; and the knowledge and information gained can be used to benefit all construction companies across the border that are eager to adopt the key aspects identified in the research.

1.4 Aim of this study

The aim of this study is to establish factors that motivate heavy duty construction workforce to mitigate high construction project failure rates by meeting the requirements of the triple constraints, namely, time, cost, and scope.

1.5 Objectives of this study

Research objectives are the expectations of the researcher about the research project and are classified in this study as a primary research objective and secondary research objectives.

The **primary research objective** for this study is to identify critical leader behaviour factors that motivate employees to perform positively during the execution of a construction project.

Secondary research objectives are derived from the primary research objective and may be understood to be elements/components of the primary research objective. The objectives of this study are to:

i) Identify subordinate expectations of the behaviour of the project leader considered to be motivating towards performance.
ii) Identify leader behavioural patterns considered by subordinates to be demotivating towards performance.
iii) Identify the impact of leader-member exchange patterns and their effect on expected employee engagement in projects.
iv) Identify leader behavioural patterns that attract a response (positive or negative) from the construction project practitioners.
v) Identify/propose improvement strategies that will enhance motivation.
vi) Encourage organisation/companies to have regular team building workshops, seminar, training (formal/informal) and/or information sessions that can be either in-house or external based on the organisational preference (cost implications and expertise).
vii) Assess the motivation status annually through conducting surveys on how employees is motivated within the organisation. The key would be to have one-on-one sessions, and having a leadership style that is less “top-down”, enhances the performance of subordinates, and motivating them to become involved.

1.6 Research questions

Research questions need to be answered during the research to address the problem statement or study gap, which is the purpose of the study. These research questions are

directly derived from or aligned to the research objectives, which inform the literature review and guide the research to be conducted.

The **main research question** (RQ) for this study is:

RQ: What specific leader behaviour factors motivate project teams to perform well in executing construction project processes?

Research sub-questions (RSQs) break down the main question in building blocks/aspects to explore all sides or perspectives of the main research question. The RSQs for this study are:

RSQ1: What leader behavioural patterns positively encourage employees to do their best during the project execution process?

RSQ2: What leader behavioural patterns demotivate employees from exacting themselves to the fullest during project execution processes?

RSQ3: What type of relationship between the employee and the leader affects their willingness to engage positively during project execution?

RSQ4: What type of leadership style does not affect employees' determination to perform positively or negatively during the execution process?

1.7 Research hypothesis

Jowah (2015:76) posits that a hypothesis is an assertion or statement that explains the relationship between two (or more) variables, suggesting that they influence each other as dependent or independent variables. They must of necessity be subject to the research processes to establish or disprove the relationship. In this study, the assertion (hypothesis) postulated is that:

"Specific leader behavioural factors influence employee performance of construction project practitioners during project execution processes."

1.8 Literature review

Berman et al. (2010:180) define motivation as the driving force that induces the determination within the workforce to attain their goals. The researchers opined that, although obvious, employee motivation remains one of the most significant factors to achieve goals and objectives. These achievements are translated into what we consider as individual and/or organisational success, which is the aim of the undertaking in the first place.

1.8.1 Origin of motivation

Nohria et al. (2008:1) argue that one of the long-lasting challenges even in trying times is motivating employees to do their best work. Kirsten (2010:1) believes that for over 50 years, an issue troubling managers has been the motivation of people because of the complexity of human beings. Thus, the motivation of employees at all levels within the organisation remains important. Kirsten (2010) is furthermore of the opinion that the gap in managers understanding their employees is no different today than a century ago.

According to Sadri and Clarke (2011:45), motivation is defined as the correlation of a variety of psychological procedures guiding people towards a goal, and motivated people will continue chasing that goal. All throughout academia, whether it is management, psychology, applied sciences or any other field, there have been a variety of definitions for the concept 'motivation'. Motivation—albeit the yearning of what people want to do, their wants, their uncertainties, and their ambitions—has everything to do with them behaving in a certain way (Walker & Miller, 2010:58).

According to Dartey-Baah (2010:4-9), motivation can be defined as that decision-making process that results in a desired outcome chosen by the individual, and it sets in motion certain behaviours to acquire this outcome. In another definition, Shah and Shah (2010) opine that motivation inspires people to produce the best results while working either individually or in groups within any organisation. Expressed in simpler terms, motivation is what managers use to motivate their subordinates to act in a certain favourable manner, hoping that in turn, it will satisfy those requests or other similar forces (Shah & Shah, 2010).

Gupta and Subramanian (2014) believe that motivation is evidently inspiring people to achieve goals. The authors furthermore state that the crucial challenge for managers is to get employees to perform at work. Gupta and Subramanian (2014) conclude by stating that to initiate worker, motivation is both the innate and external energetic forces that determine its form, path, strength and extent. This becomes ordinary and of equal importance within organisations, as it has to do with employee fulfilment and inspiration (Gupta & Subramanian, 2014:59).

1.8.2 Types of motivation

Motivation comprises interior aspects, which impel action, and exterior aspects that turn certain stimuli and/or incentives into actions (Holmes, 2011:1).

In terms of the motivation of employees within a company, it is of immense importance that organisations create an umbrella strategy for this purpose (Holmes, 2011:55). It simply means putting in place policies, procedures and processes necessary to ensure the setting of goals

or tasks, and to ensure there is monitoring in place for the acknowledgement of all achievements, thus promoting a good co-worker relationship (Holmes, 2011:55).

Should it be that the strategy, by its very nature, proves to be questionable, the level of commitment and motivation might cause productivity and/or project efficiency to suffer considerably due to its corrupt nature. Two types of motivation exist—intrinsic and extrinsic in nature.

i) **Intrinsic motivation:** Any motivation that originates from within an individual is defined as intrinsic motivation and is independent of any exterior or external means. The contentment derived from completing an assigned task regardless of any rewards, is what the individual seeks (Bainbridge, 2015:1).

ii) **Extrinsic motivation:** Any motivation whereby an individual is encouraged by any exterior means is referred to as extrinsic motivation. This means someone is only motivated to do the set task for a reward, with very little to no interest in performing the task (Bainbridge, 2015). Many researchers argue that rewards, which include people's salary or wages, will motivate them to perform tasks (Brooks, 2009:25). The use of extrinsic rewards may result in dishonesty, which is contra-productive irrespective of the benefits derived from extrinsic motivation (Noop, 2012:1).

Motivation in itself is neither behaviour nor performance, since motivational theories are extensively used to predict a behavioural pattern within people in any industry. It is said that while motivation is concerned with certain actions, it also has to do with both interior and exterior forces, which influence a choice of action within a person (Joseph, 2015:63).

In this study, the researcher endeavours to recognise the relevance of each definition to prove the relevance and build on what others researchers have found by presenting valid information that can be incorporate/implemented for subordinates to be better motivated.

1.8.3 Motivation of an employee

Salanova and Kirmanen (2010) explain that motivation as a process starts with establishing a goal to satisfy the recognised need. In conjunction to this, certain external motivating factors similar to rewards and incentives may be implemented for individuals to better accomplish their goals. Thus, it can be inferred that motivation increases employees' effectiveness and ultimately improves their willingness to work. It is thus employees' intrinsic eagerness that drives them to do work-related activities (Gupta & Subramanian, 2014:60).

1.8.4 Motivation as an instrument for improving productivity

The association between motivation and productivity is directly linked—in much simpler terms it means motivation is dependent on productivity. It can be assumed that appropriate motivation is the key contributor towards maximising worker productivity. In general, the

accurate alignment of controls and instruments, which helps direct humans to behave a certain way, can be defined as the motivation notion. In more specific terms, it can be described as the inspiring actions helping the workers to fulfil their tasks in a substantial way relatively close to achieving the project objectives.

It is undoubtedly of paramount importance that extensive focus be placed on the motivation of the labour force, as the quality of human performance revolves around motivation. Increased motivation brings forth increased productivity. The slightest possible action, positive or negative, can influence a worker's attitude towards work and hence affect their motivation. As far as motivation is concerned, whether it is of monetary value or based on moral value, its effect has been confirmed by the productivity of workers, especially when monetary value is at play. Over the past few decades, for approximately forty (40) years, the association between motivation and productivity within the construction industry has been acknowledged (Kazaz et al., 2008:96).

1.8.5 Motivation of the construction workforce

Shanks (2011) perceives the motivation of employees as complicated, as it necessitates a thorough considerate of ideas, principles and myths about the subject matter. Other researchers believe that motivation is a variable that is categorised into-between principal project aims and project performance (Rose & Manley, 2011:765-773). Due to its very nature, the industry depends heavily on its workforce to remain modest and lucrative (Hermanta & Xia-Hua, 2008:6). For many decades, both academics and practitioners have tried to find effective ways to motivate their construction employees.

The ability of an incentive mechanism to induce motivation originates in the principles of work motivation theories (Volker & Rose, 2012:3). Seiler et al. (2012) classify the motivation theories into two major types, namely: (i) content theories; and (ii) process theories. The content theories concentrate on the specific needs of the employees with regard to work motivation, while the process theories describe motivation concerning a coherent intellectual process, where the emphasis is on behaviour because of a conscious decision-making process.

Parkin et al. (2009) argue that the behavioural and psychological stand of employees might not always conform to the related motivational theories—it is merely a guide (Parkin et al., 2009:25).

1.8.6 Review of workforce motivational drivers—previous studies

i) In Australia, Hermanta and Xia-Hua (2008) conducted research on workers' drive and work efficiency. The outcomes included a total of 13 sub-criteria and 25 project attributes (Hermanta & Xia-Hua, 2008:6).

ii) In Turkey, a study conducted by Parkin et al. (2009) recognised ten (10) motivating factors and eight (8) de-motivating factors influencing construction workers. This emphasises the opinion that usage of interior and social forces motivates employees. Other significant motivating factors were identified in a study in Ireland. These are: organisational support, recognition, working conditions and design process efficiency (Oyedele, 2009:195).

iii) In Taiwan, Huang and Lu (2008) investigated the job satisfaction of sub-contractor workforce employed within the country at the time (Huang & Lu, 2008:528).

iv) In New Zealand, research conducted by Holmes (2011) was based on whether work-related groups were inspired by several motivating factors (Holmes, 2011:54).

v) In Kuwait, Jarkas and Radosavljevic (2013) identified twenty-three (23) motivational factors from literature to evaluate the efficiency of worker output in the construction industry (Jarkas & Radosavljevic, 2013).

1.8.7 Factors of employee motivation

Employee motivation can be achieved through numerous aspects that will affect the employee's performance. According to Flynn (2011), money is regarded as the most significant motivation factor to instil in employees a sense of increased responsibility towards their job performance in the workplace.

In a study done by Abdullah and Islam (2012:285-306), they confirmed that all the above-mentioned factors will motivate an employee in more than one way, ultimately leading to an increased performance. A study performed by Islam and Ismail on Malaysian employees recognised the following motivating factors as most important: high earnings, decent operational environments, advancements, work safekeeping, stimulating work, gratitude for work done, offering enhancement opportunities, job accountability, practical guidelines in assisting management with problem solving (Islam & Ismail, 2008:344-362). Cruz et al. (2009:478-490) focused on intrinsic and extrinsic motivation to derive employee motivational factors. Intrinsic motivating factors are self-assurance, independence, trustworthiness, affiliation, and extrinsic motivational factors are high-authority enticements, acknowledgment, advancement and permanency (Cruz et al., 2009).

1.8.8 The triple constraints in project management

The concept of the iron triangle is fundamental to how we understand success in a project. It is also sometimes referred to as the triple constraints or the project management triangle. According to Pinto, the iron triangle is a representation of the most basic criteria by which project success is measured. It has also become the standard for routine assessment of project performance (Pinto, 2010:35).

Figure 1.2: The Iron Triangle in Project Management
(Source: Bordio)

Since the 1970s, cost and quality have been the most widely accepted project success criteria (Atkinson, 1999). Thus, the concept of the iron triangle (triple constraints) is an effective way of communicating the interrelationships between these central success criteria. It is typically depicted as a triangle with the criteria on the vertices. Movement on one criterion, for example in response to client demands or resource demands, can put pressure on the other. According to Mokoena, failure in one constraint will likely lead to negative pressure on one or both of the other two constraints (Mokoena et al., 2013:814).

According to van Wyngaard et al. (2012:1993), this phenomenon is sometimes referred to as the "good, fast or cheap—pick two". Misunderstanding the iron triangle can lead to project failure despite effective management of all the other aspects of a project (Mokoena et al., 2013:813). Effectively managing the iron triangle has been found to be central to project success; however, it has also been found that research into the iron triangle is one of the most overlooked fundamentals of project management (Van Wyngaard et al., 2012:1993). Berssaneti and Carvalho (2015) opine that project management maturity is linked to the triple constraints. Berssaneti and Carvalho (2015) found that project management maturity is linked to the iron triangle. The persistent popularity of the iron triangle framework may be attributed to its simplicity.

Table 1.1: The triple constraints
(Source: Researcher – CPUT literature)

	Cost	Time	Performance/Scope
Constrain (Fixed)		●	●
Enhance (optimise)	●		●

Accept (Trade-off)			

1.8.9 Construction industry (history)

Within the construction industry, research on motivation in companies is scarce or non-existent in some countries (Cardoso et al., 2015:1201-1207). According to Lim and Ling (2012), it is important to create a suitable work environment so that a correlation exists between job satisfaction and other work practices, such as:

i) Appreciating employee efforts
ii) Including employees in key decision-making processes
iii) Appropriate allocation of the workload
iv) Applying a method of performance appraisal
v) Implementing adequate organisational structures (Lim & Ling, 2012:101-118).
vi) According to Laio et al. (2010), Taiwan over-emphasises the notion that job commitment and job characteristics influence job satisfaction (Laio et al., 2010:2273-2277).
vii) In a study by Tabassi et al. (2012), it was demonstrated that on-the-job practical training (i.e., employee motivation training) leads to considerable improvement in teamwork and efficient performance in completing assigned tasks (Tabassi et al., 2012:213-224).
viii) Dai et al. (2009) conducted a study on the perception of construction workers about the matters that affect their productivity, hence directly focussing on motivation (Dai et al., 2009:217-226).
ix) All of the above-mentioned researchers concluded in their respective studies that the main influences on employee productivity can be linked to a shortage in any of the following: tools, supplies, materials, project management, and construction equipment.
x) Cardoso et al. (2015) opine that very little research has been done as far as human resource management is concerned, and in particular, research that is related to employee motivation within the construction industry.

This research study endeavours to contribute to the existing body of knowledge by identifying motivating factors that subordinates, employed in the construction industry, can voice/make known that will enable them to perform better in executing their duties while working on projects.

1.9 Research design

1.9.1 Research paradigm

Over the years, research scientists have come to believe that there are methods that can be used to investigate or look for information about a phenomenon. The understanding of a

phenomenon or a situation assists in determining, analysing and deducing the likely trends, possibilities or even predicting how things can turn out to be.

For the research study, Saunders et al.'s (2015) 'research onion' design has been selected as it makes provision for mixed methods research constituting both qualitative research (interpretivism) and quantitative research (positivism). Two research two research paradigms have been adopted: i) the positivist paradigm for collecting and analysis quantitative data objectively by means of a questionnaire; ii) the Interpretivist paradigm, where the researcher is subjectively part of the research process; qualitative data are collected and analysed.

1.9.2 Research approach

The choice of research approach is determined by the type of problem and the objectives of the research, thereby requiring both the depth and breadth of the phenomenon. Creswell (2009) posits that the type of problem is the single most critical determinant of what approach is to be used considering what the information/findings will be used for.

The use of mixed methods research enabled the researcher to collect and analyse both quantitative and qualitative data. Mixed methods research is ideal where there is a need for a full description of the phenomenon being studies. For the positivist paradigm, a deductive research approach was deemed appropriate because a hypothesis was given and the deductive process was followed to prove this hypothesis true or false. For the interpretivist paradigm, the inductive approach was found to be appropriate because qualitative data were collected and research questions were asked, which were answered inductively.

1.9.3 Research strategy

The research strategy selected for this study included i) a case study and ii) a survey. The case selected was a legal entity operating in the public sector (Western Cape local government) within the municipal environment. The survey comprised a questionnaire (quantitative data) and interviews (qualitative data). This is discussed in detail in Chapter 5, section 5.4.

1.9.4 Research population and sample

1.9.4.1 Population

The target population was identified as project practitioners in the construction industry at the Civil Engineering Services (CES) Directorate of a selected public organisation in the Western Cape who report to a team leader, manager or supervisor. These included technicians, journey men or artisans (whichever way they are classified) who are plumbers, bricklayers, plasterers, floorists, electricians, carpenters and mortar mixers, amongst others, as would be found working directly at a construction site.

1.9.4.2 Sampling

According to Blair et al. (2014:204), a sample symbolises a subset of a larger population, while the population is the set of elements intended to make inferences. All the people with similar characteristics who are studied are called the population (Leedy & Ormrod, 2013:204). For this study, categories of construction workers ranged from unskilled and semi-skilled to skilled; these were employees with first-hand experience of the situations within the organisation they are employed with. As indicated in section 1.9.4.1, all the employees in the CED department at the selected public organisation formed the population of the study and were invited to take part. In total, 54 participants were willing to take part; thus, the final sample size was 54.

1.9.5 Data collection

1.9.5.1 Data collection instruments

The researcher opted to use a questionnaire as a data collection instrument considering the possible advantages of the use of such an instrument. A structured three-part questionnaire was used. The questionnaire provided uniformity across the questions and may be used in the same format by other researchers to confirm the findings or for future research. It may also be kept or stored and can be utilised as a secondary source for future research (Treiman, 2008:59).

The three parts of the questionnaires were designed as the biography section, the Likert scale section, and an open-ended section. The questionnaire questions are an elaboration of the research questions as derived/developed from the research objectives emanating from the problem statement.

1.9.5.2 Data collection fieldwork

For data collection, the following was incorporated into the research:

i) **Questionnaire A:** Google Forms questionnaire; the graphs and figures were created automatically.

ii) **Questionnaire B:** Construction Professionals interview (case study). Due to the COVID-19 pandemic, it was not possible to visit or request any in-person visits for an interview; hence the researcher has structured the questionnaire accordingly. No face-to-face interviews were conducted during the COVID-19 period. The target audience was identified as project managers, project engineers, engineers, technologists, technicians, HSE Officials, and site agents.

All COVID-19 protocols were adhered to during this research. These included:

i) Keeping a safe distance of 1.5m.

ii) Wear a face mask.

iii) Apply hand sanitizer.

iv) Limit people to 2/3 in a room depending on the size of the room.

v) No physical contact whatsoever.

1.9.6 Data analysis

1.9.6.1 Thematic analysis—qualitative data

Thematic analysis is a method of analysing qualitative data. It is usually applied to a set of texts such as interview transcripts. The researcher closely examines the data to identify common themes—topics, ideas, and patterns of meaning that are repeated frequently. Thematic analysis (TA) is one of the most common forms of analysis in qualitative research. The purpose of TA is to identify patterns of meaning (themes) across a dataset that provide an answer to the research question being addressed. Themes are patterns across datasets that are important to the description of a phenomenon and associated to a specific research question. In this study, the themes were extracted by using a word repetition technique through which dominant ideas are identified from frequently used words.

1.9.6.2 Google Forms—quantitative data

The structured questionnaire was created with Google Forms for ease of reference. In Google Forms, the analysis of the above-mentioned questionnaire is automatically generated, which has been found sufficient to achieve the objectives of this research. The results extracted from Google Forms were cleared, coded, and imported to the SPSS software for a more meaningful analysis, where component groupings and themes were created. These results are presented in Chapter 7, the quantitative study analysis.

1.10 Ethics

The researcher requested and was granted permission to conduct research at a selected public organisation involved in construction in the Western Cape Province of South Africa. Although permission to conduct research was granted by the organisation, individual participants needed to give written consent to partake in the research by completing the survey. Only those workers who volunteered to take part in the study were involved.

The participants were free to withdraw from completing the questionnaire at any time if they felt uncomfortable with the process. They could omit any sections/questions, and they did not need to explain why they omitted a question (questions) or decided to withdraw from the study. All the prospective participants were debriefed. The details, objectives and purpose of the research were explained to those who were available to take part in the study. The identity of the participants was protected; no names or identification marks were allowed on the questionnaire (the data collection tool). No authorities were given access to the questionnaire and the participants were protected by remaining anonymous. Confidentiality was (and still is) essential.

1.11 Delimitation

The research was limited to a selected organisation in the Western Cape. The conditions of the Lockdown (Disaster Act), attributed to the COVID-19 pandemic, may have affected the data collection process.

1.12 Outline of the thesis

This research is divided into eight chapters, followed by the reference list and the appendices. The chapters are organised in such a way that the argument of the thesis is formed. The following are the specifics of the thesis chapters:

Chapter 1: The chapter starts with an introduction of the study, and continues with a literature review that leads to identifying the study gap. The problem statement, objectives, research questions, research methodology, data collection instrument and method, and ethical considerations are presented. The chapter concludes with a summary.

Chapter 2: The chapter starts with an introduction to the aims of management and leadership, the purpose of management and leadership, the distinction between management and leadership, and the characteristics of a manager and leader. It concludes with a chapter summary.

Chapter 3: The chapter introduces and defines motivation. The process of motivation, a description of motivation theories, and the types of motivation are discussed. This is followed by a short description of intrinsic and extrinsic motivation and the basic concepts of motivation. Next, the different motivation theories, factors related to job satisfaction, steps to achieve high levels of motivation, motivation of the construction workforce through the use of incentives to improve performance and other related benefits are presented. The chapter concludes with a summary.

Chapter 4: The chapter starts with an introduction and definition of leadership, followed by a discussion of the different leadership theories, principles of leadership and the different types of leadership styles. The factors that determine leadership style are explained, and the competency of 21st century leadership roles—performance and productivity—are identified. The chapter concludes with a summary of a leader and manager.

Chapter 5: The chapter starts with an introduction to the research methodology. Next, the research approach is discussed, key assumptions for the study are drawn, and the research design, types of designs, and choice of design for the current research are presented. The research methodology, types of methodologies (qualitative and quantitative research), and choice and justification of methodology for this research are explained. The advantages and

disadvantages of the mixed method approach are explained, and the chapter concludes with a summary.

Chapter 6: The chapter starts with an introduction to the qualitative analysis of the study. The interviews that were conducted are reported on. The data analysis and findings derived from this analysis are presented, and the chapter concludes with a summary.

Chapter 7: The chapter starts with an introduction to the quantitative analysis of the research. Next, the four objectives of the study are discussed. The chapter concludes with a summary.

Chapter 8: The chapter starts with a brief introduction. Next, answers to all the research questions are presented, followed by a summary of the findings, recommendations, and limitations experienced during the study. Prospects for future research are provided, and a conclusion is drawn for the study.

CHAPTER 2: LITERATURE REVIEW

Figure 2.1: Layout of Chapter 2

2.1 Introduction

Chapters 2, 3 and 4 comprise a general introduction to the thesis and a brief background on what was previously done in the research space. It helps the reader to understand the general concepts which relating to a manager and leader and then focuses on how the motivational theories and leadership styles used in organisations help motivate employees. It leads to a discussion of the research setting, the statement of the research problem and the hypotheses. It furthermore outlines the research aim, objectives and research questions derived from the formulated problem. The foundation for this thesis is laid through a discussion of the elements about management and leadership before the motivational theories (Chapter 3) and leadership theories (Chapter 4) are discussed in detail.

2.2 The aims of management and leadership

Management has been defined as activities required in designing, organising, encouraging, and controlling personnel and operational resources needed to achieve organisational outcomes (Kotter, 2008). According to Armstrong (2008:3), management is “deciding what to do and then getting it done through the effective use of resources”. The most important part of

management will indeed be getting things done through people, but managers will be concerned directly or indirectly with all other resources, including their own.

Management is concerned with achieving results by effectively obtaining, deploying, utilising and controlling all the resources required, namely people, money, information, facilities, plant and equipment. Thus, management's role is to apply organisational resources to achieve organisational objectives. In general, any industry, including the construction industry, is aware of the importance of human resources in achieving these objectives. Organisational goals include increased productivity and efficiency, and it is generally acknowledged that worker motivation is an influencing factor in these areas.

Management as a discipline has evolved over time as new-generation managers strived to increase organisational productivity. Different methods of control had to be implemented to influence the behaviour of the workforce (Parkin et al., 2009:105):

i) Scientific management—focuses on specific control of work activities.
ii) New-wave management—relies on the culture of an organisation to direct worker behaviour.

Leadership is a process whereby an individual influences a group of individuals to achieve a common goal, the ability to establish vision and direction, to influence, align others towards a common purpose, and to empower and inspire people to achieve success (Ranani, 2015: [Slide 5]). Leadership focuses on the most important resource—people. It is the process of developing and communicating a vision for the future, motivating people and gaining their commitment and engagement.

Despite the challenges, leadership is all about making a difference in the lives of others; it is about collaborating with others to enable them to fulfil their ambition: it is about stimulating creativity and bringing out the best in others. Leadership is about solving problems as well as transforming what appears as an impossible task.

2.3 Purpose of management and leadership

Debates on the place of leadership and management in organisations have been on-going for many decades and gurus in the field have observed that the basic principles and practices of leadership and management have not changed significantly over the years. However, they are becoming much more complex because of the nature of the 21st century organisations and the dynamics of the new global economy (Drucker, 2001, 2006, 2009; Rose, 2008; Trilling & Fadel, 2009).

In addition, leaders and managers have become great team players and relationship builders (Sandmann & Van den Berg, 1955) as well as create a motivating work environment to enhance workers' productivity.

It has also been observed that developing 21st century business organisations requires leaders and managers who are capable of making quick and effective decisions, learn to utilise the powers of emerging technologies and social media to effectively and efficiently communicate and coordinate actions (Drucker, 2001, 2006, 2009; Rose, 2008; Trilling & Fadel, 2009). They need to become aware of global politics in the world connected by internet and globalisation, become more innovative and "create a sense of urgency, make decisions, and act decisively (Rose, 2008).

As Drucker (2006) aptly observed, executives should first manage themselves effectively before they can possibly be expected to manage their co-workers and followers. Although leadership is not all about the style, leaders and managers must choose from the various leadership styles to effectively lead and manage in 21st century organisations.

Leadership is about character, taking responsibility, decision-making and solving complex problems. So, leaders and managers in 21st century organisations are expected to possess the capability and competence to design and implement appropriate interventions as problems arise (Stodgill, 1974; Parsons, 2015).

Other researchers have noted that leadership and management, although similar, are two different concepts that are often used interchangeably (Drucker, 2001, 2006, 2009; Rose, 2008; Trilling & Fadel, 2009).

> *Management is about coping with complexity while leadership by contrast is about coping with change* (Gallos, 2008:6).

To run organisations effectively and efficiently in the 21st century, good leaders and managers are imperative. As noted, leadership is an individual's ability to influence others. Therefore, in contrasting with management leadership, Drucker (2009), in Essential Drucker, has noted that "Management is doing things right: Leadership is doing the right things".

According to the Management Standards Centre, the key purpose of management and leadership is to provide direction, facilitate change and achieve results through the efficient, creative and responsible use of resources (Armstrong, 2008:20), as analysed in Table 2.1.

Table 2.1: Purpose of management and leadership
(Source: Armstrong, 2008:20)

Providing direction	Facilitating change	Achieving results	Meeting customer needs	Working with people	Using resources	Managing self & personal skills
Develop a vision for the future	Lead innovations	Lead business to achieve goals and objectives	Promote products and/ or services to customers	Build relationships	Manage financial resources	Manage own contribution
Gain commitment	Manage change	Lead operations to achieve specific results	Obtain contracts to supply products and/ or services	Develop networks and partnerships	Procure products and/or services	Develop own knowledge, skills and competence
Provide leadership		Lead projects to achieve specific results	Deliver products and/or services to customers	Manage people	Manage physical resources and technology	
Provide governance – comply with values, ethical and legal frameworks and manage risk in line with shared goals			Solve problems for customers		Manage information and knowledge	
			Assure the quality of products and/ or services			

Prior studies in the Project Management field—according to the PMBOK 5th edition—the overall process of management is subdivided into several individual processes, which are methods of operation specifically designed to assist in the achievement of objectives. Their purpose is to bring as much as possible order, predictability, logic and consistency to the tasks of management in the ever-changing, varied and turbulent environment in which managers work. The main processes of management have been defined in classical manners by theorists of management as (classical view of management):

i) Planning—deciding on a course of action to achieve a desired result.
ii) Organising—setting up and staffing the most appropriate organisation to achieve the desired aim.
iii) Motivating—exercising leadership to motivate people to work together smoothly and to the best of their ability as part of a team.
iv) Controlling—measuring and monitoring the progress of work in relation to the plan and taking corrective action when required.

Empiricists/earlier researchers such as Mintzberg (1973) challenged/opposed the classical view of management in terms of management spent their time. It has been concluded that management is a process that involves a mix of rational and logical problem-solving, decision-making activities, and intuitive judgemental activities. It is therefore both a science and an art.

Table 2.2: Comparison—managing vs. leading of projects in the workplace (Source: Matande, 2017: Slide 6)

Management	Leaders
Managers—managing complexity	Leaders—managing change
Formulate plans and objectives	Recognise the need for change to keep the project on track
Monitor results	Initiate change
Take corrective action	Provide direction and motivation
Expedite activities	Innovate and adapt as necessary
Solve technical problems	Integrate assigned resources
Serve as peacemaker	
Make trade-offs in terms of time, cost and project scope	

2.4 The distinction between management and leadership

Managers must be leaders. Leaders are often, but not always, managers. A distinction can be made between the processes of management and leadership.

Management is concerned with achieving results by effectively obtaining, deploying, utilising and controlling all the resources required, which are people, money, information, facilities, plant and equipment.

Leadership focuses on the most important resource—people. It is the process of developing and communicating a vision for the future, motivating people and gaining their commitment and engagement.

This distinction is important. Management is mainly about the provision, deployment, utilisation and control of resources. However, where people are involved—and they almost always are—it is impossible to deliver results without providing effective leadership. It is not enough to be a good manager of resources; they also have to be good leaders of people (Armstrong 2010:7).

Questions that may be asked can relate to the any of the following two categories:

i) How can leaders and managers motivate their followers to achieve their objectives in the (new) work environment?
ii) What leadership and management styles are appropriate in today's (21st century) organisations?

2.5 Characteristics of managers and leaders

The characteristics of a manager are presented in Table 2.3.

Table 2.3: Characteristics of a manager
(Source: Naylor, 1999:524)

The Manager	
Leads from the head	Exerts positive power
Rational	Analytical
Consulting	Structured
Persistent	Deliberate
Problem solving	Authoritative
Tough-minded	Stabilising

The characteristics of a leader are presented in Table 2.4.

Table 2.4: Characteristics of a leader
(Source: Naylor, 1999:524)

The Leader	
Leads from the heart	Exerts personal power
Visionary	Innovative
Passionate	Courageous
Creative	Imaginative
Flexible	Experimental
Inspiring	Initiates change

2.6 Summary

In this chapter, it was important to establish an overall review and highlight the distinct differences between a leader and a manager within any organisation. To emphasise the fact that not all leaders are managers and not all managers are leaders, there exist notable differences that were be pointed out. Furthermore, the purpose of a manager and a leader as well as their innate characteristics were pointed out, as they are either directly or indirectly responsible for project success and/or failure because they oversee the people aspect, and they are either directly or indirectly responsible for the motivation of the workforce in relation to the triple constrains. If they neglect the one key asset, i.e., the people component, a project has little to no chance of achieving the set objectives and runs the risk of not being completed at all, as motivation, productivity and people are connected.

CHAPTER 3: MOTIVATIONAL THEORIES

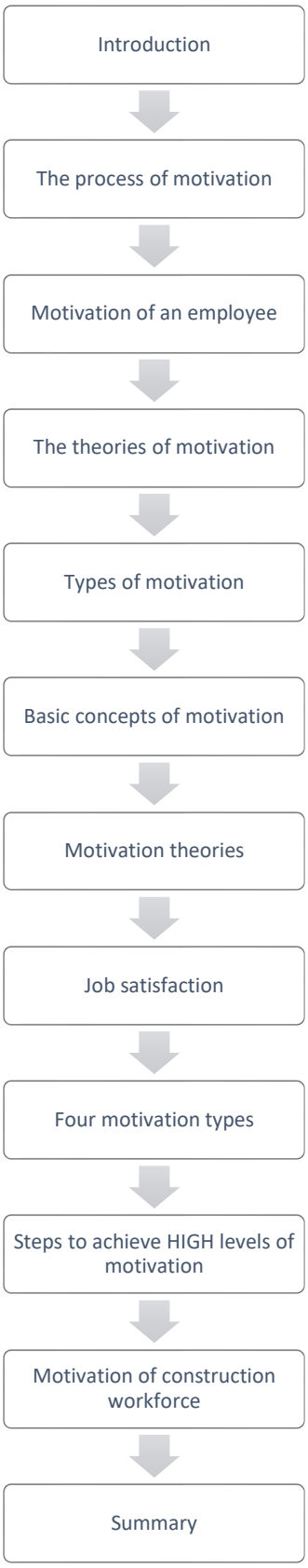

Figure 3.1: Layout of Chapter 3

3.1 Introduction

This section provides an overview of the literature reviewed about the basic concepts of motivation and the various theories on motivation. Motivating people is the process of getting people to move in the direction the manager wants them to go. Organisations can provide or facilitate the context in which high levels of motivation can be achieved through reward systems and the provision of opportunities for learning and development. However, the individual manager still has a major part to play in deploying their own motivation skills to self and then to motivate individuals in the team to give their best and to make good use of motivational systems and processes provided in-house and/or through outsourcing.

Staff in any industry are the key resources to that industry's success. Human assets in the 21st century are considered the most important asset of any company (Hafiza et al., 2011). The performance of employees and managers determines to a large extent the quality of employees because low job satisfaction may lead to costly turnovers, non-attendance, sluggishness and even poor mental health (Hellriegel et al., 2008). According to Gallagher and Einhorn (1976), whether supervising an expansion of a firm's activities or cutting back on policies in response to a drop in demand, a manager continually strives to draw better return on his capital investment. When this effort is redirected towards the human portion of the firm's capital, the manager focuses on a recurrent problem in business activity, namely employee motivation.

Since all organisations are concerned with what should be done to achieve sustained high levels of performances through people, it means paying close attention to how individuals can best be motivated through means such as incentives and rewards, as the work they do and the organisation context in which they carry out that work cannot be understated (Armstrong, 2010).

According to Hafiza et al. (2011), there are several factors that can affect employee performances, including training and development opportunities, working conditions, worker-employer relationship, job security, and company overall policies and procedures for rewarding employees.

3.1.1 Motivation defined

Motivation is defined as the process that accounts for an individual's intensity, direction and persistence towards attaining a goal (Page, 2008). According to Tosi et al. (2000), motivation has both psychological and managerial meaning.

Psychological meaning of motivation refers to the internal mental state of a person that relates to initiation, direction, persistence, intensity and termination of behaviour.

Managerial meaning of motivation deals with the activity of managers and leaders to induce others in order to produce results desired or outlined by the organisation or by the manager which conforms to a relationship between motivation, ability and performance.

Since staff can be motivated in various ways, it will be ridiculous for those responsible for motivation (i.e., HR professionals) in the construction industry to attempt motivating their employees when they do not know what motivates the employees. Motivation of employees in the workplace still remains one of the sensitive subjects that determine the level of input of employees in the organisation to deliver a good performance. This means that motivation contributes either intrinsically or extrinsically to employee satisfaction and therefore enhances performance and productivity (Bhattacharyya, 2007). In the 21st century, treating people right is not an option but a necessity (Lawler, 2003).

3.2 The process of motivation

Motivation is concerned with goal-directed behaviour. People are motivated to do something if they think it will be rewarding. The process of motivation is initiated by someone recognising an unsatisfied need. A goal is then established which will satisfy that need, and a course of action is determined which is expected to lead towards the attainment of that goal. Motivation is the process of inspiring people to achieve their goals (Chaudhary & Sharma, 2012). Ultimately, management and managers motivate people by providing the means for them to satisfy their unsatisfied needs, which can be offered through incentives and rewards for their achievements and effort.

Work motivation is a set of energetic forces that originate within individual to initiate work-related behaviour and determine its form, direction, intensity and duration (Kirsten, 2010). Getting people to do their best at work is one of the hardest challenges of managers. The importance of employee satisfaction and motivation is becoming increasingly important every day. Nohria et al. (2008) point to four drivers underlining motivation: acquire, bond, comprehend and defend. Nohria et al. furthermore point out that the organisational levels of motivation include reward system, culture, job design and performance-management, and resource-allocation processes.

Motivated people make decisions and dedicate considerable effort to obtain something they value. Many researchers in recent years have shown a definite relationship between motivation and performance (Gagné & Deci, 2005). Since the needs of individuals and their associated goals vary and are widespread, it is difficult, if not impossible, to precisely predict exactly how a particular incentive or reward will affect the individual's behaviour.

3.3 Motivation of an employee

Motivation is an employee's intrinsic enthusiasm and drives the employee to accomplish the activities related to work (Chaudhary & Sharma, 2012). Similarly, Salanova and Kirmanen (2010) explain that the process of motivation starts with the recognition of unsatisfied needs. Then a goal needs to be established to satisfy this need. Rewards and incentives may be established for employees to better accomplish the given goal.

The social context also affects the motivation level. The context consists of organisational and cultural values, but it also includes leadership and management as well as the influences of the group or team (Salanova & Kirmanen, 2010). Motivation increases effectiveness beyond the organisation by improving the willingness of the employees to work.

3.4 The theories of motivation

There are many theories of motivation. Maslow's Hierarchy of Needs and Herzberg's Motivation-Hygiene Theory are some of the most used theories. These will be analysed more in detail since they are related to the research study. The most known theory is Maslow's Hierarchy of Needs, which consists of the physiological levels, safety and security, social, esteem or egoistic, self-fulfilment or self-actualisation. Maslow's Hierarchy of Needs can illustrate a theoretical explanation of why salary is important. In Maslow's Hierarchy of Needs, when the basic necessities of a human being are fulfilled, the individual wants to use his capabilities to the fullest (Maslow, 1943). If the organisation does not provide him the opportunities to overcome his job assignments on the level of his abilities, he will never be satisfied. It also increases the level of stress in the workplace.

According to Herzberg's Motivation-Hygiene Theory, to create satisfaction, the motivational factors associated with work need to be addressed—Herzberg calls this "job enrichment". It is a given that any job should be examined to determine how it could be improved to further satisfy the employee. In relation to the above-mentioned theory, training and development opportunities help employees to pursue their satisfaction in the company and their position.

Motivation can be associated with many elements, including salary, promotion, personal goals, job security, working environment, training and development, recognition, administrative practices and workloads. Some of these factors are briefly discussed below:

i) **Salary**—Money has been pointed out as a motivational factor by many researchers. It is often seen as a symbol of success and associated with comfort and security (Engelberg & Sjöberg, 2006). It is considered an advantage for managers, as they can use money as a strategy seeing that it has an impact on employees' performance. Also, some researchers are of the opinion that motivation is the main instrument to be used, knowing that it exists as a direct correlation between salary and the results obtained

(Androniceanu, 2011). Other researchers, such as Murphy, opine that the employee should be motivated through a proportional salary according to the work efforts done. There are other important factors as well, but a satisfactory salary is among the top factors being recognise.

ii) **Training and development**—is the process of gathering work experience related to knowledge and skills in order to systematically improve the performance of the employees. It is known that organisational training has prodigious potential outcomes. Training has to begin with the recognition of the training needs through job analysis, performance assessment and organisational analysis; then, after identifying the training needs, training programmes need to be organised. As indicated by Nesan and Holt (cited by Tabassi & Bakar, 2009), a system of performance measures is developed to monitor improvements among building teams.

iii) **Workloads**—refer to the intensity of job assignments. It has commonly been the amount of work assigned or the amount of work expected to be completed by a worker within a specified time period (Dasgupta, 2013). It is a source of mental stress for employees. Stress is an active state of mind in which human face opportunity and constraints (Robbins, 1997). Workload can negatively affect people's overall performance. The main objectives of assessing and predicting workloads are to achieve an evenly distributed, managed workload and determine the resources needed to carry out the work (Dasgupta, 2013). It is a difficult task to have full control over all the workloads at all times, but it is possible to recognise the effects and take action in advance. Lastly, the workload analysis is used as a methodical approach to set a time and specify efforts and resources with the intent of enforcing activities to achieving objectives.

iv) **Promotion**—is one of the most efficient ways of keeping employees motivated. Employees are offered more opportunities to advance their careers, which leads to more responsibilities and implies greater authority. Promotion can mean an increase in salary. This commodity can also cover part of the security needs by enhancing the buying power of the employee. Promotions may help with assigning workers to jobs that better suit their abilities and is a way to promote the talented worker (Gibbons, 1997). Promotions can be also used to reward employees' past efforts, promote investments in specific human capita, and decrease job turnover rates.

