THE IMPACT OF AUTHENTIC LEADERSHIP ON CONSTRUCTION PROJECT SUCCESS IN THE DURBAN CONSTRUCTION INDUSTRY

by

TSITSI MERCY MATEKO

Thesis submitted in partial fulfilment of the requirements for the degree

Master of Technology: Business Administration in Project Management

In the Faculty of Business and Management Sciences

at the Cape Peninsula University of Technology

Supervisor: Dr Larry E Jowah

Co Supervisor: Ms Nobuhle Luphondo

Cape Town

October 2022

DECLARATION

I, Tsitsi Mercy Mateko, declare that the contents of this dissertation/thesis represent my own unaided work, and that the dissertation/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.

31 October 2022

Signed   **Date**

ABSTRACT

Leaders that practice authenticity take full responsibility for their actions, good and bad. Leaders that represent this style are self-aware and can adjust their approach to leading based on the specific needs of the circumstance. By developing this self-awareness, authentic leaders can wholly embrace their identity as individuals and as leaders. Relationships between project managers and their subordinates are a crucial element in the construction industry. There is a dearth of studies that examine the effects of authentic leadership on construction projects, despite its significance and potential contribution to project delivery.

This research investigates the impact of authentic leadership on project success within the Durban construction industry. It addresses the pressing need for effective leadership competencies to mitigate high project failure rates and enhance company growth. Through comprehensive data collection and analysis, the research identifies key authentic leadership components. These include relational transparency, self-regulation, self-awareness and balanced processing.

The research utilises both correlation and regression analyses with the findings confirming a positive correlation between authentic leadership traits and project success. Specifically, self-awareness emerged as a critical predictor of project success. Conversely, self-regulation showed no significant impact, while relational transparency and balanced processing had moderate effects.

The research suggests several actionable recommendations for the construction industry. These include implementing comprehensive leadership training programs, fostering environments that encourage authentic leadership, promoting a culture of ethical leadership and adopting authentic leadership frameworks. Additionally, developing feedback mechanisms and strategies for continuous improvement are recommended to enhance leadership effectiveness.

This research contributes valuable insights and practical strategies for cultivating authentic leadership in the construction industry, aiming to improve project success rates and overall industry performance. Future research should explore other authentic leadership aspects and their effects across different industries to broaden the understanding of effective leadership in diverse contexts.

ACKNOWLEDGEMENTS

DEDICATION

I dedicate this thesis to my parents, Abenia and Lucia, who have been unwavering sources of support throughout my academic journey. Their unconditional love and steadfast encouragement have provided a solid foundation for both my personal and professional life. I am profoundly grateful for their invaluable guidance over the years.

To my dear mum and dad, your endless inspiration and unwavering belief in me have propelled me to achieve greater heights than I ever thought possible. I am honoured to be your child, and I hope to make you proud with all that I have accomplished.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER 1

RESEARCH OVERVIEW

1.1 Introduction

In project management, the presence of a pacesetter or team of leaders who can inspire and encourage all key parties engaged in putting in maximum effort without the need for monitoring is essential for success (Abbas, 2014:52). The effectiveness of an organisation's leadership is crucial to the success of projects. According to Pretorius, Steyn and Bond-Barnard (2018:161) South African industries need to enhance research output to provide quality knowledge about leadership's critical function and contribution to Project Management. Specifically, the South African construction industry must focus on developing strategies to effectively execute projects in tumultuous times, as well as discussing how leadership can unlock and fully unfold into successful project delivery. To this end, appropriate models and policy frameworks for leadership development should be established and regularly altered in response to changes in economic policies and the environment. Considering the increasing significance of leadership in project management, it is crucial to explore the concept of authentic leadership, which has been the subject of extensive discussion in contemporary leadership literature in recent years.

Over the past several years, the city of Durban has seen a wave of government initiatives to revive the tourist economy (Patel, 2020). Durban, a coastal city in South Africa, is home to some of the world's most opulent and unspoiled beaches. Because of KwaZulu-Natal's numerous ports and transportation hubs, Durban is considered the province's industrial powerhouse. Tourist numbers have risen in recent years alongside economic growth, industrialisation, and increased human habitation (Vetrimurugan et al., 2019). Several building projects, including the Suncoast Casino Complex refurbishment and the Oceans Mall Development, as well as commercial and residential developments in uMhlanga and Cornubia, are expected to be finished by the end of the year, according to the Durban Chamber of Commerce. The former mayor of eThekwini opened the Durban Point Waterfront Development, which is expected to cost R35 billion (Rajgopaul, 2018). The initiative is expected to generate an unprecedented opportunity for city life by

bringing together people from all industries of society (Durban Point Development Company, 2019). Numerous projects are planned to meet the rapidly urbanising city's housing needs while also providing economic possibilities and entertainment venues that have the potential to reshape the metropolis.

Research by Bonkoungou, Raisinghani and Idemudia (2022:2) established the importance of leadership quality in an organisation and its effect on project delivery. Therefore, the construction industry must conduct research that generates high-quality information regarding the critical function and contribution of leadership in project management. Project management professionals must focus on developing techniques that enable effective management of construction projects despite the multiple challenges faced daily. It is imperative to explore and identify strategies that enhance project delivery and improve project outcomes in the construction industry.