3.5 Types of motivation

Motivation at work can take place in two ways. Firstly, people can motivate themselves by seeking, finding and carrying out work which satisfies their need or at least leads them to expect that their goals will be achieved. Secondly, people can be motivated by management through methods such as salaries, promotions and praise, among others.

3.5.1 Intrinsic motivation

Intrinsic motivation refers to self-generated factors influencing people to behave in a particular way or move in a particular direction. These include:

i) Responsibility
ii) Freedom to act
iii) Scope to use and develop skills and abilities
iv) Interesting and challenging work
v) Opportunities for advancement

3.5.2 Extrinsic motivation

Extrinsic motivation refers to what is done to or for people to motivate them. Two types of rewards are:

i) Increase in pay—promotion or praise
ii) Punishment—disciplinary hearing, withholding pay or criticism

These two types are discussed in more detail in section 3.9.

According to Armstrong (2008), extrinsic motivators could have an immediate and powerful effect, but this will not last for long. The intrinsic motivators, which are concerned with the quality of work life, are likely to have a deeper and longer-term effect because they are inherent in individuals and not imposed from outside (Armstrong, 2008).

3.6 Basic concepts of motivation

The basic concepts of motivation are concerned with needs, goals, reinforcement and expectations.

3.6.1 Needs

The key needs associated with work are achievement, recognition, responsibility, influence and personal growth. Behaviour is thus motivated by unsatisfied needs.

3.6.2 Goals

Motivation will increase if goal setting techniques are used, preferably with the following characteristics:

i) Specific
ii) Challenging but reachable
iii) Fair and reasonable
iv) Full participation goal setting
v) Appropriate feedback channels—people feel pride and satisfaction when achieving a challenge where the goal is fair; this leads to commitment to higher goals

3.6.3 Reinforcement

Achieving goals and rewards acts as positive incentives and reinforces successful behaviour, which repeats whenever a similar need arises.

3.6.4 Expectations

Motivation only happens when individuals experience any of the following:

i) Feel able to change their behaviour
ii) Feel confident that a change in their behaviour will produce a reward
iii) Value the reward as sufficient to satisfy the change in behaviour (Armstrong, 2010)

For this current study, *needs*, *goals*, *reinforcement* and *expectation* are crucial concepts to consider in line with the basic criteria for motivation, which are particularly important as each person is unique. Each employee has different needs, goals, reinforcements and expectations, and these factors are response triggers. This proves particularly true as factors that motivate one employee do not necessarily motivate the next employee. We all need support systems to bring out the best in us. In this study, the researcher endeavours to show how the *needs*, *goals*, *reinforcement* and *expectation* of employees have an effect on their motivation at work.

3.7 Motivation theories

For many decades, employers sought various ways of motivating their employees to enhance their performance. Still, the basic understanding of what motivates people holds true. This is embedded in the "whip and the carrot approach". It is believed that in the 1950s, just after the Second World War, theories of motivation became visible through the following three founding theories:

i) Abraham Maslow's Hierarchy of Needs
ii) Douglas McGregor's X and Y Theory
iii) Fredrick Herzberg's Two Factor Theory

Although these founding theories have been criticised by many academics over past years, since the beginning of the 20th century, many researchers in academia (management, scientists, sociologists, psychologists) studied various means of motivating human behaviour from different perspectives, and several management theories for motivation have been developed. These theories are referred to as contemporary theories (Parkin et al., 2010; Seiler et al., 2012). These contemporary motivation theories are interlinked to earlier theories and either add to or expand on the earlier ones. Literature reviewed on motivation theories revealed two categories, namely, content theories and process or cognitive theories.

The motivation theories discussed in the next sections have been identified in literature as being significant to motivating employees in the workplace. Individual aspects of these

motivational theories have been identified as important to this current study and were used to formulate appropriate questionnaire and interview questions posed to the study participants.

3.7.1 Content theories

Content theories focus on the individual's need and explain why it is important to consider the individual needs of employees with regards to work motivation (Seiler et al., 2012). These theories try to describe why people are motivated in different ways and at different work settings/surroundings. Derived from content theories are the needs theories and job content theories. Maslow's Hierarchy of Needs theory, which was developed by psychologist, Abraham Maslow in 1943, is still one of the best known content theories to date. It is based on a satisfaction-progression process where an individual satisfies a lower-level need; then the next higher need in the hierarchy becomes the primary motivator. Maslow's Hierarchy of Needs theory involves the following: physiological, safety, belonging/love, self-esteem, and self-actualisation. Although these needs are always in existence, it is only as the lower-level needs become satisfied that the higher-level needs start to emerge and become motivators of behaviour. Maslow noted that one need does not have to be satisfied for another, higher, need to emerge. Once a need has been met, it ceases to play an active role in motivation. Thus, lower-level needs tend to be met through external satisfaction, while higher-level needs tend to be met through internal satisfaction (Parkin et al., 2009:107).

Although one of the best-known organisational behaviour theories, Maslow's need hierarchy is considered too rigid to explain the dynamic and unstable characteristics of employee needs. Yet, it provides an important introduction to the needs of employees. It has also laid the foundation for other theories such as Alderfer's ERG theory. In 1969, Clayton P Alderfer simplified Maslow's theory by categorising the hierarchy of needs into three simpler needs categories: i) Existence; ii) Relatedness; and iii) Growth.

3.7.1.1 Maslow's Hierarchy of Needs Theory

ERG Theory is based on the frustration-regression process and proposes that if an individual is continually frustrated in trying to satisfy a need in the hierarchy, then the higher need will be required. David McClelland (1961) proposes a context for understanding the needs of people, which is significant in understanding human motivation and behaviour, in his book named "The Achieving society". It is divided into the following sub-divisions:

i) The need to achievement
ii) The need for affiliation
iii) The need for power

Generally, the need theories hold that an individual is motivated to do something if he or she comes across a certain need that may be accomplished directly or indirectly by performing the

assigned work (Maslow, 1943; McClelland, 1961; Alderfer, 1972). The Job Content Theory (Hackman & Oldham, 1976) maintains that aspects related to job content can satisfy and motivate people to work. In 1966, Herzberg further explained the Job Content Theory by proposing a two-factor motivational theory, in close relation to Maslow's theory as motivation-hygiene.

3.7.1.2 Fredrick Herzberg's Two Factor Theory (Motivation-Hygiene)

Fredrick Herzberg's Two Factor Theory is based on this idea that a person's needs fall into two categories, namely:

i) Animal needs—to avoid pain.
ii) Human needs—to grow psychologically (Herzberg et al., 1959; Bevins, 2018).

This theory differentiates between satisfaction and the opposite of dissatisfaction and vice versa. It further states that in relation to work setting it contends that job satisfaction is not the opposite of job dissatisfaction, and things that people find satisfying about their work are not always the opposite of the things they find dissatisfying. An individual's needs of meaning and personal growth can be fulfilled by motivators/satisfiers. It may include achievement, recognition, work itself, responsibility, advancement, and growth. Hygiene factors might create dissatisfaction if they are mishandled. These include: company policy and administration, supervision, relationship with supervisor, working conditions, personal life, salary, relationship with subordinates, status, and security.

Table 3.1: Job satisfiers and dissatisfiers – Herzberg et al.'s (1959) Two Factor Theory (Source: Self-created based on previous literature)

Motivators/Satisfiers	Dissatisfiers
Used to fulfil an individual's need of meaning and personal growth	Hygiene factor mishandled
Achievement	Company policy and administration
Recognition (for achievement)	Supervision
Work itself	Relationship with supervisor
Responsibility	Working conditions
Advancement	Personal life
Growth	Salary
	Relationship with subordinates
	Status and security

Motivating factors contribute towards job satisfaction. It describes a person's relationship with what they do—their job content—and as motivators lead to job satisfaction because they address a person's need for growth. It is therefore the substance of the job which allows

achievement of the growth goals, and hence satisfaction (Parkin et al., 2009:107). Motivating factors tends to correlate with intrinsic rewards.

Job dissatisfaction/hygiene factors describe a person's relationship with the context or environment in which they work. A positive experience within that work environment will result in motivation and a negative experience will result in demotivation. Hollyforde and Whiddett (2002) opined that motivation is deemed to be a function of growth, hygiene factors on the other hand do not motivate, but it rather moves people because of the need to avoid punishment or failure (Parkin et al., 2009:107). Job dissatisfaction/hygiene factors tend to correlate with intrinsic rewards.

3.7.1.3 Douglas McGregor's Theory X and Theory Y

Douglas McGregor's Theory X and Theory Y integrated motivation with management philosophies, from scientific management with its reliance on extrinsic motivations to wave management with emphasis on intrinsic motivational factors (Parkin et al., 2009:106). Theory X and Theory Y is said to describe the average workers from a management perspective and suggests methods by which management can get the best out of the worker. From both theories evolves another Theory Z which turns the focus away from the worker, as an individual, and zoom into management of the workforce as a whole.

Theory X illustrates a pessimistic view of employees' nature and behaviour at work as: indolent, lack of ambition, disliking responsibility, indifferent to organisation needs, resistant to change and gullible (McGregor, 1960). This theory is drawn from the scientific management school of thought, which describes management's task as simply to redirect human energy for organisational purposes. As such management methods based on Theory X involve coercion and threat, close supervision and tight controls over behaviour through extrinsic motivators. (Parkin et al., 2009:106). The management of workers using solely extrinsic techniques is consistent with Theory X.

Theory Y presents an optimistic view of employee's nature and behaviour at work. This theory supports the idea that a worker's behaviour within an organisational setting is a consequence of management philosophy and practice and it highlights the potential of managing the worker's human nature (McGregor, 1960). Theory Y supposes that intrinsic motivators are used as a means of promoting self-control and self-direction for employees and allowing them to work towards achieving project objectives/goals rather than controlling their work activities rigorously. The management of workers using solely intrinsic techniques is consistent with Theory Y.

Theory Z, as mentioned earlier, emerged from a combination of Theory X and Theory Y and it focuses on the organisation rather than the individual worker, using the corporate culture as a

means of control (Parkin et al., 2009:106). It offers the notion of a hybrid management system between American and Japanese management principles/style. Its aim is to create a strong organisational culture which provides a source of social affiliation and solidarity, thereby promoting worker behaviour that enhance productivity (McAuley et al., 2006). In Japanese culture, the emphasis is on the collective consensus, while in American culture, the emphasis is on individualism.

Theory Z assumes that employees who are disciplined can be trusted to do their job and desire build and intimate working relationship with their subordinates, peers and superiors. Theory Z imposes a strong organisational culture that values a good working environment, where family, cultures, tradition and social institutions are regarded as equally important as work itself, with potential to promote high productivity (improved financial performance and turnover), high employee morale (lower rates of absenteeism) and job satisfaction (produce higher quality products) in any organisation (McAuley et al., 2006). The management of workers using solely through culture and environment is consistent with Theory Z.

3.7.2 Process or cognitive theories

Process or cognitive theories define motivation in terms of a rational cognitive process which focuses on behaviour because of a conscious decision-making process (Seiler et al., 2012). These theories endeavour to understand how and why people are motivated. The concept of these theories is supported by Adam' Equity Theory, Vroom's Expectancy Theory, Locke's Goal Setting Theory and Skinner's Reinforcement Theory. In the 1960s, Edwin Locke introduced "The Goal Setting" theory of motivation which states that goal setting is essentially linked to task performance and the specific and challenging goals, along with appropriate feedback, which will in turn contribute to high and more improved task performance. Equity Theory suggests that if the individual perceives that rewards received are equitable, meaning it is fair or just in comparison with those in similar positions in or outside the organisation, then the individual feels satisfied (Adams, 1963). The Equity Theory explores an individual's motivation to work based on the fairness or sense of equality he/she detects in the relationship and the amount of effort compared to the number of benefits (Rosen, 2011:1).

According to Locke, the theory states that if an individual sets goals, he/she will be motivated to achieve those goals simply by the virtue of setting them to begin with. Several elements are to be considered for effective goal setting namely, clear goals, challenging and attainable goals with an appropriate feedback process. Reinforcement Theory assumes that people's behaviour is influenced by the consequences of their actions. This is primarily based on Thorndike's law of effect, which posits that behaviour that resulted in pleasurable outcomes is most likely to be repeated (Skinner, 1969; Steer & Porter, 1991:10-12; Parkin et al., 2009:106).

3.7.2.1 Expectancy Theory

Vroom's expectancy theory is a cognitive process theory of motivation that is based on the idea that people believe that there is a correlation among the effort they put in at work, the performance they achieve from their effort and the rewards they receive for their effort/performance. Vroom's expectancy theory explains why people want specific outcomes for their behaviour and inputs which may be thought of as rewards or consequences for performance they achieve, or the outcomes they receive (Nelson & Quick, 2003). In 1964 Victor Vroom first developed the expectancy theory which later was refined and expanded by Porter and Lawler (1968). According to Daft (2003, cited in Dartey-Baah, 2010), the expectancy theory proposes that motivation depends on the individual's expectations or outlook about their ability to perform tasks and receive desired rewards. The theory assumes that people think about what they are doing, what they are getting and its worth (Armstrong, 2010).

The expectancy theory is based on four assumptions (Vroom, 1964):

i) Firstly, people join an organisation with expectations for their needs, motivations and past experiences. It is believed that their expectations influence how they react within the organisations.
ii) Secondly, it emphasises how conscious choices/decisions made is a result of an individual's behaviour.
iii) Thirdly, people desire different things within their organisations such as job security, good salary, advancement and a challenge.
iv) Lastly, it states that people will choose among other alternatives to optimise outcomes for themselves.

All these assumptions are ultimately centred on three key elements, which are expectancy, instrumentality and valence. The strength of expectations may be based on past experiences (reinforcement), but individuals are frequently faced with new situations—a change in job, payment system, or working conditions imposed by management—where past experience is not an adequate guide to the implications of the change. In these circumstances, motivation may be reduced (Armstrong, 2010).

3.7.2.2 Goal Setting Theory

In the late 1960s, Locke identified the goal-setting theory as specific and challenging goal affecting to the motivation and behaviour of the individual (Parkin et al., 2009:108). Of particular interest is the influence of incentives on performance addressed in this theory. Challenging goals are more motivational than any easy or vague goals, and achieving those goals is already motivating. The more dedicated an individual is at achieving the goal, the more motivated they become. However, high value incentives associated with goals have the effect of encouraging people to work even harder. It goes without saying that money encourages

commitment to a task, but is not motivating beyond a necessary level of income. Similarly, the participation in goal setting of a person who is to work towards the goal increases their commitment to the goal, but it does not in itself increase motivation. Indirect means of influencing goals do not direct a person's behaviour explicitly, but commitment to a goal is linked to the motivation to achieve it (Parkin et al., 2009:108).

3.7.2.3 Reinforcement Theory

In 1938, Skinner (1938) identified that it was not necessary to study the needs or cognitive processes of an individual, but to examine the consequences of their behaviour. It is believed that behaviour that is reinforced is likely to continue. Often in business, the reward for doing something well is used as an example. Since behaviour that is not rewarded or punished will continue. Thus, if there is no reward, why is it worth doing it again? In motivating the workforce, all four major process theories are useful. Therefore, management should ensure that the belief of employees, i.e., that increased effort will improve overall performance, will lead to rewards (Vroom, 1964). It should be seen by employees as fair. Management should be aware of the motivational benefits of having the involvement of the employee in the setting of goals and understanding the level of self-efficacy within the organisation. The higher the level the more likely an employee is to respond positively to the setting of challenging goals. Good performances should be encouraged with positive feedback and praise, and negative performance will not be rewarded and may lead to punishment (Skinner, 1938).

3.7.2.4 Equity Theory

Equity Theory recognises that individuals are concerned not only with the absolute number of rewards they receive for their efforts, but also with the relationship of the amount to what others receive (Armstrong, 2010). Adams' theory is perhaps the most rigorous developed statement of how individuals evaluate social exchange relationships (Armstrong, 2010). The major components for exchange relationships in this theory are inputs and outputs. In a situation where a person exchanges his or her services for payment, inputs may include previous work experience, education, effort on the job and training. Outcomes are those factors that result from the exchange. The most important outcome is likely to be payment with outcome such as supervisory treatment, job assignments, fringe benefits and status symbols also to be taken into consideration.

Equity Theory rests upon three main aspects (Carrell & Dittrich, 1978):

i) People develop beliefs about what constitutes a fair and equitable return for their contributions to their jobs.

ii) People tend to compare what they perceive to be the exchange they have with employers.
iii) When people believe that their own treatment is not equitable, relative to the exchange theory they perceive others to be making, they will be motivated to take actions they deem appropriate. This concept of equity is most often interpreted in work organisation as a positive association between an employee's efforts or performance on the job and the salary the individual receives.

As suggested by Adams (1965, cited in Armstrong, 2010), two forms of equity are identified:

i) Distributive equity is concerned with an individual's contribution and in comparison with others.
ii) Procedural equity is concerned with the perception's employees have about the fairness with the procedures in such areas as performance appraisal, promotion and discipline are being operated.

Equity Theory states that people will be better motivated if they are treated equitably and de-motivated if they are treated inequitably (Armstrong, 2010).

3.8 Job satisfaction

Job satisfaction has been defined in many different ways and a definitive designation for the term is unlikely to materialise. Job satisfaction is a psychological concept that refers to job related attitudes and characteristics such as salary and reward, policies, leadership behaviours, management styles and co-workers (Dartey-Baah, 2010). According to Armstrong (2010), the attention of job satisfaction refers to the attitudes and feelings people have about their work. This implies that positive and favourable attitudes towards the job indicate job satisfaction, while negative and unfavourable attitudes towards the job indicate job dissatisfaction. Armstrong defined morale as being equivalent to job satisfaction.

3.8.1 Factors affecting job satisfaction

The level of job satisfaction is affected by intrinsic and extrinsic motivating factors, the quality of supervision, social relationships with the work group and the degree to which individuals succeed or fail in their work (Wilson, 2010). Wilson (2010) believes that discretionary behaviour which helps the firm to be successful is most likely to happen when employees are well motivated and feel committed to the organisation and when the job gives them high levels of satisfaction. The research findings of his study state that the key factors affecting job satisfaction are personal expectation, career opportunity, job influence, and team and job challenge (Wilson, 2010).

3.8.1.1 Social-demographic factors as determinants of job satisfaction

The relationship between job satisfaction, level of education, the unemployment rate, and wages are intertwined and convoluted (Bryan & Sell, 2011). Education raises wages and thus job satisfaction. It also raises expectations with respect to job content and thus the likelihood of experiencing job dissatisfaction. Ren (2010) points to the value congruence that organisation and employees can strengthen the intrinsic motivation and satisfaction. Ren (2010) also investigates whether value congruence can impact the design of the organisation and finds that, value congruence is related to employee participation in decision making and autonomy as opposed to control which affect job satisfaction.

3.8.1.2 Job satisfaction and performance

For decades, organisational researchers have been intrigued by employee satisfaction with work. Some studies have examined antecedents of job satisfaction, specific dimensions of job satisfaction, and the relationship between job satisfaction and outcomes such at job performance (Igalens & Roussel, 1999; Pool, 1997). Kahya (2007) also investigated on certain factors that affect the job performance. Some studies were reviewed describing the effect of past experience, salary, education, working conditions and job satisfaction on performance. As a result of the research, it has been found that several factors affected employee's performance. The position or grade of an employee in a company was of high positive effect on his or her performance. Working conditions and environment, on the other hand, had shown both positive and negative relationship on performance. Highly educated and qualified employees showed dissatisfaction of bad working conditions, and this affected their performance negatively. Employees with low qualifications, on the other hand, showed high performance despite bad conditions. In addition, experience showed a positive relationship in most cases, while education did not yield a clear relationship to performance (Kahya, 2007). According to Wheelan (2010), educational chances in organisations focusing on education and training people about the technical aspects of their jobs and effective group participation, will increase the likelihood that organisational groups will become high performance teams.

3.9 Four motivation types

There are four commonly defined motivation types: intrinsic motivation, extrinsic motivation, introjected motivation, and identified motivation.

Table 3.2: Definition of different types of motivation
(Source: Changing Minds, 2012)

Motivation	Behaviour sustained by	Example
External motivation	Environmental reward or punishment contingencies	Do work because paid to do it
Introjected motivation	Desire to avoid internally imposed guilt and recrimination	Do work to earn money to sustain family
Identified motivation	Desire to express important self-identification	Do work because it is what I want to do

Table 3.3: Internal vs. external motivation
(Source: Changing Minds, 2012)

	Action	Non-action
External	Extrinsic	Identified
Internal	Intrinsic	Introjected

This study focused on the highlighted column in Table 3.3.

i) Intrinsic motivation is done for reasons that are intrinsic to oneself. It is for self-satisfaction and not for the fear of a consequence. The reward is within the action itself and does not need external factors to steer behaviour.
ii) Extrinsic motivation comes from external factors and actions are done because of what has been said. This means that if we are told to do something, we do it because of extrinsic motivation.
iii) Introjected motivation also comes from within oneself, but then if the action is not done, then the person is filled with guilt. The main difference between introjected and intrinsic motivation is the feeling of guilt.
iv) Identified motivation is defined as when a person knows that a task needs to be complete, but does nothing to complete it (Burton, 2012:12).

3.9.1 Intrinsic motivation

Intrinsic motivation is defined as the motivation that comes from within an individual, rather than from an external or outside reward. Even though the individual might seek rewards, he/she derives pleasure or satisfaction in completing an assigned task. (Bainbridge, 2013:1). This may be referred to as performing an activity for its inherent satisfaction, rather than for some separate consequence. Many researchers and psychologists have studied what makes an activity intrinsically motivated and several theoretical reasons have been identified. People can be motivated intrinsically by the desire to manipulate or to challenge the reduction of uncertainty, personal causation, curiosity, fantasy, competition, competence and self-determination (White, 1959:303; Kagan, 1972:55; Deci & Ryan, 1985:43; Malone & Lepper, 1978:235).

3.9.2 Extrinsic motivation

Extrinsic motivation is a construct that occurs whenever an activity is carried out to attain some separable outcome (Ryan & Deci, 2000a:60). Extrinsic motivation can also be referred to as motivation that an individual derives from outside or external; the individual is motivated to perform a task for anticipated satisfaction of some reward even if he/she has little or no interest in doing it (Bainbridge, 2013:1). In 1911, Taylor's "Principles of Scientific Management" introduced the concept of behaviourism, where human being's actions can be categorised as negative and positive reinforcements. These principles are reinforced on the notion of rewards and punishments, also referred to as "carrot and stick". Many researchers have argued for the use of rewards to motivate based on the assumption that if people are paid sufficiently, they will be motivated to do almost anything (Brooks, 2009:25). Regardless of the benefits derived from extrinsic rewards it can induce a platform for cheating which will be contra-productive (Noop, 2012:1). It is possible to rely on intrinsic motivation to achieve a desire task. Human beings have a fundamental thirst for knowledge, challenge, development and responsibility which have grown into acceptance (McGregor, 1960). Ryan and Deci (2000b:72) further affirm that humans are motivated by three basic psychological needs: competence, relatedness and autonomy. When the three basic needs are satisfied, the individual is intrinsically motivated, but if one of these needs is unsatisfied, it will require extrinsic factors to motivate such an individual. There are several misconceptions about what drives employee motivation; it is therefore important to understand that a combination of factors can motivate employees, not merely one type of extrinsic or intrinsic reward (Morse, 2003; Manion, 2005).

3.10 Steps to achieve HIGH levels of motivation (strategies)

The following steps need to be taken to achieve higher levels of motivation:

i) Set and agree on demanding but achievable goals.
ii) Provide regular feedback on performance.
iii) Create the expectation that certain behaviour and outputs will produce worthwhile rewards when people succeed but will result in penalties if they fail.
iv) Design jobs which enable people to feel a sense of accomplishment, to express and use their abilities and to exercise their own decision-making powers.
v) Provide appropriate financial incentives and rewards for achievement (pay-for-performance).
vi) Provide appropriate non-financial rewards such as recognition and praise for work done well.
vii) Enhance expectations by communicating to individuals the link between performance and reward (publicise).
viii) Train only selected team leaders who exercise effective leadership and have the required motivating skills.

ix) Provide guidance and training to enhance existing knowledge, skills and competencies to improve performance in people.

x) Show individuals what they have to do to develop their careers.

3.11 Motivation of construction workforce

3.11.1 History

The construction Industry employs a high percentage of any country's workforce with the highest record of job losses when compared to other industrial sectors (Rosen et al., 2001; ETA/Business Relations Group, 2004). Over the past decades, the construction workforce has experienced a shift from the original blue collar (routine work) to white collar (knowledge work). This involves the continuous process of creating new insights and beliefs that will define problems, apply the new knowledge to solve these problems and then further develop the new knowledge through the action of problem solving (Nonaka et al., 2000:14). Today's highly competitive and rapidly evolving working environment demands that businesses be able to respond to the changes in market conditions legislation technology or public expectations (Curtis, 2004). In recent times, the construction industry has received an increasing interest in new innovations among academics and practitioners (Reichstein et al., 2005:634). New innovations consist of new methods, materials and technologies in construction project implementation.

Motivation is an act of manipulation which has both positive and negative implications (Shanks, 2011). From logical and rational approach, it is presumed that employees are motivated to respond to inducements from managers, but this is not always the case. In the modern workforce, the use of incentives and rewards to motivate employees might be increasingly difficult to improve performance even if they are well-designed. For example, the use of compensation as a motivational tool can only be done up to a certain level, but if it is predictable, it becomes entitlement and not a motivator (Morse, 2003:18). It is therefore important to adopt appropriate rewards and recognitions which can motivate an individual positively towards achieving the desired project objectives and outcomes.

According to Shanks (2011), the motivation of employees is a 'tricky business' that requires a clear understanding of concepts, principles and myths about motivation to effectively utilise it. Employees, being different, act in different ways and are motivated by different stimuli. Motivation is focused on redirecting the employee's energies towards optimistic job-related behaviours (Manion, 2005). This requires proper understanding of the employees' strengths and weaknesses to find out what will be needed to get specific employees to perform and on how to capitalise on the way in which the employee learns to motivate them correctly (Brickingham, 2005:72).

Motivation is considered as an intermediate variable between principal activities and project performance (Rose & Manley, 2011:767). The nature of construction industry relies heavily on its workforce to remain competitive and profitable according to Hermanta and Xiao-Hua (2008). Throughout history, both practitioners and academics have sought the most effective ways of motivating their construction workforce. Volker and Rose (2012:3) emphasise that an incentive's ability to induce motivation, is found in the principles of work motivation theories.

3.11.2 The use of Incentive schemes to improve performance

Most managers are faced with the challenge of creating a suitable environment for knowledge sharing and learning among employees while most employees are reluctant to encourage and support the knowledge sharing process. Knowledge gives one organisation a competitive edge over another; it gives one employee a competitive edge over the other within an organisation (Milne, 2007:28).

Over the years, the use of incentives to acquire knowledge and skills to perform an assigned task has proven effective. Knowledge sharing is influenced by both individual and organisational motivational factors in an organisation (Ismail et al., 2009). Wang and Noe (2010:117) further differentiate between knowledge sharing, knowledge transfer and knowledge exchange. Knowledge transfer represents the interchange of knowledge between different departments or organisations, rather than individuals, while knowledge exchange embodies both knowledge sharing among employees and knowledge seeking from others (Wang & Noe, 2010:117). Incentives, as motivational tools can effectively propel all aspects of knowledge both within and outside an organisation. There are basic principles required for effective incentive design to provide proper benefits to an organisation and employees. These are:

i) The incentive design must strike a balance between rewarding the team's effort and the individual's effort.
ii) It should foster collaboration rather than encouraging individual competition.
iii) It should be effective in all economic conditions.
iv) Establish performance measures and ensure that they are measurable to have a positive effect on performance.
v) It must be aligned to focus on serving the client (Camilleri, 2011:103-104).

The ability to perform at an individual level is based on the individual's personal skills and how they are motivated. Employees, who believe that they are motivated, are most likely to be creative and industrious in their duties. Incentives are essential for building the individuals capacity and abilities by motivating skills development and bridging the gap between organisational requirements and employee's needs (Al-Nsour, 2012:79).

According to Al-Nsour (2012:79), the UNDP highlights two attributes that influence an individual's motivation:

i) Intrinsic motivation, as previously discussed in this chapter.
ii) Moral incentives, which are related to the emotional, psychological and humanitarian needs of employees. The attributes that influence morale incentives in a work environment can be identified as supervision, leadership role, work relationship, working conditions, and participation in decision-making (Al-Nsour, 2012:79).

3.11.2.1 Benefits associated with incentive schemes in projects

The major aim of incentive design is to align the interests of all levels of employees with the project stakeholders of clients (Gordon & Kaswin, 2010:2). According to Kochanski et al. (2013:1), the use of salary increases alone has not proven sufficiently effective in organisations. Incentives have become the most powerful tools to improve employees' output, to drive performance and to establish a clear link between performance and rewards within an organisation. Therefore, with recent economic developments many organisations had to consider better ways of driving performance within their limited budget available for compensation. An effective incentive design plan must as previously mentioned focus on how to increase performance by encouraging the delivery of specific goals and desired behaviours to communicate and reinforce messages around corporate aims and personal performance. Gordon and Kaswin (2010:2) identified four features of an effective incentive plan: i) top management support; ii) communication; iii) performance management; and iv) appropriate rewards.

Regardless of these features, incentive plans may fail to motivate employees due to the following reasons, pointed out by Rao (2011):

i) Performance pay may impede employee's motivation because of factors such as ambiguous instructions, a lack of clear goals, unavailability of tools, and a hostile workforce.
ii) When incentive rewards are viewed as punishment and not rewards.
iii) It can potentially cause rupture in work relationships by encouraging individuals to pursue self-interest at the expense of teamwork.
iv) Rewards might undermine responsiveness and intrinsic motivation.
v) It can have unintended consequences through inspiring employees to concentrate on area where they are being measured and neglected other areas.

Rao (2011) further highlighted the essential process for implementation effective incentive plan as follows:

i) Ensuring that performance levels are adequate to motivate employees
ii) Link the incentive plan to contract strategy

iii) Set an effective standard by calculating their rewards based on their level of effort both in design and construction
iv) View the standard as relationship management—a contract with employees

Incentives, in general, are viewed from a cost-benefit perspective where the costs for incentives are compared to the derived benefits. Benefits for incentives are:

i) Flexibility in reaching project targets.
ii) Encouragement of technological innovation.
iii) Improved relationships between parties.
iv) Substantial cost savings and enhanced management (Kaput, 2013).

Improving customer satisfaction and increasing skills level are also regarded as advantages of incentive mechanisms (Yauch, 2006:2146). Kaput (2013) identified further healthy competition as an advantage of incentive plans.

3.11.2.2 Challenges associated with incentive schemes in projects

According to the Construction Industry Review Committee, construction activities are dangerous, with potential to pollute the environment and built products are not often defect-free. The nature of the construction industry encourages the award of contracts to lowest bidders, where contractors will have no choice but to adopt a short-term view on business development with little or no interest on how long-term competitiveness is achieved. This might result in cutting their costs and profits to the minimum, thereby strangling the sustainable approach in construction. The construction process is largely labour intensive, complex, dynamic and uncertain and it requires highly motivated workers to achieve project success (Abdulsalam et al., 2012:1196). Since the early 1980s, there has been a conflicting perspective on the use of rewards for employee motivation. Intrinsic rewards have received stronger support from academic field, while extrinsic rewards have also obtained greater support from project practitioners (Schweyer, 2012).

It is crucially important to understand the use of incentives and rewards are inextricably linked with project risk (Thomas & Thomas, 2005:197). It is essential to note that some outcomes can be incentivised while others are much harder to be influenced through incentive. Schweyer (2012) formulated the right question asking how to artfully and wisely design an incentive programme to be effective for each situation, task, and person? Bassi (2010, cited by Volker & Rose, 2012:13) stated that the foremost challenge faced in the design of incentives schemes, is to align formal incentive mechanisms with informal governance arrangements in a complimentary way (Volker & Rose, 2012:13). Likewise, Heathfield (2013:1) identifies that compensation through incentive payments is tricky and challenging since employers want to remain in business and empower their employees to boost performance.

Human beings are highly intelligent and possess endlessly creativity especially when it comes to improve their personal well-being at everyone else's expense. In 2008 the IPC stated that incentive programmes have proven to boost performance at an average of 25% for individuals and 44% for project teams—if they are conducted in ways that can address all issues related to performance and human motivation. A further challenge with incentive programmes is the lack of adequate knowledge on constructively designing these programmes to yield the desired outcomes. Other common challenges associated with incentives are identified as: scheduling difficulties, approval changes, sacrificing quality for speed, adverse relationships among project work teams, budget difficulties, and delays in review of specifications and requirements (Raduescu & Heales, 2005:4).

Wild et al. (2012:18), in their study on the constraints affecting incentives that can impair performance in project delivery from political-economic perspective, identified the following common constraints:

i) Political market imperfection
ii) Policy incoherence
iii) Lack of effective performance oversight
iv) Collective action challenges
v) Moral hazards

3.12 Summary

The importance of motivating employees in the workplace and/or in projects is key to the success thereof. In terms of current developed theories of motivation, there is no single reliable theory to be used that can motivate employees; a mixture of existing theories needs to be used. It is thus the leadership's responsibility to develop and align with existing theories appropriate in the 21st century to keep employees satisfied in organisations, especially since different individuals have unique needs and expectations. Subsequently, motivation is not always only based on financial rewards; non-financial rewards can also be derived to get the best out of the workforce or employees to perform. It can emanate from an employee having a passion and a desire to work and produce a result, whether self-driven or via an external source such as a reward that boosts the employee to perform. In principle, it is important to note that employees work in exchange for compensation; how far they will ultimately go depends on how motivated they are. Motivation is an important need for employees in any organisation to be productive, and the management and/or leadership style has a pivotal role to play.

In closing, by the manager understanding himself, it will better enable him to understand the individuals with whom he works. In any management role, thinking about motivating co-workers may increase the manager's knowledge of how best to support them. Motivation

Theory links motivation and performance, which is usually a positive link. There are varied reasons behind people's motivation and this is useful to know. Knowing how to manage one's own emotions can help with personal skills in a managing role. Managing can be hard and lonely, and is crucial to find out what resources be drawn from colleagues.

CHAPTER 4: LEADERSHIP THEORIES

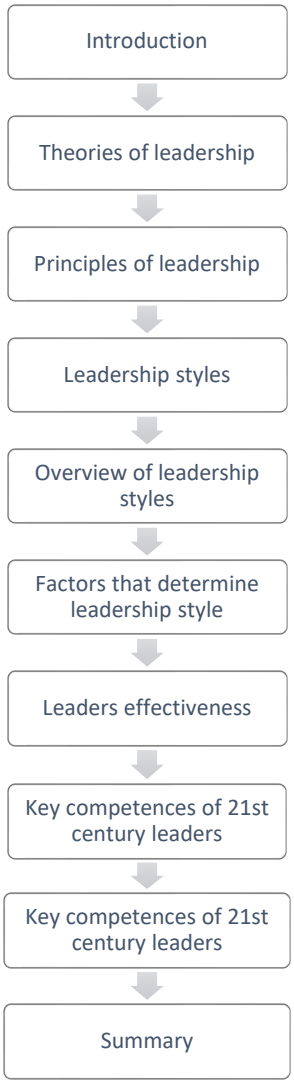

Figure 4.1: Layout of Chapter 4

4.1 Introduction

To be a good leader, one must have the experience, knowledge, commitment, patience, and, most importantly, the skill to negotiate and work with others to achieve goals. Good leaders are therefore made, not born. Good leadership is developed through a never-ending process of self-study, education, training, and the accumulation of relevant experience (Bass & Bass, 2008). Boulding (1956), in the book, “The Image: Knowledge in Life and Society”, outlines the general transdisciplinary theory of knowledge and human, social and organisational behaviour. Boulding states that the basis of good leadership is a strong character and selfless devotion to an organisation (Jenkins, 2013). From the perspective of employees, leadership comprises everything a leader does that affects the achievement of objectives and the well-being of employees and the organisation (Abbasialiya, 2010).

Leadership involves a type of responsibility aimed at achieving a particular ends by applying the available resources (human and material) and ensuring a cohesive and coherent organisation in the process (Ololube, 2013). Leadership is arguably one of the most observed yet least understood phenomena on earth (Burns, cited in Abbasialiya, 2010). Over time, researchers have proposed many different styles of leadership as there is no particular style of leadership that can be considered universal. Despite the many diverse styles of leadership, a good or effective leader inspires, motivates and directs activities to help achieve group or organisational goals. Conversely, an ineffective leader does not contribute to organisational progress and can, in fact, detract from organisational goal accomplishment.

Leadership styles and approaches are essential to the organisational effectiveness of a business. Thus, understanding leadership styles and approaches can help a business build a foundation that leads to improved productivity, subordinate retention, and improves subordinate relations.

Leadership is the process whereby a person exerts influence over other people and inspires, motivates and directs their activities to help achieve group or organisational goals (Gareth & George, 2009:497).

A key component of effective leadership is found in the power the leader has to affect other people's behaviour and get them to act in certain ways. A traditional African leader is acutely aware that this position is defined by support of his followers and not by his own personal characteristics. The African leadership in any situation only exists because of the community support that upholds it (Bagraim et al., 2010:303). Leaders establish direction for the future, communicate through vision, and forge aligned high performance teams (Englund & Bucero, 2006). The project manager's leadership function is specifically used to communicate the project vision (Flannes & Levin, 2003). A leader is expected to play many roles and therefore must be qualified to guide others to organisational achievement (Aquinas, 2008:343). According to Champoux (2006:279), the following seven competencies have been identified in recent literature as characteristics of a leader: drive, leadership, motivation, integrity, self-confidence, intelligence, knowledge of the business and emotional intelligence. Although no traits may be identified, the individual who possess the ability to lead must have certain attributes to help them in performing their leadership roles. The skills necessary are:

i) Human skills
ii) Conceptual skills
iii) Technical skills
iv) Personal skills

For the successful management of a project, the project leader's quality is essential. His/her duties include organising, information gathering and distribution, leading, coordination, moderating, planning, and controlling of the project team (Burghardt & Hacker, 2002). A project may be difficult to lead due to social, educational, cultural differences or physical distances between members, within the team. These hindrances will therefore require a strong project leader. Pinto and Kharbanda (1996) described leadership as an "essential ingredient" in a project.

4.2 Theories of leadership

Leadership literature reveals that theories have been refined and modified with the passage of time, and none of the theories are completely irrelevant. However, its relevance depends on the context in that it is applied. The type of leadership applied in functions entailing very high degree of precision, confidence level, sensitivity, care and technical expertise may be different than that in simple management-oriented portfolios, as one that does not fit all heads (Dess & Picken, 2000). Most leadership research can be classified into one of the following four approaches:

i) Trait approach
ii) Behaviour approach
iii) Power-influence approach
iv) Situational approach

There are a few types of research that do not fit neatly into any single approach but instead cut across two or more approaches. Exceptions include leadership style such as participative leadership, charismatic leadership, and leadership within decision groups. Other leadership styles might also exist but are not mentioned in this research.

There are as many different views of leadership as there are characteristics that distinguish leaders from non-leaders. Most research today has shifted from traditional trait or personality-based theories to situational theory, which dictates that the situation in which leadership is exercised is determined by the leadership skills and characteristics of the leader (Avolio et al., 2009). Notwithstanding, all contemporary theories can be categorised into to one of the following three perspectives: i) leadership as a process or relationship; ii) leadership as a combination of traits or personality characteristics; and iii) leadership as certain behaviours or, as they are more commonly referred to, leadership skills. In the more dominant theories of leadership, there exists the notion that at least to some degree, leadership is a process that influences a group of people towards the realisation of goals (Wolinski, 2010). It was also determined that, "a person does not become a leader merely by virtue of the possession of some combination of traits" (Samad, 2012).

Charry (2012), noting that academic interest in leadership increased significantly during the early part of the 20th century, identified eight major leadership theories. While earlier theories focused on the qualities that distinguish leaders from followers, later theories looked at other variables such as situational factors and skill levels. Although new theories are emerging all the time, most can be classified into one of Charry's eight major types, which are as follows:

4.2.1 "Great Man" Theory

Great man theories assume that the capacity for leadership is inherent, that great leaders are born, not made. These theories often portray leaders as heroic, mythic and destined to rise to leadership when needed. The term great man was used because, at the time, leadership was thought of primarily as a male quality, especially military leadership (Ololube, 2013).

4.2.2 Trait Theory

Similar in some ways to great man theories, the trait theory assumes that people inherit certain qualities or traits that make them better suited to leadership. Trait theories often identify particular personality or behavioural characteristics that are shared by leaders. Many have begun to ask of this theory, however, if particular traits are key features of leaders and leadership, how do we explain people who possess those qualities but are not leaders? Inconsistencies in the relationship between leadership traits and leadership effectiveness eventually led scholars to shift paradigms in search of new explanations for effective leadership.

Hundreds of trait studies were conducted during the 1930s and 1940s to discover these elusive qualities, but the massive research efforts all failed to find any traits that would guarantee leadership success. One reason of the failure is the lack of attention given to intervening variables in the causal chain, which could explain how traits may affect a delayed outcome such as group performance of leader advancement (Zaccaro, 2007).

This research method looked for a significant correlation between the individual leader's attributes and a criterion of leader's success, without examining any explanatory processes. Researchers have made progress in recent years discovering how a leader's attributes are related to leadership behaviour and effectiveness, as evidence from better designed methods accumulated over the years.

4.2.3 Situational Theory

Situational theory proposes that leaders choose the best course of action based on situational conditions or circumstances. Different styles of leadership may be more appropriate for different types of decision-making. For example, in a situation where the leader is expected to be the most knowledgeable and experienced member of a group, an authoritarian style of

leadership might be most appropriate. In other instances where group members are skilled experts and expect to be treated as such, a democratic style may be more effective.

The situational approach emphasises the importance of contextual factors such as the nature of work performed by the leader's unit, the nature of the external environment, and the characteristics of subordinates. This research and theory have two major sub-categories. One type of research considers managerial behaviour as a dependent variable and researchers seek to discover how this behaviour is influenced by aspects of the situation such as the type of organisation or managerial position. The research investigates how managers cope with demands and constraints from subordinates, peers, superiors and outsiders (Mwai, 2011).

The primary research method is a comparative study of two or more situations in which managerial activities or behaviours are measured using leader's behaviour descriptive questionnaires, job description questionnaires or direct observation. Researchers seek to discover the extent to which managerial work is the same or unique across different types of organisations and management levels. This comparative research was not designed to identify what behaviour is effective in what situation, but it is relevant for the understanding of managerial effectiveness because effectiveness depends on how well a leader resolves conflicts, copes with demands, recognises opportunities and overcome constraints (Hoy & Miskel, 2013).

The second sub-category of situational research attempts to identify aspects of the situation that "moderate" the relationship between leader behaviour (or traits) and leadership effectiveness. The assumption is that different behaviour patterns (or traits patterns) will be effective in different situations, and that the same behaviour pattern is not optimal in all situations.

Theories describing this relationship are sometimes called "contingency theories" of leadership. These contingency theories can be contrasted with "universal theories" of leadership effectiveness, which specify an optimal pattern of behaviour for all situations (Mwai, 2011).

4.2.4 Contingency theories

Contingency theories of leadership focus on variables related to the environment that might determine which style of leadership is best suited for a particular work situation. According to this theory, no single leadership style is appropriate in all situations. Success depends on several variables, including leadership style, and no single leadership style is appropriate for all situations. Success depends on a number of variables, including leadership style, qualities of followers and situational features (Charry, 2012). A contingency factor is thus any condition in any relevant environment to be considered when designing an organisation or one of its

elements (Naylor, 1999). Contingency theory states that effective leadership depends on the degree of fit between a leader's qualities and leadership style, demanded by a specific situation (Lamb, 2013).

4.2.5 Behavioural Theory Approach

In the 1950s, researchers became discouraged with the Trait Theory Approach. They have become more attentive to what leaders do on the job. Behaviour research (research of managerial behaviour) falls into two general sub-categories, namely:

i) Managerial work
ii) Managerial behaviour

Sub-category i) focuses on the nature of managerial work. It examines how leaders spend their time and it describes the content of managerial activities, using content categories for managerial roles, functions and responsibilities. The research on managerial work relies mostly on descriptive questionnaires and anecdotes obtained through interviews (Waniganayake et al., 2012).

Sub-category ii) compares the behaviour of effective and ineffective leaders. The preferred research method is survey research with behaviour description questionnaires. Hundreds of studies over the last five decades have examined the correlation between questionnaire measures of leadership behaviour and measures of leadership effectiveness. A much smaller number of studies comprised laboratory experiments, field experiments and critical incidents to determine how effective leaders differ from ineffective leaders (Hoy & Miskel, 2013).

Behavioural theories of leadership are based on the belief that great leaders are made, not born. This leadership theory focuses on the actions of leaders not on intellectual qualities or internal states. According to the behavioural theory, people can learn to become leaders through training and observation. Naylor (1999) posits that interest in the behaviour of leaders has been stimulated by a systematic comparison of autocratic and democratic leadership styles. It has been observed that groups under these types of leadership perform differently:

i) Autocratically-led groups will work well as long as the leader is present. Group members, however, tend to be unhappy with the leadership style and express hostility.
ii) Democratically-led groups do nearly as well as the autocratic group. Group members have more positive feelings and no hostility. Most importantly, the efforts of group members continue even when the leader is absent.

4.2.6 Participative Theory

Participative leadership theories suggest that the ideal leadership style is one that takes the input of others into account. Participative leaders encourage participation and contributions from group members and help group members to feel relevant and committed to the decision-

making process. A manager who uses participative leadership rather than making all the decisions seeks to involve other people, thus improving commitment and increasing collaboration, which leads to better quality decisions and a more successful business (Lamb, 2013).

4.2.7 Transactional/Management Theory

Transactional theories, also known as management theories, focus on the role of supervision, organisation and group performance and the exchanges that take place between leaders and followers. These theories base leadership on a system of rewards and punishments (Charry, 2012); in other words, on the notion that a leader's job is to create structures that make it abundantly clear what is expected of followers and the consequences (rewards and punishments) associated with meeting or not meeting expectations (Lamb, 2013). When employees are successful, they are rewarded and when they fail, they are reprimanded or punished (Charry, 2012). Managerial or transactional theory is often likened to the concept and practice of management and continues to be an extremely common component of many leadership models and organisational structures (Lamb, 2013).

4.2.8 Relationship/Transformational Theory

Relationship theories, also known as transformational theories, focus on the connections formed between leaders and followers. In these theories, leadership is the process by which a person engages with others and is able to "create a connection", which results in increased motivation and morality in both followers and leaders. Relationship theories are often compared to charismatic leadership theories in which leaders with certain qualities, such as confidence, extroversion, and clearly stated values best able to motivate followers (Lamb, 2013). Relationship or transformational leaders motivate and inspire people by helping group members see the importance and higher good of the task. These leaders are focused on the performance of group members, but also on each person to fulfilling his or her potential. Leaders of this style often have high ethical and moral standards (Charry, 2012).

4.2.9 Skills Theory

This theory states that learned knowledge and acquired skills/abilities are significant factors in the practice of effective leadership. Skills theory by no means refuses to acknowledge the connection between inherited traits and the capacity to lead effectively, but argues that learned skills, a developed style, and acquired knowledge, are the real keys to leadership performance. A strong belief in skills theory often demands that considerable effort and resources be devoted to leadership training and development (Wolinski, 2010). Effective educational leadership is essential to any school's effectiveness and improvement (Ololube et al., 2012).

4.2.10 Power-Influence Theory Approach

Power-influence research attempts to understand leadership by examining influence processes between leaders and subordinates. Like other research is has a leader-centred perspective with an implicit assumption that causality is unidirectional (leaders act and followers act). It seeks to explain leadership effectiveness in terms of the amount and type of power possessed by a leader and how power is exercised. The methodology has been the use of questionnaires to relate a leader's power to various measures of leadership effectiveness (Tang, 2015).

Other power-influence research used questionnaires and descriptive incidents to determine how leaders influence the attitudes and behaviour of subordinates. The study of influence tactics can be viewed as a bridge linking the power-influence approach to the behaviour approach. Different influence tactics are compared in terms of their relative effectiveness for getting people to do what the leader wants (Tang, 2015).

A different type of power-influence research views influence as a reciprocal process between leaders and subordinates. From this perspective, power resides in subordinates as well as in leader and leadership effectiveness cannot be understood without examining how leaders and subordinates influence each other over time. One major question addressed by this research is the way power is acquired and lost by various individuals within the group. In addition to research with a micro-level analysis of power acquisition by individuals, there has been research with a macro-level analysis of power acquisition by organisational subunits or coalitions are able to exert more influence over strategy decisions and the allocation of scare resources (Tang, 2015).

4.3 Principles of leadership

In addition to leadership theories, the principles of leadership are a commonly studied phenomenon. Steadman (2018) identified eleven basic principles of leadership and the means for implementing them:

i) *Be technically proficient:* As a leader, you must know your job and have a solid familiarity with the tasks of your different employees.
ii) *Develop a sense of responsibility in your workers:* Help to develop good character traits that will help them carry out their professional responsibilities.
iii) *Ensure that tasks are understood, supervised, and accomplished:* Communication is key. A leader must be able to communicate effectively. Leaders should spend most of their day engaged in communication. Older studies, in fact, noted that organisational leaders (managers) spent 70% to 90% of their time each day on communication and related activities (Barrett, n.d.).

iv) *Keep your workers informed:* Know how to communicate with not only junior staff, but senior staff and other key people as well.
v) *Know your people and look out for their well-being:* Be well versed in basic human nature and recognize the importance of sincerely caring for your workers.
vi) *Know yourself and seek self-improvement:* To know yourself, you have to understand what you are, what you know, and what you can do (attributes). Seeking self-improvement means continually strengthening your attributes. This can be accomplished through self-study, formal education, workshops, reflection, and interacting with others.
vii) *Make sound and timely decisions:* Use good problem solving, decision making, and planning tools.
viii) *Seek responsibility and take responsibility for your actions:* Search for ways to guide your organisation to new heights. When things go wrong, do not blame others. Analyse the situation, take corrective action, and move on to the next challenge.
ix) *Set the example:* Be a good role model for your employees. Employees must not only be told what is expected of them, but see leaders embodying organisational qualities and ethics. Leaders must embody what they wish to see in their employees.
x) *Train as a team:* Do not focus on just your department, section, or employees, but envision the whole organisation as an entity that must learn and succeed together; and
xi) *Use the full capabilities of your organisation:* By developing a team spirit, you will be able to employ the abilities of your entire organisation towards organisational goals.

Most leadership research can be classified into one or more of the following four traditional approaches:

i) Trait approach
ii) Behaviour approach
iii) Power-influence approach
iv) Situational approach

4.4 Leadership styles

Leadership styles are the approaches used to motivate followers. It is a leader's style of providing direction, implementing plans, and motivating subordinates. Leadership is not a "one size fits all" phenomenon. Leadership styles should be selected and adapted to fit organisations, situations, groups, and individuals. It is therefore useful to possess a thorough understanding of the different styles as such knowledge increases the tools available to lead effectively. There are many different leadership styles proposed by various researchers that can be exhibited by leaders in political, business or any other field(s). Leadership styles includes a leader's conceptual abilities such as agility, innovation, interpersonal sensitivity and domain knowledge which encompassing tactical and technical knowledge as well as cultural

and geographical awareness (Igbaekemen, 2014). Leadership style can be described as a leader's style of providing direction, implementing plans, and motivating subordinates.

4.5 Overview of leadership styles

Leadership has been studied in different ways, depending on the researcher's methodological preference and their conception of leadership. As most researchers would only deal with one narrow aspect of leadership, most of the studies fall into a distinct line of research. According to Tang (2019:11), a leader brings a personal style to any administrative position that infuses all that he does in the organisation. It also serves as a screen through which organisational activities are then viewed.

Style influences and is influenced by the way leaders view people, task and organisations. In the past, these three factors were extensively studied, discussed, written about and taught to help leaders improve their style through behaviourism. Irrespective of the discipline, whether it is business, education, construction or any other field the qualities of leadership are similar. Behaviourism is concerned with the psychological satisfaction, social interaction, motivation, job satisfaction, climate, ethos, group dynamics, interpersonal relations, empowerment, and organisational culture (Tang, 2019:12).

There are many styles of leadership that fit many types of businesses and organisations. Thus, subordinates learn and become motivated in different ways, so effective leaders need to know which style works best in what situation or organisations. Many styles share common traits and multiple studies have narrowed down the styles of leadership to any of the following leadership styles:

i) Trait leadership style
ii) Authoritarian leadership style
iii) Managerial leadership style
iv) Paternalistic leadership style
v) Bureaucratic leadership style
vi) Democratic leadership style
vii) Laissez-faire leadership style
viii) Transactional leadership style
ix) Transformational leadership style
x) Participative leadership style
xi) Distributed leadership style
xii) Moral leadership style
xiii) Emotional leadership style
xiv) Postmodern leadership style
xv) Contingent leadership style (Tang, 2019)

4.5.1 Trait leadership style

One of the earliest approaches in studying leadership was the trait leadership style. It emphasises the personal attributes of leaders. Underlying this approach was the assumption that some leaders are natural leaders who are endowed with certain traits not possessed by other people. Early leadership theories attributed managerial success to possession of extraordinary abilities such as tireless energy, penetrating intuition, uncanny foresight and irresistible persuasive powers (Zaccaro, 2007).

Traits of a good leader are:

i) Honesty—display sincerity, integrity and openness in all the leader's actions. Dishonest behaviour will not inspire trust.
ii) Competence—based on leader's actions on reason and moral principles. Do not make decisions based on childlike emotional desires or feelings.
iii) Forward-looking—set goals and have a vision for the future. The vision must be owned throughout the organisation. Effective leader envisions what he or she wants and how to get it. Leaders habitually pick priorities stemming from his basic values.
iv) Inspiring—display confidence in all tasks that the leader performs. By showing endurance in mental, physical and spiritual stamina, leader will inspire others to reach for new heights. Take charge when necessary.
v) Intelligence—read, study, and seek challenging assignments.
vi) Fair-minded—show fair treatments to all subordinates. Prejudice is the enemy of justice. Display empathy and being sensitive to the feelings, values, interests and well-being of others.
vii) Broad-minded—seek out diversity.
viii) Courageous—Have the perseverance to accomplish a goal regardless of the seemingly overwhelming obstacles. Display a confident calmness when under stress/ pressure.
ix) Straightforward—use sound judgement to make good decisions at the right time.
x) Imaginative—make timely and appropriate changes in your thinking, plans, and methods. Show creativity by thinking of new and better goals, ideas, and solutions to problems. Be innovative (Zaccaro, 2007).

4.5.2 Autocratic leadership style/Authoritarian leadership style

Autocratic leadership is an extreme form of transactional leadership, where leaders have complete power over staff. Staff and team members have little opportunity to make suggestions, even if these are in the best interest of the team or organisation. The benefit of autocratic leadership is that it is incredibly efficient. Decisions are made quickly, and the work to implement those decisions can begin immediately. In terms of disadvantages, most staff

resent being dealt with in this way. Autocratic leadership is often best used in crises situations when decisions must be made quickly and without dissent.

The authoritarian leadership style keeps the main emphasis on the distinction of the authoritarian leader and his subordinates. A distinct professional relationship is being created by this leader using this style. Having direct supervision is believed to be the key in maintaining a successful environment and followership. Authoritarian leadership style often follows the vision of those that are in control and may not necessarily be compatible with those that are being led. The autocratic leader focuses on efficiency, with a distinct set of characteristics that gives the leader the position to get things in order or to bring the point across. Authoritarian traits of a leader include the following: the leader sets goals individually; engages primarily in one-way and downwards communication; controls discussion with subordinates; and dominates interaction. An authoritarian style of leadership may create a climate of fear, where there is little or no room for dialogue and where complaining may be considered useless (Zhang & Xie, 2017). Several studies have confirmed a relationship between bullying on the one hand, and an autocratic leader and an authoritarian way of setting conflicts of dealing with disagreements, on the other.

4.5.3 Managerial leadership style

Managerial leadership is essentially “top-down”, with authority closely aligned to the formal roles of leaders. According to Leithwood et al. (1999:14), managerial leadership assumes that the focus of leaders ought to be on functions, tasks, and behaviours and that if these functions are carried out competently the work of others in the organisation will be facilitated. Authority and influence are allocated to formal positions in proportion to the status of those positions in the organisational hierarchy. Managerial leadership is focused on managing existing activities successfully rather than visioning a better future for the organisation. This approach is very suitable for business leaders working in centralised systems as it prioritises the efficient implementation of external imperatives, particularly those prescribed by higher levels in the hierarchy.

Managerial leadership has certain advantages, but there are difficulties in applying it too enthusiastically to business organisations because of the professional role of subordinates. If subordinates do not “own” innovations but are simply required to implement externally imposed changes, they are likely to do so without enthusiasm, leading to possible failure (Bush, 2011:59).

4.5.4 Paternalistic leadership style

In this style of leadership, the leader supplies complete concern for his subordinates. The paternalistic leader works by acting as a father figure by taking care of their subordinates in a

parent world. In return, the leader receives the complete trust and loyalty of his subordinates. Subordinates under this style are expected to become totally committed to what the leader believes and will not wander off to work independently. The relationship between subordinates and the leader is solid and the subordinates are expected to stay with a company for a longer time because of the loyalty and trust (Tian & Sanchez, 2017).

Leader and subordinates treat each other as family both inside and outside of the work scenario. Subordinates can go to leader with any problems they experience, because they believe in whatever the leader says is going to help them. One of the downsides of paternalistic leadership is that the leader may revert to favouritism when making decisions. Nevertheless, in today's business market, paternalism is more difficult to come across because there have become more layoffs and stronger unionisation, which affects the paternalistic leader because the subordinates may not believe that their jobs are secured/ensured. According to Bass and Bass (2008), subordinates who follow a paternalistic leadership style also have better organisational skills, because the paternalistic leader encourages and allows subordinates to complete tasks so that the leader can stay on top of their work.

Continuing with this line of reasoning, subordinates' self-confidence grows when they complete their tasks, and this makes them work even harder to reach and even exceed a goal to prove to their leader that they are hard-working. Having a paternalistic leadership style can also help with implementing a reward system that will enable subordinates to work harder and smarter because there is something for them in return. Subordinates may also be able to accomplish more in a set time frame (Tian & Sanchez, 2017).

4.5.5 Bureaucratic leadership style

Bureaucratic leaders follow rules rigorously and ensure that their staff also follow procedures precisely. This is an appropriate leadership style for work involving serious safety risks (such as working with machinery, with toxic substances, or at dangerous heights) or where large sums of money are involved. Bureaucratic leadership is also useful in organisations where employees do routine tasks (Schaefer, 2005). The drawback of this type of leadership is that it is ineffective in teams and organisations that rely on flexibility, creativity, or innovation (Santrock, 2007).

4.5.6 Charismatic leadership style

Charismatic leadership theory describes what to expect from both leaders and followers. Charismatic leadership is a leadership style that is identifiable but may be perceived with less tangibility than other leadership styles (Bell, 2013). Often called a transformational leadership style, charismatic leaders inspire eagerness in their teams and are energetic in motivating employees to move forward. The ensuing excitement and commitment from teams is an

enormous asset to productivity and goal achievement. The negative side of charismatic leadership is the amount of confidence placed in the leader rather than in employees. This can create the risk of a project or even in an entire organisation collapsing if the leader leaves. Additionally, a charismatic leader may believe that s/he can do no wrong, even when others warn them about the path they are on; feelings of invincibility can ruin a team or organisation.

4.5.7 Democratic leadership style

Democratic leaders make the final decisions but include team members in the decision–making process. They encourage creativity, and team members are often highly engaged in projects and decisions. There are many benefits of democratic leadership. Team members tend to have high job satisfaction and are productive because they are more involved. This style also helps develop employees' skills. Team members feel part of something "bigger and more meaningful" and are therefore motivated by more than just a financial reward. The danger of democratic leadership is that it can falter in situations where speed or efficiency is essential. During a crisis, for instance, a team can waste valuable time gathering input. Another potential danger is team members without the knowledge or expertise to provide high quality input.

The democratic Leadership style consists of the leader sharing the decision-making abilities with the subordinates by promoting the interests of subordinates and by practicing social equality. The boundaries of democratic participation tend to be limited by the organisation or group needs and the instrumental value of subordinates' attributes; for example, skills and attitudes. The democratic leadership style encompasses the notion that everyone, by virtue of their human status, should play a part in the group's decisions. However, this style still requires the guidance and control by a specific leader (Allafchi, 2017:168-179).

This style demands the leader to make decisions about who should be called upon within the group and who is given the right to participate in, make and vote on decisions. It has been found through research that this style is one of the most effective leadership styles, leading to increased productivity, more efficient or effective contributions from subordinates, and increased group morale. Democratic leadership style can lead to better ideas and more creative solutions to problems because subordinates are encouraged to share their thoughts and ideas (Allafchi, 2017:168-179). Potential downsides of this type of leadership style, especially in situations where roles are unclear or time is of the essence, is that it may lead to communication failures and incomplete projects. Democratic leadership style works best in situations where subordinates are skilled and eager to share their knowledge. It is also important to allow ample of time for subordinates to contribute, develop a plan and then for on the best course of action, hence the decision-making process (Allafchi, 2017:168-179).

4.5.8 Laissez-faire leadership style

Laissez-faire leadership may be the best or the worst of leadership styles (Goodnight, 2011). Laissez-faire, the French phrase for “let it be”, when applied to leadership, describes leaders who allow people to work on their own. Laissez-faire leaders abdicate responsibilities and avoid making decisions. They may allow a team complete freedom to do their work and set their own deadlines. Laissez-faire leaders usually allow their subordinate the power to make decisions about their work (Chaudhry & Javed, 2012). They provide teams with resources and advice, if needed, but otherwise, they do not get involved. This leadership style can be effective if the leader monitors performance and gives feedback to team members regularly. The main advantage of laissez-faire leadership is that allowing team members so much autonomy can lead to high job satisfaction and increased productivity. It can be damaging if team members do not manage their time well or do not have the knowledge, skills, or motivation to do their work effectively. This type of leadership can also occur when managers do not have sufficient control over their staff (Ololube, 2013).

The laissez-faire leadership style is where all the rights and power to make decisions is given to subordinates. Past researchers such as Lewin et al. (1939) first described this laissez-faire leadership style along with authoritarian leadership and democratic leadership styles. The laissez-faire leader allows subordinates to have complete freedom to make decisions concerning the completion of their work. It allows subordinates self-rule, while at the same time offering guidance and support when requested. According to Yang (2015), the laissez-faire leader uses guided freedom to provide the subordinates with all the materials necessary to accomplish their goals but does not directly participate in decision-making unless the subordinates request his assistance. This style should not be used when the leader cannot or will not provide regular feedback to his subordinates. Laissez-faire is an effective style to use in any of the following:

i) Subordinates are highly skilled, experienced and educated.
ii) Subordinates have pride in their work and the drive to work successfully on their own.
iii) Outside experts such are staff specialists or consultants are being used.
iv) Subordinates are trustworthy and experienced (Yang, 2015).

4.5.9 Transactional leadership style

This leadership style starts with the idea that team members agree to obey their leader when they accept a job. The transaction usually involves the organisation paying team members in return for their effort and compliance. The leader has a right to punish team members if their work does not meet the appropriate standard. The minimalistic working relationships that result (between staff and managers or leaders) are based on this transaction (effort for pay).

A Transactional leader focuses his leadership on motivating subordinates through a system of rewards and punishments. There are two factors which form the basis for this system, namely:

i) Contingent reward—provides rewards, materialistic or psychological, for effort, and recognises good performances.
ii) Management-by-exception—allows the leader to maintain the status quo.

For this style of leadership, the leader only interferes when subordinates do not meet acceptable performance levels and initiates correction action to improve performance. Management-by-exception helps reduce the workload of leaders as they are only called upon when subordinates do not progress (Hussain et al., 2017). Transactional leader identifies the needs of their subordinates and gives rewards to satisfy those needs in exchange of certain level of performance. It also focuses on increasing the efficiency of established routines and procedures. The Leader is more concerned in following existing rules than making any changes to what exists within the organisation.

Be as it may, a transactional leader establishes and standardised practices that will help the organisation to reach maturity, goal setting, efficiency of operation, and increasing productivity (Husain et al., 2017). A transactional leader is negatively affected when the emotional level is high while positively affected when the emotional level is low. Transactional leadership presents a form of strategic leadership that is important to the organisational development which is essential for team innovativeness (Hussain et al., 2017). Transactional Leadership style is based on a “give and take” relationship between a leader and subordinates.

4.5.10 Transformational leadership style

Leadership expert James McGregor Burns (1978) in his book titled “Leadership” introduced the concept of transformational leadership. It is defined as a leadership style that can causes change in an individual and social systems. In its ideal form, transformational leadership creates valuable and positive change in the subordinates with the end goal of developing subordinates into leaders. In this leadership style, leaders work with subordinates to identify needed changes, creating a vision to guide the change through inspiration and executing the change in tandem with committed members in a group (Prasertcharoensuk & Tang, 2016).

Transformational Leadership serves to enhance the motivation, morale, and job performance of subordinates through a variety of mechanisms. This includes connecting the subordinate sense of identity and self to a project and to the collective identity of the organisation. A transformational leader’s main purpose is to be a role model for subordinates to inspire them and to raise their interest in the project, challenging subordinates to take greater ownership of their work, and understanding their strengths and weaknesses, thus allowing the leader to align subordinates with tasks that enhance their performance (Prasertcharoensuk & Tang,

2016). This concept was initially introduced by James V. Downton and further developed by Burns in 1978. As earlier mentioned, according to Burns, transformational leadership is defined as a process where leaders and their subordinates raise one another to higher levels of morality and motivation. Bass (1985) later further developed this concept of transformational leadership and established the following. Burns opined that transformational leadership can be seen when leader and subordinate make each other advance to a higher level of mortality and motivation.

The transformational leader is able to inspire followers to change their expectations, perceptions, and motivation to work towards common goals through the strength of their vision and personality. Transformational Leadership is built on the leader's personality, traits and ability to make changes through leading by example and articulating an energised vision and challenging goals. Transforming leaders are idealised in the sense that they are moral exemplars of working towards the benefit of the team, the organisation itself, and the community.

As earlier mentioned, Burns theorised that transformational and transactional leadership styles are mutually exclusive styles—meaning "the one happens independently from the other" (Bass, 1985). Bass furthermore expanded on Burns' original ideas, developing what is referred to today as the Bass Transformational Leadership Theory. Bass opined that transformational leadership can be defined based on the impact it has on subordinates. Bass (1985) also suggested that a transformational leader gathers trust, respect and admiration from their subordinates. Bass (1985) then expanded the work of Burns (1978) work by explaining the psychological mechanisms underlying both transformational and transactional leadership. Bass (1985) furthermore explained how transformational leadership could be measured and how it impacts subordinates' motivation and performance. It is believed that the extent to which a leader is transformational is measured firstly in terms of his influence on the subordinates; and secondly by the subordinates' feeling of trust, admiration, loyalty and respect towards their leader, simply because of the leader's willingness to work harder than initially anticipated. These outcomes are attributed to the transformational leader offering more than just working for self-gain (Dong et al., 2017).

A transformational leader provides subordinates with an inspiring mission and vision, thereby giving them an identity. The leader transforms and motivates subordinates through his idealised influence referred to as charisma, intellectual stimulation, and individual consideration. The leader continually encourages subordinates to explore new and unique ways to challenge the status quo.

In 1985, Bass identified four dimensions of transformational leadership:

i) Idealised influenced
    - The leader serves as an ideal role model for subordinates
    - The leader "walks the talk" and is admired for this
ii) Inspirational motivation
    - The leader has the ability to inspire and motivate subordinates
iii) Individualised considerations
    - The leader demonstrates genuine concern for the needs and feelings of subordinates
    - One-on-one personal attention to each subordinate is a key element in bringing the best of efforts out of everyone
iv) Intellectual stimulation
    - The leader challenges subordinates to be innovative and creative
    - A common misunderstanding is that a transformational leader is "soft", but the truth is that they constantly challenge subordinates to higher levels of performance

4.5.11 Participative leadership style

Participative leadership style is primarily concerned with power sharing and empowerment of subordinates although firmly rooted in the tradition of behavioural research. Prior studies endeavoured to correlate subordinates' perceptions of participative leadership to criteria of leadership effectiveness such as subordinates' satisfaction, effort and performance. Methods used include questionnaires, laboratory and field experiments to compare autocratic leadership with participative leadership in terms of the effects on subordinate satisfaction and performance. A descriptive study of effective leaders explored how leaders use consultation and delegation to instil a sense of ownership in subordinates on the decisions made (Sinani, 2016). According to Hoyle and Wallace (2005:124), participation refers to the opportunities that subordinates have to engage in the process of organisational decision-making.

This leadership style is underpinned by the following three assumptions:

i) Participation will increase organisational effectiveness.
ii) Participation is justified by democratic principles.
iii) In terms of site-based management, leadership is potentially available to any legitimate stakeholder (Leithwood et al., 1999:12).

4.5.12 Distributed leadership style

In the 21st century, distributed leadership style has become the norm as preferred model in leading subordinates within organisations. To understand this phenomenon, an important

starting point would be to separate it from positional authority. Harris (2004:13) indicated that distributed leadership concentrates on engaging expertise wherever it exists within an organisation rather than looking for this via a formal position or role.

Hallinger and Heck (2010) found that distributed leadership is significantly related to growth in student learning. Bennett et al. (2003:3) claimed that distributed leadership is an emergent property of a group or network of individuals where group members "pool" their expertise. Hartley (2010:282) concluded that distributed leadership resides uneasily within the formal bureaucracy of organisations because heads and leaders retain much of the formal authority.

4.5.13 Moral leadership style

The moral leadership style is based on the assumption that critical focus of leadership ought to be on the values, beliefs and ethics of leaders themselves. According to West-Burnham (1997), there are two approaches to moral leadership. Firstly, it is "spiritual" and relates to the recognition that many leaders possess "higher order" perspectives. Secondly, moral leadership is "moral confidence", referring to the capacity to act in a way consistent with an ethical system and remaining consistent over time. Sergiovanni (1991) argued that both moral and managerial leadership are needed in order to develop a learning community. The challenge of leadership, however, is to make peace with two competing imperatives—managerial and moral style. The two imperatives are unavoidable and the neglect of either one creates problems. Business organisations must be run effectively if they are to survive.

4.5.14 Emotional leadership style

Crawford (2009) discussed the emerging model of emotional leadership whereby he emphasised that emotion is concerned with the individual's motivation and interpretation of events. Rather than focusing on underlining the fixed and the predictable and criticises much of the literature on leadership for underestimating this dimension. Crawford (2009) then added that emotion is socially constructed and stressed the importance of individual interpretation of events and situations: "perception is reality". According to Beatty (2005:124), emotional leadership contrasts with bureaucratic approaches. Crawford (2009) concluded that emotional leadership cannot, and does not, function with our emotion.

4.5.15 Postmodern leadership style

The post-modern model offers clues to how leaders are expected to operate. Leaders should respect and pay attention to the diverse and individual perspectives of stakeholders. They should avoid reliance on a hierarchy because this concept has little meaning in such a fluid organisation (Keough & Tobin, 2001). Keough and Tobin (2001:2) mentioned that current postmodern culture celebrates the multiplicity of subjective truths as defined by experience

and revels in the absence of absolute authority. Keough and Tobin identified several key features of postmodernism:

i) Language does not reflect reality.
ii) Reality does not exist there are multiple realities.
iii) Any situation is open to multiple interpretations.
iv) Situations must be understood at local level with particular attention to diversity.

4.5.16 Contingency leadership style

The contingency leadership style provides an alternative approach, recognising the diverse nature of organisational contexts and the advantages of adapting leadership styles to a particular situation rather that adopting a “one-size-fits-all” stance. Yukl (2010:234) added that the managerial job is too complex and unpredictable to rely on a set of standardised responses to events. Effective leaders are continuously reading the situation and evaluating how to adapt their behaviour to it. Leadership requires the effective diagnosis of problems, followed by adopting the most appropriate response to the issue or situation (Morgan, 1997). This reflexive approach is particularly important in periods of turbulence when leaders need to be able to assess the situation carefully and react as appropriate, rather than relying on a standard leadership style.

4.6 Factors that determine leadership style

There are a number of factors that can help determine which type of leadership style is most effective and/or when to draw on a different or combination of leadership styles. Listed below are factors outlined by Ibara (2010:74-76):

i) Size of an institution/organisation
ii) Degree of interaction/communication
iii) Personality of members
iv) Goal congruency
v) Level of decision making

A brief explanation of each factor applicable to leadership is covered below.

4.6.1 Size of an institution/organisation

Many organisations have the tendency to grow, and as they grow, to divide into subgroups where the real decision–making power lies. As institutions or organisation grow, problems arise which may become more difficult to address at a macro or senior management level. At the same time, as institutions and organisations grow larger and become more multifaceted, there is a propensity for decision making to be centralised (Naylor, 1999). This situation leads to limited employee participation or no participation at all. Leaders may, if inclined, present ideas and invite input from employees (Ibara, 2010).

4.6.2 Degree of interaction/communication

Organisational interaction or communication in this paradigm refers to a relational approach between two or more individuals basis on social and organisational structures aimed at achieving goals (Ololube, 2012). Given that uncertainty surrounds many situations in organisations, leaders need to be involved with their staff. In this way, leaders can focus on key issues and ensure that organisational learning takes place. The quantity and quality of interaction in an organisation tends to influence the style of organisational management with the main issue that employees must work together to accomplish tasks.

According to Omenazu (2022:6100-6113), for organisations to be effective the following aspects need to be incorporated: i) management's role in the organisation; ii) strategic management in the organisation iii) the need of decision making in the organisation; iv) management's effectiveness; v) factors affecting the organisation; vi) decision making process; organisational performance; and vii) decision making support system.

Organisations can operate as open or closed systems. An open system receives information and uses it to interact dynamically with its environment. Openness increases the likelihood of better communication, and, in turn, the functioning and survival of organisations (Ololube, 2012).

4.6.3 Personality of members

The personality attributes of employees and other managers/leaders can influence the leadership style of an organisation. Some people tend to react more to certain styles of leadership than others. Individuals who like to depend on others generally do not like to participate in organisational affairs since their need for security and direction is better served by a rigid organisational structure. Those with an understandable sense of direction wish to advance in their careers and enjoy participating in organisational decision-making processes; they tend to be more inclined towards open and collaborative leadership styles. Leaders should adapt to such situations by providing opportunities for participation to those who desire them and directing those who find it more difficult to participate in organisational decision-making (Ibara, 2010).

4.6.4 Goal congruency

The term *goal congruence* is applied to an organisation that ensures all of its operations and activities support the achievement of its goals. Organisations with high goal congruence review their operations and activities to ensure that none of these limits or inhibits the ability to achieve organisational goals. In a situation like these, there is a unity of direction as everybody (individuals, departments and divisions) are working towards the attainment of a common goal.

Different leadership styles may be called for depending on the degree of existing goal congruence in an organisation.

4.6.5 Level of decision making

Differentiating effective leaders from ineffective leaders is a major management concern. One means of differentiation could be the quality of decision making; effective leaders make good decisions or choices that yield favourable outcomes for the organisation (Schoderbek et al., 1988). In addition to leadership ability, employee perception often plays a major role in the implementation and outcome of decisions (Weddle, 2013). In a centralised organisation, there is little or no provision for decisions or input from lower level staff. Directives are handed down and strict obedience is expected. Leadership in these organisations tends to be directive rather than participative or laissez-faire. Hence, the location of decision-making, which is the functional specialisation of the organisation, determines the style of leadership that is called for (Ibara, 2010).

Weddle (2013) identified five levels of decision-making in organisations. With each level, the amount of time and the decision-making involvement increases:

i) *Level One:* Leader makes the decision alone and announces the decision. This level requires little time and no staff involvement. This is particularly useful in crisis situations where immediate action is needed.
ii) *Level Two:* Leader gathers input from individuals and makes the decision. The leader seeks input, usually to cover blind spots and enhance the depth of understanding of the issue at hand. Key individuals hold important information and not consulting is seen to be irresponsible.
iii) *Level Three:* Leader gathers input from the team and makes the decision. The leader holds a team meeting and solicits input from the team, listens to the team's ideas and then using that information, makes a decision.
iv) *Level Four:* Consensus building. At this level, the leader is part of the team and s/he is just one vote/voice among many. The group processes all possible options and compromises until everyone is in agreement.
v) *Level Five:* Consensus and delegation with criteria/constraints. The leader delegates decision making to the team and is not part of decision-making discussions. This requires the leader to be very clear with the team on the criteria/constraints that must be met for their decision to be able to move forward. Failure to meet these criteria could result in the need for the team to reconsider their decision or for the leader to choose a default and/or use another level (from above) for moving the decision forward (Weddle, 2013).

4.7 Leader effectiveness

Most researchers evaluate leadership effectiveness in terms of the consequence of a leader's actions for subordinates and other organisational stakeholders. However, according to Méndez et al. (2013) many different types of outcomes have been used in this regard. These include: i) the performance and growth of the leader's group or the organisation; ii) its preparedness to deal with challenges or crises; iii) subordinates' satisfaction with the leader; iv) subordinates' commitment to the group objectives; v) the psychological well-being and development of subordinates; vi) the leader's retention of high status within the group; and vii) the leader's advancement to higher positions of authority in the organisation.

4.8 Key competences of 21st century leaders

Through extensive research, different scholars presented various competencies that 21st century leadership need to possess. The following has been identified as key competencies:

i) *Ability to motivate and inspire others:* A vision is defined as something to accomplish in the future which is created now. A leader's purpose is to create such a vision. It should be descriptive, while compelling and motivating employees to fulfil the vision. Everyone needs to contribute to make a difference in society (the world). A leader should have the ability to support team members to better connect with community, including customers. This is also known as "the letting go" ability (Hays & Kim, 2012).

ii) *Exhibit honesty and high integrity:* Honestly and transparency are inherent characteristics of great leaders. Also, there should be compliance between what a leader says and does. Davis (2013) indicates that he always informs employees of their ownership to solve/answer questions they may have. He highlights the importance of dealing with truth.

iii) *Problem solving and analysis skills:* The ultimate objective of recruiting and training employees is to find solutions to organisational problems and enjoy the benefit of market opportunities. The leader should have a high level of analytical skills. Most 21st century problems have not been experienced previously; hence leaders should be more creative to find solutions to such problems (Prentice, 2013).

iv) *Result-oriented performances:* Great leaders have a strong determination and drive towards success and the ability to get things done to fulfil the vision. A leader decides what to do and what not to do, and guides employees to achieving the intended results (Isaacson, 2012) (for example, Steve Jobs, leader and founder of Apple, always expected to find the most efficient and convenient ways to communicate).

v) *Powerful and productive communication abilities:* Leaders in the 21st century should have the ability to communicate using different communication methods appropriate for each situation. Leaders have to communicate by performing different roles, such as manager, entrepreneur and regulator, among others. Therefore, a leader has to use

different communication methods such as face-to-face meetings, email, Skype and conference calls.

vi) *Competency in relationship building:* According Kourdi and Bibb (2007), the attributes a person needs to fulfil to gain trust from others are: respect, openness, supportiveness, empathy, courage and unselfishness. A successful business cannot be built without a relationship of trust. The leader should have the ability to maintain a relationship with team members, customers and other stakeholders.

vii) *Technical and professional expertise:* Knowledge society requires high end technical and professional skills in different fields. The best leaders should be able to build these skills over time and become an expert in the relevant field. Knowledge workers are of the four trends of 21st century leaders (Hays & Kim, 2012).

viii) *Strategic perspective*: The best leaders have a long-term vision, shared with others. They lead to make this vision a reality, which is the success of leadership.

ix) *Being innovative:* A good leader in the 21st century should be sufficiently innovative to capture market opportunities. Innovations should be integrated into the business strategy by leaders (Greer, 2013).