1.2 Problem Statement

According to a report published by Research and Markets (2022), the construction industry significantly contributes to the Gross Domestic Product (GDP) and plays a significant role in the South African labour market. Despite its importance, the industry faces several underlying challenges threatening its growth, including a shortage of effective leadership competencies (Alade, 2022). This shortage of leadership skills has a negative impact on project success and company growth, and the absence of leadership training for construction project managers has contributed significantly to high project failure rates. As a result, there is a need to explore effective management techniques for projects, despite their numerous challenges. The existing research, including the research by Pretorius, Steyn, and Bond-Barnard (2018:161), highlights the significance of leadership in project management in South African industries. However, what remains unclear is the specific contribution of authentic leadership to the success of construction projects. This gap in knowledge presents a significant research problem, as understanding the role of authentic leadership could reveal critical insights for enhancing the effectiveness and success of construction projects. My research explored this area and contributed new knowledge about the impact of authentic leadership on the outcomes of construction projects specifically in the Durban construction projects. The research examined the relationship between project managers with authentic

leadership traits and their rate of successful project delivery in the industry. The research also identified the authentic leadership components that impact project success in the construction industry, such as project managers' relational transparency and morals on project success, as well as their self-awareness and balanced processing. Lastly, the research examined the authentic leadership components that enable construction project managers to handle challenges in the construction industry and deliver a high success rate.

This research is significant because it contributed to developing appropriate models and policy frameworks for leadership development in the construction industry, which can improve project outcomes and enhance project delivery. With the increasing significance of leadership in project management, the research provided insights into the role of authentic leadership in the construction industry, which can contribute to developing appropriate models and policy frameworks for leadership development in the industry. This research would aid in the reduction of project expenses, ensuring project success, and providing important information for the training and development of project managers in the construction industry.

1.3   Rationale and Significance of the Research

It has been established in the literature that traditional Project Management tools and techniques alone are insufficient to ensure project success (Turner, 2014). In addition to these tools and techniques, leadership has been identified as a crucial factor that significantly impacts project performance (Bon-Gang, 2018). Furthermore, strong relationships between Project Managers and subordinates have been shown to play a vital role in influencing project performance. However, there is a gap in research that focuses on improving the success rate of construction projects by emphasising the soft skills of Project Management Professionals.

Against this background, this research contributes new knowledge to the existing body of knowledge on authentic leadership, specifically focusing on Durban construction projects. Specifically, the research aimed to gain a deeper understanding of the relationship between authentic leadership traits possessed by project managers and the rate of successful project delivery. This research defined successful project delivery as meeting the project's budget, schedule, and scope objectives. If authentic leadership

skills can be seen as reliable indicators of project success, executives of a company may choose to prioritise leadership competencies while selecting a project manager, thereby reducing costs associated with the project.

To achieve its aims, the research was based on a survey of Project Management Professionals actively engaged in construction projects in Durban. Based on the research findings, a project leadership framework for effective project performance in Durban construction projects was developed. Additionally, the research aided in developing a leadership development strategy that would enhances the leadership capabilities of Project Management Professionals. Construction industry professionals would benefit from the research by considering the proposed components and following the recommended strategies for improving their leadership skills.

1.4   Objectives of the Research

Objective 1: To examine the role of authentic leadership in successfully delivering construction projects.

Objective 2: To identify specific authentic leadership traits and how they impacted project success in the construction industry.

Objective 3: To identify similarities and differences in leader and manager attributes required by construction project managers.

Objective 4: To develop a project leadership and management framework for effective project performance in construction projects.

Objective 5: To develop a leadership development strategy that augmented the leadership capabilities of construction project managers.

Objective 6: To critically examine how construction project managers evolved their leadership skills to handle challenges in the construction industry.

1.5   Research Questions

Research Question 1: What role does authentic leadership play in the successful delivery of construction projects?

Research Question 2: Which specific traits of authentic leadership most significantly impact the success of construction industry projects?

Research Question 3: What are the similarities and differences in the attributes of leaders and managers required for effective construction project management?

Research Question 4: How can a project leadership and management framework be developed to enhance project performance in the construction industry?

Research Question 5: What strategies can be developed to augment the leadership capabilities of construction project managers?

Research Question 6: How do construction project managers evolve their leadership skills to address the challenges faced in the construction industry?

1.6   Hypotheses or Propositions

Hypothesis 1

H0: Relational transparency and morals of the project manager do not impact project success in the construction industry.

H1: Relational transparency and morals of the project manager have a positive impact on project success in the construction industry.

Hypothesis 2

H0: Project managers with high levels of self-awareness and balanced processing skills are not more likely to achieve successful project outcomes in the construction industry.

H1: Project managers with high levels of self-awareness and balanced processing skills are more likely to achieve successful project outcomes in the construction industry.

Hypothesis 3

H0: There is no correlation between authentic leadership behaviours exhibited by project managers and the level of success achieved in construction projects in Durban.

H1: There is a positive correlation between authentic leadership behaviours exhibited by project managers and the level of success achieved in construction projects in Durban.