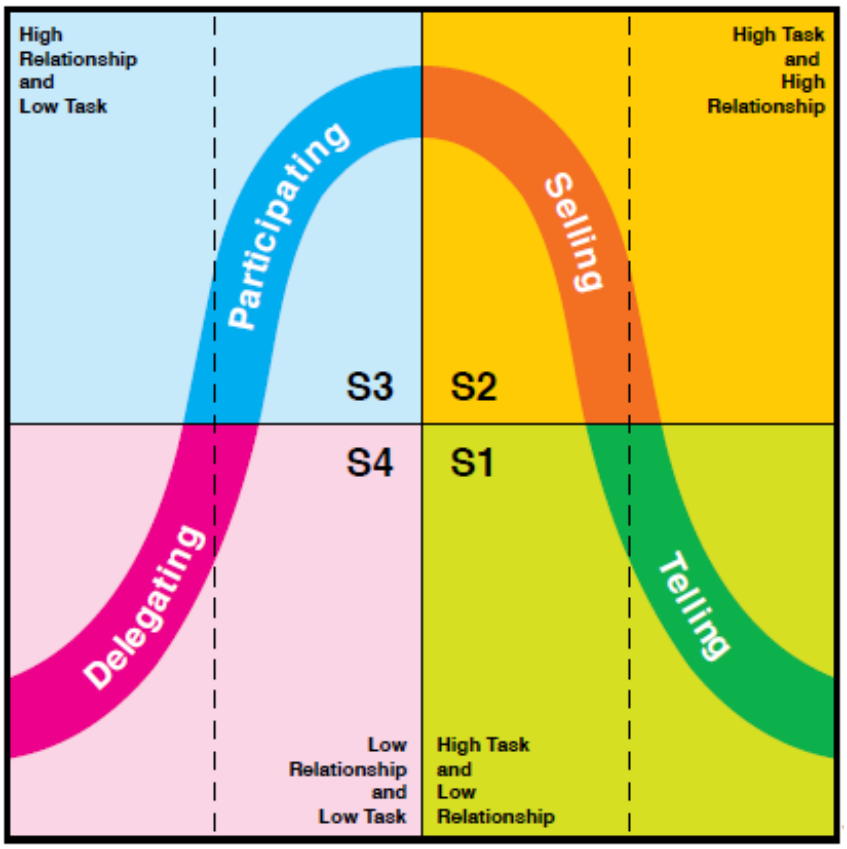

Figure 4.2: Leadership theories
(Source: Hersey & Blanchard, 1977)

Brief Implications of the diagram can be illustrated as follows:

i) *Self-reliant achiever:* High competence, high commitment.

ii) *Capable but cautious performer:* High competence, variable commitment.

iii) *Disillusioned learner:* Some competence, low commitment.

iv) *Enthusiastic beginner:* Low Competence, high commitment.

Leaders in the past was said to be the 'boss', but in the 21st century a leader can no longer lead solely from a position of power. The following characteristics are important:

i) Insight: A situational leader understands the needs of their employees, then adjusts their leadership style to meet those needs.

ii) Flexibility: A situational leader moves seamlessly from one leadership style to another to meet current demands.

iii) Trust: a situational leader gains the trust and confidence of their employees.

iv) Problem solving: A situational leader solves problems using the most applicable leadership style for the current challenge they are facing.

v) Coach: A situational leader is capable of evaluating the maturity and competence of their employees and then applies the best strategy to enhance their employees' skill sets and goals.

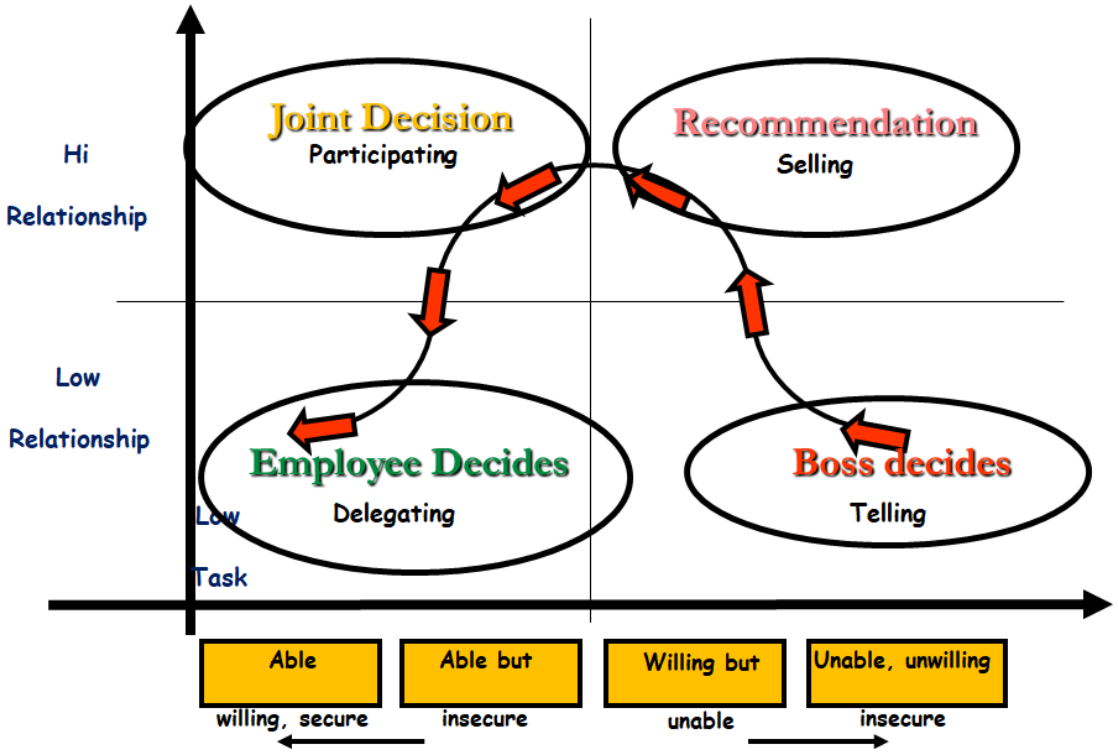

Figure 4.3: Situational leadership
(Source: Rarani, 2015: slide 5)

4.9 Summary

Leadership and management must go hand-in-hand. Although not the same, they are necessarily linked and complementary. Any effort to separate leadership and management is likely to cause more problems than it solves. Still, much ink has been used to delineate the differences. The manager's task is to plan, organise and coordinate. The leader's task is to inspire and motivate. In his book "On Becoming a Leader", Warren Bennis composed a list of the difference, stating that i) the manager administers, the leader innovates; and ii) the manager is a copy, the leader is original.

Good leaders are made, not born. With desire and willpower, one can become an effective leader. Good leaders develop through a never-ending process of self-study, education, training and experience. To inspire workers into higher levels of teamwork, there are certain things a leader must be, know, and do. These do not come naturally, but are acquired through continual work and study. Good leaders are continuously working and studying to improve their leadership skills; they are not resting on their laurels.

"Management is doing things right; leadership is doing the right things" – Peter Drucke

CHAPTER 5: RESEARCH METHODOLOGY AND DESIGN

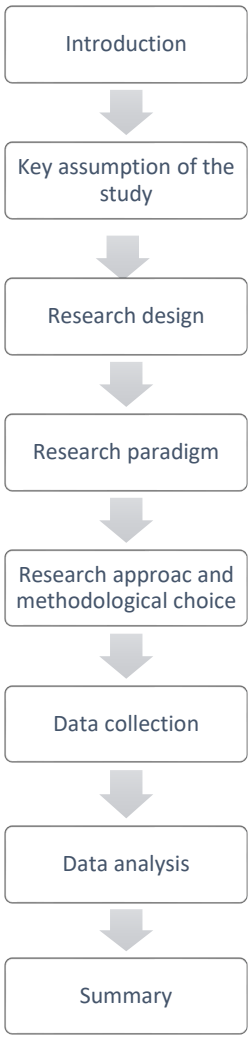

Figure 5.1: Layout of Chapter 5

5.1 Introduction

The scientific philosophy behind any research should have a logical effect on all stages of the research process, which addresses the key questions under investigation. In this chapter, the key assumptions of the study are stated and the research design, which comprises the research paradigm, methodological choice and approach, as well as the research strategy are discussed. The data collection and data analysis are also explained, and the chapter concludes with a summary.

5.2 Key assumptions of the study

According to Leedy and Ormrod (2013), assumptions are conditions taken for granted and may be accepted as true without proof. In relation to the problem statement, the following assumptions were formulated to guide this study as conceptualised:

i) Motivation has the capability to align within any project participants' efforts towards the delivery of the project's objectives.
ii) In the 21st century, the concept of motivation is still a developing field of knowledge and expertise in the construction industry.

The aim of this research was "to establish factors that motivate heavy duty construction workforce to mitigate high construction project failure rates by meeting the requirements of the triple constraints". The research objectives were used to achieve the aim of this research study.

5.3 Research design

According to Kirshenblatt-Gimbleet (2006), research design is the overall strategy chosen to integrate different components of the study in a coherent and logical way to address the research problem. Jowah (2011) supports the view of Kirshenblatt-Gimbleet (2006), stating that research design is the blueprint or programme of action showing the process used by researcher in response to a clearly stated problem and research question (Jowah, 2011:73). Jowah (2011) further posits that the research design is a strategic vision document indicating indicates where we are and where we want to be at a given point in time. Essentially, it is the response to a "what?" question. The process clearly outlines what should be done, at what stage and/or level, and sometimes stating by whom it should be done (Jowah, 2011).

In simpler terms, the research design can be regarded as the blueprint (plan) for data collection, measurement and analysis, which includes identifying what techniques are needed to achieve the intended goals and objectives. The elements of a research design is considered to be the logical structure of inquiry, purpose of the study, type of investigation, sampling method to be used, data collection method, and the process of data analysis (De Vaus, 2001:9).

The choice of research design is made based on the assumptions associated with the research and shaped by applying the inquiry of paradigms/worldviews (Creswell, 2007:19). Research in the construction industry (economics and management) covers cognitive, affective and behavioural components, which are present in both qualitative and quantitative research (Amaratunga et al., 2002:324).

According to Jowah (2011:66), the research design is the structure of the research to be undertaken in pursuit to answer the research question and/or to solve an identified problem (Table 5.1).

Table 5.1: Research design
(Source: Jowah, 2011:66)

Problem statement		
Purpose of the study	**Type of investigation**	**Interference by researcher**
To increase the productivity among construction workers via a range of motivational strategies and theories within the construction Industry	Through the use of sample design and sample size of 120 construction professionals and workers	Study was performed during a three-year study period from 2019 to 2022
Groups and/or individuals	Probability sampling technique	
Within both private and public sectors in the municipal environment	Data collection tools, namely questionnaires and interviews	As events occurred, and delays due to **COVID-19** pandemic

Jowah (2011:66) furthermore opines that the research design is a series of logical decision-making processes where choices are made aligned to the purpose of the study. These include:

i) How to conduct the study.
ii) The setting of the study.
iii) Conformity to acceptable expected norms all in the process to determine the researcher's ability to influence the process.
iv) Conformity to expected norms.
v) The researcher's ability to influence the process.

Potential errors likely to occur during the research design process include planning errors, collection errors, analytical errors, and reporting errors. All these errors can be taken care of by implementing well-structured strategies.

The research design for this study can be classified as descriptive (formal) research, as both a hypothesis and research questions were posed. "Descriptive research is a type of research that describes a population, situation, or phenomenon that is being studied. It focuses on answering the how, what, when, and where questions… rather than the why" (Formplus, 2022:1). Furthermore, although much is known about the population, the paucity of prior research has led to very little information being available about the phenomenon under study. The research therefore found descriptive research appropriate as design for this study.

5.3.1 Research paradigm

The philosophical foundations of a research methodology guide the selection of the research methods used in gathering and analysing the data. Selecting a research approach involves making decisions about the plans and procedures to be adopted for particular research project. According to Creswell (2014:3), these decisions are based on philosophical assumptions, inquiry of paradigms and specific research methods of data collection, analysis and

interpretation. Core assumptions are based on philosophical perspectives revolving around the nature of society and science.

Research in construction management and economics has a strong affiliation with the study of social science and the environment. Therefore, the use of assumptions and paradigms are considered appropriate in this research project. Creswell opines that fundamentally, there are basically four ways of thinking that influence the choice of a research approach, which are ontology, epistemology, axiology and methodological choice (Creswell, 2013:21). This research is restricted to two major schools of thought that define the ways of thinking about research philosophy, namely ontology and epistemology. Thomas (2004) supports the stance that the ontological and epistemological philosophical assumptions provide a guide for any research to avoid making unsuitable and unsubstantiated claims, overestimating what research can achieve by way of truth, certainty and universality.

Ontology involves the study of *being,* which is the nature of existence (Gray, 2009:17). Similarly, Creswell (2014:20) defines ontology as the nature and characteristics of reality. Ontological assumptions revolve around the understanding of what the assumption of reality under investigation is. The assumption about the nature of the world or the belief on how social reality is viewed influences the choice and design of a research study. In their research, Tashakkori and Teddlie (2010) classified the ontological views in the social and behavioural research as:

i) Mechanistic ontology, which approaches the world in 'deterministic terms' by focusing on the causes and effects of an action.
ii) Social ontology, which perceives the world as 'a world of meaning and interpretation' through identifying the intentions and reasons behind an action.

To any researcher, these assumptions underpin the collection of data to address the research problem while investigating the operational and sociological constructs in relation to the motivation of employees in the construction industry.

Epistemology, on the other hand, involves the philosophical backdrop for deciding whether or not knowledge is justifiable and acceptable (Gray, 2009:17). It constitutes acceptable knowledge in the field of study (Saunders et al., 2012) and the general set of assumptions about the best ways of inquiry into the nature of the world (Easterby-Smith et al., 2008). Epistemology describes what the researcher knows about the reality, and assumptions about how the knowledge should be acquired and accepted.

Paradigm thinking creates a dominant way to understand research methodology by providing valuable knowledge and insight into social life (Kelemen & Rumen, 2008:21). It also provides a frame of reference for organising research observations and reasoning (Babbie, 2007:31).

According to Neuman (2012), a paradigm as an integrated set of assumptions to conduct good research, and techniques to gather and analyse data (Neuman, 2012:46). The paradigm provides an explanation of why a researcher assumed that a particular set of research designs can address the purpose of a research. The use of paradigms is based on two different types of philosophical assumptions, namely ontology and epistemology as previously noted. Falqi (2011) identifies three types of paradigms in construction management research: positivism, interpretivism, and combined or pragmatic approach.

Creswell (2014) further identifies four research paradigms/worldviews, namely post-positivism, constructivism, pragmatism, and the transformative paradigm (Table 5.2).

Table 5.2: Four research paradigms/worldviews (Source: Creswell, 2014:6)

Post-positivism	**Constructivism**
Determination	Understanding
Reductionism	Multiple participant meanings
Empirical observation and measurement	Theory generation
Theory verification	
Transformative	**Pragmatism**
Political	Consequences of actions
Power and justice-oriented	Problem-centred (focused)
Collaborative	Pluralist
Change-oriented	Real-world practice oriented

Paradigms play a crucial role in understanding the nature of science and social behaviour; hence, the personal belief held by any researcher will definitely influence the research process, whether it is qualitative, quantitative or mixed methods (Babbie, 2007:33). The current research topic focuses on the construction industry, which comprises highly complex, technical and social systems within the natural and social sciences. It is important to note that these paradigms/worldviews are combined in a complementary manner to reflect both the nature of science and social behaviour.

Research is a combination of techniques that can be used to investigate a certain condition (Easterby-Smith et al., 2008:31). The philosophy behind research is the development of new knowledge. The application of research can be classified as either pure or applied, where pure research refers to the development of new knowledge focused on contributing to the existing body of knowledge, while applied research is used to address challenges contributing to knowledge application, with the contribution as a secondary purpose (Fellows & Lui, 2003:8). According to Creswell (2009), the choice of research philosophy depends on the nature of the

research problem and objectives of the study. For the purpose of this study, ontological and epistemological assumptions are used to identify the cause and effects of the research problem the intentions and reasons behind it. It enables the operational and sociological constructs in relation to the *motivation* aspects/issues to be explored within the construction industry.

De Vos et al. (2011:46) define professional research as the scientific inquiry of a professional problem that provides an answer that contributes towards increasing the body of generalised knowledge. Paradigms/worldviews are combined in a complementary manner to reflect both the nature of science and social behaviour.

Positivism is considered for predetermined and highly structured data techniques, and for interpretive philosophy. According to Saunders et al. (2012), the use of positivism enables both subjective and socially constructed meanings to be expressed in order to establish the truth and an in-depth understanding of the subject (Saunders et al., 2012:162).

5.3.2 Research approach and methodological choice

This study adopted an explanatory sequential research approach and the mixed methods methodological choice for data collection and analysis, which is embedded in the post-positivism and constructivism research paradigms. Post-positivism guided the quantitative data collection and analysis, while constructivism aided in the qualitative data collection and analysis.

The research methodological choice comprises the principles and procedures of the logical processes adopted in a scientific investigation (Fellows & Liu, 1997). It can be categorised as qualitative research (QUAL), quantitative research (QUAN), and mixed methods research, which will be discussed next.

5.3.2.1 Qualitative research

According to Nieuwenhuis (2007:71), qualitative research focuses on how to comprehend both social and cultural contexts of certain behavioural patterns and processes. It enables an in-depth understanding of an individual's experiences through the inquiry process and involves the study of relationships between different variables and generalising the results to an entire population.

This research involved the study of people or situations and making observations based on their natural environment, which allowed for the views and opinions of the participants to be expressed through words and other symbols or metaphors, gathered as textual data for analysis. Qualitative research is underpinned by three basic aspects: conceptualisation, ontology and epistemology (Nieuwenhuis, 2007:71). Creswell (2014:204) identified five qualitative research methods for inquiry, namely narrative inquiry, phenomenology, grounded

inquiry, ethnography and the case study. Narrative inquiry and phenomenology explore the individual's experience. The case study approach and ground theory explore processes, activities and events, while ethnography enables us to learn about the broad culture sharing behaviour of individuals or groups (Creswell, 2014:187).

5.3.2.2 Quantitative research

Maree and Pietersen (2007) define quantitative research as a process that is systematic and objective, using numerical data from a selected sub-group of a population to generalise the findings to the entire population that is being studied. Quantitative research consists of the collection of numerical data that can be quantified and examined through statistical testing to prove or disprove a fact/statement/knowledge (Creswell, 2003:153). The three approaches for quantitative research are experimental, quasi-experimental, and non-experimental research (Welman et al., 2005:78).

5.3.2.3 Mixed methods research

Mixed methods research is the combination of qualitative and quantitative methods for a comprehensive analysis of a specific research subject under study (Teddlie & Tashakkori, 2009:7). Ivankova et al. (2006) further define mixed methods research as a procedure for collecting, analysing and mixing both qualitative and quantitative data at some stage of the research process in a single study to understand a research problem more completely. In mixed methods research, the design is based on concurrent and sequential methods of data collection. It uses both numeric and textual data for analysis, operating within the pragmatic paradigm.

Advantages of mixed methods research:

i) Allows one to use both qualitative and quantitative research methodologies
ii) Able to expand on the results from the qualitative study by adding the quantitative results to the study.
iii) Allows for a more detailed study to be conducted.

Disadvantages of mixed methods research:

i) Possible increase in the cost of the research study.
ii) It is time consuming.
iii) The researcher must have experience in both qualitative and quantitative research.
iv) No easy to analyse qualitative data.
v) Requires the necessary guidance and skills to accurately implement.

5.3.2.4 Methodological choice selected for this research study

For the purpose of the study, mixed methods research using an explanatory sequential approach was adopted to address the research question, commencing with the collection and

analysis of quantitative data, followed by the collection and analysis of qualitative data to obtain an in-depth interpretation of the study. The explanatory sequential approach is embedded in the post-positivist research paradigm in phase 1 (quantitative data), and in the constructivist research paradigm in phase 2 (qualitative data), designed to explain how the qualitative findings enable the research to elaborate on, or extend the quantitative results (Creswell & Plano Clark, 2011).

5.4 Research strategy

The research strategy selected for this study included i) a case study and ii) a survey.

5.4.1 Case study

The study area was delimited to construction project practitioners operating in the construction industry. Prior informal discussions with project stakeholders functioning in the construction industry have indicated their interest in field, which motivated the researcher to undertaking this particular research study.

The case selected was a legal entity operating in the public sector (Western Cape local government) within the municipal environment. The Western Cape Province is geographically one of the largest provinces in South Africa with a population of about 6.84 Million (11.6%). It has a fair amount of construction activities within the province.

South Africa has a diverse economy, with key sectors roughly contributing to the GDP* as follows:

- Agriculture: 2.2%
- Mining: 10%
- Manufacturing: 13.3%
- Electricity and Water: 2.6%
- Construction: 3.9% - the area of focus
- Wholesale, Retail and Motor Trade, Catering and Accommodation: 14.6%
- Transport, Storage and Communication: 9%

The case constituted both public and private sector staff in the Civil Engineering Services (CES) Directorate employed by the selected municipality. The core function of the CES department is to implement, construct, oversee, monitor, and control various capital projects in the construction industry, and other related services.

5.4.2 Survey

The survey comprised a questionnaire (quantitative data) and interviews (qualitative data) (elaborated on in section 5.5). Due to the recent COVID-19 pandemic, the researcher experienced two main constraints: i) some of the projects for the municipality (case of this

research) were completely stopped for a few months before they eventually reopen sites and allow worked to commence; ii) access to construction sites were thus very difficult, and the research was unable to reach most of the research population (see section 5.5), as they were either working from home or not easily accessible to assist with the study. These contributing factors posed a drastic delay to the research. The researcher then opted to take a proactive approach—Microsoft Teams meetings for the interviews and constructing questionnaires via an online platform for the questionnaire.

5.5 Data collection

5.5.1 Research population

The target population was identified as project practitioners operating in the construction industry who report to a team leader, manager or supervisor at a selected municipality in the Western Cape. These included technicians, journey men or artisans (whichever way they are classified) who are plumbers, bricklayers, plasterers, floorists, electricians, carpenters and mortar mixers, amongst others, as would be found working directly at a construction site. For the selection of the population, important factors such as relevance, availability, accessibility, flexibility and applicability of their current placement/job description in the municipality were considered.

5.5.1 Procedure adopted for the data collection

The interview questions were structured from the findings of the quantitative survey and focused on gaining a deeper understanding of the research problem. The interviewees ranged from positions as company director, associates, and construction personnel willing to partake in the study. The researcher considered them to be the best placed and having the appropriate knowledge of operations and policies within the organisation to provide useful and reliable information about the motivation factors/drivers for the workforce to meet the requirements of the triple constraints (section 1.8.9; Table 1.2).

The first set of question(s) focused on *organisation and performance;* firstly, on how the participants perceived their contribution to the organisation and what they thought is the biggest contributors and/or stumbling blocks within the organisation to perform their duties; and secondly, whether they felt they receive sufficient support from the organisation to perform and how the organisation can enable them to perform their job more effectively. Other aspects identified and discussed with interviewees *include: job satisfaction; monetary incentives and work performance; work conditions and work performance; physical environments and work performance; job security and work performance; recognition and work performance;* and *performance monitoring and work performance*.

Before the interviews, an introductory email was sent to the individuals who willingly opted to partake in the study. Due to the COVID-19 pandemic and the enforced mandatory COVID-19 protocols and restrictions, face-to-face meetings were not allowed. The researcher wrote to the participants and rescheduled initial appointments to either have Microsoft Teams/ Zoom meetings or a written document that they could complete in the comfort of their own homes and then return to the researcher for analysis. Fortunately, all the participants were able to attend a Microsoft Teams meeting. They all responded and agreed that given the pandemic, it would be best to meet using an online platform, and, for simplicity, still send through their documents for referencing purposes, which was agreed to by both parties.

During the interviews, the interviewees were allowed to express their opinions on the issues relating to the research topic covered in the interview questions. The opportunity of having interviews on Microsoft Teams enabled the researcher to recall what has been discussed and to compliment the notes taken during the interview sessions.

5.5.2 Reliability and validity

According to Bageis (2008), reliability in qualitative research focuses on three aspects: the background of the interviewer and interviewees, the quality of the interview context, and the methods of data acquisition and interpretation. For the purpose of the study, the researcher was the sole lead researcher; hence the background of the interviewer was not in question. The quality and competence of the interviewees were also not in question as they were taking up diverse roles within the selected organisation, being company owners, directors and/or associates within the case organisation. Their responses were considered credible and reliable to draw fairly reasonable conclusions. The researcher also ensured the quality of the interview context and cross-referenced it after the interview to confirm whether the context was addressed. The researcher authenticated the responses during the interviews based on the answers of past events and/or scenarios, which explained the general theory of the research study under investigation.

5.5.3 Selection of and presentation of interviewees

The interviewees were carefully selected to align with the research topic and their willingness to participate in the research study. For complete anonymity, all employees were assigned a number to uphold the agreed commitment of keeping all participants' information confidential and protect the integrity of the information, bearing in mind the POPI Act. Interviews were carried out with personnel doing work for the selected municipality, i.e., as the client (called the case for this study), whether it be a public and/or private organisation.

5.5.4 Research sample

For this study, categories of construction workers ranged from unskilled and semi-skilled to skilled; these were employees with first-hand experience of the situations within the selected case. As indicated in section 1.9.4.1, all the employees in the CED department at the selected public organisation formed the population of the study and were invited to take part. In total, 54 participants were willing to take part, which was thus the final sample size.

5.5.5 Data collection instruments

According to Yaremko and Harari (1986:26), the core element of a survey is the questionnaire, comprising "a set of questions on the topic that does not test the participants' ability, but measures his opinion, interests, aspects of his personality, and biographical information". For this research, the data collection tool was a survey in the form of a questionnaire to collect quantitative data and a survey to collect qualitative data. For this purpose, the researcher created Questionnaire A for the quantitative data collection (see Appendix A) and Questionnaire B for the qualitative data collection (see Appendix B).

The questionnaire for this study was populated using Google Forms:

- How to collect
- How to measure
- How to analyse

} Google forms – *structured survey questionnaire*

Based on the research objectives, this research considered questions such as, "What should we research?", "What is the scope of the research?", and "What is the hypothesis that we need to investigate?" Attending to these questions enabled the researcher to conclude the research design. The choice of design was made based on the available resources, which included time, cost, scope, the lack of research done within the construction industry, and the research questions posed in Chapter 1.

5.6 Data analysis

5.6.1.1 Thematic analysis—qualitative data

Thematic analysis was found to be appropriate to analyse the qualitative data collected in this study. This method is usually applied to a set of texts such as interview transcripts. The researcher closely examines the data to identify common themes—topics, ideas, and patterns of meaning that are repeated frequently. Thematic analysis (TA) is one of the most common forms of analysis in qualitative research. The purpose of TA is to identify patterns of meaning (themes) across a dataset that provide an answer to the research question being addressed. Themes are patterns across datasets that are important to the description of a phenomenon and associated to a specific research question. In this study, the themes were extracted by

using a word repetition technique through which dominant ideas are identified from frequently used words.

5.6.1.2 Google Forms—quantitative data

The structured questionnaire was created with Google Forms for ease of reference. In Google Forms, the analysis of the above-mentioned questionnaire is automatically generated, which has been found sufficient to achieve the objectives of this research. The results extracted from Google Forms were cleared, coded, and imported to the SPSS software for a more meaningful analysis, where component groupings and themes were created. These results are presented in Chapter 7, the quantitative study analysis.

5.7 Summary

In this chapter, the research methodology and design of the study were presented. This study adopted the post-positivist paradigm to guide the quantitative data collection and analysis, and constructivist paradigm for the qualitative data collection and analysis. Explanatory sequential research was deemed appropriate as research design, with the mixed methods methodological choice (i.e., both qualitative and quantitative research) because it allowed for a full description of the phenomenon under study and enabled informed analysis and interpretation (Easterby-Smith et al., 2008:31).

The research strategy selected for this study included i) a case study and ii) a survey. The case selected was a legal entity operating in the public sector (Western Cape local government) within the municipal environment. The target population was identified as project practitioners in the construction industry in the Civil Engineering Services (CED) Directorate of a selected public organisation in the Western Cape who report to a team leader, manager or supervisor. These included technicians, journey men or artisans (whichever way they are classified) who are plumbers, bricklayers, plasterers, floorists, electricians, carpenters and mortar mixers, amongst others, as would be found working directly at a construction site. All the employees in the CED department at the selected public organisation formed the population of the study and were invited to take part. In total, 54 participants were willing to take part, which was thus the final sample size.

The researcher opted to use a structured three-part questionnaire data as well as interviews as data collection instrument. The questionnaire questions are an elaboration of the research questions as derived/developed from the research objectives emanating from the problem statement. Thematic analysis was found to be appropriate to analyse the qualitative data collected in this study. For the quantitative data analysis, the results were extracted from Google Forms, where after it was cleared, coded, and imported to the SPSS software for a more meaningful analysis.

CHAPTER 6: QUALITATIVE ANALYSIS AND DISCUSSION

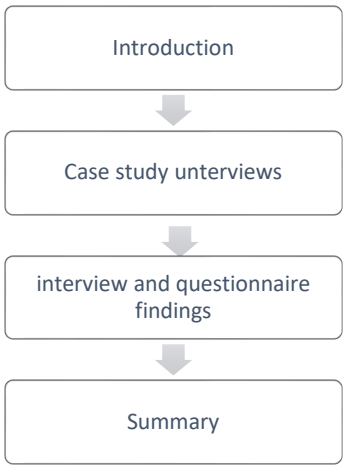

Figure 6.1: Layout of Chapter 6

6.1 Introduction

In this chapter, the qualitative data analysis is presented. The interview structure for the study and well as the procedure and techniques are described. A brief description of the selected cases is provided, followed by a summary of the responses of the participants. The interview findings are discussed, and the chapter concludes with a summary.

6.2 Case study interviews

This section presents the results of a series of interviews conducted with participants in the Civil Engineering Services (CES) Directorate of a selected municipality in the Western Cape. The focus was on gaining a deeper understanding of the drivers that motivate the workforce to a higher productivity in their operational construct for increased work performance.

6.2.1 Case I (Private sector)

The interviewee for this case was a Senior Engineer for continuous improvement within the organisation and has been serving within the organisation for 4 years. **Little to no data about any company profile was revealed during the interview.*

6.2.2 Case II (Private sector)

The case was carried out in a multi-disciplinary company that have been in existence for over 50 years and undertakes work covering the entire spectrum of Consulting Mechanical and Electrical Engineering. The firm offers a complete service, including design, contract administration and project management. It provides experts services to offer a powerful resource and range of services in the handling of multi-disciplinary, major, and specialised projects, anywhere in the world. The interviewee for this case was a Senior Engineer by profession and Associate for the past 15 years at this reputable organisation, conducting key

infrastructure projects in South Africa in the industry. The Company is a Member Firm of CESA, committed to excellence, and has instituted a formal Quality Management System in accordance with the requirements of Consulting Engineers South Africa (CESA).

6.2.3 Case III (Private sector)

This case was carried out in a multi-disciplinary organisation, being in existence for over 50 years and undertaking work covering the entire spectrum of Consulting Mechanical and Electrical Engineering. The firm offers a complete service, including design, contract administration and project management. It provides experts services to offer a powerful resource and range of services in the handling of multi-disciplinary, major, and specialised projects, anywhere in the world. The interviewee for this case was a Senior Engineer by profession and Associate for the past 19 years at this reputable organisation, conducting key infrastructure projects in South Africa in the industry. The Company is a Member Firm of CESA, committed to excellence, and has instituted a formal Quality Management System in accordance with the requirements of Consulting Engineers South Africa (CESA).

6.2.4 Case IV (Private sector)

This case was carried out in a construction consulting firm where they consult to all clients, contractors, engineers, suppliers and interested parties on matters in the Civil Engineering Construction industry with the focus on contractual issues, tender particulars and road-related projects. Civil construction is part of the company's passion to ensure the successful completion of all projects. They offer expert advice and training and can provide assistance with all ventures to assure successful projects. The driving force behind the Company (director/consultant/trainer) has over 26 years' experience and passion. The interviewee for this case was an experienced engineer in roads construction, concrete work and structures, infrastructure development and water reticulation, and his skills span across the entire field of civil construction, having been employed in various organisations over the course of his career to date. In his own words, he is functioning as a "construction consultant" and started working as a private consultant for companies who need skills/experience/problems solved—in other words, "Advice for hire".

6.2.5 Case V (Public sector, local government)

This case was carried out in the selected public sector organisation (municipality), established by local government to implement, monitor and control various capital projects under various works and services done within the municipal area. The department falls within the Directorate of Civil Engineering Services where they execute municipal projects as a way to uplift the communities as part of improving service delivery via various key infrastructure development projects. These include a variety of works and services in accordance with various legislations,

water, sewerage, roads, civil works, housing and planning. The interviewee works in the capacity as a Project Manager and has over five (5) years of experience.

6.2.6 Case VI Public sector, local government)

This case was carried out in the selected public sector organisation (municipality), established by local government to implement, monitor and control various capital projects under various works and services done within the municipal area. The department falls within the Directorate of Civil Engineering Services where they execute municipal projects as a way to uplift the communities as part of improving service delivery via various key infrastructure development projects. These include a variety of works and services in accordance with various legislations, water, sewerage, roads, civil works, housing and planning. The interviewee works in the capacity as a Superintendent in the Utility department and has over nine (9) years of experience.

6.3 Interviews/questionnaire findings and discussions

In this section, the findings from the interviews conducted with construction professionals at various organisations ranging from both public and private sectors are analysed. The section concludes with a discussion of the various participants based on the nine (9) identified themes play a key role in a worker's *performance, motivation, and engagement in projects*.

The sub-questions vary per theme and provide a clearer understanding of how the participants initially comprehended the assignment, thereby illuminating irrelevant responses not relating to the research question. *Participants function within various profiles at the current organisations and each participant's distinct function was captured within the construction industry, but they were not willing to disclose any names and sectors for privacy reasons.*

6.3.1 Organisation and performance

Interviewees were asked to provide their views on the **organisation and performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- Does your job contribute an overall percentage within the organisation?
- Do you feel that you can contribute positively to the organisation? If yes, why? If no, why?
- If you are not fulfilling the purpose of your job, what do you think is the biggest stumbling block?
- Do you feel you have enough support from the organisation to enable you to perform well?
- Do you feel that you have enough support from the people below you?

- What do you think can be done to enable you to improve on your job?

Below are the remarks made by the interviewees in view of the sub-questions.

Interviewee 1

Interviewee 1 totally agreed that his job has an overall contribution within the organisation, and that the contribution is positive, because “projects are profitable” to the organisation. He also agreed to have support from the organisation to perform well and totally agreed that they receive enough support from people below. Lastly, the interviewee acknowledges that educating each other on their responsibilities for the different levels within organisation can improve them in their jobs.

Interviewee 2

Interviewee 2 totally agreed that his job makes a positive contribution towards the organisation by contributing 100% overall because they have built a large base of satisfied clients with a bit of a niche market their organisation offers to the market. He eagerly agreed that support is given, both by others and the organisation, and he explained that assistance would be most welcome given the current workload.

Interviewee 3

Interviewee 3 totally agreed that his job makes a positive contribution towards the organisation by contributing 100% overall through hard work, leadership and being thorough. He furthermore explained how central government is the biggest stumbling block in getting him to fulfil his job and suggested that their systems be improved as it affects the organisation directly.

Interviewee 4

Interviewee 4 totally agreed that he makes an overall contribution towards the organisation in a positive way. No percentage was given and he indicated that he receives enough support from the organisation as well as from the people from below, and this enables him to perform.

Interviewee 5

Interviewee 5 agreed that his job ultimately has a contribution of 75% towards the organisation in a positive way, because all the projects he worked on reached project success and were of financial benefit to the company, which enabled the company to achieve corporate goals and objectives. The biggest stumbling block in the organisation is the cumbersome supply chain management processes and cooperate governance and leadership. When asked about having enough the support from the organisation and people below, he politely smiled and rather opted to not comment. To the question, “What do you think can be done to enable you to improve on your job?” the interviewee said: “Improving my job will be to provide/obtain more

power on decision making, through better training and assistance from top structures within the organisation, without any *political interferences* on key issues".

Interviewee 6

Interviewee 6 totally agreed that his job has an overall contribution towards the organisation and contributes positively, but only by a percentage of 25% because it is mainly as a core function in maintenance, improving the supply to customers and reducing the number of unplanned outages in supply to customers. The biggest stumbling block identified by this interviewee is his colleagues preventing him in fulfilling the purpose of his job. The interviewee furthermore stated that there is no support from the organisation and the people below to enable him to perform well. When asked what he thought could be done to enable him to improve your job, he stated that "constructive implementation of company policies and procedures which will be applicable to all staff members within the organisation".

6.3.2 Job satisfaction and work performance

Interviewees were asked to provide their views on the **job satisfaction and work performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- Do you feel satisfied with your job?
- If you feel dissatisfied, what dissatisfies you most about your job?
- Do you feel you are using your talents when performing your job or are your talents wasted, since the boss gives you clear directives to follow?
- When you make a proposal to your boss, does your boss take you seriously?
- During the course of your duty, are you allowed to make certain decisions?
- If no, is it important to you that you make some independent decisions in relation to your job?
- What kind of topics in your job are you allowed to make decisions about?
- How important are these decisions to you as an individual and to the organisation?

Below are the remarks made by the interviewees in view of these sub-questions:

Interviewee 1

Interviewee 1 indicated satisfaction with his current job; he is given clear instructions and/or directives in relation to performing his duties, and he uses his talents in the course of executing his job. Also, he is allowed to make certain decisions on the job and his suggested proposals are taken into consideration by his superiors/boss. The interviewee furthermore Indicated that the topics he is allowed to make some independent decisions on are "projects and turn around

strategies", and this proves to be "very crucial" for both the individual and the organisation. When asked to rank important elements in his job, *recognition* was placed very high up in the value chain. The rankings were indicated as follows:

Please indicate against each by ranking from 1-5:

Good pay	3
Good working conditions	3
Good physical surrounding	2
Adequate job security	2
Good working relations	2.5
A feeling that you are able to achieve your aspirations and plans through your job	3
To be recognised as contributing to the general organisational goal	4.5

Interviewee 2

Interviewee 2 indicated satisfaction in his job, using his talents in the course of executing his job with clear directives from the boss. His proposals are taking into considerations by his bosses, and he is allowed to make certain decisions in relations to his jobs. The interviewee is allowed to make decisions about "all aspects, barring certain high level financial and resource commitment decisions requiring appropriate authority". When asked why it is important, he answered: "Necessary in order to meet project deadlines and commitments". When asked to rank important elements in his job, he rated working conditions, physical surroundings, job security, good working conditions, and achieving self-aspirations equally at a very high ranking in the value chain.

Please indicate against each by ranking from 1-5:

Good pay	3
Good working conditions	5
Good physical surrounding	5
Adequate job security	5
Good working relations	5
A feeling that you are able to achieve your aspirations and plans through your job	5
To be recognised as contributing to the general organisational goal	3

Interviewee 3

Interviewee 3 said he is satisfied in his current job. He agreed that his talents are used in executing his current duties, with clear directives received form his boss. He is allowed to make independent decisions and his proposals are taken into consideration in relation to his job. These include, "all project management related aspects" on projects. When asked what kind of topics decision making is allowed on an individual role for the organisation, he politely said, "very important". The interviewee rated good pay, working conditions, physical surroundings,

job security, working relations, achieving self-aspirations, and recognition in his job all as equally important at the highest ranking in the value chain.

Please indicate against each by ranking from 1-5:

Good pay	5
Good working conditions	5
Good physical surrounding	5
Adequate job security	5
Good working relations	5
A feeling that you are able to achieve your aspirations and plans through your job	5
To be recognised as contributing to the general organisational goal	5

Interviewee 4

Interviewee 4 indicated that he is completely satisfied in his current job and illustrated that his talents are being utilised within the organisation when performing his job. He receives clear directives from his boss and is allowed to make decisions, hence illustrating that he is being taken seriously in the executing his job. The interviewee ranked good physical surrounding as the highest, followed by the rest in the order as described below.

Please indicate against each by ranking from 1-5:

Good pay	1
Good working conditions	4
Good physical surrounding	5
Adequate job security	3
Good working relations	2
A feeling that you are able to achieve your aspirations and plans through your job	X
To be recognised as contributing to the general organisational goal	X

Interviewee 5

Interviewee 5 said he is overall satisfied with his job, but also mentioned that a lack of adequate leadership from those above him makes him feel a bit dissatisfied in the sense that his proposals are not acknowledged by his boss, thus, he feels his talents are wasted as no clear directives are given by his superiors in performing his duties. With limited to no independent decision-making in doing his job, it is clear that his bosses do not really take him seriously. The interviewee ranked achieving aspirations and plans, being recognised in the organisation and good salary as high, followed by the rest in the order as indicated below.