1.7   Conceptual Framework

Based on the hypotheses, the research developed a conceptual framework that explores the link between authentic leadership and project success in the construction industry. The framework comprises three main constructs: authentic leadership, project success, and the antecedents of authentic leadership. Authentic leadership is the independent variable in this framework, while project success is the dependent variable. The antecedents of authentic leadership include relational transparency and morals, self-awareness, and balanced processing. The conceptual framework is designed to show how the antecedents of authentic leadership affect project success in the construction industry. Specifically, it posits that project managers with high levels of relational transparency and morals, self-awareness, and balanced processing skills exhibit authentic leadership behaviours that positively impact project success. The framework guided this research's research design, data collection, and analysis.
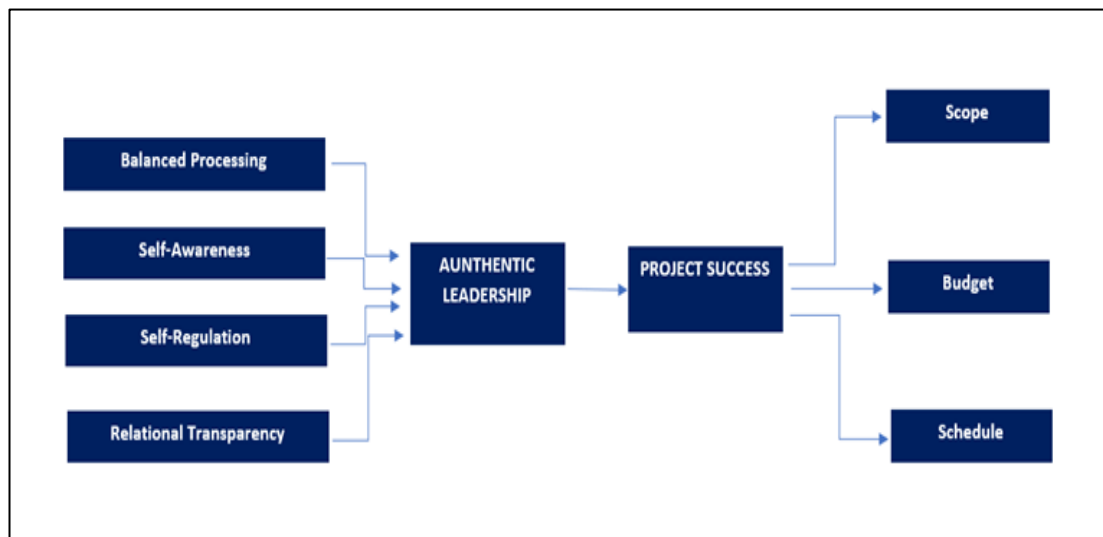
Figure 1.1: Conceptual Framework

Source: Own Construction/ Conceptualisation

1.8 Definition of KEY Concepts

Authentic Leadership: Gardner, Avolio, Luthans, May and Walumbwa (2005) describe authentic leadership as a process whereby leaders are aware of their thoughts and behaviours within the context in which they operate. It is a leadership style that is true to the leader's personality and appropriate for the given situation.

Relational Transparency: Walumbwa et al. (2007) define relational transparency as presenting one's authentic self to others, building trust by sharing information openly, and expressing one's true thoughts and feelings, while avoiding inappropriate emotional displays.

Balanced Processing: Balanced Processing is the ability of leaders to objectively analyse all relevant data before reaching a decision. Leaders who possess this skill also encourage views that challenge their deeply held assumptions (Walumbwa et al., 2007).

Self-Awareness: Kernis (2003) describes self-awareness as the ability to recognise one's strengths and weaknesses and understand the multi-faceted nature of the self. This includes gaining insight into oneself through exposure to others and being mindful of one's impact on others.

Self-Regulation: Self-regulation is the process of exerting self-control by setting internal standards, evaluating discrepancies between these standards, and expected outcomes, and identifying actions to reconcile these differences (Stajkovic and Luthans, 1998).

Project Success: Project success refers to achieving predetermined objectives and desired findings within predetermined conditions of time, cost, and performance (Beleiu, Crisan and Nistor, 2015). It is a measure of how effectively a project has been completed in accordance with the given plan.

1.9 Research Paradigm

The research's worldview, opinions, and interpretations of the world constitute the research paradigm, as Lather (1986:65) highlighted. Lincoln and Guba (1985) posit that a research paradigm comprises four components: epistemology, ontology, technique, and axiology. Epistemology relates to how one identifies truth or reality. According to

Cooksey and McDonald (2019), epistemology refers to knowledge. This research's epistemological foundation was based on authoritative knowledge from field specialists, publications, journals, and Project Management leaders.

On the other hand, ontology is the research of being and the nature of existence. It scrutinises the research's fundamental view of being and existence (Gray, 2018). The methodology includes the research design, techniques, approaches, and processes (Keeves, 1997). It comprises a comprehensive description of data collection, respondents, instruments used, and data analysis. In summary, research methodology explains the rationale and direction of the systematic techniques used in research.

This research utilised a quantitative research paradigm with focus on correlational, non-experimental research using regression analysis. The paradigm was founded on the epistemological foundations of the research, which were derived from literature review and a comprehensive survey of project experts and professionals. The paradigm offers a thorough evaluation and quantification of the correlations between leadership attributes and project success in the construction industry using surveys and statistical analysis. Adopting a quantitative paradigm resulted in the precise and impartial investigation of the proposed correlations thereby presenting articulate, factual insights into the dynamics of leadership in the construction industry.

1.10 Research Design

The research's choice of research design for the thesis was influenced by the work of Saunders, Lewis and Thornhill (2019), who describe research design as a fundamental aspect of the research process. It involves the planning and execution of methods for data collection, analysis, interpretation, and presentation. A range of methodologies can be employed to collect data in social sciences, and a combination of these can be used to create a research design. Teddlie (2020) notes that researchers can use qualitative, quantitative, or combined approaches. This research employed the quantitative method to investigate the research question. The quantitative method is a widely accepted research design in construction project management and allows for the collection of numerical data through structured surveys and statistical analysis. The research used a questionnaire to collect data from respondents, and the findings were analysed using descriptive and inferential statistics.

1.11 Research Approach

A comprehensive literature review has determined that prior studies investigating leadership have predominantly adopted a quantitative research approach that explores the effectiveness of different leadership styles across various fields. However, some researchers have also utilised qualitative methodologies that enable them to engage in-depth with individuals. Considering this context, the research opted to employ a quantitative research approach. Specifically, a quantitative, non-experimental, correlational inquiry utilising regression analysis was conducted. Regression analysis was used to evaluate the associations between variables statistically. The design was solely chosen to allow for a more objective assessment and analysis. One of the key features of quantitative research is its ability to establish clear cause-and-effect relationships (Gray, 2018), thereby providing precise findings that align with the research objectives. Moreover, the remote nature of the research design eliminated the need for respondents to report to a particular site, thus facilitating a more efficient data collection process.

1.12 Demarcation/Delimitation

The boundaries of the research were strategically chosen to focus on Durban, a city with many development projects, making it an ideal setting for understanding the research problem of leadership in construction project management. With respect to the respondents, the research focused primarily on project management professionals and leaders in the construction industry in Durban. This research concentrated on project management professionals who undertake project management duties, either as formally designated project managers or as unofficial leaders who fulfil the project manager position and any other project personnel involved in construction projects. This ranged from Project Managers, Portfolio Managers, Project Administrators, Project Management Office personnel, Construction Managers, Site Managers, Design Managers, Procurement Managers and Contracts Managers. This perspective was chosen to ensure that the insights and data collected were directly relevant to the city's unique architectural context and could provide specific insights into leadership development in this context.

1.13 Research Methods/Processes

According to Gray (2018), The total number of distinct units or components accounted for in the research is referred to as the population. Researchers must specify the sampled components, geographic limits, and location. This provided the studies with a target population representing a pool of examples that studies wish to analyse (Neuman (2003).

Potential project management professionals and personnel for this research were identified through Project Management Institute (PMI) chapters and MANCOSA students involved in Project Management and Project Management groups on social media. PMI is a U.S.-based professional. The Project Management Institute (PMI) is the world's premier project management organisation headquartered in the United States. As PMI is a big worldwide organisation for project management (Project Management Institute, 2021), it was fair to invite fellow PMI members to participate in this research.

1.14 Sample Method/Technique and Sample Size

1.14.1 Sample Frame

The quantitative non-experimental research's sample frame comprised PMI members in the Durban Chapter, MANCOSA students who work on construction industry projects, and people who belong to LinkedIn and other social media groups dedicated to project management. The sample frame consisted of individuals involved in project management occupying various positions. Possession of an email account and access to a device for responding to the SurveyMonkey or Google Questionnaire were additional qualifying conditions. Approximately 200 current PMI Durban Chapter members were included in the sample frame.

1.14.2 Sampling Method

A quantitative research's sampling approach serves the following purposes: "to measure variables and generalise findings obtained from a representative sample from the total population" and define a representative sample as "one that has all the important characteristics of the population from which it was drawn". Nonprobability sampling research was utilised to gather data from a representative sample of people who work as project managers or in roles related to project management in the construction

industry in Durban. The sampling approach was purposive sampling; (Trochim, 2007) observed that purposive sampling enables a sample to be swiftly chosen according to specified criteria.

1.14.3 Sample Size

To determine the sample size of 80 respondents a methodical approach was utilised using the G*Power 3.1 program. This is a statistical tool widely recognized for calculating sample sizes in social science research. The initial number was further validated using a Correlation Sample Size calculator to ensure robustness.

Respondents were selected through a purposive sampling technique, focusing on individuals in leadership roles within the construction industry in Durban. The inclusion criteria were set to target professionals with direct experience in project management, while those outside of this specific industry were excluded to maintain the research's focus. This approach, guided by standard practices in quantitative research as detailed by Creswell (2014), ensured a representative and relevant sample for this research.