Please indicate against each by ranking from 1-5:

Good pay	5

Good working conditions	3
Good physical surrounding	2
Adequate job security	4
Good working relations	1
A feeling that you are able to achieve your aspirations and plans through your job	5
To be recognised as contributing to the general organisational goal	5

Interviewee 6

Interviewee 6 disagreed with being satisfied in his current job and contributing positively within the organisation in executing his job. When asked the reasons that dissatisfy him mostly, he stated, “special privileges for certain staff members” within the organisation. The interviewee furthermore said his talents are wasted since the boss does not give clear directives to follow in performing his job. He is not taken seriously by his boss as his proposals are not being considered. He is only allowed to make certain decisions with regard to his job based on the topics relating to maintenance and installations done on existing plant and equipment. Decision making for him as individual and for the organisation, is “very important because they affect the quality of supply or cost or both”. He ranked good working relations in the organisation as most important, followed by the rest in the order as described below.

Please indicate against each by ranking from 1-5:

Good pay	3
Good working conditions	1
Good physical surrounding	4
Adequate job security	2
Good working relations	5
A feeling that you are able to achieve your aspirations and plans through your job	2
To be recognised as contributing to the general organisational goal	2

6.3.3 Monetary incentive and work performance

Interviewees were asked to provide their views on the **monetary incentive and work performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- Do you think a good salary and allowance is a good incentive to encourage good performance?
- What is your opinion about your salary level?
- Do you find it adequate?
- If it is not adequate, what do you feel would be more adequate?

Below are the remarks made by the interviewees in view of these sub-questions:

Interviewee 1

Interviewee 1 totally agreed that a good salary and allowance is a good incentive to encourage good performance. He opined that in his current organisation, his salary is “not at its best” and he does not find it adequate, with a big “NO” in capital letters. When asked what would make it more adequate, the interviewee indicated that “salaries should [be] paid based on the market”.

Interviewee 2

Interviewee 2 agreed that a good salary and allowance is a good incentive to encourage performance. He stated, “Quite satisfied”, when asked about his current salary level.

Interviewee 3

Interviewee 3 agreed that a good salary and allowance is a good incentive to encourage good performance. When asked about the salary level, he politely indicated it to be “good” and agreed with finding it to be adequate.

Interviewee 4

Interviewee 4 said he totally agrees that a good salary and allowances is a good incentive to encourage good performances and that he has no problem with his current salary level.

Interviewee 5

Interviewee 5 totally agreed that a good salary and allowance is a good incentive to encourage good performance within any organisation. He disagrees that his salary level is adequate and said it is not fair given his current workload. What would be fair is to increase his current salary to at least another T-grade and appoint more personnel to ease the workload within the department, as this that would be more realistic to complete tasks.

Interviewee 6

Interviewee 6 totally agreed that a good salary and other allowances are good incentives to encourage good performance. In his opinion, his salary level seems fair given the tasks he performs and agrees that he finds it adequate.

6.3.4 Working conditions and work performance

Interviewees were asked to provide their views on the **working conditions and work performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- Do you think good working conditions is a good initiative to encourage good performance?
- What is your opinion about the working conditions in the **local government** district?
- Do you find them effective to encourage good performance? Add any other comments.
- In case they are not effective, what would you suggest to be done?

Below are the remarks made by the interviewees in view of these sub-questions:

Interviewee 1

Interviewee 1 agreed that working conditions are a good initiative to encourage a good performance within and organisation. Based on experience, the interviewee stated the working condition in local government to be “poor”. He also indicated them effective to encourage good performance.

Interviewee 2

Interviewee 2 totally agreed that good working conditions are a good initiative to encourage good performance in an organisation. He then refrained from making any comments with regards to the working conditions, and said, “cannot comment as employed as part of private sector” and again opted for a “no comment” when asked about finding them effective and to make any suggestions if not effective.

Interviewee 3

Interviewee 3 agreed that good working conditions are a good initiative to encourage good performance within an organisation. When asked about the current working conditions in local government, he opted for a simple “adequate and seems reasonable” answer and agreed to it being effective to encourage good performance.

Interviewee 4

Interviewee 4 totally agreed that good working conditions are a good incentive to encourage good performance.

Interviewee 5

Interviewee 5 agreed that good working conditions are a good initiative to encourage good performance. He identified it to be “a bit of a slow progress” working in local government as not all workers are treated fairly. The interviewee completely disagreed that the current working conditions are effective and encouraging to good performance, and suggested that government launches a survey whereby they assess working conditions in tackling these key

aspects relating to the workforce in order to try improving their working conditions in the hope of better work performance as a result.

Interviewee 6

Interviewee 6 agreed that good working conditions are a good initiative to encouraging good performance among workers. When asked about the working conditions in local government, the interviewee stated that in his opinion “favouritism is everywhere”. He then further explained that he disagrees with finding his current working conditions effective to encouraging good performance and suggested that “favouritism and unfairness must be addressed in a constructive way”.

6.3.5 Physical environment and work performance

Interviewees were asked to provide their views on the **physical environment and work performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- Do you believe a good physical environment has a contribution to make towards good performance? Add any other comments.
- What is your opinion about the physical environment at the District Local Council?
- Do you find the physical environment adequate to encourage good performance? Add any other comments.
- In case it is not adequate, what changes would you suggest to make the environment more conducive?

Below are the remarks made by the interviewees in view of these sub-questions:

Interviewee 1

Interviewee 1 totally agreed that a good physical environment has a contribution to make and found it adequate towards encouraging a good performance from the workforce.

Interviewee 2

Interviewee 2 totally agreed that a good physical environment has a contribution to make towards good work performance but refused to make any other comment to the other questions as he is employed in the private sector.

Interviewee 3

Interviewee 3 agreed that a good physical environment contributes towards good work performance. In his opinion, the local district physical environment can be upgraded to have a better reception area. The interviewee also agreed to it being adequate to encourage good performance, but that it can be improved to better than its current state.

Interviewee 4

Interviewee 4 agreed that a good physical environment has a contribution to make towards good work performance and found it adequate within his current organisation.

Interviewee 5

Interviewee 5 agreed that the physical environment can have a direct contribution on work performance. The current state of how the local government's physical environment is being portrayed is unprofessional, especially within the smaller towns. Little to no maintenance is done, and corruption is at its very core where the available funds allocated for these purposes are either stolen or misused. The physical environment is not adequate; it needs major upgrades to existing infrastructure to improve and encourage performance by the workers.

Interviewee 6

Interviewee 6 agreed that a good physical environment is a contributing factor leading towards good work performance. He confirmed that it is currently acceptable within local government and agreed that it is adequate to encourage a good performance from workforce within the organisation.

6.3.6 Job security and work performance

Interviewees were asked to provide their views on the **job security and work performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- Do you think that having assured security over the retention of your job can encourage you to perform better? Add any other comments.
- What is your opinion in relation to job security in your work?
- Do you find the security of your job adequate? Add any other comments.
- In case you find your job relatively insecure, what suggestion do you make for change?

Below are the remarks made by the interviewees in view of these sub-questions:

Interviewee 1

Interviewee 1 agreed that assured security over job retention encourages him to perform better. He furthermore opined that "it is very important" in relation to his work and found the security of his job adequate.

Interviewee 2

Interviewee 2 agreed that assured security over the retention of his job as encouraging to performing better. He confirmed his job security at work as “fairly safe, as the need to the industry is great” and found the security of his job adequate.

Interviewee 3

Interviewee 3 agreed that having assured security over the retention of his job can be encouraging to perform better. He opined that the relation to job security in his work provides a sense of “good security and back-up”. He found the security of his job adequate.

Interviewee 4

Interviewee 4 agreed that having an assured job security encourages him to perform better and he found his job security to be adequate.

Interviewee 5

Interviewee 5 fully agreed that having a sense of assured job security within the organisation can be encouraging to performing better. He indicated that he is not too concerned about his current job security within the current organisation as the market for project managers is in high demand.

Interviewee 6

Interviewee 6 totally agreed that assured security over the retention of his job can encourage him to perform better. In relation to job security he said that “unfair labour practices represent a great deal of danger” within the organisation. He totally disagreed with finding the security over his job adequate and suggested that “unfair labour practices must be constructively addressed” across the organisation.

6.3.7 Recognition and work performance

Interviewees were asked to provide their views on the **recognition and work performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- Do you think the feeling of recognition in your job is a good incentive towards enabling you to perform better? Add any other comments.
- Do you feel that you are recognised in your job?
- If that feeling is lacking, what do you think is the stumbling block? If other, please specify.
- What do you suggest could be done so that you are able to feel recognised in your job?

Below are the remarks made by the interviewees in view of these sub-questions:

Interviewee 1

Interviewee 1 totally agreed that recognition is a good incentive to enable him to perform better. The interviewee also acknowledged that he is recognised in his job. No further comments were provided to the other questions.

Interviewee 2

Interviewee 2 agreed that recognition enables him to perform better in his job and that he feels recognised in his job. He opted not to comment to the other questions posed.

Interviewee 3

Interviewee 3 agreed that recognition enables him to perform better in his job and that he feels recognised in his job. The interviewee stated something very important on what he thought the biggest stumbling block can be in recognition at work. He said that when one does not feel recognised in his job, the stumbling block can be self-centred; self-improvement is thus needed, whether through internal training or through training external to the parent organisation.

Interviewee 4

Interviewee 4 agreed that recognition enables him to perform better in his job and that he feels recognised in his organisation.

Interviewee 5

Interviewee 5 eagerly agreed that recognition is a good motivation tool to allow workers to perform better within an organisation. It became clear that he is not being recognised in his current job as he is not allowed to make decisions. He receives no guidance from management and indicates that management is the biggest stumbling block to him not being recognised at work. The Interviewee furthermore eagerly suggested that there needs to be a survey done by the organisation to continue assessing recognition of the workforce within the organisation to address the issue of people not being recognised.

Interviewee 6

Interviewee 6 totally agreed job recognition is a good incentive to perform better. He is not recognised in his current job and identified management as the stumbling block behind his feeling of a lack of recognition in the workplace. He eagerly suggested that “unfair labour practices and favouritism must be addressed” within the organisation.

6.3.8 Performance monitoring and work performance

Interviewees were asked to provide their views on the **performance monitoring and work performance** theme based on their own personal view and experiences in the construction industry.

Questions: *Interviewees were asked to comment on the following sub-questions:*

- What is your opinion about the performance assessment exercise carried out annually? Add any other comments.
- How often is your performance assessed through the performance assessment exercise? Add any other comments.
- Do you find this exercise effective in improving one's performance?
- If it is not effective, can you suggest how it could be improved?

Below are the remarks made by the interviewees in view of these sub-questions:

Interviewee 1

Interviewee 1 totally agreed to the annual performance assessment exercise which is carried out within the organisation. As theirs is done bi-annually, the interviewee agreed that performance assessments are effective and help workers improve their performance.

Interviewee 2

Interviewee 2 agreed that the performance assessment exercise carried out at the organisation annually allows workers to improve their performance and is effective. The interviewee stated that he is not allowed to comment on the municipal performance assessment but confirmed that these assessments are based on company policy and done on an annual basis. He agreed that the performance review process is effective and stated that "due to our day-to-day dealing[s] with clients, constant feedback is obtained regarding our performance and level of service. The annual assessments therefore only serve to validate this".

Interviewee 3

Interviewee 3 agreed that their annual performance assessment exercise is important and that it helps improving one's performance. The interviewee found it effective within their current organisation.

Interviewee 4

Interviewee 4 agreed that the performance monitoring process should be carried out annually at the very least. His performance assessment is being done monthly and is an effective exercise aimed at improving one's performance.

Interviewee 5

Interviewee 5 said no performance reviews exist within the parent organisation from the time that he has been employed. The process is therefore deemed not effective and non-existent. Should it be implemented within the organisation, it could help the workforce to better their performance at work. He suggested that management should [re]visit the performance review policy, ensure that it is implemented, and have certain performance review processes in motion as soon as possible.

Interviewee 6

Interviewee 6 completely agreed that the annual performance assessment carried out within his current organisation is both “inadequate and useless”. He then indicated that in the space of nine (9) years, he has never been assessed on his performance, and he disagreed that the performance assessment process is effective and increases one’s performance at work. He eagerly suggested that “management must be removed” in the process and that “maybe my performance might become effective then”.

6.4 Discussion

It’s clear that interviewees responded completely different received to the questions posed to them. Organisation and work performance, job satisfaction, monetary incentive and work performance, working conditions and work performance, physical environment and work performance, job security and work performance, recognition and work performance, and performance monitoring and work performance contribute towards work performance in the organisation, whether positively or negatively. The motivation of the workforce directly affects their productivity in delivering projects that the organisation embarks on. Various factors pose a challenge to projects being delivered **on time**, **within budget**, and **to the correct performance standards**, which constitutes the triple constraints. Thus, the workforce receiving the necessary support to achieve the overall project objects in relation to the set given resources and delivering it successfully, depends greatly on the motivation of the workforce.

The questions posed were direct, which invited a clear response from the interviewees as a result. This assisted with obtaining valid information (answers), which, in return, helped to paint a clear picture of employee motivation when engaging in projects. Numerous factors affect worker productivity, which is dependent on how motivated employees are while working on site.

6.4.1 Qualitative Research (Case study interviews)

Discussion of results (in light of the questions posed to interviewees):

Interviewees were asked nine (9) main questions related to **work performance,** each having sub-questions aligned to the main question. Participants were asked to answer the questions

considering their own personal perspective and/or experiences within their own respective organisations.

i) All the interviewees contributed in some way to their parent organisation. The majority said they do receive some type support from their organisations, while the minority totally disagreed. To some of the questions posed, no response was recorded; especially when interviewees were asked about the support given by the organisations and what the biggest stumbling block were in them performing their job. In the public sector, cumbersome supply chain processes, the lack of cooperation from team members, and political interferences were identified to be the major stumbling blocks. In the private sector, local government was said to be the biggest stumbling block, but no specific reason was provided when asked to motive their answer.

ii) For **job satisfaction,** interviewees were asked to rank the most important feature that keeps them satisfied in their current job personally. Answers varied from *good pay*, *good working conditions*, *physical surroundings*, *security*, *work relations with colleagues*, to *being recognised as they contribute towards organisational goals,* with each participant individually having their own preference listed as the highest ranked characteristic.

iii) The majority of interviewees indicated that they are to some extent able to make some decisions related to their jobs, being taken seriously by the seniors, and use their talents in executing their job. They acknowledged being given clear direction and are able to do the job. The minority of interviewees pointed to issues regards the leadership, including not being taken seriously, being dissatisfied in their job, and not being allowed to make decisions, which demotivates them (mainly due to favouritism in the organisation and not being recognise at work).

iv) The majority of interviewees indicated that their current salary, together with incentives, is good enough and they have no problem with what they currently earn, thus, salary does not hinder their performance in the organisation. Only one participant indicated that being paid in line with market salaries would motivate him more.

v) In terms of working conditions, all interviewees indicated that the working conditions in local government are poor and need an upgrade. They agreed that this will enhance the performance of the employees and that it will be an acceptable starting point. Somewhat average feedback from the public sector participants indicate that the working conditions are ineffective, slow, and not what it should be as favouritism that is everywhere in local government (private sector employees did not comment).

vi) All participants were in agreement that a good physical environment contributes to increased work performance. Suggestions were made that the existing physical

environment requires an upgrade to some extent, as it is perceived as inadequate and deemed unprofessional (especially in smaller municipalities).

vii) The majority of interviewees agreed that having a secured job instils in them as sense of security and having a backup, which is extremely important in motivating employees to enhance their performance.

viii) The majority of participants agreed that being recognised at work motivates workers to perform better and is definitely a positive motivation tool. The minority indicated that they do not receive the necessary recognition and guidance a work, which demotivates them and is definitely seen as a stumbling block.

ix) Performance assessments occur annually at some organisations, while it is either non-existent or not being implemented in the public sector. In the organisations where performance assessments are implemented, it is done effectively done and improves the performance of workers (private sector).

6.5 Summary

From the conducted case studies both in the private sector and in the public sector, it was revealed that all the participants regarded one or more of the following elements as important to their job:

i) Being recognised as contributing to the general organisational goal
ii) Good pay
iii) Good working conditions
iv) Good physical surroundings
v) Adequate job security
vi) Good working relations
vii) A feeling of being able to achieve aspirations and plans through one's job

This chapter described the procedures adopted for data collection as well as an explanation of the reliability and validity of the qualitative data. A brief history of the case organisations was highlighted, and interview findings were presented. The practices of motivation (productivity within organisations that can enhance productivity in the construction industry) were explored. The case study investigations provided in-depth explanations on "how" and "why" motivational mechanisms are needed in organisations to achieve increased productivity of the workforce while working on projects in relation to the triple constraints.

The major concerns of the data collection were the non-responsiveness of interviewees to the open-ended questions, which were answered in less detail than initially anticipated.

General comments

There is a need to focus on a positive approach to motivation in the construction industry, which will boost productivity.

There is a need for orientation and culture to better understand the fundamentals of motivation and the productivity of the workforce in projects to benefit from it.

CHAPTER 7: QUANTITATIVE ANALYSIS AND DISCUSSION

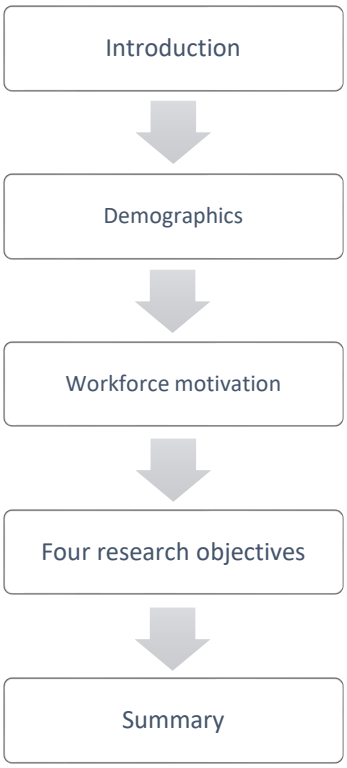

Figure 7.1: Layout of Chapter 7

7.1 Introduction

In this chapter, the quantitative data analysis is presented. Each of the four research objectives identified in section 1.5 are discussed (sections 7.2 to 7.5) and relevant tables are presented. The chapter concludes with a summary.

7.2 Demographics

A total of 54 individuals participated in this study. Because of the limitations of the research, the anticipated/expected sample size could not be achieved. The various reasons for this are explained in the limitations of the research (section 8.5). The mean age of the participants was between 37± 21 years. The age of the participants ranged from 20 to 63 years, with most of the participants aged between 31–40 years (Figure 7.2).

When they were asked their gender, most of the participants (66.7%) identified themselves as male, 29.6% of the participants identified themselves as female, and 1.9% selected the option ‘other’. This is illustrated in Figure 7.3.

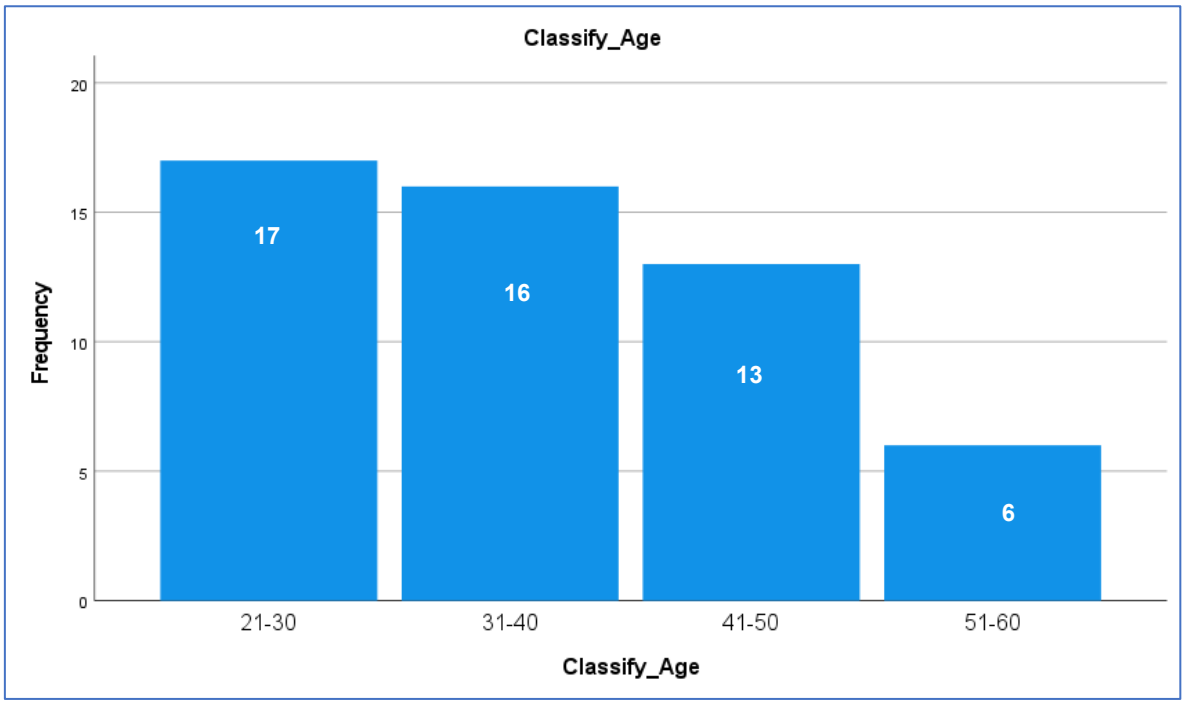

Figure 7.2: Age classification of participants

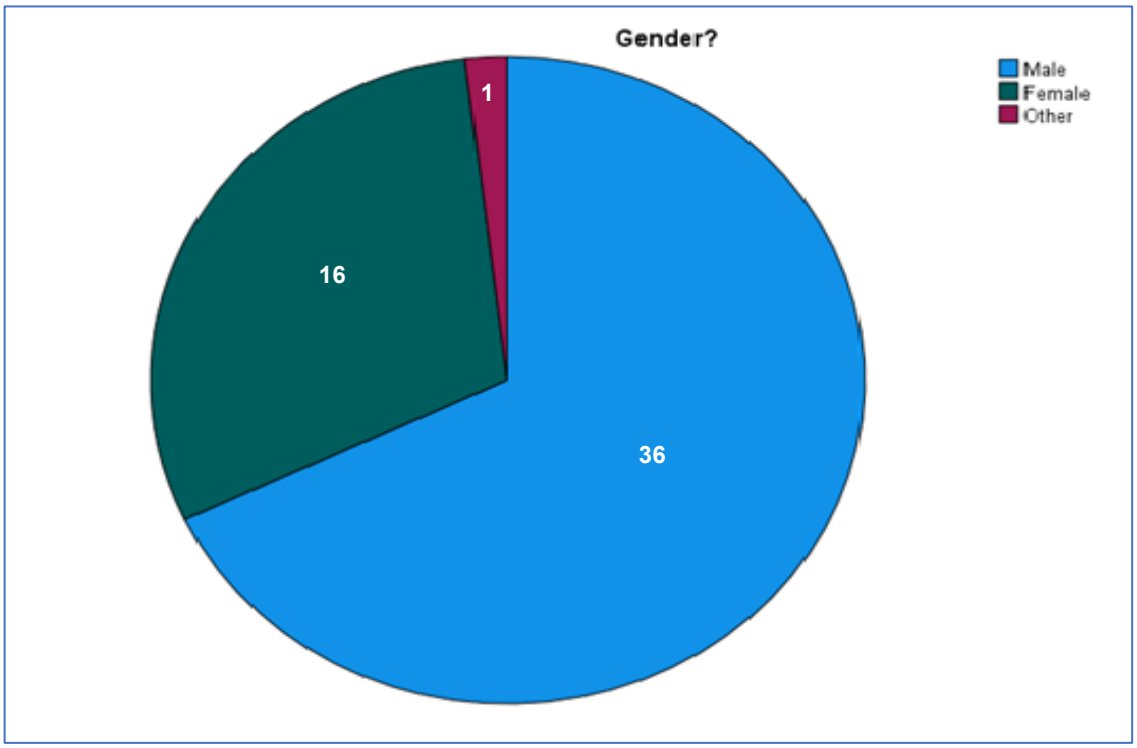

Figure 7.3: Gender classification of participants

When asked what their education level is, 37.0% of the participants said they have a degree; 33.3% said they have a diploma; and 11.1% indicated that they have a college certificate. Short courses were taken by 3.7% of the participants. Overall, 85.1% of the participants said they have a tertiary education, and 13% have a basic education. The percentage of participants

with matric and primary school is 9.3% and 3.7% respectively. There was no response from 3.7% of the study population (Figure 7.4).

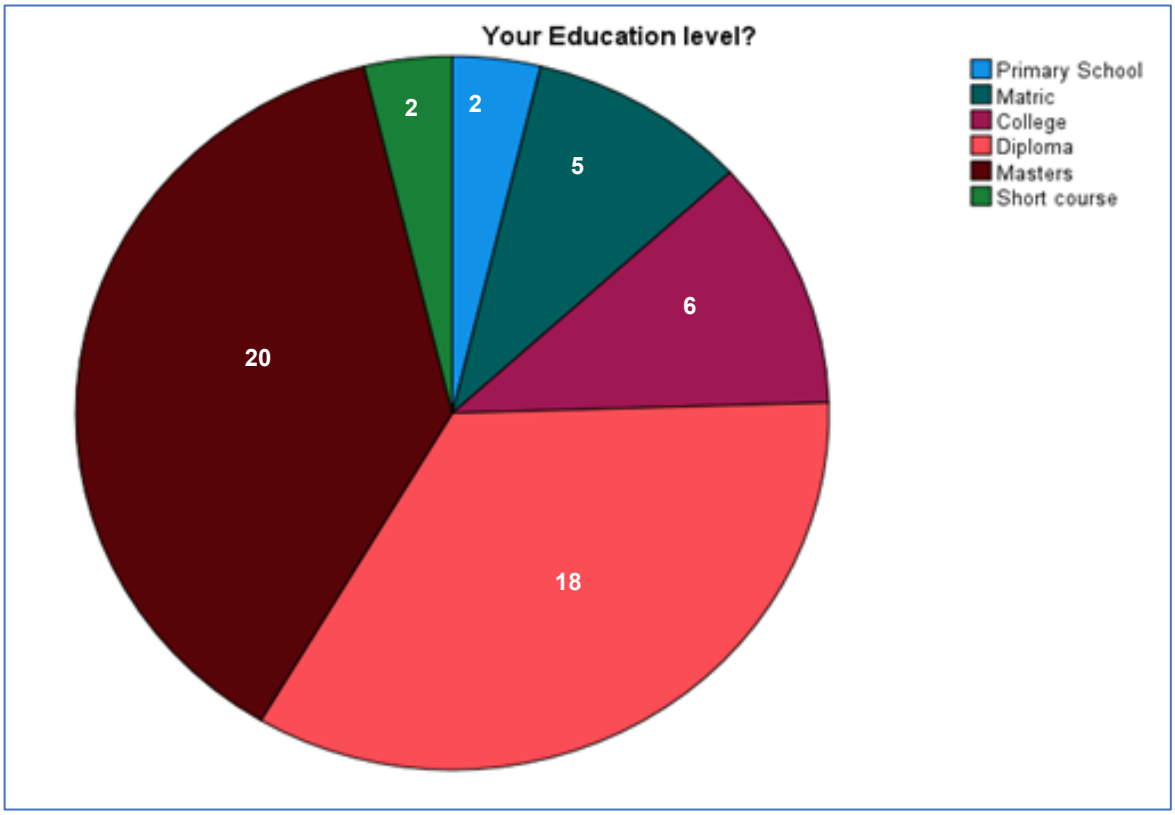

Figure 7.4: Educational level

Table 7.1 reveals the descriptive statistics for the demographics of the research population, with a mean score of 37.42 and a standard deviation of 9.744, followed by a minimum and maximum value of 21 and 58 respectively. There was missing information for 3.8% of the study population.

Table 7.1: Descriptive statistics

S/N item	Mean	Standard deviation	Minimum	Maximum	Missing system (%)
1	37.42	9.744	21	58	2(3.8)

In terms of years working for the company, most of the participants (50.0%) have been working there for 0–5 years; 16.7% have been working for the company for 6–10 years; 7.4% for 11–15 years; and 24.1% of the participants have been working for the company for 16 years or more (Figure 7.5).

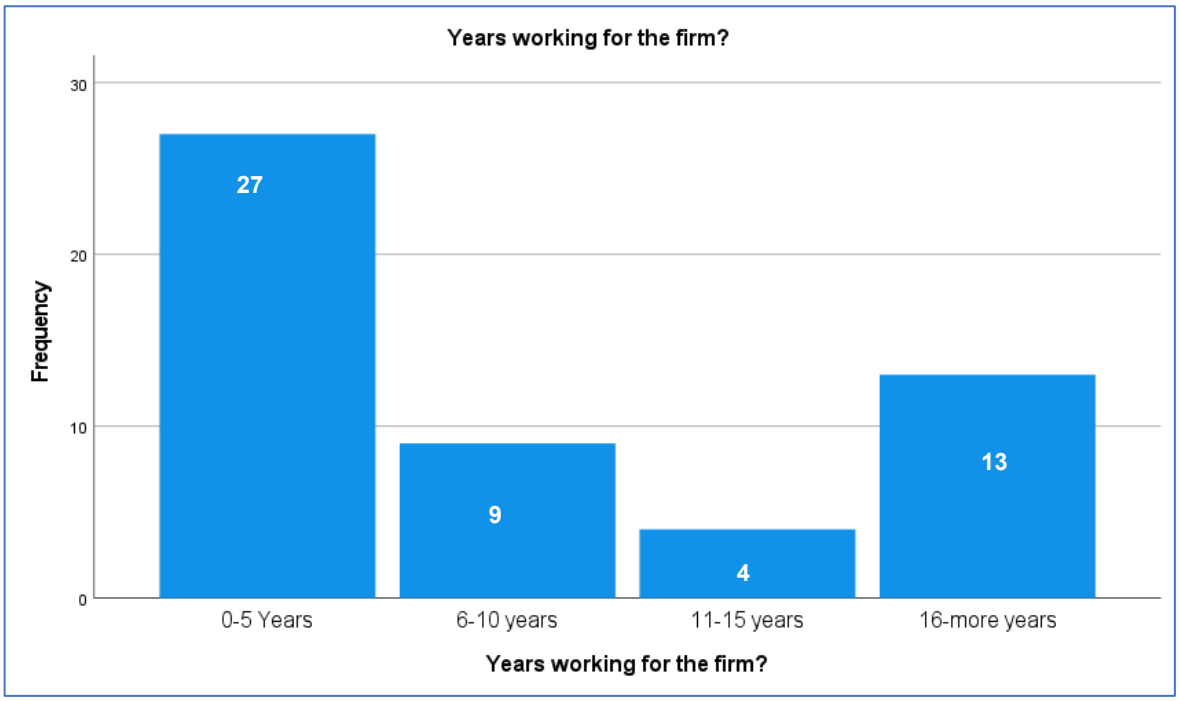

Figure 7.5: Years working for the company

Most of the participants (37.0%) said they have 16 or more years of working experience; 27.8% of the participants rated their working experience as 0–5 years; 20.4% said they have 6–10 years of working experience; and 13.0% stated their working experience as 11–15 years (Figure 7.6).

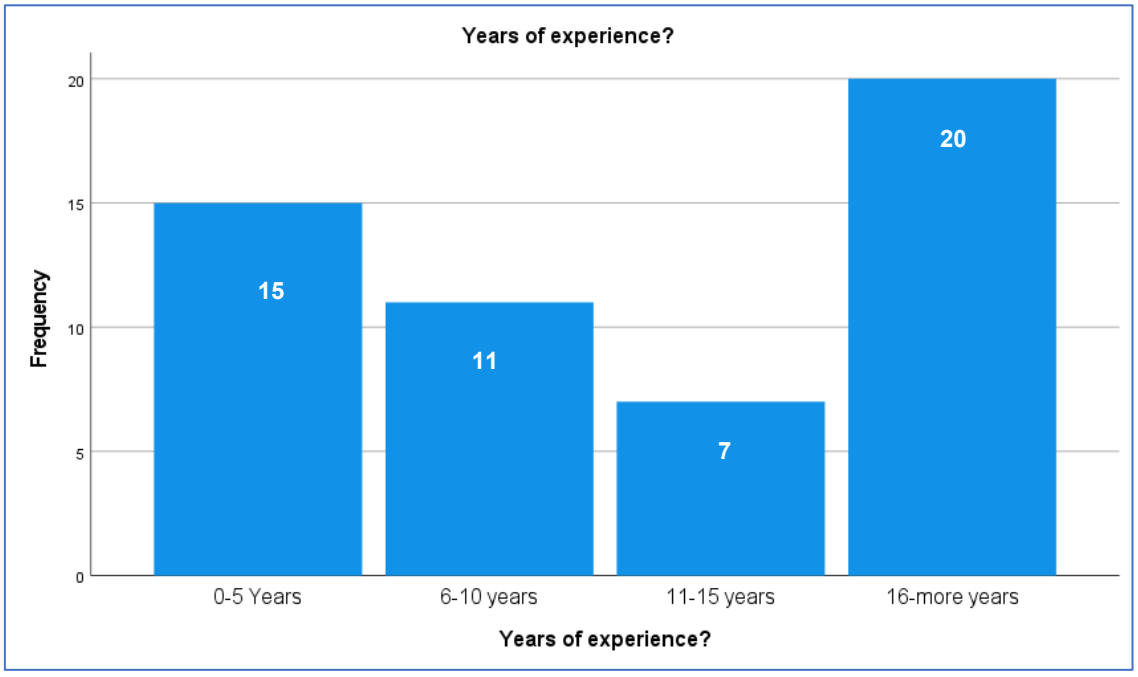

Figure 7.6: Years of experience

Most of the participants (57.4%) indicated that they work in a management role in their current organisation; 6.7% have some intern/training-related work position; and 1.9% of the

participants work in one of the following roles in their current organisation: a clerk of works, carpenter, educator, accountant, general assistant, marketing assistant, ranger, admin officer, engineering technologist. Five point six per cent (5.6%) of the participants revealed that they work as electricians, and 3.7% stated that they are a health and safety professional or a technician (Figure 7.7).

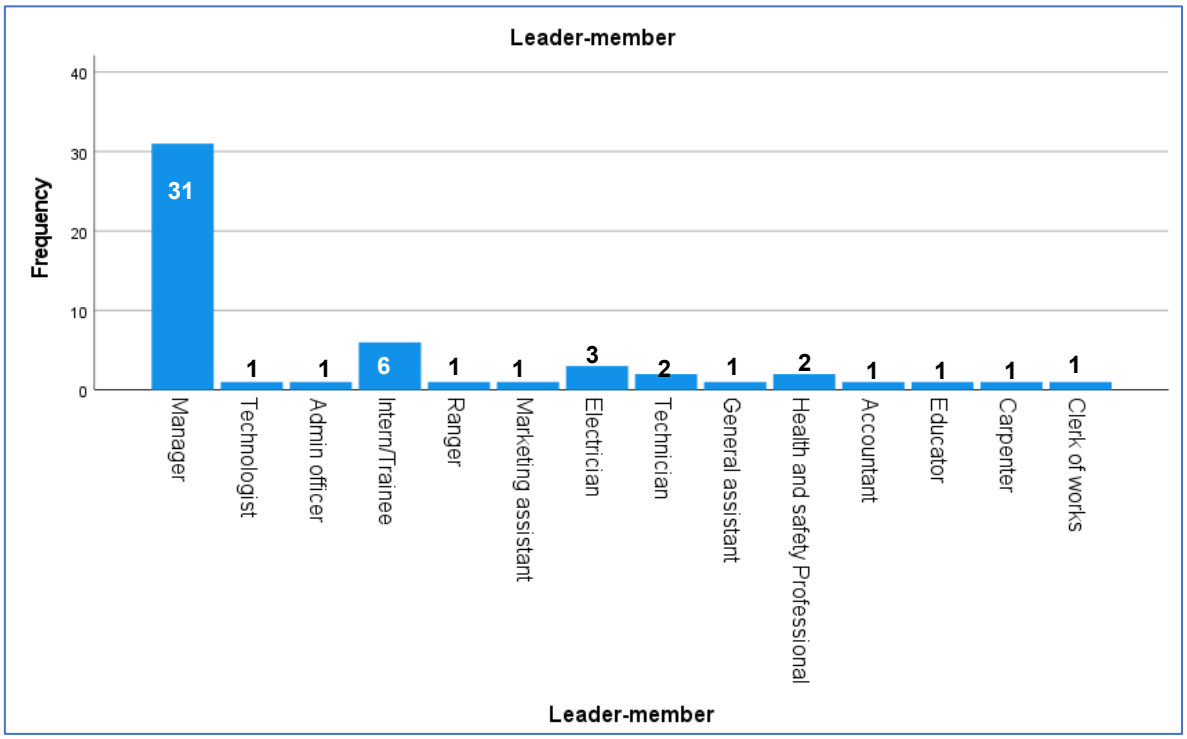

Figure 7.7: Position in the organisation

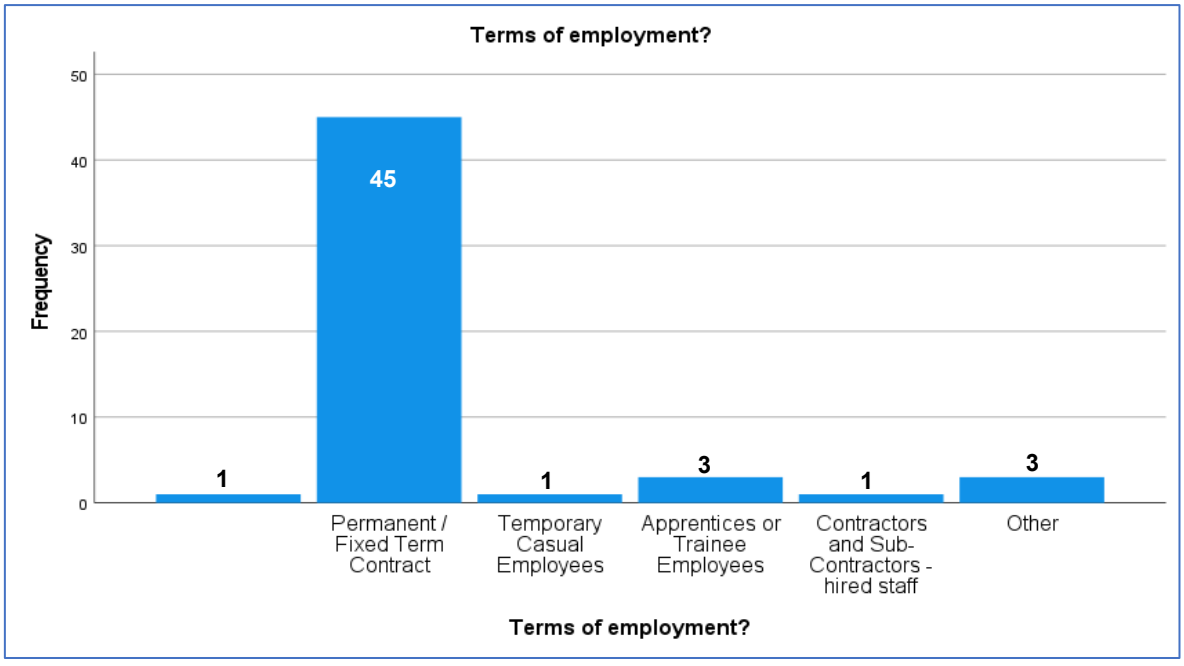

Figure 7.8: Terms of employment

Most of the participants (45%) revealed that they work in their current organisation on a permanent or fixed term contract; 5.6% said they have an intern/training-related work-based contract in their current organisation (i.e., temporary casual employees or apprentices and training employees); 1.9% of the participants work in a temporary position or are hired contractually (i.e., they are contractors or sub-contractors); and 7.5% selected the option 'other', which means they are either retired or self-employed (Figure 7.8).

7.2.1 Implication of demographics on the research study

The demographic information gathered from the research population provided relevant data and assisted in determining whether the representative sample of the target population can be generalised to some extent. It can be useful for the company and/or the industry and serves as a means of analysing and predicting certain social, cultural, and economic trends related to the population being studied. The statistics included common characteristics such as *age*, *gender*, *race*, and *education level,* which provided specific information about the different participants. This information can be useful for the company/field being studied in uplifting the levels of motivation and subsequently the productivity of the team members in executing their task(s) on projects.