1.15 Data Collection Instruments

Structured questionnaires were used to facilitate the gathering of consistent data from a large population across all respondents in the research. The researcher sent an invitation to participate in the research to potential respondents who had provided their email addresses and posted the invitation on LinkedIn and WhatsApp social media sites. Respondents who accepted the invitation were given access to a web-based informed consent form and a questionnaire. Statements included in the questionnaire were constructed based on the operationalisation of the variables, and respondents were required to indicate the frequency with which they participated in the behaviour described. According to Zohrabi (2013:255), questionnaires are an effective method of collecting primary data in any research.

1.15.1 Data collection/fieldwork

How a survey is carried out directly influences the questionnaire format (Saunders et al., 2012). When determining which approach would be most suited for the research, the research considered a variety of resources, including budget and time. As a result, the

surveys for the research were conducted online and issued in hard copies. For the online survey, the questionnaires were made available to respondents via the survey monkey website and google documents. Because of the large number of individuals who have access to the internet, these distribution strategies were selected. On the other hand, delivery and collection were also employed to prevent the underrepresentation of certain demographic groups.

1.15.2 Data coding and analysis

Conducting an accurate data analysis that ensures research questions are answered appropriately should be the primary focus of all research projects. The information gathered from the structured questionnaires was input into a spreadsheet created using IBM SPSS 29.

IBM SPSS 29 assisted in determining descriptive statistics and establishing the link between the predictor variable of authentic leadership among project professionals and the outcome variable of successful project completion (multiple regression analysis).

To determine the sample and effect sizes for this research project, statistical software known as SPSS 29 was applied, and the G*Power 3.1 program was used to compute the findings. A set of descriptive statistics, including frequency, mean, and standard deviation, was compiled. After gathering all the necessary descriptive statistics, the research further conducted correlation and multiple regression analysis using SPSS 29. This analysis was significant in determining the relations between the different variables of interest, particularly how different authentic leadership traits influenced project success in the construction industry. The findings from the regression analysis were used to test the research's hypotheses. These findings which will be detailed in Chapter 5 provide empirical insights into the specific impacts of various authentic leadership characteristics on project success.

1.16 Ethical Consideration

During this research, a code of conduct or an anticipated social standard of behaviour was considered to fall into the category of research ethics. Institutions, organisations, companies, and individual members should always abide by ethical standards during the

research process. The research ensured the research was conducted in good faith, considered, and paid attention to the findings obtained. The research reflects the ethical conduct of the researcher who provided the findings, presented the findings, interpreted the findings, and suggested alternative solutions and the respondents providing the data. In addition, the research considered ethical issues that could potentially harm the research respondents, such as sensitive questions, confidentiality and anonymity of the interviewee, and the legal issue of holding research data.

The research took into consideration ethics and governance when conducting the research. The research had the utmost respect for all research respondents and remained authentic throughout the research period. In addition, the research was carried out under the auspices of the ethical clearance committee of the Cape Peninsula University of Technology. An Ethics Clearance Certificate was issued by the university.

By adhering to the ethical processes and principles that govern research with people, the research made certain that the required precautions were taken to safeguard the rights of those who participated in the research as subjects. These values include, but are not limited to, respect for the respondents' autonomy, their agreement to participate in the research, as well as confidentiality and ownership of the information collected.

The research ensured that all respondents were adequately informed about the research through an informed consent letter. In addition, the research made use of recommendations from Creswell (2006) which include:

- Non-disclosure of confidential information about the research respondents (respect for privacy) - code names were used for the focus group interviews.
- Usage of numbers to reflect the respondents in the research.
- Informed consent is a part where the participant would sign as agreeing to participate in an interview voluntarily.
- Freedom of choice or the right to decide whether to continue the interview.

1.17 Limitations

The data collection from just one city may limit the generalizability of the findings to other cities or countries that differ from Durban. While conducting this research in Durban provided a rich and relevant context for the research, the unique socio-economic, cultural, and industrial dynamics of the city meant that the findings and findings gathered may not be directly applicable to other urban settings with different dynamics.

These differences can potentially influence how leadership traits impact project success, resulting in different outcomes in different contexts. Therefore, while the research's findings offer valuable insights into leadership in construction projects within Durban, drawing conclusions on other cities or countries should be done with caution.

Despite these drawbacks, the research's findings are reliable because of the methodical approach that was used which includes the use of reliable statistical instruments for data processing and sample size calculation. The careful selection of Durban-based samples proved to be highly advantageous for the research's comprehensive investigation of the research subject. This method produced insightful findings that are particularly applicable to similar metropolitan settings. The research's rigorous adherence to accepted research methodology and exhaustive analytical procedures further contribute to its reputation.

1.18 Summary and Conclusions

This chapter provided an outline of the significance of authentic leadership in Durban's construction industry. The chapter provided emphasis on the necessity of effective leadership in project management as well as the unique challenges of the South African construction industry. The problem statement highlighted the implications of leadership deficiencies on the industry's growth and success. The research's rationale provided emphasis on the importance of leadership skills beyond conventional project management tools, specifically in the context of Durban.

The chapter outlined the research's objectives and research questions that were aimed to explore the influence of authentic leadership on project success. The chapter explored the reasons why a quantitative, non-experimental approach, using regression analysis

within a defined conceptual framework was adopted. It also touches on the ethical considerations that were used to ensure the respect of respondents ' rights, and limitations acknowledge the research's geographical focus, which might affect the generalizability of its findings.