7.3 Workforce motivation

The participants' feelings about their jobs and place of work were explored by the researcher. Most of the participants (59.3%) said **yes,** they are happy working in their current organisation; 35.2% said they are **not always** happy working in their current organisation; and 3.7% stated that they are **not at all** happy in their current organisation (Figure 7.9).

In total, more than half (55.6%) of the participants who said **yes** they are always happy working in their current organisation, also stated that they always give their best when feeling happy; 1.9% said no, they do not always give their best; and 3.7% of the participants did not provide a clear response but instead opted to select the neutral answer 'maybe'. Thirty-eight point nine per cent (38.9%) did not respond to this question.

Furthermore, more than half (55.6%) of the participants who said they do **not always** feel happy working in their current organisation, stated that notwithstanding, they always give their best; 14.8% said no, they do not always give their best, while 5.6% did not give a clear response but instead opted to select the neutral answer 'maybe'. Twenty-four point one per cent (24.1%) did not respond to this question.

A third of the participants (33.3%) who said they do **not at all** feel happy working in their current organisation also stated that they always give their best; 3.7% of the participants said no, they

do not always give their best; and 3.7% opted to select the neutral answer ‘maybe’. Forty point seven per cent (40.7%) did not respond to this question.

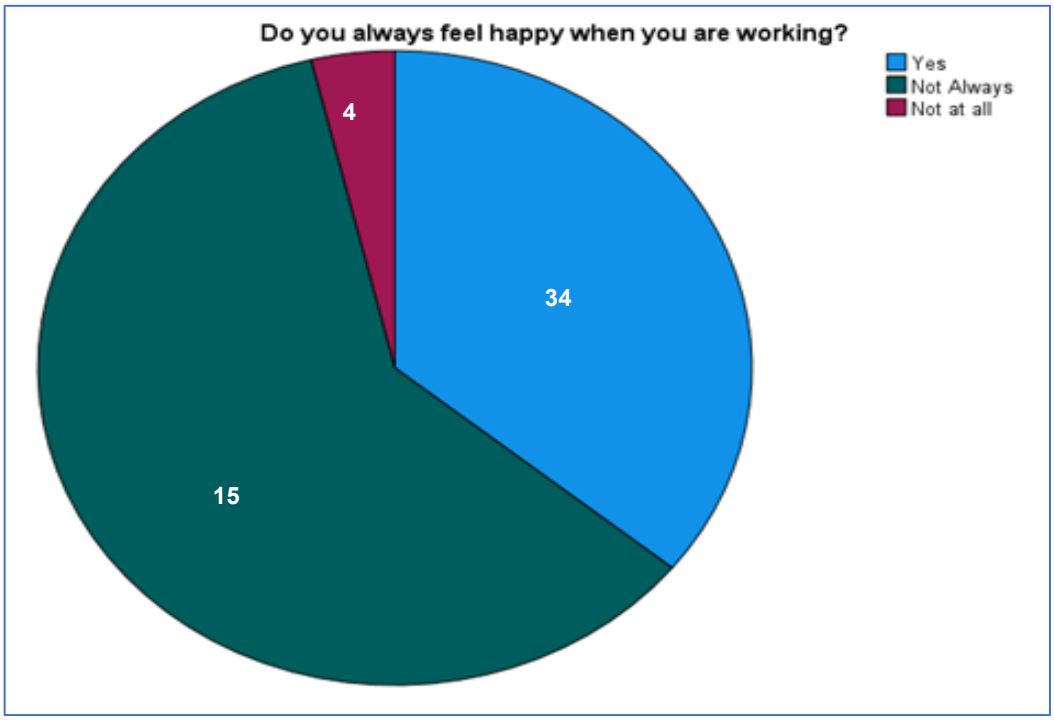

Figure 7.9: Do you feel happy at work?

For the question, “Do you feel motivated at your current place of employment”, two thirds of the participants (63.0%) said they feel motivated at their current place of employment; 27.8% said they do not feel motivated at their current place of work; and 7.4% gave a neutral response, they were neither motivated nor not motivated (Figure 7.10).

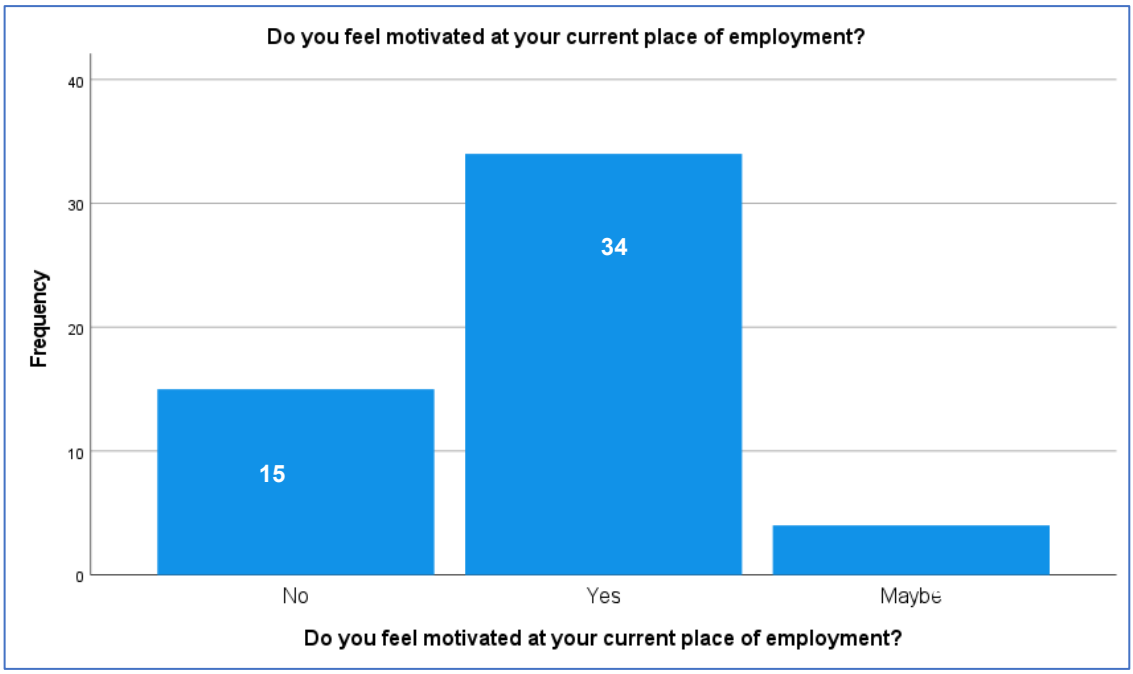

Figure 7.10: Do you feel motivated at your current place of employment?

For the question, “Have you even gone on a strike”, most of the participants (88.9%) said they had never been on a strike, providing comments such as “not applicable”, “no comment”, “nope”, “not in my nature”, “not necessary”, “strike will never be contradictive to any economy”. Only 9.3% of said they participated in a strike before and stated reasons such as “for money”, “protected labour union action” and “safety” (Figure 7.11).

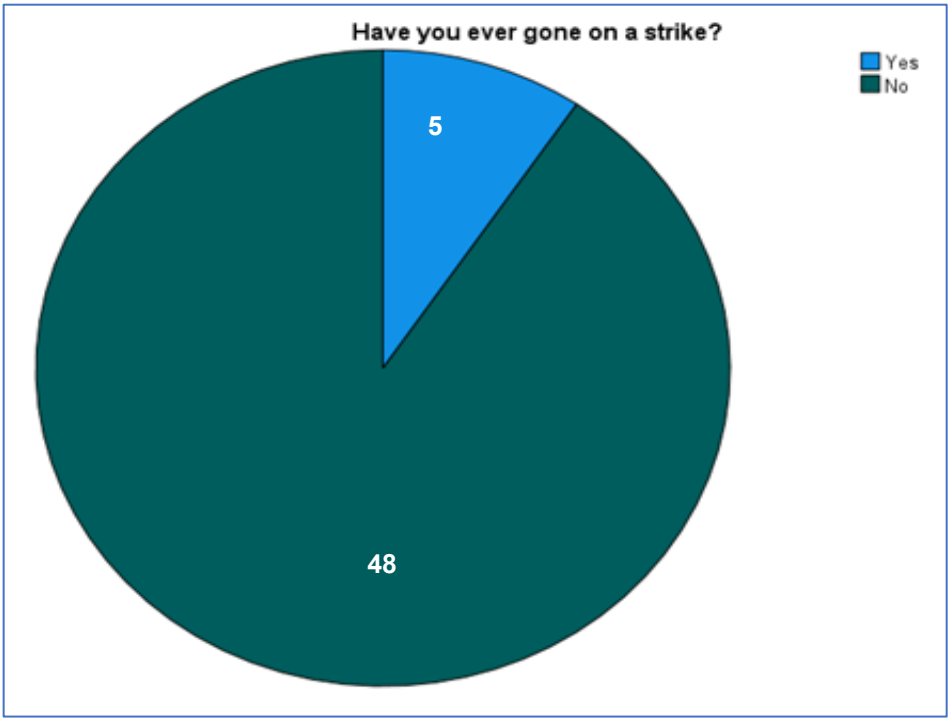

Figure 7.11: Have you ever participated in a strike?

7.4 Achieving the four research objectives

7.4.1 Objective 1: Identify subordinate expectations of the behaviour of the project leader that are considered to be motivating towards performance

The participants were asked 16 questions to identify which expectations of the project leader sent positive messages that motivated them. These expectations are presented as four themes/components, identified through factor analysis in Table 7.2.

Table 7.2: Factor analysis of the sub-themes in order of degree of significance

Rotated Component Matrix[a]				
Questions	**Component**			
	1	**2**	**3**	**4**
Communication (easy flow of information, being well communicated)	.845			
Teamwork (everyone contributing to the work, all hands on deck)	.831			
Job security (permanent job, job all the time, etc.)	.726			
Identification with a goal (being honoured for a particular target achieved)	.681			

Rotated Component Matrix[a]				
Questions	**Component**			
	1	**2**	**3**	**4**
Equity (fair treatment)	.673			
Opportunity to undertake a challenging task (being given goal to work towards through one's own directives)	.651			
Safety plans (availability of first aid, provision of safety kits, etc.)	.639			
Transportation (vehicle at one's disposal, allowance for transportation, transportation from a location to site and back)	.638			
Overtime (provision of extra money after normal working time)		.830		
Salary (pay, wage, etc.)		.822		
Bonus at the end of a project or year (showing appreciation at the end of the project and year)		.754		
Promotion (elevation, example from mason-to-mason foreman)		.731		
Accommodation (provision of physical accommodation, package as subsidy to rent apartment)			.902	
Medical care (having a particular hospital to attend in case of illness or subsidising the cost of hospital bills)			.793	
Canteen for employees (having a place within the premise where food are given at break for free or at a reduced price)			.649	
Worker participation in decision making (offering suggestions)				.736
Provision of equipment for work (adequate equipment to work with, quick replacement and repairs of broken down and old equipment)				.637

From the above factor analysis table, four significant groups/components were identified. Each attribute is contained in any one of the four components as analysed in the factor analysis. The four main components are:

i) Organisational culture (esteem/social needs of employees)
ii) Financial incentives/reward system
iii) Semi-financial incentives or subsidies
iv) Leadership style

7.4.1.1 Organisational culture: Esteem/social needs of employees

Communication, *teamwork*, *job security*, *identification with a goal*, *equity*, *opportunity to undertake a challenging task*, *safety plans* and *transportation* were all identified as important factors that fulfil the esteem/social needs of employees. These factors were categorised into the **organisational culture** component grouping.

Eight questions were evaluated in order of degree of significance on productivity, whereby the project leadership influences the motivation of the workforce and the productivity on the esteem and social needs of employees. These include:

i) **Communication** (easy flow of information, being well communicated) in order of degree of significance on productivity.

ii) **Teamwork** (everyone contributing to the work, all hands on deck) in order of degree of significance on productivity.

iii) **Job security** (permanent job, job all the time, etc.) in order of degree of significance on productivity.

iv) **Identification with goal** (being honoured for a particular attained target) in order of degree of significance on productivity.

v) **Equity** (fair treatment) in order of degree of significance on productivity.

vi) **Opportunity to undertake challenging task** (being given goal to work towards through one's own directives) in order of degree of significance on productivity.

vii) **Safety plans** (availability of first aid, provision of safety kits etc.) in order of degree of significance on productivity.

viii) **Transportation** (vehicle at one's disposal, allowance for transportation, transportation from a location to site and back) in order of degree of significance on productivity.

The significance of each of these variables is evaluated and discussed below.

Table 7.3: Factors improving organisation culture by enhancing the esteem/social needs of employees

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Communication** (easy flow of information, being well communicated)	3 (5.7)	2 (3.7)	7(13.2)	7 (13.2)	28 (52.8)	6 (11.3)	48.213	4	0.001
ii)	**Teamwork** (everyone contributing to the work, all hands on deck)	2(3.8)	5(9.4)	9(17.0)	5(9.4)	27(50.9)	5(9.4)	42.000	4	0.001
iii)	**Job security** (permanent job, job all the time, etc.)	6(11.3)	**NS**	13(24.5)	13(245)	15(28.3)	6(11.3)	3.979	3	0.264
iv)	**Identification with a goal** (being honoured for a particular attained target)	2(3.8)	2(3.8)	11(20.8)	20(37.7)	13(24.5)	5(9.4)	24.708	4	0.001
v)	**Equity** (fair treatment)	1(1.9)	2(3.8)	9(17.0)	10(18.9)	24(45.3)	7(13.2)	36.826	4	0.001
vi)	**Opportunity to undertake a challenging task** (being given goal to work towards through one's own directives)	2(3.8)	3(5.7)	14(26.4)	10(18.9)	18(34.0)	6(11.3)	20.340	4	0.008

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
vii)	**Safety plans** (availability of first aid, provision of safety kits, etc.)	5(9.4)	**NS**	12(22.6)	8(15.1)	18(34.0)	10(18.9)	8.814	3	0.032
viii)	**Transportation** (vehicle at one's disposal, allowance for transportation, transportation from a location to site and back)	2(3.8)	2(3.8)	13(24.5)	13(24.5)	16(30.2)	7(13.2)	19.435	4	0.001

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Communication (easy flow of information, being well communicated)

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to this question (Table 7.3). Most of the participants (35%) agreed that communication by the project leader is a significant contributor to motivating employees (Chi-square = 48.213, p<0.001). Only a few (5%) employees were not motivated by adequate (or inclusive) communication of the project leader.

In order of effect in occurrence

Most of the participants (58.5%) agreed that communication, i.e., having an easy flow of information and being well-informed, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 35.150, p<0.001). Only 7.5% of the participants stated that the order of effect in occurrence is medium, while 9.4% of the participants said the order of effect in occurrence is low and therefore adequate (or inclusive) communication of the project leader does not affect worker motivation and productivity of the workforce.

ii) Teamwork (everyone contributing to the work, all hands on deck)

In order of degree of significance

A total of 48 (90.6%) out of 53 participants responded to this question (Table 7.3). Most of the participants (60.3%) agreed that teamwork is a significant contributor to motivating employees (Chi-square = 42.000, p <0.001), thereby increasing project productivity. Only 13.2% of the participants disagreed that teamwork is a significant contributor to motivating employees working on the project and affecting productivity.

In order of effect in occurrence

A total of 37 (69.8%) out of 53 participants responded to the question (Table 7.3). Most of the participants (50.9%) specified that teamwork, i.e., everyone is contributing to the work and

having an all-hands-on-deck approach during projects, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 26.324, p<0.001). Only 11.3% of the participants stated that the order of effect in occurrence is medium, while 9.4% of the participants said the order of effect in occurrence is low and therefore teamwork does not affect worker motivation and productivity of the workforce.

iii) Job security (permanent job, job all the time, etc.)

In order of degree of significance

A total of 47 (88.7%) individuals responded to the question (Table 7.3). Most of the participants (52.8%) agreed that job security is a significant contributor to motivating employees (p<0.05) and therefore increases productivity on projects (Chi-square = 3.979, p = 0.264). Only 11.3% of the participants disagreed that job security is a significant contributor to the motivation of employees working on the project and affecting productivity.

In order of effect in occurrence

A total of 38 (71.7%) out of 53 participants responded to the question. Most of the participants (39.6%) showed that job security, i.e., having a permanent job and/or a secure job of any means during projects, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 8.579, p .014). Only 18.9% of the participants stated that the order of effect in occurrence is medium, while 13.2% of the participants said the order of effect in occurrence is low and therefore job security does not affect worker motivation and productivity of the workforce.

iv) Identification with a goal (being honoured for a particular attained target)

In order of degree of significance

A total of 48 (90.6%) out of 53 participants responded to the question (Table 7.3). Most of the participants (62.2%) agreed that identifying with a goal is a significant contributor to motivating employees (p<0.05), thereby increasing productivity on projects. Only 7.6% of the participants disagreed that identifying with a goal is a significant contributor to the motivation of employees while working on the project and affecting productivity (Chi-square = 24.708, p <0.001). More than 20.8% of participants opted to remain neutral.

In order of effect in occurrence

A total of 38 (71.7%) out of a total of 53 participants responded to the question. In total, 41.5% of the participants stated that identifying with a goal, i.e., being honoured for a particular attained goal during a project, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 14,263, p<0.001). Only 24.5% of the participants stated that the order of effect

in occurrence is medium, and 5.7% of the participants said the order of effect in occurrence is low and therefore identifying with a goal does not affect worker motivation and productivity of the workforce.

v) Equity (fair treatment)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to the question (Table 7.3). Most of the participants (64.2%) agreed that equity is a significant contributor to motivating employees ($p<0.05$), thereby increasing productivity on projects (Chi-square = 36.826, $p <0.001$). Only 5.7% of the participants disagreed that equity is a significant contributor to the motivation of employees while working on the projects, thus not affecting productivity, while 17.0% of participants opted to remain neutral.

In order of effect in occurrence

A total of 38 (71.7%) out of 53 participants responded to the question. The majority of the participants (54.7%) showed that equity (or fair treatment) in the workplace or during projects has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 32.579, $p<0.001$). Only 13.2% of the participants stated that the order of effect in occurrence is medium, while 3.8% of the participants said the order of effect in occurrence is low and therefore equity in the workplace does not affect worker motivation and productivity of the workforce.

vi) Opportunity to undertake a challenging task

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to the question (Table 7.3). More than half of the participants (52.9%) agreed that the opportunity to undertake a challenging task is a significant contributor to motivating employees ($p<0.05$), thereby increasing productivity on projects (Chi-square = 20.340, $p <0.001$). Only 9.5% of the participants disagreed that the opportunity to undertake a challenging task is not a significant contributor to the motivation of employees while working on projects and does not affect productivity in general. More than 26.4% of participants opted to remain neutral.

In order of effect in occurrence

A total of 37 (69.8%) out of a total of 53 participants responded to the question. As indicated, 39.6% of the participants showed that the opportunity to undertake a challenging task, i.e., given a goal to work towards at his/her own directive during a project, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 9.874, $p =0.001$). Only 18.9% of the participants stated that the order of effect in occurrence is medium, while 3.8% of the

participants said the order of effect in occurrence is low and therefore the opportunity to undertake a challenging task does not affect worker motivation and productivity of the workforce.

vii) Safety plans

In order of degree of significance

A total of 43 (81.1%) out of 53 participants responded to the question (Table 7.3). Most of the participants (49.1%) agreed that safety plans are a significant contributor to motivating employees ($p<0.05$) and therefore increases productivity on projects (Chi-square 8.814, $p=0.032$). Only 9.4% of the participants disagreed with safety plans being a significant contributor to the motivation of employees while working on projects and does not affect productivity. More than 22.6% of participants opted to remain neutral, while none of the participants selected the *"not significant"* option.

In order of effect in occurrence

A total of 35 (66.0%) out of a total of 53 participants responded to the question. As indicated, 37.7% of the participants showed that safety plans have a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 8.971, $p=0.011$). Only 13.2% of the participants stated that the order of effect in occurrence is medium, while 3.8% of the participants said the order of effect in occurrence is low and therefore safety plans do not affect worker motivation and productivity of the workforce.

viii) Transportation

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to the question (Table 7.3). Most of the participants (54.7%) agreed that transportation is a significant contributor to motivating employees ($p<0.05$) and therefore increases productivity on projects (Chi-square = 12.054, $p<0.001$). Only 7.6% of the participants disagreed that transportation is a significant contributor to the motivation of employees while working on projects and does not affect productivity. More than 24.5% of participants opted to remain neutral.

In order of effect in occurrence

A total of 37 (69.8%) out of a total of 53 participants responded to the question. As indicated, 37.7% of the participants indicated that transportation during projects has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 12.054, $p=0.002$). For 26.4% of the participants, the order of effect in occurrence is medium, while 5.7% of the participants said

the order of effect in occurrence is low and therefore transportation during projects does not affect worker motivation and productivity of the workforce.

7.4.1.2 Financial incentives/reward system

Overtime, *salary*, *bonus*, and *promotion* were identified as important factors in fulfilling the financial incentive needs of employees. These factors were categorised into the **financial incentives/reward system** component grouping.

Four questions were evaluated in order of degree of significance on productivity during a project, whereby project leadership has an influence on the motivation of the workforce in reflecting on the financial incentive needs of employees. These variables include:

i) **Overtime** (provision of extra money after normal working time) in order of degree of significance on productivity.
ii) **Salary** (pay, wage, etc.) in order of degree of significance on productivity.
iii) **Bonus at the end of a project or year** (showing appreciation at the end of the project and year) in order of degree of significance on productivity.
iv) **Promotion** (elevation, example from mason-to-mason foreman) in order of degree of significance on productivity.

The significance of each of these variables is evaluated and discussed below.

Table 7.4: Factors enhancing employee motivation by fulfilling their financial incentive needs

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Overtime** (provision of extra money after normal working time)	2(3.8)	3(5.7)	18(34.0)	6(11.3)	16(30.2)	8(15.1)	24.889	4	0.000
ii)	**Salary** (pay, wage, etc.)	2(3.8)	2(3.8)	9(17.0)	7(13.2)	28(52.8)	5(9.4)	48.042	4	0.000
iii)	**Bonus at the end of a project or year** (showing appreciation at end of year/ project	3(5.7)	4(7.5)	8(15.1)	10(18.9)	19(35.8)	9(17.0)	18.500	4	0.001
iv)	**Promotion** (elevation, example from mason-to-mason foreman)	2(3.8)	5(9.4)	13(24.5)	12(22.6)	15(28.3)	6(11.3)	13.319	4	0.010

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Overtime (provision of extra money after normal working time)

In order of degree of significance

A total of 45 (84.9%) out of 53 participants responded to this question (Table 7.4). Most of the participants (41.5%) agreed that overtime, whereby extra money is paid after normal hours, is a significant contributor to motivating employees (Chi-square = 24.889, p=0.000). Only 9.5% of employees were not motivated by the opportunity of extra financial gain through working overtime.

In order of effect in occurrence

Participants (32.1%) agreed that overtime, whereby provision is made for extra money, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 6.703, p =0.035). Only 15% of the participants stated that the order of effect in occurrence is medium, while 9.4% of the participants said the order of effect in occurrence is low and therefore overtime payment which does not affect worker motivation and productivity of the workforce.

ii) Salary (pay, wage, etc.)

In order of degree of significance

A total of 48 (90.6%) out of 53 participants responded to this question (Table 7.4). Most of the participants (66%) agreed that the salary, wage or pay earned by the employee is a significant contributor to motivating employees (Chi-square = 48.042, p =0.000). Only 6.8% of employees were not motivated by a salary, wage of pay.

In order of effect in occurrence

Most of the participants (62.3%) indicated that payment in the form of their earned salary has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 51.946, p =0.000). Only 3.8% of the participants stated that the order of effect in occurrence is medium, and 3.8% of the participants said the order of effect in occurrence is low and therefore payment in the form of their earned salary does not affect worker motivation and productivity of the workforce.

iii) Bonus at the end of a project or year (showing appreciation at the end of the project or year)

In order of degree of significance

A total of 44 (83.0%) out of 53 participants responded to this question (Table 7.4). Most of the participants (54.7%) agreed that a bonus at the end of the project or year by the project leadership is a significant contributor to motivating employees (Chi-square = 18.500, p =0.001). Only 13.2% of employees were not motivated by a bonus incentive being paid to them at end of the project or year.

In order of effect in occurrence

Most of the participants (58.5%) agreed that a bonus at the end of the project or year by the project leadership has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 19.500, p =0.000). Only 7.5% of the participants stated that the order of effect in occurrence is medium, while 9.4% of the participants said the order of effect in occurrence is low and therefore bonus at the end of a project or year does not affect worker motivation and productivity of the workforce.

iv) Promotion (elevation, example from mason-to-mason foreman)

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to this question (Table 7.4). Most of the participants (50.9%) agreed that being promoted by the project leadership is a significant contributor to motivating employees (Chi-square = 13.319, p =0.010). Surprisingly, 27.4% provided a neutral response, while 13.2% of the employees were not motivated by a promotion by the project leadership.

In order of effect in occurrence

Most of the participants (45.3%) agreed that a promotion, whereby the employee is elevated to the next level by the project leadership, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 18.200, p =0.000). In total, 26.4% of the participants stated that the order of effect in occurrence is medium, while only 3.9% of the participants said the order of effect in occurrence is low and therefore promotion does not affect worker motivation and productivity of the workforce.

7.4.1.3 Semi-financial incentives

Accommodation, *medical care* and *promotion* were identified as important factors in fulfilling the semi-financial incentive needs of employees. These factors were categorised into the **semi-financial incentives or subsidies** component grouping.

Three questions were evaluated in order of degree of significance on productivity during a project, whereby the project leadership influences the motivation of the workforce in relation to the semi-financial incentive needs of employees. These variables include:

i) **Accommodation** (provision of physical accommodation, package as subsidy to rent apartment) in order of degree of significance on productivity.
ii) **Medical care** (having a particular hospital to attend in case of illness or subsidising the cost of hospital bills) in order of degree of significance on productivity.
iii) **Canteen for employees** (having a place within the premise where food are given at break for free or at a reduced price) in order of degree of significance on productivity.

Table 7.5: Factors enhancing employee motivation by fulfilling their semi-financial incentive needs

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Accommodation** (provision of physical accommodation, package as subsidy to rent apartment)	8(15.1)	5(9.4)	9(17.0)	12(22.6)	16(30.2)	3(5.7)	7.000	4	0.136
ii)	**Medical care** (having a particular hospital to attend in case of illness or subsidising the cost of hospital bills)	3(5.7)	3(5.7)	13(24.5)	12(22.6)	16(30.2)	6(11.3)	15.447	4	0.004
iii)	Canteen for employees (having a place within the premise where food are given at break for free or at a reduced price)	6(11.3)	7(13.2)	14(26.4)	12(22.6)	9(17.0)	5(9.4)	4.708	4	0.319
iv)	**Promotion** (elevation, example from mason-to-mason foreman)	2(3.8)	5(9.4)	13(24.5)	12(22.6)	15(28.3)	6(11.3)	13.319	4	0.010

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

The significance of each of these variables is evaluated and discussed below.

i) **Accommodation** (provision of physical accommodation, package as subsidy to rent apartment)

In order of degree of significance

A total of 50 (94.3%) out of 53 participants responded to this question (Table 7.5). Most of the participants (52.8%) agreed that the provision of accommodation, whether by rent or a subsidy by the project leadership, is a significant contributor to motivating employees (Chi-square = 7.000, p =0.136). Only 24.5% of the participants were not motivated by the provision of accommodation by the project leadership.

In order of effect in occurrence

Most of the participants (41.5%) indicated that accommodation, whether subsidised and/or rented, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 9.800, p =0.007). Only 11.3% of the participants indicated that the order of effect in occurrence is medium, while 22.6% of the participants said the order of effect in occurrence is low and

therefore accommodation, whether subsidised and/or rented, does not affect worker motivation and productivity of the workforce.

ii) **Medical care** (having a particular hospital to attend in case of illness or subsidising the cost of hospital bills)

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to this question (Table 7.5). Most of the participants (52.8%) indicated that particular subsidising hospital care in the case of illness is a significant contributor to motivating employees (Chi-square =15.447, p =0.004). Only 11.4% of employees indicated that they are not motivated by medical-related care provided by the project leader. Again, unexpectedly, 24.5% provided a neutral response.

In order of effect in occurrence

Most of the participants (41.5%) indicated that medical care, whereby having a particular hospital to attend in case of illness or subsidising the cost of hospital bills, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 10.474, p =0.005). Only 17.0% of the participants indicated that the order of effect in occurrence is medium,, while 13.2% of the participants said the order of effect in occurrence is low and therefore medical care provision does not affect motivation and productivity of the workforce.

iii) **Canteen for employees** (having a place within the premise where food are given at break for free or at a reduced price)

In order of degree of significance

A total of 48 (90.6%) out of 53 participants responded to this question (Table 7.5). Most of the participants (39.6%) indicated that having a place for refreshments, offered by the project leadership at the place of work, is a significant contributor to motivating employees (Chi-square = 4.708, p =0.319). Only 24.5% of employees were not motivated by a canteen at the workplace where they can have refreshments.

In order of effect in occurrence

Some the participants (22.6%) agreed that a canteen for refreshments on the work premises has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 2.000, p=0.368). More than 30.2% of the participants stated that the order of effect in occurrence is medium, and 17.0% of the participants said the order of effect in occurrence is low and therefore a canteen for employees does not affect worker motivation and productivity of the workforce.

Leadership style

Participation in decision making and *provision of equipment for work* were identified as important factors that motivate employees in fulfilling their jobs. These factors were categorised into the **leadership style** component grouping.

Two questions were evaluated in order of degree of significance on productivity during a project, whereby the project leader's leadership style has an influence on the motivation of the workforce. These variables include:

i) **Worker participation in decision making** (offering suggestions) in order of degree of significance on productivity.

ii) **Provision of equipment for work** (adequate equipment to work with, quick replacement and repairs of broken down and old equipment) in order of degree of significance on productivity.

The significance of each of these variables is evaluated and discussed below.

Table 7.6: Factors enhancing employee motivation through the project leader's leadership style

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Worker participation in decision making** (offering suggestions)	**NS**	5(9.4)	16(30.2)	13(24.5)	12(22.6)	7(13.2)	5.652	3	0.130
ii)	**Provision of equipment for work** (adequate equipment to work with, quick replacement and repairs of broken down and old equipment)	2(3.8)	2(3.8)	13(24.5)	10(18.9)	19(35.8)	7(13.2)	23.348	4	0.000

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Worker participation in decision making (offering suggestions)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7.6). Most of the participants (47.1%) indicated that worker participation during projects is a significant contributor to motivating employees, whereas a significant portion of the participants (30.2%) provided a neutral response (Chi-square= 5.652, p =0.130). Only 9.4% of employees were not motivated by workers' participation in motivating employees. Option 1, *"strongly not significant"*, was not selected by any participants.

In order of effect in occurrence

Most of the participants (30.2%) confirmed that worker participation, whereby a worker is allowed to make suggestions, has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 8.486, p=0.014). In total, 32.1% of the participants indicated that the order of effect in occurrence is medium, while only 7.5% of the participants said the order of effect in occurrence is low and therefore worker participation in decision making does not affect worker motivation and productivity of the workforce.

ii) Provision of equipment for work (adequate equipment to work with, quick replacement and repairs of broken down and old equipment)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7.6). Most of the participants (54.7%) indicated that adequate equipment to work with during projects is a significant contributor to motivating employees (Chi-square = 23.348, p =0.000). Only 7.6% of employees were not motivated by having adequate equipment issued to them by the project leader.

In order of effect in occurrence

Most of the participants (39.6%) indicated that adequate equipment being provided to work with has a high order of effect in occurrence, which influences the motivation of the workforce and ultimately affects the productivity in the execution of a project (Chi-square = 13.189, p =0.001). In total, 24.5 % of the participants stated that the order of effect in occurrence is medium, while only 5.7% of the participants said the order of effect in occurrence is low and therefore the provision of adequate equipment does not affect worker motivation and productivity of the workforce.

7.4.2 Objective 2: Identify leader behavioural patterns consider by subordinates to be demotivating towards performance

The participants were asked 22 questions to identify leader behavioural patterns considered by subordinates to be **demotivating** to performance during projects. Subordinates' responses were presented as five themes/components, identified through the factor analysis in Table 7.7.

Table 7.7: Factor analysis of the sub-themes in order of degree of significance

Rotated Component Matrix[a]					
	Components				
	1	2	3	4	5
Rework due to construction error (making corrections on wrong work done)	.938				

Rotated Component Matrix[a]					
	Components				
	1	2	3	4	5
Late issuance of construction drawings by consultant (detailed set of drawings not delivered in bulk, leading to the work done in bits or small sections)	.877				
Workers strike because of unpaid work	.875				
Material shortage on site	.855				
Unrealistic deadline for project set by client (deadline that is not easy to attain)	.849				
Waiting for other crew (waiting for gang of different trade to finish before another can continue)	.832				
Inadequate site planning (site layout which leads to difficulty in movement)	.820				
Inadequate site staff (less labour for a task leading to excessive workload)	.770				
Slow response of consultant's site staff attending to inspection work	.729				
Contractor staff absenteeism (crew members not being present for work)	.663				
Poor buildability design (design which is difficult to construct)	.578				
Promotion (elevation, example from mason-to-mason foreman)		.859			
Overtime (provision of extra money after normal working time) in order of degree of significance on productivity		.824			
Transportation (vehicle at one's disposal, allowance for transportation, transportation from a location to site and back)		.771			
Bonus at the end of a project or year (showing appreciation at the end of the project and year)		.724			
Work based on a contract (finish and go)			.815		
Teamwork (everyone contributing to the work, all hands on deck)			.631		
Provision of equipment for work (adequate equipment to work with, quick replacement and repairs of broken down and old equipment)			.601		
Worker participation in decision making (offering suggestions)			.601		
Congestion (overcrowding in a work area, improper site planning)			.451		
Poor weather conditions				.860	
Disrespect from co-workers (use of abusive language from colleagues, impolite speeches etc.)					.890

From the factor analysis in Table 7.7, five significant groups/components were formed and/or identified from employees' responses. Each attribute is contained in any one of the components as analysed in the factor analysis. The five main components are:

i) Work performance related issues
ii) Financial incentives/reward system
iii) Site-specific related matters
iv) External environment/weather

v) Disrespect from co-workers/neglect with intend

7.4.2.1 Work performance related issues

Rework due to construction errors, *late issuance of construction drawings by a consultant*, *workers strike because of unpaid work*, *material shortage on site*, *unrealistic deadline for project set by client*, *waiting for other crew*, *inadequate site planning*, *Inadequate site staff*, *slow response of consultant's site staff attending to inspection work*, *slow response of consultant's site staff attending to inspection work*, *contractor staff absenteeism*, and *poor buildability design* were all identified as important factors relating to work performance. These factors were categorised into the **work performance related issues** component grouping.

Eleven questions were evaluated in order of degree of significance on productivity, whereby the project leadership demotivates the workforce in terms of work performance related issues experienced by employees on site during projects, thus ultimately affecting the productivity. These variables include:

i) **Rework due to construction error** (making corrections on wrong work done) in order of degree of significance on productivity.
ii) **Late issuance of construction drawings by consultant** (detailed set of drawings not delivered in bulk, leading to the work done in bits or small sections) in order of degree of significance on productivity.
iii) **Workers strike because of unpaid work** in order of degree of significance on productivity.
iv) **Material shortage on site** in order of degree of significance on productivity.
v) **Unrealistic deadline for project set by client** (deadline that is not easy to attain) in order of degree of significance on productivity.
vi) **Waiting for other crew** (waiting for gang of different trade to finish before another can continue) in order of degree of significance on productivity.
vii) **Inadequate site planning** (site layout, which leads to difficulty in movement) in order of degree of significance on productivity.
viii) **Inadequate site staff** (less labour for a task, leading to excessive workload) in order of degree of significance on productivity.
ix) **Slow response of consultant's site staff attending to inspection work** in order of degree of significance on productivity.
x) **Contractor staff absenteeism** (crew members not being present for work) in order of degree of significance on productivity.
xi) **Poor buildability design** (design that is difficult to construct) in order of degree of significance on productivity.

The significance of each of these variables is evaluated and discussed below.

Table 7.8: Work/site-related issues that demotivate employees while working on projects

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Rework due to construction error** (making corrections on wrong work done)	5(9.4)	2 (3.3)	5(9.4)	10(18.9)	25(47.2)	6(11.3)	35.872	4	<0.001
ii)	**Late issuance of construction drawings by consultant** (detailed set of drawings not delivered in bulk, leading to the work done in bits or small sections)	4(7.5)	4(7.5)	7(13.2)	10(18.9)	19(35.8)	9(17.0)	17.591	4	0.001
iii)	**Workers strike because of unpaid work**	5(9.4)	4(7.5)	7(13.2)	6(11.3)	25(47.2)	6(11.3)	32.894	4	<0.001
iv)	**Material shortage on site**	3(5.7)	2(3.8)	9(17.0)	12(22.6)	19(35.8)	8(15.1)	21.556	4	<0.001
v)	**Unrealistic deadline for project set by client** (deadline that is not easy to attain)	5(9.4)	**NS**	14(26.4)	8(15.1)	16(30.2)	10(18.9)	7.326	3	0.062
vi)	**Waiting for other crew** (of a different trade to finish before the job can continue)	5(9.4)	**NS**	12(22.6)	10(18.9)	17(32.1)	9(17.0)	6.727	3	0.081
vii)	**Inadequate site planning** (site layout which leads to difficulty in movement)	6(11.3)	2(3.8)	10(18.9)	8(15.1)	18(34.0)	9(17.0)	16.000	4	0.003
viii)	**Inadequate site staff** (less labour for a task leading to excessive workload)	6(11.3)	**NS**	13(24.5)	7(13.2)	20(37.7)	7(13.2)	10.870	3	0.012
ix)	**Slow response of consultant's site** (staff attending to inspection work)	4(7.5)	**NS**	14(26.4)	12(22.6)	14(26.4)	9(17.0)	6.182	3	0.103
x)	**Contractor staff absenteeism** (crew members not being present for work)	2(3.8)	**NS**	9(17.0)	10(18.9)	17(32.1)	15(28.3)	11.895	3	0.008
xi)	**Poor buildability design** (design which is difficult to construct)	4(7.5)	**NS**	13(24.5)	12(22.6)	17(32.1)	7(13.2)	7.739	3	0.052

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) **Rework due to construction error** (making corrections on wrong work done)

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to this question (Table 7.8). Most of the participants (66.1%) agreed that rework due to construction errors on site because of a lack of coordination by the project leader is a significant contributor that demotivates employees when working on site (Chi-square = 35.872, p<0.001). Only 13.2% of employees were not demotivated by rework due to construction errors on site where corrections are made to the wrong work executed on site.

In order of effect in occurrence

Most of the participants (54.7%) agreed that rework due to construction errors, whereby corrections are made to work already done, has a high order of effect in occurrence, which demotivates the workforce on site and therefore ultimately affects the productivity during executing projects (Chi-square = 33.946, p<0.001). In total, 9.4% of the participants indicated that the order of effect in occurrence is medium, while only 5.7% of the participants said the order of effect in occurrence is low and therefore rework due to construction errors on site because of a lack of coordination by the project leader does not affect worker motivation and productivity on site.

ii) Late issuance of construction drawings by consultant (detailed set of drawings not delivered in bulk, leading to the work done in bits or small sections)

In order of degree of significance

A total of 44 (83.0%) out of 53 participants responded to this question (Table 7.8). Most of the participants (54.7%) agreed that late issuance of construction drawings by a consultant was a significant contributor that demotivates employees when working on site (Chi-square = 17.591, p =0.001). Only 15% of employees were not demotivated by the late issuance of construction drawings by a consultant due to a lack of coordination by the project leader.

In order of effect in occurrence

Most of the participants (41.5%) agreed that late issuance of construction drawings by a consultant whereby a detailed set of drawings is not delivered in bulk, leading to work done in bits or sections, has a high order of effect in occurrence, which demotivates the workforce on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 12.667, p =0.002). Only 15.1% of the participants indicated that the order of effect in occurrence is medium, and 11.3% of the participants said the order of effect in occurrence is low and therefore the late issuance of construction drawings by a consultant does not affect worker motivation and productivity of the workforce.

iii) Workers strike because of unpaid work

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to this question (Table 7.8). Most of the participants (58.5%) agreed that workers striking because of unpaid work is a significant contributor that demotivates the workforce when working on site (Chi-square = 32.894, p<0.001). Only 16.9% of employees were not demotivated by workers striking because of unpaid work when executing a project on site.

In order of effect in occurrence

Most of the participants (62.3%) agreed that workers striking because of unpaid work has a high order of effect in occurrence, which demotivates the workforce on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 49.316, p<0.001). Only 1.9% of the participants indicated that the order of effect in occurrence is medium, while 7.5% of the participants said the order of effect in occurrence is low and therefore workers who strike because of unpaid work does not affect worker motivation and productivity of the workforce.

iv) Material shortage on site

In order of degree of significance

A total of 45 (84.9%) out of 53 participants responded to this question (Table 7.8). Most of the participants (58.4%) agreed that material shortage on site, whereby materials getting depleted while working on site, is a significant contributor that demotivates the workforce on site (Chi-square = 21.556, p<0.001). Only 9.5% of employees were not demotivated by material shortage on site due to a lack of project coordination from the project leader during projects.

In order of effect in occurrence

Most of the participants (47.2%) agreed that material shortage on site, whereby materials are depleted while working on site, has a high order of effect in occurrence, which demotivates the workforce on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 18.053, p<0.001). Only 11.3% of the participants indicated that the order of effect in occurrence is medium, and 13.2% of the participants said the order of effect in occurrence is low and therefore material shortage on site does not affect worker motivation and productivity of the workforce.

v) Unrealistic deadline for project set by client (deadline that is not easy to attain)

In order of degree of significance

A total of 43 (81.1%) out of 53 participants responded to this question (Table 7.8). Most of the participants (45.3%) agreed that an unrealistic deadline for a project set by the client, whereby the deadline is not easy to attain but accepted by the project leader, is a significant contributor that demotivates the workforce when working on projects (Chi-square = 7.326, p=0.062). Only 9.4% of employees were not demotivated by an unrealistic deadline set for the project by the

client and accepted by the project leader. Option 2, *"not significant"*, was not selected by any participants. A significant number of participants (26.4%) selected option 3, signifying a neutral response.

In order of effect in occurrence

Most of the participants (32.1%) agreed that an unrealistic deadline for a project set by the client, whereby the deadline is not easy to attain, has a high order of effect in occurrence, which demotivates the workforce on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 9.588, p=0.008). In total, 26.4% of the participants indicated that the order of effect in occurrence is medium, while 5.7% of the participants said the order of effect in occurrence is low and therefore an unrealistic deadline for a project set by a client does not affect worker motivation and productivity of the workforce.

vi) Waiting for other crew (of a different trade to finish before the job can continue)

In order of degree of significance

A total of 44 (83.0%) out of 53 participants responded to this question (Table 7.8). Most of the participants (51%) agreed that waiting for other crew of a different trade to finish before the job can continue, is a significant contributor that demotivates the workforce when working on projects (Chi-square = 6.727, p=0.081). Only 9.4% of employees were not demotivated by the delay period in waiting for other crew of a different trade to finish. Option 2, *"not significant"*, was not selected by any participants. A significant number of participants (22.6%) indicated option 3, signifying a neutral response.

In order of effect in occurrence

Most of the participants (41.5%) agreed that waiting for other crew of different trade to finish before the job can continue has a high order of effect in occurrence, which demotivates the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 13.351, p=0.001). Only 20.8% of the participants indicated that the order of effect in occurrence is medium, and 7.5% of the participants said the order of effect in occurrence is low and therefore waiting for other crew of a different trade to finish does not affect worker motivation and productivity of the workforce.

vii) Inadequate site planning (site layout which leads to difficulty in movement)

In order of degree of significance

A total of 44 (83.0%) out of 53 participants responded to this question (Table 7.8). Most of the participants (49.1%) agreed that inadequate site planning, where the site layout leads to difficulty in movement, is a significant contributor that demotivates the workforce when working on projects (Chi-square = 16.000, p=0.003). Only 15.1% of employees were not demotivated by inadequate site planning by the project leader.

In order of effect in occurrence

Most of the participants (43.4%) agreed that inadequate site planning, where the site layout leads to difficulty in movement, has a high order of effect in occurrence, which demotivate the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 13.632, p=0.001). Only 18.9% of the participants indicated that the order of effect in occurrence is medium, and 9.4% of the participants said the order of effect in occurrence is low and therefore inadequate site planning does not affect worker motivation and productivity of the workforce.

viii) Inadequate site staff (less labour for a task, leading to excessive workload)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7.8). Most of the participants (50.9%) agreed that inadequate site staff, where there is less labour for a task leading to an excessive workload allowed by the project leader, is a significant contributor that demotivates the workforce when working on projects (Chi-square = 10.870, p=0.012). Only 11.3% of employees were not demotivated by inadequate site staff allowed by the project leader. Option 2, *"not significant"*, was not selected by any participants. A significant number of participants (24.5%) indicated option 3, signifying a neutral response.

In order of effect in occurrence

Most of the participants (39.6%) agreed that inadequate site staff, whereby there is less labour for a task, leading to an excessive workload and allowed by the project leader, has a high order of effect in occurrence, which demotivate the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 11.730, p=0.003). Only 22.6% of the participants indicated that the order of effect in occurrence is medium, and 7.5% of the participants said the order of effect in occurrence is low and therefore inadequate site staff does not affect worker motivation and productivity of the workforce.

ix) Slow response of consultant's site staff attending to inspection work

In order of degree of significance

A total of 44 (83.0%) out of 53 participants responded to this question (Table 7.8). Most of the participants (49%) agreed that a slow response of the consultant's site staff attending to inspection work, allowed by the project leader, is a significant contributor that demotivates the workforce when working on projects (Chi-square = 6.182, p=0.103). Only 7.5% of employees were not demotivated by the slow response of a consultant's site staff attending to inspection work allowed by project leader. Option 2, *"not significant"*, was not selected by any participants. A significant number of participants (26.4%) indicated option 3, signifying a neutral response.

In order of effect in occurrence

Most of the participants (32.1%) agreed that a slow response of the consultant's site staff attending to inspection work, allowed by the project leader, has a high order of effect in occurrence, which demotivates the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 5.167, p=0.076). Only 24.5% of the participants indicated that the order of effect in occurrence is medium, and 11.3% of the participants said the order of effect in occurrence is low and therefore a slow response of the consultant's site staff attending to inspection work does not affect worker motivation and productivity of the workforce.

x) Contractor staff absenteeism (crew members not being present for work)

In order of degree of significance

A total of 38 (71.7%) out of 53 participants responded to this question (Table 7.8). Most of the participants (51%) agreed that contractor staff absenteeism, where crew members are not present at work and allowed by the project leader, is a significant contributor that demotivates the workforce when working on projects (Chi-square = 11.895, p=0.008). Only 3.8% of employees were not demotivated by contractor staff absenteeism, where crew members are not being present for work and allowed by the project leader. Option 2, *"not significant"*, was not selected by any participants. Some of the participants (17.0%) indicated option 3, signifying a neutral response.

In order of effect in occurrence

Most of the participants (34.0%) agreed that contractor staff absenteeism, where crew members are not present for work and allowed by the project leader, has a high order of effect in occurrence, which demotivates the workforce and therefore ultimately affects the productivity in the execution of a project (Chi-square = 10.903, p=0.004). Only 18.9% of the participants indicated that the order of effect in occurrence is medium, and 5.7% of the participants said the order of effect in occurrence is low and therefore contractor staff absenteeism does not affect worker motivation and productivity of the workforce.

xi) Poor buildability design (design which is difficult to construct)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7.8). Most of the participants (54.7%) agreed that poor buildability design, i.e., the project leader accepting a design that is difficult to construct, is a significant contributor that demotivates the workforce when working on projects ($p<0.05$) (Chi-square = 7.739, p=0.052). Only 7.5% of employees were not demotivated by poor buildability design. Option 2, *"not significant"*, was not selected by any participants. A significant number of participants (24.5%) indicated option 3, signifying a neutral response.

In order of effect in occurrence

Most of the participants (41.5%) agreed that poor buildability design, i.e., the project leader accepting a design that is difficult to construct, has a high order of effect in occurrence, which demotivates the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 12.500, p=0.002). Only 13.2% of the participants indicated that the order of effect in occurrence is medium, and 13.2% of the participants said the order of effect in occurrence is low and therefore poor buildability design does not affect worker motivation and productivity of the workforce.

7.4.2.2 Financial incentives/reward system

Promotion, *overtime*, *transportation*, and *bonus at the end of a project or year* were all identified as important factors that fulfil the financial motivation needs of employees. These factors were categorised into the **financial benefits or financial incentives or reward system** component grouping.

Four questions were evaluated in order of degree of significance on productivity during a project, whereby project leadership has an influence on the motivation of the workforce in reflecting on the financial incentive needs of employees. These include:

i) **Promotion** (elevation, example from mason-to-mason foreman) in order of degree of significance on productivity.
ii) **Overtime** (provision of extra money after normal working time) in order of degree of significance on productivity.
iii) **Transportation** (vehicle at one's disposal, allowance for transportation, transportation from a location to site and back).
iv) **Bonus at the end of a project or year** (showing appreciation at the end of the project and year) in order of degree of significance on productivity.

The significance of each of these variables is evaluated and discussed below.

Table 7.9: Factors that demotivate employees through financial benefits (allowances)

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Promotion** (elevation, example from mason-to-mason foreman)	2(3.8)	5(9.4)	13(24.5)	12(22.6)	15(28.3)	6(11.3)	13.319	4	0.010
ii)	**Overtime** (provision of extra money after normal working time)	2(3.8)	3(5.7)	18(34.0)	6(11.3)	16(30.2)	8(15.1)	24.889	4	<0.001

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
iii)	**Transportation** (vehicle at one's disposal, allowance for transportation, transportation from a location to site and back)	2(3.8)	2(3.8)	13(24.5)	13(24.5)	16(30.2)	9(17.0)	19.435	4	<0.001
iv)	**Bonus at the end of a project or year** (showing appreciation at the end of the project and year)	3(5.7)	4(7.5)	8(15.1)	10(18.9)	19(35.8)	9(17.0)	18.500	4	<0.001

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Promotion (elevation, example from mason-to-mason foreman)

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to this question (Table 7.9). Most of the participants (50.9%) agreed that promotion is a significant contributor that can demotivate employees if not offered by the project leader (Chi-square = 13.319, p =0.010). Only 13.2% of participants responded that they were not demotivated by the project leader not offering a promotion.

In order of effect in occurrence

Most of the participants (45.3%) agreed that promotion, where elevation in their job is not offered by the project leader, has a high order of effect in occurrence, which demotivates the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 18.200, p<0.001). Only 26.4% of the participants indicated that the order of effect in occurrence is medium, and 3.8% of the participants said the order of effect in occurrence is low and therefore promotion does not affect worker motivation and productivity of the workforce.

ii) Overtime (provision of extra money after normal working time)

In order of degree of significance

A total of 45 (84.9%) out of 53 participants responded to this question (Table 7.9). Most of the participants (41.5%) agreed that overtime, where the provision of extra money after normal working time is not offered by project leader, is a significant contributor that demotivates the workforce while working on site (Chi-square = 24.889, p <0.001). Only 9.5% of employees were not motivated by overtime not being offered to them. A significant number of participants (34.0%) indicated option 3, signifying a neutral response.

In order of effect in occurrence

Most of the participants (32.1%) indicated that overtime pay has a high order of effect in occurrence that demotivates the workforce if not offered and therefore ultimately affects the productivity in the execution of a project (Chi-square = 6.703, p=0.035). In total, 28.3 % of the participants indicated that the order of effect in occurrence is medium, while 9.4% of the participants said the order of effect in occurrence is low and therefore overtime pay does not affect worker motivation and productivity of the workforce.

iii) **Transportation** (vehicle at one's disposal, allowance for transportation, transportation from a location to site and back)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7.9). Most of the participants (54.7%) agreed that transportation, i.e., having a vehicle at one's disposal, allowance for transportation, or transportation from a location to the site and back, if not provided by the project leader, is a significant contributor that demotivates the workforce while working on site (Chi-square = 19.435, p <0.001). Only 7.6% of employees were not motivated by transportation provision.

In order of effect in occurrence

Most of the participants (37.7%) agreed that transportation, i.e., having a vehicle at one's disposal, allowance for transportation, or transportation from a location to site and back, has a high order of effect in occurrence, which demotivate the workforce if not offered to them by the project leader and therefore ultimately affects the productivity in the execution of a project (Chi-square = 12.054, p =0.002). Only 26.4% of the participants indicated that the order of effect in occurrence is medium, and 5.7% of the participants said the order of effect in occurrence is low and therefore transportation, i.e., having a vehicle at one's disposal, allowance for transportation, or transportation from a location to the site and back, does not affect worker motivation and productivity of the workforce.

iv) **Bonus at the end of a project or year** (showing appreciation at the end of the project and year)

In order of degree of significance

A total of 44 (83.0%) out of 53 participants responded to this question (Table 7.9). Most of the participants (54.7%) agreed that a bonus at the end of the project or year, whereby the project leader shows appreciation, is a significant contributor that demotivate employees if not offered to them (Chi-square = 18.500, p<0.001). Only (13.2%) of employees were not motivated by a bonus at the end of a project or year.

In order of effect in occurrence

Most of the participants (45.3%) agreed that a bonus at the end of a project or year, whereby the project leader shows appreciation, has a high order of effect in occurrence, which demotivates the workforce and therefore ultimately affects the productivity in the execution of a project if not offered (Chi-square = 19.500, p<0.001). Only 17.0% of the participants indicated that the order of effect in occurrence is medium, and a mere 5.7% of the participants said the order of effect in occurrence is low and therefore a bonus at the end of a project or year does not affect worker motivation and productivity of the workforce.

7.4.2.3 Site-specific related matters

Work based on a contract, *teamwork*, *provision of equipment for work*, *worker participation in decision making*, and *congestion* were all identified as the important factors that fulfil the site-specific needs of employees while working on site. These factors were categorised into the **site-specific related matters** component grouping.

Five questions were evaluated in order of degree of significance on productivity during a project, whereby project leadership has an influence on the motivation of the workforce in reflecting on the specific site-specific related needs of employees. These include:

i) **Work based on a contract** (finish and go) in order of degree of significance on productivity.
ii) **Teamwork** (everyone contributing to the work, all hands on deck) in order of degree of significance on productivity.
iii) **Provision of equipment for work** (adequate equipment to work with, quick replacement and repairs of broken down and old equipment) in order of degree of significance on productivity.
iv) **Worker participation in decision making** (offering suggestions) in order of degree of significance on productivity.
v) **Congestion** (overcrowding in a work area, improper site planning) in order of degree of significance on productivity.

The significance of each of these variables is evaluated and discussed below.

Table 7.10: Factors that demotivate employees in terms of site-specific related matters

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Work based on a contract** (finish and go)	3(5.7)	3(5.7)	21(39.6)	6(11.3)	13(24.5)	7(13.2)	26.174	4	<0.001
ii)	**Teamwork** (everyone contributing to the work, all hands on deck)	2(3.8)	5(9.4)	9(17.0)	5(9.4)	27(50.9)	5(9.4)	42.000	4	<0.001

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
iii)	**Provision of equipment for work** (adequate equipment to work with, quick replacement and repairs of broken down and old equipment)	2(3.8)	2(3.8)	13(24.5)	10(18.9)	19(35.8)	7(13.2)	23.348	4	<0.001
iv)	**Worker participation in decision making** (offering suggestions)	**NS**	5(9.4)	16(30.2)	13(24.5)	12(22.6)	7(13.2)	5.652	3	0.130
v)	**Congestion** (overcrowding in a work area, improper site planning)	2(3.8)	4(7.5)	10(18.9)	19(35.8)	12(22.6)	6(11.3)	19.489	4	<0.001

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Work based on a contract (finish and go)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7.10). Some of the participants (35.8%) agreed that work based on a contract with a finish-and-go policy by the project leader is a significant contributor that demotivates employees (Chi-square = 26.174, p<0.001) A significant number of participants (39.6%) indicated option 3, signifying a neutral response, while 11.4% of the participants were not demotivated by work based on a contract with a finish-and-go policy.

In order of effect in occurrence

Most of the participants (45.3%) agreed that work based on a contract with a finish-and-go policy has a high order of effect in occurrence, which influences the motivation of the workforce and therefore ultimately affects the productivity in the execution of a project (Chi-square = 4.667, p =0.97). Only 26.4% of the participants indicated that the order of effect in occurrence is medium, and a mere 3.9% of the participants said the order of effect in occurrence is low and therefore work based on a contract with a finish-and-go policy does not affect worker motivation and productivity of the workforce.

ii) Teamwork (everyone contributing to the work, all hands on deck)

In order of degree of significance

A total of 48 (88.7%) out of 53 participants responded to this question (Table 7.10). Most of the participants (60.3%) agreed that teamwork where everyone contributes to the work, having an all-hands-on-deck approach, if not enabled by the project leader is a significant contributor that demotivates employees while working on site (Chi-square = 42.000, p<0.001). Only 17.0%

indicated option 3, signifying a neutral response, while 13.2% of employees were not demotivated if teamwork is not properly managed by the project leader.

In order of effect in occurrence

Most of the participants (50.9%) agreed that teamwork where everyone contributes to the work, having an all-hands-on-deck approach, has a high order of effect in occurrence, which demotivates the workforce while on site and therefore ultimately affects the productivity in the execution of a project if not properly managed by project leader (Chi-square = 26.324, $p<0.001$). Only 11.3% of the participants indicated that the order of effect in occurrence is medium, while 37.5% of the participants said the order of effect in occurrence is low and therefore teamwork does not affect worker motivation and productivity of the workforce.

iii) Provision of equipment for work (adequate equipment to work with, quick replacement and repairs of broken down and old equipment)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7. 10). Most of the participants (63%) agreed that the provision of equipment for work, where adequate equipment to work with and quick replacement and repairs of broken down and old equipment, arranged by the project leader, is a significant contributor that demotivates employees if not provided (Chi-square = 23.348, $p<0.001$). A significant number of participants 24.5% indicated option 3, signifying a neutral response, while 7.6% of employees were not demotivated if adequate work equipment is not provided by the project leader.

In order of effect in occurrence

Most of the participants (39.6%) agreed that the provision of equipment for work, where adequate equipment to work with and quick replacement and repairs of broken down and old equipment is arrange by project leader, has a high order of effect in occurrence, which demotivates the workforce while working on site and therefore ultimately affects the productivity in the execution of a project if not provided by the project leader (Chi-square = 13.189, $p =0.001$). Only 24.5% of the participants indicated that the order of effect in occurrence is medium, and 5.7% of the participants said the order of effect in occurrence is low and therefore the provision of adequate equipment does not affect worker motivation and productivity of the workforce.

iv) Worker participation in decision making (offering suggestions)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7. 10). Most of the participants (47.1%) agreed that worker participation in decision making, whereby the project leader allows employees to make suggestions, is a significant contributor that

demotivates employees if not allowed (Chi-square = 5.652, p =0.130). A significant number of participants (30.2%) indicated option 3, signifying a neutral response, while 9.4% of employees were not demotivated by worker participation in decision making. Option 1, *"strongly not significant",* was not selected by any of the participants.

In order of effect in occurrence

Most of the participants (30.2%) agreed that worker participation in decision making, whereby employees are allowed to make suggestions, has a high order of effect in occurrence, which demotivates the workforce while working on projects and therefore ultimately affects the productivity if workers are not allowed offer suggestions (Chi-square = 8.486, p =0.014). Only 32.1% of the participants indicated that the order of effect in occurrence is medium, and 7.5% of the participants said the order of effect in occurrence is low and therefore worker participation in decision making does not affect worker motivation and productivity of the workforce.

v) Congestion (overcrowding in a work area, improper site planning)

In order of degree of significance

A total of 47 (88.7%) out of 53 participants responded to this question (Table 7.10). Most of the participants (58.4%) agreed that congestion, i.e., overcrowding in a work area because of improper site planning by the project leader, is a significant contributor that demotivates employees while working on site (Chi-square = 19.489, p<0.001). Only 18.9% indicated option 3, signifying a neutral response, *w*hile 11.3% of the participants were not demotivated by congestion on site.

In order of effect in occurrence

Most of the participants (41.5%) agreed that congestion, i.e., overcrowding in a work area because of improper site planning, has a high order of effect in occurrence, which demotivates the workforce and therefore ultimately affects the productivity in the execution of a project (Chi-square = 14.263, p<0.001). Only 24.5% of the participants indicated that the order of effect in occurrence is medium, and 5.7% of the participants said the order of effect in occurrence is low and therefore congestion on site does not affect worker motivation and productivity of the workforce.

7.4.2.4 External environment/weather

Poor weather conditions were identified as the important factor that frustrates the motivation of employees. This factor was categorised into the **external environments** component grouping. The question was evaluated in order of degree of significance on productivity during a project, whereby the external environment has an influence on employee motivation while working on site.

The significance of this variable is evaluated and discussed below.

Table 7.11: Factors that demotivate employees through external environment [weather]

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Poor weather conditions**	5(9.4)	NS	16(30.2)	10(18.9)	12(22.6)	10(18.9)	5.837	3	0.120

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Poor weather conditions

In order of degree of significance

A total of 43 (81.1%) out of 53 participants responded to this question (Table 7.11). Most of the participants (41.5%) agreed that poor weather conditions are a significant contributor that demotivates employees while working on site (Chi-square = 5.837, p =0.120). A significant portion of the participants 30.2% indicated option 3, signifying a neutral response, while 9.4% of the participants were not demotivated by poor weather conditions. Option 2, *"not significant"*, was not selected by any of the participants.

In order of effect in occurrence

Most of the participants (18.9%) agreed that poor weather conditions, due to an eternal environment [weather], has a high order of effect in occurrence, which demotivates the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 3.829, p =0.147). In total, 32.1% of the participants indicated that the order of effect in occurrence is medium, while and only 15.1% of the participants said the order of effect in occurrence is low and therefore poor weather conditions do not affect worker motivation and productivity of the workforce.

7.4.2.5 Disrespect from co-workers

Disrespect from co-workers was identified as the sole important factor that demotivates employees. This factor was categorised into the **disregard and/or disrespect from co-workers** component grouping. The question was evaluated in order of degree of significance on productivity during a project, whereby project leadership has an influence on the motivation of the workforce in relation disregard and/or disrespect from co-workers towards other employees while working on site.

The significance of this variable is evaluated and discussed below.

Table 7.12: Factors that demotivate employees because of disrespect from co-workers

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Disrespect from co-workers (**use of abusive language from colleagues, impolite speeches, etc.)	9(17.0)	5(9.4)	11(20.8)	7(13.2)	14(26.4)	7(13.2)	5.304	4	0.257

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) **Disrespect from co-workers** (use of abusive language from colleagues, impolite speeches etc.)

In order of degree of significance

A total of 46 (86.8%) out of 53 participants responded to this question (Table 7.12). Most of the participants (39.6%) agreed that disrespect from co-workers, whereby the use of abusive language from colleagues, impolite speeches etc. is entertained on site by the project leader, whether himself and/or others, is a significant contributor that demotivates employees (Chi-square = 5.304, p =0.257). Only 20.8% of the participants indicated option 3, signifying a neutral response, while 26.4% of employees were not demotivated by a disrespect from co-workers in any case.

In order of effect in occurrence

Most of the participants (49.1%) agreed that disrespect from co-workers, whereby the use of abusive language from colleagues, impolite speeches etc. is entertained on site by the project leader, has a high order of effect in occurrence, which demotivates the workforce while working on site and therefore ultimately affects the productivity in the execution of a project (Chi-square = 18.200, p<0.001). Only 15.1% of the participants indicated that the order of effect in occurrence is medium, and 11.3% of the participants said the order of effect in occurrence is low and therefore disrespect from co-workers does not affect worker motivation and productivity of the workforce.

7.4.3 Objective 3: Identify the impact of leader-member exchange patterns and their effect on expected employee engagement in projects

The participants were asked 11 questions to identify the impact of leader-subordinate exchange patterns that influence the expected subordinate engagement during projects. Subordinates' expected engagement on a project because of leader-member interactions were categorised into two themes/components as identified through the factor analysis in Table 7.13.

Table 7.13: Factor analysis of the sub-themes in order of degree of significance

Rotated Component Matrix[a]		
	Components	
	1	2
Opportunity to undertake challenging task (being given goal to work towards through one's own directives)	.851	
Identification with goal (being honoured for a particular attained target)	.846	
Rank the importance of interpersonal skills to get peers to perform	.843	
Equity (fair treatment)	.781	
Rank the importance of technical ability to get peers to perform	.781	
Worker participation in decision making (offering suggestions)	.664	.
Rank the importance of negotiating skills to get peers to perform	.626	
Peers take my instructions because I have political connections		.908
Rank the importance of political connections to get peers to perform		.903
Rank the importance of 'favours' skills to get peers to perform		.877
Peers take my instructions because I am a nice person		.515

From the factor analysis (Table 7.13), two distinct significant component groupings were identified. Each attribute and/or variable is contained in any one of the two component groupings as analysed in the factor analysis. The two main components are: i) Leader-subordinate style and ii) Member/employee engagements. It is important to note the two component groupings distinguish between the leader and the subordinates:

- Leader-subordinate style
  - Leader
  - Subordinates
- Member/employee engagements
  - Leader
  - Subordinates

7.4.3.1 Leader-subordinate style (leaders)

Opportunity to undertake a challenging task, *identification with a goal*, *ranking the importance of interpersonal skills to get peers to perform*, *equity*, *ranking the importance of technical ability to get peers to perform*, *worker participation in decision making*, and *ranking the importance of negotiating skills to get peers to perform* were all identified as important factors that fulfil the leader-member exchange patterns during projects. These factors were categorised into the **leader-subordinate style** component grouping.

Seven questions were evaluated in order of degree of significance on productivity, whereby the leader-member interactions during projects have an influence on the engagements of subordinates, which ultimately affect productivity while working on site. These include:

i) **Opportunity to undertake challenging task** (being given goal to work towards through one's own directives) in order of degree of significance on productivity.

ii) **Identification with goal** (being honoured for a particular attained target) in order of degree of significance on productivity.

iii) **Ranking the importance of interpersonal skills to get peers to perform** in order of degree of significance on productivity.

iv) **Equity** (fair treatment) in order of degree of significance on productivity.

v) **Ranking the importance of technical ability to get peers to perform** in order of degree of significance on productivity.

vi) **Worker participation in decision making** (offering suggestions) in order of degree of significance on productivity.

vii) **Ranking the importance of negotiating skills to get peers to perform** in order of degree of significance on productivity.

The significance of each of these variables is evaluated and discussed below.

Table 7.14: Leader-subordinate style that affects productivity while working on projects—Leader input

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Opportunity to undertake challenging task** (being given a goal to work towards through one's own directives)	1(3.6)	**NS**	8(28.6)	8(28.6)	8(28.6)	3 (10.7)	5.880	3	0.118
ii)	**Identification with goal** (being honoured for a particular attained target)	1(3.6)	**NS**	5(17.9)	12(42.9)	7(25.0)	3(10.7)	10.040	3	0.018
iii)	**Ranking the importance of interpersonal skills** to get peers to perform	**NS**	1(3.6)	6(21.4)	9(32.1)	9(32.1)	3(10.7)	6.840	3	0.077
iv)	**Equity** (fair treatment)	**NS**	**NS**	2(7.1)	7(25.0)	14(50.0)	5(17.9)	9.478	2	0.009
v)	**Ranking the importance of technical ability** to get peers to perform	1(3.6)	**NS**	7(25.0)	10(35.7)	6(21.4)	4(14.3)	7.000	3	0.072
vi)	**Worker participation in decision making** (offering suggestions)	**NS**	2(7.1)	8(28.6)	7(25.0)	7(25.0)	4(14.3)	3.667	3	0.300
vii)	**Ranking the importance of negotiating skills** to get peers to perform	**NS**	7(25.0)	6(21.4)	8(28.6)	3(10.7)	4(14.3)	2.333	3	0.506

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Opportunity to undertake challenging task (being given a goal to work towards through one's own directives)

In order of degree of significance

A total of 25 (89.3%) out of 28 participants responded to this question (Table 7.14). Most of the participants (57.2%) agreed that an opportunity to take on a challenging task, i.e., being given a goal to work towards through one's own directives is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 5.880, p=0.118). Only 3.6% of the participants said they are not affected by an opportunity to take on a challenging task on site. None of the participants selected the *"not significant"* option.

In order of effect in occurrence

Most of the participants (39.3%) agreed that that an opportunity to take on a challenging task, i.e., being given a goal to work towards through one's own directives, has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing the productivity during executing projects (Chi-square = 5.474, p=0.065). Only 17.9% of the participants stated that the order of effect in occurrence is medium, while 10.7% of the participants said the order of effect in occurrence is low and therefore an opportunity to take on a challenging task does not affect worker motivation and productivity while working on project-related work on site.

ii) Identification with goal (being honoured for a particular attained target)

In order of degree of significance

A total of 25 (89.3%) out of 28 participants responded to this question (Table 7.14). Most of the participants (67.9%) agreed that identifying with a goal, i.e., being honoured for a particular attained target is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 10.040, p=0.018). Only 3.6% of the participants said they are not affected by identifying with a goal while working on site. None of the participants selected the *"not significant"* option.

In order of effect in occurrence

Most of the participants (39.3%) agreed that identifying with a goal, i.e., being honoured for a particular attained target, has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing the productivity through their engagements in projects (Chi-square = 6.421, p=0.040). Only 21.4% of the participants indicated that the order of effect in occurrence is medium, and 7.1% of the participants said

the order of effect in occurrence is low and therefore identifying with a goal does not affect worker motivation and productivity while working on project-related work on site.

iii) Ranking the importance of interpersonal skills to get peers to perform

In order of degree of significance

A total of 25 (89.3%) out of 28 participants responded to this question (Table 7.14). Most of the participants (67.9%) agreed that the importance of interpersonal skills to get peers to perform is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 10.040, p=0.018). Only 3.6% of the participants said they are not affected by the importance of interpersonal skills to get peers to perform while working on site. None of the participants selected the "*strongly not significant"* option.

In order of effect in occurrence

Most of the participants (50.0%) agreed that the importance of interpersonal skills to get peers to perform has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing the productivity through their engagements in projects (Chi-square = 6.421, p=0.040). Only 14.3% of the participants indicated that the order of effect in occurrence is medium, while 3.6% of the participants said the order of effect in occurrence is low and therefore interpersonal skills to get peers to perform does not affect worker motivation and productivity while working on project-related work on site.

iv) Equity (fair treatment)

In order of degree of significance

A total of 23 (82.1%) out of 28 participants responded to this question (Table 7.14). The majority of the participants (75%) agreed that equity, where fair treatment is at the order of the day, is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 9.478, p=0.009). Only 7.1% of the participants indicated a neutral response. None of the participants selected the *"strongly not significant"* and *"not significant"* options.

In order of effect in occurrence

Most of the participants (53.6%) agreed that equity, where fair treatment is at the order of the day, has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing the productivity through their engagements in projects (Chi-square = 6.368, p=0.012). Only 14.3% of the participants indicated that the order of effect in occurrence is medium and fair treatment does not affect worker motivation and productivity while working on site. None of the participants selected the order of effect in occurrence to be low.

v) Ranking the importance of technical ability to get peers to perform

In order of degree of significance

A total of 24 (85.7%) out of 28 participants responded to this question (Table 7.14). Most of the participants (57.1%) agreed that the importance of technical ability to get peers to perform is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 7.000, p=0.072). Only 3.6% of the participants said they are not affected by the importance of technical ability to get peers to perform while working on site. A significant number of participants (25%) indicated a neutral response. None of the participants selected the *"not significant"* option.

In order of effect in occurrence

Most of the participants (42.9%) agreed that the importance of technical ability to get peers to perform has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 8.316, p=0.016). Only 17.9% of the participants indicated that the order of effect in occurrence is medium, while 7.1% of the participants said the order of effect in occurrence is low and therefore technical ability to get peers to perform does not affect worker motivation and productivity while working on site.

vi) Worker participation in decision making (offering suggestions)

In order of degree of significance

A total of 24 (85.7%) out of 28 participants responded to this question (Table 7.14). Most of the participants (50%) agreed that worker participation in decision making, i.e., offering suggestions during work is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 3.667, p=0.300). Only 7.1% participants said they are not affected by worker participation in decision making while working on site. A significant number of participants (28.6%) indicated a neutral response. None of the participants selected the *"strongly not significant"* option.

In order of effect in occurrence

Most of the participants (28.6%) agreed that worker participation in decision making, i.e., offering suggestions during work has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 2.333, p=0.311). Only 25.0% of the participants indicated that the order of effect in occurrence is medium, while 10.7% of the participants said

the order of effect in occurrence is low and therefore worker participation in decision making does not affect worker motivation and productivity while working on site.

vii) Ranking the importance of negotiating skills to get peers to perform

In order of degree of significance

A total of 24 (85.7%) out of 28 participants responded to this question (Table 7.14). Most of the participants (50%) agreed that the importance of negotiation skills to get peers to perform is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 3.667, p=0.300). Only 25% of the participants said they are not affected by the importance of negotiation skills to get peers to perform while working on site. A significant number of participants (21.4%) indicated a neutral response. None of the participants selected the *"strongly not significant"* option.

In order of effect in occurrence

Most of the participants (25%) agreed that the importance of negotiation skills to get peers to perform has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 2.333, p=0.311). Only 35.7% of the participants indicated that the order of effect in occurrence is medium, while 3.6% of the participants said the order of effect in occurrence is low and therefore negotiation skills to get peers to perform does not affect worker motivation and productivity while working on site.

Table 7.15: Leader-subordinate style that affects productivity while working on projects—Subordinate input

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Opportunity to undertake challenging task** (being given goal to work towards through one's own directives)	1(3.8)	3(11.5)	6(23.1)	2(7.7)	10(38.5)	4(15.4)	12.091	4	0.017
ii)	**Identification with goal** (being honoured for a particular attained target)	1(3.8)	2(7.7)	6(23.1)	8(30.8)	6(23.1)	3(11.1)	7.652	4	0.105
iii)	**Ranking the importance of interpersonal skills** to get peers to perform	2(7.7)	1(3.)	7(26.9)	4(15.4)	8(30.8)	4(15.4)	8.455	4	0.076
iv)	**Equity** (fair treatment)	1(3.8)	2(7.7)	7(26.9)	3(11.5)	10(38.5)	3(11.5)	12.435	4	0.014

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
v)	**Ranking the importance of technical ability** to get peers to perform	2(7.7)	4(15.4)	5(19.2)	2(7.7)	10(38.5)	3(11.5)	9.391	4	0.052
vi)	**Worker participation in decision making** (offering suggestions)	**NS**	3(11.5)	8(30.8)	6(23.1)	5(19.2)	4(15.4)	2.364	3	0.500
vii)	**Ranking the importance of negotiating skills** to get peers to perform	3(11.5)	1(23.8)	8(30.8)	4(15.4)	6(23.1)	4(15.4)	6.636	4	0.156

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) **Opportunity to undertake challenging task** (being given goal to work towards through one's own directives)

In order of degree of significance

A total of 22 (84.6%) out of 28 participants responded to this question (Table 7.15). Most of the participants (46.2%) agreed that an opportunity to take on a challenging task, i.e., being given a goal to work towards through one's own directives is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 12.091, p=0.017). Only 15.3% of the participants said they are not affected by an opportunity to take on a challenging task on site. A significant number of participants (23.1%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (38.5%) agreed that an opportunity to take on a challenging task, i.e., being given a goal to work towards through one's own directives, has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 4.333, p=0.115). Only 19.2% of the participants indicated that the order of effect in occurrence is medium, and 11.5% of the participants said the order of effect in occurrence is low and therefore an opportunity to take on a challenging task does not affect worker motivation and productivity while working on project-related work on site.

ii) **Identification with goal** (being honoured for a particular attained target)

In order of degree of significance

A total of 23 (88.5%) out of 26 participants responded to this question (Table 7.15). Most of the participants (53.9%) agreed that identification with a goal, i.e., being honoured for a particular target reached is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 7.652, p=0.105) Only 11.5% of the participants said they are not affected by identifying with a goal while working on site. A significant number of participants (23.1%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (42.3%) agreed that identifying with a goal, i.e., being honoured for a particular attained target, has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 8.000, p=0.018). Only 26.9% of the participants indicated that the order of effect in occurrence is medium, while 3.8% of the participants said the order of effect in occurrence is low and therefore identifying with a goal does not affect worker motivation and productivity while working on project-related work on site.

iii) Ranking the importance of interpersonal skills to get peers to perform

In order of degree of significance

A total of 22 (84.6%) out of 26 participants responded to this question (Table 7.15). Most of the participants (46.2%) agreed that the importance of interpersonal skills to get peers to perform is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 8.455, p=0.076). Only 11.5% of the participants said they are not affected by the importance of interpersonal skills to get peers to perform while working on site. A significant number of participants (26.9%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (53.8%) agreed that the importance of interpersonal skills to get peers to perform has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 5.556, p=0.018). Only 15.4% of the participants indicated that the order of effect in occurrence is medium and therefore the importance of interpersonal skills to get peers to perform does not affect worker motivation and productivity while working on project-related work on site. None of the participants selected the order of effect in occurrence to be low.

iv) Equity (fair treatment)

In order of degree of significance

A total of 23 (82.1%) out of 26 participants responded to this question (Table 7.15). The majority of participants (50%) agreed that equity, whereby fair treatment is at the order of the day, is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 12.435, p=0.014). Only 11.5% of the participants said they are not affected by equity while working on site. A significant number 26.9% of participants indicated a neutral response.

In order of effect in occurrence

Most of the participants (53.8%) agreed that equity, where fair treatment is at the order of the day, has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 14.000, p<0.001). Only 11.5% of the participants indicated that the order of effect in occurrence is medium, while 7.7% of the participants said the order of effect in occurrence is low and therefore fair treatment does not affect worker motivation and productivity while working on project-related work on site.

v) Ranking the importance of technical ability to get peers to perform

In order of degree of significance

A total of 23 (88.5%) out of 26 participants responded to this question (Table 7.15). Most of the participants (46.2%) agreed that the importance of technical ability to get peers to perform is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square=9.391, p=0.052). Only 23.1% of the participants said they are not affected by the importance of technical ability to get peers to perform while working on site. A number of participants (19.2%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (42.3%) agreed the importance of technical ability to get peers to perform has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 5.474, p=0.065). Only 19.2% of the participants indicated that the order of effect in occurrence is medium, while 11.5% of the participants said the order of effect in occurrence is low and therefore technical ability get peers to perform does not affect worker motivation and productivity while working on site.

vi) Worker participation in decision making (offering suggestions)

In order of degree of significance

A total of 22 (84.6%) out of 26 participants responded to this question (Table 7.15). Most of the participants (42.3%) agreed that worker participation in decision making, i.e., offering suggestions during work, is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 2.364, p=0.500). Only 11.5% of the participants said they are not affected by worker participation in decision making while working on site. A significant number of participants (30.8%) indicated a neutral response. None of the participants selected the *"strongly not significant"* option.

In order of effect in occurrence

Most of the participants (30.8%) agreed that that worker participation in decision making, i.e., offering suggestions during work, has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 7.053, p=0.029). Only 38.5% of the participants indicated that the order of effect in occurrence is medium, and 3.8% of the participants said the order of effect in occurrence is low and therefore worker participation in decision making does not affect worker motivation and productivity while working on site.

vii) Ranking the importance of negotiating skills to get peers to perform

In order of degree of significance

A total of 22 (84.6%) out of 26 participants responded to this question (Table 7.15). Most of the participants (38.5%) agreed that the importance of negotiation skills to get peers to perform is a significant contributor expected by the workforce to motivate them while working on site, thus increasing productivity through their engagements in projects (Chi-square = 6.636 p=0.156). Only 15.3% of the participants said they are not affected by the importance of negotiation skills to get peers to perform while working on site. A significant number of participants (30.8%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (34.6%) agreed that the importance of negotiation skills to get peers to perform has a high order of effect in occurrence expected by the workforce to motivate them while working on site, ultimately increasing productivity through their engagements in projects (Chi-square = 2.000, p=0.368). Only 23.1% of the participants indicated that the order of effect in occurrence is medium, and 15.4% of the participants said the order of effect in occurrence is low and therefore the importance of negotiation skills to get peers to perform does not affect worker motivation and productivity while working on site.