CHAPTER 2

AUTHENTIC LEADERSHIP

2.1.   Overview

This research aimed to provide new knowledge to the existing body of work on authentic leadership, specifically focusing on Durban construction projects. The research was conducted to gain a more in-depth understanding of the relationship between authentic leadership traits possessed by project professionals and their rate of successful project delivery. For this investigation, successful project delivery was defined as meeting the project's budget, schedule, and scope objectives. Suppose authentic leadership skills are a good indicator of whether a project will be successful; company executives may emphasise leadership competencies more while selecting a project manager to cut costs associated with the project.

A few studies highlighted the relationship between authentic leadership and project success, specifically in construction. Turner (2014) asserted that traditional Project Management tools and techniques alone are insufficient for ensuring project success. This perspective was significant to the research as it delved into investigating the effect of other non-conventional elements such as authentic leadership styles and how they contribute to project outcomes. The research offered an exploration that revealed the limitations of relying solely on traditional tools in addressing the unique challenges faced by construction projects in Durban.

Apart from Project Management tools and techniques, the literature pointed to leadership as one factor significantly affecting project performance. According to Bon-Gang (2018), Project Managers must have strong relations with subordinates because these relationships play a vital role in influencing project performance. However, while this relationship is well-established in the literature, my research aimed to investigate how these dynamics specifically play out in Durban's unique context.

Existing knowledge is the foundation for all academic research endeavours, regardless of the field of research; therefore, all researchers must prioritise doing so correctly.

Furthermore, knowledge generation in business research is increasing at an astounding rate while staying fragmented and inter-disciplinary, thus increasing the complexity of this undertaking (Snyder, 2019:233). Therefore, the literature review is more important than ever as a research approach.

Research by Tranfield, Denyer and Smart (2003:207) highlighted the importance of conducting literature as it aids researchers in mapping and assessing the relevant intellectual territory to specify a research question which will further develop the knowledge base. Combining empirical findings from various studies and viewpoints, a literature review may answer research problems more effectively than any one research. A well-conducted and methodical literature review establishes a solid basis by identifying knowledge gaps increasing chances for new knowledge and promoting the creation of theories. A literature review is a methodical compilation and synthesis of prior research.

This literature review aided in giving a broad perspective of fields where multidisciplinary and diverse research were being conducted. Furthermore, it provided a great approach to summarising research findings to provide evidence on a meta-level and identify areas in which additional research is required, which was an essential step in developing theoretical frameworks and conceptual models.

However, conventional methods of explaining and displaying the literature sometimes fall short of completeness and are not carried out methodically (Tranfield, Denyer and Smart, 2003:210). This research considered many studies to avoid basing the research on false presumptions. Multiple sources of evidence were explored to support the research. This included studies on leadership in general highlighting leadership qualities, actions, characteristics, or styles. The review explored the construction industry in general and specifics in South Africa and Durban. It further explored the challenges faced in the industry.

2.2.   Leadership Overview

There is no doubt that leadership is essential to the accomplishment of any endeavour. The success of any undertaking is contingent upon the effectiveness of its leadership techniques. Abbas (2014:52) highlighted that each project or organisational objective gets simpler to fulfil when there is a leader or team of leaders who can persuade all

parties involved to perform at their best without being overseen. In the context of Durban's construction industry, this concept was examined to understand how leadership styles, particularly authentic leadership, and its impact on project success. It is becoming increasingly obvious that leadership capabilities and effectiveness are critical for future economic growth and development in developing countries.

Since a few decades ago, researchers have studied the complicated and wide-ranging subject of leadership (Antonakis, Cianciolo, and Sternberg, 2011). The theoretical underpinnings of leadership were formed over almost a century of scientific research. Hernez-Broome and Hughes (2008) emphasized that a rising understanding of what leadership development requires goes beyond creating individual leaders. This notion was a building block to the research as it aimed to explore how leadership development within the Durban construction industry involves not only enhancing the capabilities of individual project managers but also fostering a leadership culture that permeates the entire organizational structure. Leadership development involves carefully considering how to deploy leadership abilities and strike the right work-life balance. As a result, the concept of "authentic leadership" emerged as one of the key areas of focus in leadership.

According to Hartzell (2006), the term "leadership" is frequently used to refer to the personality characteristics and conduct of those who have power, influence, and responsibility for leading organisations. Most schools of thought place a premium on leadership qualities, actions, characteristics, or styles. While each school of thought contributed significantly to our knowledge of the phenomena of leadership, each research gave an imperfect picture of the notion of leadership. Leadership is the process through which a person motivates others to achieve a common goal. It involves possessing a certain degree of awareness of the environment and adapting to the conditions to affect the personnel involved in the execution of the project. Research has been undertaken on leadership skills, characteristics, behaviours, and styles. Leadership is essential to the accomplishment of any endeavours. The fulfilment of any project or organisational objective is facilitated by the presence of a leader who can persuade the interested parties to provide their best effort without being directly overseen.