7.4.3.2 Member/employee engagements

Peers take my instructions because I have political connections, *ranking the importance of political connections to get peers to perform*, *ranking the importance of 'favours' skills to get peers to perform*, and *peers take my instructions because I am a nice person* were all identified as important factors for employee engagement. The factors were categorised into the **member/employee engagement** components grouping.

Four questions were evaluated in the order of the degree of significance on productivity during a project, whereby the leader-member interactions during projects influence the engagements of subordinates that affect productivity while on site. These include:

i) **Peers take my instructions because I have political connection**s in order of degree of significance on productivity.
ii) **Ranking the importance of political connections to get peers to perform** in order of degree of significance on productivity.
iii) **Ranking the importance of political connections to get peers to perform** in order of degree of significance on productivity.
iv) **Peers take my instructions because I am a nice person** in order of degree of significance on productivity.

Table 7.16: Member/employee engagements affecting productivity while working on projects—Leader input

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Peers take my instructions because I have political connections**	11(39.3)	5(17.9)	3(10.7)	4(14.3)	1(3.6)	4(14.3)	11.833	4	0.019
ii)	**Ranking the importance of political connections to get peers to perform**	14(50.0)	3(10.7)	5(17.9)	1(3.6)	1(3.6)	4(14.3)	24.333	4	<0.001
iii)	**Ranking the importance of 'favours' skills to get peers to perform**	10(35.7)	3(10.7)	7(25.0)	2(7.1)	1(3.6)	5(17.9)	6.333	2	0.042
iv)	**Peers take my instructions because I am a nice person**	2(7.1)	6(21.4)	9(32.1)	6(21.4)	2(7.1)	3(10.7)	7.200	4	0.126

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Peers take my instructions because I have political connections

In order of degree of significance

A total of 24 (85.7%) out of 28 participants responded to this question (Table 7.16). Most of the participants (57.2%) agreed that peers taking instructions because of political connections is not a significant contributor expected by the workforce to motivate them while working on site, and does therefore not have any effect on productivity through their engagements in projects (Chi-square = 24.333, p<0.001). Only 17.9% of the participants said they are affected by peers taking instructions because of political connections while working on site.

In order of effect in occurrence

Most of the participants (39.3%) agreed that peers taking instructions because of political connections has a low order of effect in occurrence expected by the employee which motivates the workforce while working on site, and does therefore not have any effect on the productivity through their engagement in projects, while working on site (Chi-square = 16.000, p<0.001). Only 14.3% of the participants indicated that the order of effect in occurrence is medium, and equally, 14.3% of the participants said the order of effect in occurrence is high and therefore peers taking instructions because of political connections can affect worker motivation and productivity while working on site.

ii) Ranking the importance of political connections to get peers to perform

In order of degree of significance

A total of 24 (85.7%) out of 28 participants responded to this question (Table 7.16). Most of the participants (60.7%) agreed that the importance of political connections to get peers to perform is not a significant contributor expected by the workforce to motivate them while working on site, and does therefore not have any effect on productivity through their engagements in projects (Chi-square=12.435, p=0.014). Only 7.2% of the participants said they are affected by political connections to get the peers to perform while working on site.

In order of effect in occurrence

Most of the participants (50.0%) agreed that the importance of political connections to get peers to perform has a low order of effect in occurrence expected by the employee which motivates the workforce while working on site, and does therefore not have any effect on the productivity through their engagements in projects (Chi-square =6.333, p=0.042). Only 7.1% of the participants indicated that the order of effect in occurrence is medium, while equally, 7.1% of the participants said the order of effect in occurrence is high and therefore political connections to get peers to perform can affect worker motivation and productivity while working on site.

iii) Ranking the importance of 'favours' skills to get peers to perform

In order of degree of significance

A total of 23 (82.1%) out of 28 participants responded to this question (Table 7.16). Most of the participants (46.4%) agreed that the importance of 'favours' skills to get peers to perform is not a significant contributor expected by the workforce to motivate them while working on site and does therefore not have any effect on the productivity through their engagements in projects (Chi-square=7.200, p=0.126). Only 10.7% of the participants said they are indeed affected by the importance of 'favours' skills to get peers to perform while working on site. A significant number of participants (25.0%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (39.3%) agreed that the importance of 'favours' skills to get peers to perform has a low order of effect in occurrence expected by the employee which motivates the workforce while working on site, and does therefore not have any effect on the productivity through their engagements in projects (Chi-square = 1.684, p=0.431). Only 10.7% of the participants indicated that the order of effect in occurrence is medium, while 14.3% of the participants said the order of effect in occurrence is high and therefore 'favours' skills to get peers to perform can affect worker motivation and productivity while working on site.

iv) Peers take my instructions because I am a nice person

In order of degree of significance

A total of 25 (89.3%) out of 28 participants responded to this question (Table 7.16). Several participants (28.5%) agreed that peers taking instructions from someone because he is a nice person is a significant contributor expected by the workforce to motivate them while working on site, thereby increasing productivity through their engagements in projects (Chi-square=11.833, p=0.019). Equally, 28.5% of the participants said they are not affected by peers taking instructions from someone because he is a nice person while working on site. A significant number of participants (31.1%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (32.1%) agreed that peers taking instructions from someone because he is a nice person has a medium order of effect in occurrence expected by the workforce to motivate them while working on site, thereby increasing productivity through their engagements in projects (Chi-square =5.158, p=0.076). Only 17.9% of the participants indicated that the order of effect in occurrence is medium, and equally, 17.9% of the participants said the order of effect in occurrence is high nature and therefore peers taking instructions from someone because he is a nice person can affect worker motivation and productivity while working on site.

Table 7.17: Member/employee engagements affecting productivity while working on projects—Subordinate input

S/N Item	Questions	Strongly not significant (%)	Not significant (%)	Neither significant nor not significant (%)	Significant (%)	Strongly significant (%)	Missing system (%)	Chi-square test	df	p-value
i)	**Peers take my instructions because I have political connections**	10(38.5)	7(26.9)	4(15.4)	**NS**	1(3.8)	4(15.4)	8.182	3	0.042
ii)	**Ranking the importance of political connections to get peers to perform**	9(34.6)	8(30.8)	4(15.4)	1(3.8)	1(3.8)	3(11.5)	12.435	4	0.014
iii)	**Ranking the importance of 'favours' skills to get peers to perform**	7(26.9)	7(26.9)	6(23.1)	1(3.8)	2(7.7)	3(11.5)	7.217	4	0.125
iv)	**Peers take my instructions because I am a nice person**	4(15.4)	6(23.1)	7(26.9)	2(7.7)	2(7.7)	5(19.2)	4.952	4	0.292

Note: P<0.05 – the difference is significant; P>0.05 – the difference is not significant; NS = not selected by the participant

i) Peers take my instructions because I have political connections

In order of degree of significance

A total of 22 (84.6%) out of 26 participants responded to this question (Table 7.17). Most of the participants (65.4%) agreed that peers taking instructions because of political connections is not a significant contributor expected by the workforce to motivate them while working on site, and therefore it does not have any effect on productivity through their engagements in projects (Chi-square =8.182, p=0.042). Only 3.8% of the participants said they are affected by peers taking instructions because of political connections while working on site. None of the participants selected the "*significant"* option.

In order of effect in occurrence

Most of the participants (57.7%) agreed that peers taking instructions because of political connections has a low order of effect in occurrence expected by the workforce to motivate them while working on site, and does therefore not have any effect on the productivity through their engagements in projects (Chi-square = 23.059, p<0.001). Only 3.8% of the participants indicated that the order of effect in occurrence is medium, and equally, 3.8% of the participants said the order of effect in occurrence is high and therefore peers taking instructions because of political connections can affect worker motivation and productivity while working on site.

ii) Ranking the importance of political connections to get peers to perform

In order of degree of significance

A total of 23 (88.5%) out of 26 participants responded to this question (Table 7.17). Most of the participants (65.4%) agreed that the importance of political connections to get peers to perform is not a significant contributor expected by the workforce to motivate them while working on site, and therefore it does not have any effect on productivity through their engagements in projects (Chi-square =12.435, p=0.014). Only 7.6% of the participants said they are affected by the importance of political connections to get the peers to perform while working on site.

In order of effect in occurrence

Most of the participants (50.0%) agreed that the importance of political connections to get peers to perform has a low order of effect in occurrence expected by the workforce to motivate them while working on site, thereby increasing productivity through their engagement in projects (Chi-square =2.579, p=0.108). Only 23.1% of the participants indicated that the order of effect in occurrence is medium, and equally, 23.1% of the participants said the order of effect in occurrence is high and therefore political connections to get peers to perform can affect worker motivation and productivity while working on site.

iii) Ranking the importance of 'favours' skills to get peers to perform

In order of degree of significance

A total of 23 (88.5%) out of 26 participants responded to this question (Table 7.17). Most of the participants (53.8%) agreed that the importance of 'favours' skills to get peers to perform is not a significant contributor expected by the workforce to motivate them while working on site, and therefore it does not have any effect on productivity through their engagements in projects (Chi-square =7.217, p=0.125). Only 11.5% of the participants said they are affected by the importance of 'favours' skills to get peers to perform while working on site. A significant number of participants (23.1%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (34.6%) agreed that the importance of 'favours' skills to get peers to perform has a high order of effect in occurrence expected by the workforce to motivate them while working on site, thereby increasing productivity through their engagements in projects (Chi-square =7.684, p=0.021). Only 23.1% of the participants indicated that the order of effect in occurrence is medium, and 15.4% of the participants said the order of effect in occurrence is low and therefore 'favours' skills to get peers to perform does not affect worker motivation and productivity while working on site.

iv) Peers take my instructions because I am a nice person

In order of degree of significance

A total of 21 (80.8%) out of 26 participants responded to this question (Table 7.17). Several participants (38.5%) agreed that peers taking one's instructions because he is a nice person is not a significant contributor expected by the workforce to motivate them while working on site, and therefore it does not have any effect on productivity through their engagements in projects (Chi-square =4.952, p=0.292). Only 15.4% of the participants said they are affected by peers taking their instructions because they are a nice person while working on site. A significant number of participants (26.9%) indicated a neutral response.

In order of effect in occurrence

Most of the participants (34.6%) agreed that peers taking one's instructions because he is a nice person, has a medium order of effect in occurrence expected by the workforce to motivate them while working on site, thereby increasing productivity through their engagements in projects (Chi-square =4.333, p=0.115). Only 26.9% of the participants indicated that the order of effect in occurrence is low, while 7.7% of the participants said the order of effect in occurrence is high and therefore it and can affect worker motivation and productivity while working on site.

7.4.4 Objective 4: Identify leader behavioural patterns that attract a response (positive or negative) from the construction project practitioners

Leadership behaviour that attracted a positive or negative response from the subordinates was identified. Four variables were identified as leadership behavioural patterns that affect subordinates' responses:

i) Equity (fair treatment)
ii) Teamwork (everyone contributing to the work, all hands on deck)
iii) Communication (easy flow of information, being well communicated)
iv) Worker participation in decision-making (offering suggestions)

The questions reliably answered the research question (Cronbach's alpha = 0.89).

Figure 7:12 indicates which variables the participants agreed to be the most likely to bring about a positive and/or negative response from the construction project practitioners while working on site.

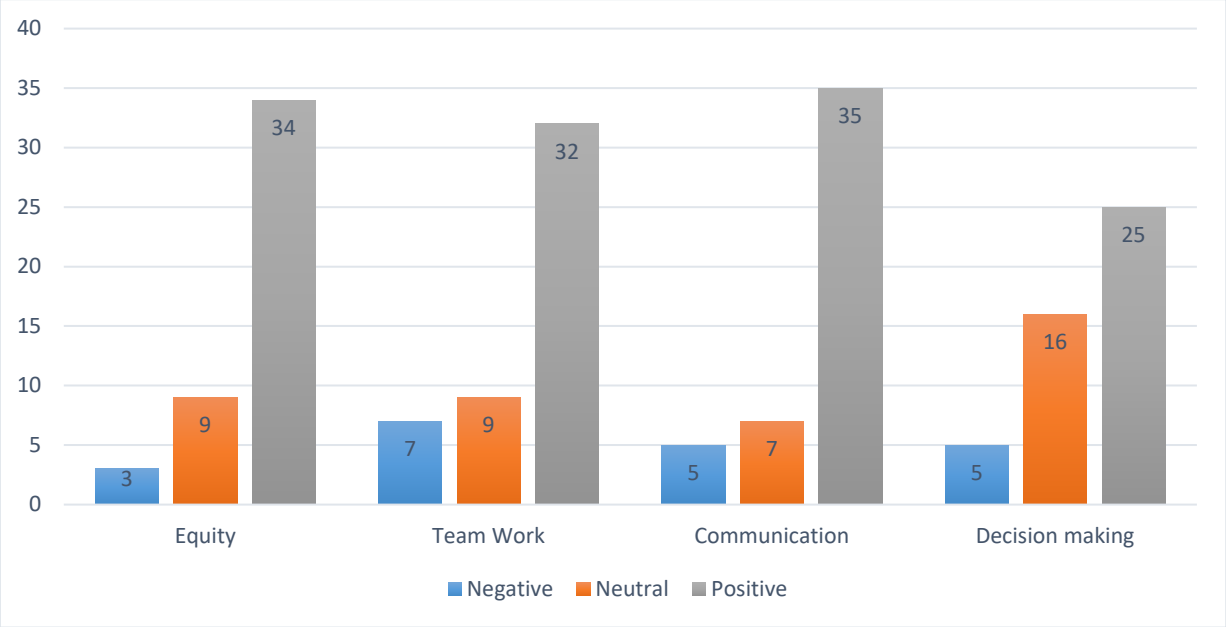

Figure 7.12: Behaviour patterns that trigger a positive response on productivity

From the responses, it is clear that the variables perceived by participants to have an influence, in order of degree of significance on productivity, on their motivation and ultimately productivity while working on projects, include:

i) Equity (fair treatment)
ii) Teamwork (everyone contributing to the work, all hands on deck)
iii) Communication (easy flow of information, being well communicated)
iv) Worker participation in decision making (offering suggestions)

Where the following outcomes were achieved:

i) Highest ranking variable identified was communication
ii) Lowest ranking variable identified was decision making

i) Equity (fair treatment)

Most of the participants (34) agreed that equity, where all project practitioners receive fair treatment during project execution, is most likely to motivate the workforce and increase their productivity while working on-site. Only nine (9) participants indicated a neutral response, and only three (3) participants stated that equity and fair treatment negatively influences their motivation, which affects their productivity while doing project-related work on-site.

ii) Teamwork (everyone contributing to the work, all hands on deck)

Most of the participants (32) agreed that teamwork, where all project practitioners are contributing to project-related work on site, is most likely to motivate the workforce and

increase their productivity while working on site. Nine (9) participants indicated a neutral response, and only seven (7) participants stated that teamwork, i.e., an all-hands-on-deck approach, negatively influences their motivation, which affects their productivity while doing project-related work on site.

iii) Communication (easy flow of information, being well communicated)

Most of the participants (35) agreed that communication, where all project practitioners experience an easy flow of information and where information is well communicated during the project, is most likely to motivate the workforce and increase their productivity while working on site. Only seven (7) participants indicated a neutral response, and only five (5) participants stated that communication, where information flows easily and where information is well communicated, negatively influences their motivation, which affects their productivity while doing project-related work on site.

iv) Worker participation in decision making (offering suggestions)

Most of the participants (25) agreed that worker participation in decision making, where all project practitioners are allowed to make suggestions given their experience within the project space, is most likely to motivate the workforce and increase their productivity while working on site. Sixteen (16) participants indicated a neutral response, and only five (5) participants stated that worker participation in decision making negatively influences their motivation which affects their productivity while doing project-related work on site.

7.5 Summary

It is clear from the analysis in this chapter that leader-behavioural patterns identified to attract a positive response from the project subordinates are communication, equity, teamwork, and worker participation in decision making. Communication was identified as the highest-ranking variable influencing the motivation of the workforce and affecting the productivity of project participants while working on site. It goes without saying that without clear, concise communication where there is an easy flow of information during the execution of the project, little to no progress is made. Furthermore, as part of any project, a **communication** plan (which is a key knowledge area in the PMBOK) needs to be an essential component in the project management plan, which illustrates the following:

i) What information will be communicated to include the level of detail and format.
ii) How the information will be communicated in meetings, email, telephone, fax, web portal, etc.
iii) When information will be distributed—the frequency of project communications both formal and informal.
iv) Who is responsible for communicating project information, communication requirements for all project stakeholders.

v) What resources the project allocates for communication,

vi) How any sensitive or confidential information is communicated and who must authorise this.

vii) How changes in communication or the communication process are managed.

viii) The flow of project communications.

ix) Any constraints, internal or external, affecting project communications.

x) Any standard templates, formats or documents the project must use for communicating.

xi) An escalation process for resolving any communication-based conflicts or issues.

CHAPTER 8: CONCLUSION AND RECOMMENDATIONS

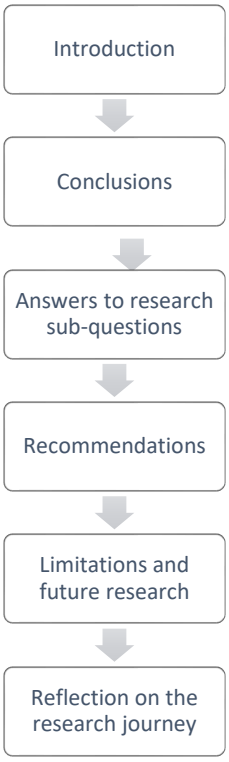

Figure 8.1: Layout of Chapter 8

8.1 Introduction

In this final chapter of the study, the key research findings aligned to the research aims and questions are summarised, and the significance and contribution of the study is discussed. The limitations are stated and recommendations for future research are made.

8.2 Answers to the research sub-questions

8.2.1 Research sub-question 1.1

RSQ1: What leader behavioural patterns positively encourage employees to do their best during the project execution process?

The findings presented below highlight leader behavioural patterns that encourage employees positively to do their best during the project execution process:

i) Organisational culture (esteem/social needs of employees)
ii) Financial incentives/reward systems
iii) Semi-financial incentives
iv) Leadership style

8.2.2 Research sub-question 1.2

RSQ2: What leader behavioural patterns demotivate employees from exacting themselves to the fullest during project execution processes?

Leader behavioural patterns that demotivate employees from exacting themselves to the fullest during project execution processes include:

i) Work performance related issues
ii) Financial incentives or reward system
iii) Site-specific related matters
iv) External environment
v) Disrespect from co-workers or neglect with intend

8.2.3 Research sub-question 1.3

RSQ3: What type of relationship between the employee and the leader affects their willingness to engage positively during project execution?

The type of relationship between the employee and the leader that affects their willingness to engage positively during project execution was found to have only two significant groupings that had a significant effect on employees' motivation:

i) Leader-subordinate style
ii) Member/employee engagements

8.2.4 Research sub-question 1.4

RSQ4: What type of leadership style does not affect employees' determination to perform positively or negatively during the execution process?

In this research, it was challenging to establish which leadership style is used within the organisation and what exact effect they have on their employees, as the participants have not revealed this in any of the questions posed to them. It is clear that there is no single perfect leadership style, which emphasises that both leaders and managers in the 21st century need to learn how to navigate through the complex and uncertain terrain and the highly competitive economy. To achieve project objectives, they must take their followers along by motivating and empowering them with skills and knowledge to perform efficiently. In addition, they must first understand that the dynamics within which projects are executed are changing and require effective strategies and flexible mindsets in an evolving and changing work environment. Thus, both leaders and managers need to have information or digital literacy, media literacy and ICT skills applicable in 21st century organisations to engage in an environment displaying socially responsible behaviour and leading a culture of change to move their organisation forward.

8.3 Answering the main question

By answering the RSQs, the main research question, “What specific leader behaviour factors motivate project teams to perform well in executing construction project processes?” can be addressed.

It has emerged from the data that were collected and analysed that the following leader behavioural factors motivate project teams to perform well in executing construction project processes:

i) Communication
ii) Teamwork (everyone contributing to the work, all hands on deck)
iii) Equity (fair treatment)
iv) Worker participation in decision making (offering suggestions)

8.4 Research hypothesis

As indicated in section 1.7, the assertion (hypothesis) postulated for this study is that:

“Specific leader behavioural factors influence employee performance of construction project practitioners during project execution processes.”

The results obtained through the quantitative analysis show that the hypothesis proves true, especially in this field of study, which is the construction industry. It is clearly indicated by the quantitative analysis that “*specific leader behavioural factors influence (positively and/or negatively) employee performance during projects”*.

The results obtained in answering the four research objectives indicate the different variables are contained in the different component groupings (see section 7.4 for a complete analysis of each of the behavioural patterns identified during the research study).

i) **Objective 1:** The four main components are organisational culture (esteem/social needs of employees), financial incentives/reward system, semi-financial incentives, and leadership style.
ii) **Objective 2:** The five main components are work performance related issues, financial incentives/reward system, site-specific related matters, external environment /weather factors, and disrespect from co-workers/neglect with intent.
iii) **Objective 3:** The two main components are leader-subordinate style, and member/ employee engagements.
iv) **Objective 4:** The four variables identified are leadership behavioural patterns affecting subordinates’ response, equity (fair treatment), teamwork (everyone contributing to the work, all hands on deck), and communication (easy flow of information, being well communicated, worker participation in decision making/offering suggestions).

From these, different behavioural patterns were identified that individually has a direct and/or indirect influence on the motivation of employees and their productivity while executing projects.

8.5 Recommendations

Given the answers to the RQ and RSQs above, the following recommendations are made:

Based on the limitations below (section 8.6), this study serves as a good starting point for future research or action. These are as follows:

i) Expand on the current research in less time bound circumstances.
ii) Develop a framework or model of motivation for the construction industry.
iii) Make recommendations to organisations to regularly perform employee performance measurements, especially in the project space.
iv) The study can serve as a starting point for HR to identify current motivation awareness in the organisation.
v) Improvement through policies, workshops and relevant training.

This study therefore aims to bridge the gap that currently exists and contributes to the existing body of knowledge in an effort to narrow the identified gaps between leader-subordinate connections occurring in an organisation. This affiliation between the two parties has either a direct and/or indirect effect on employee motivation, which hinders productivity in projects. To reach project success and meet the objectives, it is paramount to keep employees motivated as it increases their productivity while working on site.

8.6 Limitations experienced during the research

Many challenges were identified during and after completion of the research. These include:

i) The study was based on the participants' perception of the research topic. Perceptions may change over time.
ii) The recently experienced COVID-19 pandemic affected the research study in more than one way. Face-to-meetings were entirely stopped, which posed a challenge with distributing the questionnaires and conducting face-to-face interviews. The researcher found, during the distribution of the questionnaires, that sending emails was not the most effective way in getting participants to respond, simply because people only see and respond to an email once they have read it.
iii) The lack of resources to undertake the study, including mobile data, airtime, and printing of questionnaires, among others, was challenging.
iv) The lack of responses from people whom the researcher shared the questionnaire with—not many responded, even though the questionnaire was constructed in the most

convenient way and presented via Google Forms, accessible on any mobile smart device such as phones and laptops.

v) The lack of participants' understanding of the assignment, especially in answering the questionnaire, posed a challenge as many of the participants either did not complete all the questions or their answers contradicted each another.

vi) The openness of the participants to the questions posed was limited. The researcher found that the participants we hesitant to share information in detail, especially with regard to motivation at their current place of work.

Ideally, the researcher would have received input from more participants working on projects to gain a broad spectrum of the current status of motivation levels and the corresponding productivity experienced by project participants while working on site.

8.7 Future research

Based on the findings of this thesis, the following areas for further research are recommended:

i) Development of a framework to motivate workers involved in construction-related projects in industry.

ii) Further research can be done by expanding on the existing mixed methods approach, whereby all participants complete the questionnaire in more detail and take their time to answer all questions in more detail and give it more thought, especially focusing on the open-ended questions related to motivation and the key aspects related to productivity in projects. With anonymising the questionnaire, it is hoped that participants in will take part in the study more freely and openly.

iii) In addition, the survey can serve as a means of comparison and validation to see whether the perceived factors as established by the study are the actual factors that influence the motivation of project practitioners in the construction industry.

The study was conducted at a single organisation. Further studies can be conducted with more organisations located within the province and/or country to broaden the study, and when the research is not bound to time (time constraints).

8.8 Conclusion

In conclusion, as discussed in response to the identified themes of the study, it is clear that in terms of productivity of the workforce, no sole factor can be used as motivation; rather, a combination of factors needs to be identified that contributes to the motivation of employees.

As determined in this study, there are factors that motivate employees towards an increased performance while working on site. On the other hand, there are also factors that can demotivate employees, leading to conflicting responses which influence the productivity of employees while working on site. These include organisational culture, leadership style,

Incentives, and work related issues, among others, as identified and discussed in Chapters 6 and 7. Certain behavioural patterns adopted by the leader and his/her interaction with the subordinates also have an influential effect on how the subordinates will respond to an instruction given and tasks assigned to them. The workers' participation in decision making, enabled by the project leader, can influence their motivation and ultimately affects productivity. Communication was identified by the participants as a high-ranking factor and decision making as a lower ranking factor affecting productivity based on their motivation while working on projects,

Motivation is a sensitive topic since it is related to people, which is possibly one of the most complex resources to carefully manage during project execution, as the bulk of the work is implemented by the human-machine interface on site. It is therefore important to keep the workforce motivated by knowing what exactly motivates them to be in a position to get the most from the workforce while executing their job. Individuals have different needs and wants, and because of the diverse nature of humanity, it is paramount that the leader-member affiliation in a project is solid to ensure the successful completion of projects.

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APPENDIX A: QUESTIONNAIRE

Cape Peninsula University of Technology

QUESTIONNAIRE

Motivation factors for team members' performance in the execution of construction projects within the triple constraints

Management needs to understand employees' needs in order to motivate them

The target population is managers and employees / or anyone who are employed in the construction industry. This is an academic exercise, do not write your name or that of your firm.

SECTION A – BIOGRAPHY

Please cross the applicable boxes

1. **Gender**

Male	Female

2. **Age** .....

3. **Education level:**

Primary school	Middle school	Junior school	Matric	College	Diploma	Degree	Other

If other, please state .....

4. **Years working for the firm?**

0-5 years	6-10 years	11-15 years	16 – more years

5. **Years of experience?**

0-5 years	6-10 years	11-15 years	16 – more years

6. **What is your position in the organisation? (Skilled and unskilled)**

Foreman	Electrician	Carpenter	Other

If other, please state .....

7. What is your position in the organisation? (Professionals)

Project Manager	Engineer	Quantity surveyor	Other

If other, please state .....

8. Terms of employment?

Permanent	Casual	Contract	Other

9. Do you always feel happy when you are working?

Yes I always happy	Not always happy	Not at all

10. If yes, do you always give your best when you feel happy?

Yes	No

11. If not always, do you always give your best when you do not always feel happy?

Yes	No

12. If not at all, do you always give your best when you do not at all feel happy?

Yes	No

15. Have you ever gone on a strike? Yes / No

Yes	No

If Yes, please state why?.....

On the next page are factors that normally affect motivation and productivity at work in the construction industry. From your experience please of degree of effect in occurrence as well as the degree of significance to productivity on your employees.

Tick once (√/X) as appropriate the following:

i. In order of effect in occurrence.

ii. In order of degree of significance on productivity

- ✓ Effect: 1 = low; 2 = medium; 3 = high
- ✓ Significance: 1 = strongly not significant; 2 = not significant 3 = average; 4 = Significant; 5 = Strongly significant

SECTION B

Motivation by management increases productivity of employees in the organisation

Please rank the importance by crossing the most applicable, 1 – least to 5 – most applicable.

Item	Factors that affect motivation and productivity in the workplace	Effect **LOW**	Effect **MEDIUM**	Effect **HIGH**	Strongly not significant	Not Significant	Average	significant	Strongly Significant
1.	Material shortage on site (materials getting finish while working)	1	2	3	1	2	3	4	5
2.	Late issuance of construction drawings by consultant (detailed set of drawings not delivered in bulk, leading to the work done in bits or small sections)	1	2	3	1	2	3	4	5
3.	Inadequate site planning (site layout which leads to difficulty in movement)	1	2	3	1	2	3	4	5
4.	Late payment of interim certificate	1	2	3	1	2	3	4	5
5.	Rework due to construction error (Making corrections on wrong work done)	1	2	3	1	2	3	4	5
6.	Workers strike because of unpaid work	1	2	3	1	2	3	4	5
7.	Unrealistic deadline for project set by client (deadline that is not easy to attain)	1	2	3	1	2	3	4	5
8.	Slow response of consultant's site staff attending to inspection work	1	2	3	1	2	3	4	5
9.	Inadequate site staff (less labour for a task leading to excessive workload)	1	2	3	1	2	3	4	5
10.	Waiting for other crew (different trade to finish before another can continue)	1	2	3	1	2	3	4	5
11.	Poor weather conditions	1	2	3	1	2	3	4	5
12.	Poor buildability design (design which is difficult to construct)	1	2	3	1	2	3	4	5
13.	Contractor staff absenteeism (crew members not being present for work)	1	2	3	1	2	3	4	5
14.	Job security (permanent job, Job all the time, etc.)	1	2	3	1	2	3	4	5
15.	Safety plans (availability of first aid, provision of safety kits etc.)	1	2	3	1	2	3	4	5
16.	Provision of equipment for work (adequate equipment to work with, quick replacement and repairs of broken down and old equipment)	1	2	3	1	2	3	4	5
17.	Transportation (Vehicle at one's disposal, allowance for transportation, transportation from a location to site and back)	1	2	3	1	2	3	4	5
18.	Salary (pay, wage, etc.)	1	2	3	1	2	3	4	5
19.	Bonus at the end of a project or year (showing appreciation at the end of the project and year)	1	2	3	1	2	3	4	5

Item	Factors that affect motivation and productivity in the workplace	Effect **LOW**	Effect **MEDIUM**	Effect **HIGH**	Strongly not significant	Not Significant	Average	significant	Strongly Significant
20.	Overtime (provision of extra money after normal working time)	1	2	3	1	2	3	4	5
21.	Teamwork (everyone contributing to the work, all hands on deck)	1	2	3	1	2	3	4	5
22.	Worker participation in decision making (offering suggestions)	1	2	3	1	2	3	4	5
23.	Work based on a contract (finish and go)	1	2	3	1	2	3	4	5
24.	Peers take my instructions because I am a nice person	1	2	3	1	2	3	4	5
25.	Peers take my instructions because I have political connections	1	2	3	1	2	3	4	5
26.	Rank the importance of negotiating skills to get peers to perform	1	2	3	1	2	3	4	5
27.	Rank the importance of technical ability to get peers to perform	1	2	3	1	2	3	4	5
28.	Rank the importance of 'favours' skills to get peers to perform	1	2	3	1	2	3	4	5
29.	Rank the importance of political connections to get peers to perform	1	2	3	1	2	3	4	5
30.	Rank the importance of interpersonal skills to get peers to perform	1	2	3	1	2	3	4	5
31.	Promotion (elevation, example from mason to mason foreman)	1	2	3	1	2	3	4	5
32.	Disrespect from co-workers (use of abusive language from colleagues, impolite speeches etc.)	1	2	3	1	2	3	4	5
33.	Equity (fair treatment)	1	2	3	1	2	3	4	5
34.	Communication (easy flow of information, being well communicated)	1	2	3	1	2	3	4	5
35.	Opportunity to undertake challenging task (being given goal to work towards through one's own directives)	1	2	3	1	2	3	4	5
36.	Identification with goal (being honoured for a particular attained target)	1	2	3	1	2	3	4	5
37.	Congestion (overcrowding in a work area, improper site planning)	1	2	3	1	2	3	4	5
38.	Canteen for employees (having a place within the premise where food is given at break for free or at a reduced price)	1	2	3	1	2	3	4	5
39.	Medical care (having a particular hospital to attend in case of illness or subsidising the cost of hospital bills)	1	2	3	1	2	3	4	5
40.	Accommodation (provision of physical accommodation, package as subsidy to rent apartment)	1	2	3	1	2	3	4	5

THANK YOU FOR PARTICIPATING IN THE RESEARCH

APPENDIX B: INTERVIEW WITH CONSTRUCTION PROFESSIONALS

9.1 Please answer all questions:

- The questionnaire is made up of both open-ended and close ended questions.
- The open-ended questions are to be filled in the space provided while the closed questions require you to circle one of the options of the letters or as instructed.
- All information given will remain confidential and to maintain anonymity no names are required but for the ease of analysis please indicate your personal details as presented in the Questionnaire.

Personal Details

Name of Organisation:……

Department:……

Position:……....

Age:……

Gender:…..

Duration of Employment:……

Organisation and Performance

1- Do you agree with the following statements?

2- *Does your job have an overall contribution within the organisation?...[give %].....*

3- *Do you feel that you can contribute positively to the organisation?.....*

4- If yes, give reasons and if No, why? .....

5- If you are not fulfilling the purpose of your job, what do you think is the biggest stumbling block?

If Others, please specify: ….....

6- Do you feel you have enough support from the organisation to enable you to perform well?

7- Do you feel that you have enough support from the people below you?

8- What do you think can be done to enable you to improve on your job?

.....

Job Satisfaction

9- Do you feel satisfied with your job?

10- If you feel dissatisfied, what dissatisfies you most about your job?

.....

11- Do you feel you are using your talents when performing your job or are your talents wasted, since the boss gives you clear directives to follow?

Other .....

12(a)-When you make a proposal to your boss, does your boss take you seriously?

(b)-During the course of your duty, are you allowed to make certain decisions?

.....

(c)- If no, is it important to you that you make some independent decisions in relation to your job?

(d)-What kind of topics in your job are you allowed to make decisions about?

.....

(e)-How important are these decisions to you as an individual and to the organisation?

.....

13- Do you agree with the following as being important?

Please indicate against each by ranking from 1-5

Good pay	
Good working conditions	
Good physical surrounding	
Adequate job security	
Good working relations	

14- Do you agree with the following as being important elements in your job?

Please rank each from 1-2

A feeling that you are able to achieve your aspirations and plans through your job	
To be recognised as contributing to the general organisational goal	

Monetary Incentive and Work Performance

15(a)- Do you think a good salary and allowance is a good incentive to encourage good performance?

(b)- What is your opinion about your salary level?.....

(c)- Do you find it adequate?.....

(d)- If it is not adequate, what do you feel would be more adequate?

.....

Working Conditions and Work Performance

16(a)-Do you think good working conditions is a good initiative encourage to good performance?

(b)- What is your opinion about the working conditions in the District Local Government?

(c)- Do you find them effective to encourage good performance?

Other.....

(d)- In case they are not effective, what would you suggest to be done?

Physical Environment and Work Performance

17-(a)Do you believe a good physical environment has a contribution to make towards good performance?

Other….....

(b)-What is your opinion about the physical environment at the District Local Council?

.....

(c)-Do you find the physical environment adequate to encourage good performance?

Other.....

(d)-In case it is not adequate, what changes would you suggest to make the environment more conducive?

….....

Job Security and Work Performance

18(a)- Do you think that having assured security over the retention of your job can encourage you to perform better?

Other.....

(b)-What is your opinion in relation to job security in your work?

.....

(c)-Do you find the security of your job adequate?

Other.....

(d)-In case you find your job relatively insecure, what suggestion do you make for change?.....

Recognition and Work Performance

19(a)- Do you think the feeling of recognition in your job is a good incentive towards enabling you to perform better?

Other .....

(b) -Do you feel that you are recognised in your job?

(c)-If that feeling is lacking, what do you think is the stumbling block?

If other, please specify.....

(d)-What do you suggest could be done so that you are able to feel recognised in your job?

.....

Performance Monitoring and Work Performance

20(a)- What is your opinion about the performance assessment exercise carried out annually?

Other .....

(b)-How often is your performance assessed through the performance assessment exercise?

Other .....

(c)-Do you find this exercise effective in improving one's performance?

(d)-If it is not effective, can you suggest how it could be improved?

.....

THANK YOU FOR YOUR RESPONSES

APPENDIX C: PERMISSION TO CONDUCT RESEARCH

MEMORANDUM

RL Daniels
Acting Director: Civil
Engineering Services
E-mail: rldaniels@george.gov.za
Tel: +27 (0)44 801 9260

DIRECTOR: CIVIL ENGINEERING SERVICES

Aan/To	**: RUAL JACOBS**
Van/From	**: ACTING DIRECTOR: CIVIL ENGINEERING SERVICES – RL DANIELS**
Navrae/Enquiries	**: SUPERINTENDENT: WATERURIFICTION – M KOOPMAN**
Tel	**: * 9260**
Datum/Date	**: 13 June 2022**
Insake/Regarding	**: RESEARCH DISSERTATION – THESIS ON FACTORS THAT MOTIVATE HEAVY DUTY CONSTRUCTION WORKFORCE TO MITIGATE HIGH CONSTRUCTION PROJECT FAILURE RATES BY MEETING THE REQUIREMENTS TO THE TRIPLECONSTRAINTS**

The abovementioned matter, together with previous email correspondence refers.

As this Department: CES is a department whose function is in the construction project related field, we herewith approved that our workforce may take part in your research for your thesis.

We confirm that you will be the only one that administer the research data and that it will be administered in a confidential way.

We trust you find the above in order.

Yours faithfully

RL DANIELS
ACTING DIRECTOR: CIVIL ENGINEERING SERVICES

APPENDIX D: ETHICS APPROVAL

Cape Peninsula University of Technology

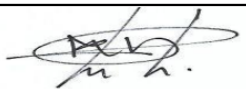
P.O. Box 1906 | Bellville 7535
Symphony Road Bellville 7535
South Africa
Tel: +27 21 4603291
Email: fbmsethics@cput.ac.za

Office of the Chairperson Research Ethics Committee	**FACULTY: BUSINESS AND MANAGEMENT SCIENCES**

The Faculty's Research Ethics Committee (FREC) on **9 December 2021**, ethics **APPROVAL** was granted to **Rual Jacobs (198026854)** for a research activity at the Cape Peninsula University of Technology for **MTech: Business Administration (Project Manager)**

Title of project:	**Motivation factors for team members' performance in the execution of construction projects within the triple constraints** Supervisor (s): Dr. L. E. Jowah

Decision: APPROVED

 **Signed: Chairperson: Research Ethics Committee**	**18 July 2022** **Date**

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the CPUT Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study requires that the researcher stops the study and immediately informs the chairperson of the relevant Faculty Ethics Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines, and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, notably compliance with the Bill of Rights as provided for in the Constitution of the Republic of South Africa, 1996 (the Constitution) and where applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003 and/or other legislations that is relevant.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after two (2) years for Masters and Doctorate research project from the date of issue of the Ethics Certificate. Submission of a completed research ethics progress report (REC 6) will constitute an application for renewal of Ethics Research Committee approval.

Clearance Certificate No | 2022 FBMSREC 030

APPENDIX E: PROOFREADING AND EDITING CERTIFICATE

2 September 2022

RUAL PHILLIP JACOBS
Faculty of Business Management Sciences
Cape Peninsula University of Technology
Cape Town

RE: EDITING CERTIFICATE OF MASTER'S THESIS

I, the undersigned, herewith certify that the editing of the Master's thesis of Rual Jacobs, *"MOTIVATION FACTORS FOR TEAM MEMBERS' PERFORMANCE IN THE EXECUTION OF CONSTRUCTION PROJECTS WITHIN THE TRIPLE CONSTRAINTS",* has been conducted and concluded.

The finalised thesis was submitted to Rual Jacobs on 2 September 2022.

Sincerely

Professor Annelie Jordaan
DTech: Information Technology
Ph: 065 990 3713

Member: SATI 1003347

South African Translators' Institute (SATI)

APPENDIX F: PLAGIARISM/SIMILARITY TURNITIN REPORT

Evaluating processes necessary for management to motivate employees to perform in construction projects.

ORIGINALITY REPORT

8%	6%	1%	4%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	repository.up.ac.za Internet Source	4%
2	newtrendsinmanagement.wikispaces.com Internet Source	2%
3	Submitted to College of Estate Management Student Paper	1%
4	Abdullah, Muhammad Madi Bin, and Rafikul Islam. "Employee motivational factors: a comparison between Malaysia and Sultanate of Oman", J for Global Business Advancement, 2012. Publication	1%
5	academicjournals.org Internet Source	1%
6	Submitted to Glasgow Caledonian University Student Paper	<1%
7	Submitted to University of Wales Institute, Cardiff	<1%