Since people are responsible for planning and implementing projects, their leadership style is a crucial part of project success. It can nurture or destroy a conducive work

atmosphere. Leaders can create an atmosphere where employees feel valued and motivated, motivating them to work hard and stay loyal to the organisation. Benator and Thumann (2003:188) emphasise the difficulty that contemporary leaders have in using different leadership theories and styles. Considering the plethora of leadership schools of thought and theories, it is unsurprising that many leaders struggle to make sense of these sometimes-contradictory leadership principles and implement them in the workplace. There are several management techniques, and individuals are open to learning from and following different types of leadership. Managers ensure that all processes, systems, and institutions are running properly, while leaders are responsible for energising their followers. Some leadership styles contribute to project team members' perception of helplessness and have a detrimental effect on motivation and self-efficacy. As stated by du Plessis (2013:72), transformational leadership, authentic leadership, and servant leadership are the three leadership styles that dominate the contemporary literary discourse on what might be considered 'useful' or conducive to success in most circumstances. This research zeroed in on the Durban construction industry and delved into understanding how authentic leadership, impacts the success of construction projects. This targeted approach allowed the research to explore the direct influence and effectiveness of authentic leadership within the unique challenges and dynamics of Durban's construction industry."

2.3. Authentic Leadership

Walumbwa et al. (2008:89) traced the roots of authenticity in leadership back to ancient Greece which placed emphasis on the principle of being true to oneself. This concept was reiterated by George and McLean (2007:5) who described authentic leaders as those who align their leadership style with their personal characteristics and situational context. In a similar research, George (2004:33) highlighted the significance of self-awareness and personal experiences in shaping authentic leadership. This research encompassed those perspectives which provided a foundational understanding of authentic leadership.

A model of authentic leadership was developed by Ilies et al. (2005:375) using Michael Kernis' (2003) conceptualisation of authentic leaders. The model is characterised by self-awareness, objectivity in processing information, authentic behaviour or acting, and

relational orientation. Shamir and Eilam (2005:396) suggested that leaders that exhibit these characteristics are genuine: (a) "the role of the leader is a central component of their self-concept, (b) they have achieved a high level of self-resolution or self-concept clarity, (c) their goals are self-concordant, and (d) their behaviour is self-expressive". This research explored how these traits of authentic leadership manifested among project managers and professionals in Durban's construction industry. The research investigated these characteristics as outlined by Shamir and Eilam and contextualized their theoretical framework within the Durban construction industry.

2.4. Authentic Leadership Components

Throughout this research, numerous works of academics who have defined essential elements of true leadership were consulted to determine the main components of authentic leadership. According to Norman et al. (2010:352), du Plessis (2013:74), and Ardichvili and Manderscheid (2008:624), the four main components of authentic leadership include self-awareness, self-regulation, relational transparency, and balanced processing. Moreover, du Plessis (2013:74) highlighted characteristics of authentic leaders, such as openness, objectivity, non-defensiveness, self-acceptance, and ethics. These elements formed the basis of this investigation into how these characteristics appear in Durban project managers and leaders and contribute to the success of construction projects.

2.4.1. Self-awareness

An increasing collection of empirical evidence indicates that self-awareness is linked to successful leadership. Self-awareness research has produced a variety of measures to evaluate self-awareness with the aim of leadership in mind. A broad range of academic fields has adopted the concept of self-awareness, implying that self-awareness may explain variation in various areas. Although definitions differ, self-awareness is an internally oriented evaluation process in which people compare themselves to others to improve self-knowledge and self-improvement. The link between self-awareness and leadership effectiveness as highlighted by Ilies et al. (2005:377) and Avolio and Gardner (2005:324) and further developed by Ashley and Reiter-Palmon (2012:3) was a critical area of inquiry in this research. The research investigated how Durban-based construction project managers and other professionals' self-awareness affected their

leadership performance. This entailed assessing their capacity to recognize and resolve internal conflicts, the effects of this self-awareness on their feelings, ideas, and behaviour, as well as how it advanced their development as capable leaders in their industry. Reflection on one's values and mental models is important to developing self-awareness as a leader. Conceptualisations of self-awareness have arisen, with newer formulations often adding subtleties to prior ones. Individuals occasionally direct their attention inward and engage in a comparison process to evaluate themselves against a superior standard.

A leader is said to have high degrees of self-awareness if, for instance, their self-reported performance evaluations are comparable to the ratings others have given them. The research used the findings of Furnham and Stringfield's (1994:59) research on authentic leadership which showed that managers who are self-aware often perform better. This idea was used to evaluate the efficacy of project managers in Durban's construction industry by assessing the relationship between their degree of self-awareness and project management performance. This method aided in placing the importance of self-awareness within the unique dynamics of the Durban building industry. Additionally, higher levels of subordinate satisfaction may result from consistency between how employees see their bosses and how they view themselves. Being self-aware enables a leader first to recognise their strengths and shortcomings and, as a result, be mindful of how they react in difficult circumstances. The research investigated the ways in which Sengupta's (2018) description of the traits of a self-aware leader influenced project success. It investigated how much leaders in this field valued diversity, acknowledged and encouraged the work of their teams, and used a range of viewpoints to improve projects. Furthermore, the research evaluated the ways in which these leaders' vision and understanding of team dynamics contributed to their teams' ability to reach their maximum potential and, ultimately, influence the success of Durban's construction projects.

2.4.2. Balanced processing

Balanced Processing refers to the notion that self-awareness is balanced or unbiased processing. This research looked at how authentic leaders' integrity affected their strategic planning and decision-making, as stated by Kernis (2003:6) and Ilies et al.

(2005:378). The research focused on the information processing and decision-making processes of authentic leaders paying special attention to their propensity to avoid distorting or inflating information and their capacity to strike a balance between introspection and outside opinions. The research determined how these   elements of authenticity affected successful project findings and competent leadership in Durban's construction industry.

The research further assessed how project managers applied the idea of balanced processing as described by Avolio and Gardner (2005:317) and Kernis (2003) in the context of the Durban construction industry. This covered their impartial information analysis, considering both internal and external input, as well as the ways in which their well-rounded approach influenced their ability to make decisions and lead effectively. The research also discussed the significance of balanced processing and how it helped leaders avoid prejudice and maintain their integrity, which might have resulted in more improved project findings in their projects.

2.4.3. Self-regulation

This research investigated how project managers and professionals in leadership positions used self-regulation, as described by Avolio and Gardner (2005:325). The research examined respondents showed consistency in their words and acts and honesty in their reasons all while aligning their beliefs, ambitions, and activities. This entailed figuring out how these self-control actions supported conflict resolution and reconciliation between individual convictions and project objectives. The emphasis was on how these facets of authentic leadership affected Durban construction project management and success.

2.4.4. Relational Transparency

The research examined how project managers implemented the idea of relational transparency as stated by Ilies et al. (2005:382) and Mazutis and Slawinski (2008:445). It specifically looked at how much self-disclosure leaders in this field had regarding their ideas, reasoning, and motives as well as how this openness impacted their interactions with their teams. The goal was to comprehend how such transparency affected Durban's construction projects' success as well as the efficacy of leadership. Disclosure of one's

22

authentic self to followers builds trust and connection, boosting collaboration and cooperation. Moreover, relational openness involves the desire to subject oneself to examination and criticism, which becomes a fundamental aspect of learning.

2.5.   Summary and Conclusions

This literature review was conducted to gain a more in-depth understanding of the relationship between authentic leadership traits possessed by project professionals and their rate of successful project delivery. Successful project delivery is defined as meeting the project's budget, schedule, and scope objectives. Traditional Project Management tools and techniques are inadequate to guarantee project success, thus considering leadership essential for accomplishing any endeavour.

Leadership is essential to the accomplishment of any endeavours. It involves possessing a certain degree of awareness of the environment and adapting to the conditions to affect the personnel involved. Managers are responsible for ensuring that all processes, systems, and institutions are running properly. Leaders create an atmosphere where employees feel valued and motivated, motivating them to work hard. An authentic leadership model was developed, characterised by self-awareness, objectivity in processing information, authentic behaviour, and authentic relational orientation.

A leader is said to have high degrees of self-awareness if, for instance, their self-reported performance evaluations are comparable to the ratings others have given them. Being self-aware enables a leader first to recognise their strengths and shortcomings and, as a result, be mindful of how they react in difficult circumstances. Authentic leaders employ a process known as self-regulation to link their values, goals, and actions. This method requires being open and honest about one's motives and goals and leading by example. Disclosure of one's authentic self to followers builds trust and connection, boosting collaboration and cooperation.

CHAPTER 3

PROJECT SUCCESS IN THE CONSTRUCTION INDUSTRY

3.1. An Overview of the Construction Industry

Construction is considered one of the prominent industries in many countries. Price Waterhouse Coopers (2016) states that the construction industry contributes at least 11% of the international Gross Domestic Product (GDP). The construction industry is vitally important in the South African labour market. The quarterly labour force survey by Statistics SA (2016) shows that at least 1.38 million people work in the construction industry on a contract or permanent basis. In this research, the growing complexity and demands of building projects in the construction industry as highlighted by the Business Wire (2021) was considered thus emphasized the necessity of improved efficiency and leadership skills. Project managers and professionals are now experiencing additional hurdles because of this expansion and complexity, so it was critical to consider how leadership—particularly authentic leadership—helped them to successfully navigate these changing demands. Delivering successful projects is proving more difficult than ever in the construction industry. There are several underlying challenges that the industry is battling, which could derail the industry's growth.

Price Waterhouse Coopers (2016) asserts that growth strategies in the industry are placing a high on maintaining appropriate leadership practices. However, South Africa continues to experience a leadership skill shortage in construction projects. The country needs significant improvement to solve this shortage. Most big contractors, especially those listed on the Johannesburg Stock Exchange, have taken major steps to try and combat this problem by investing in training and development programs for project managers. On the other hand, medium to small enterprises, particularly new entrants in the industry, lack the resources to address this problem. As a result, there is a mounting concern that the lack of effective leadership competencies affects the successful completion of construction contracts.

According to (Timofeeva, Ulrikh and Tsvetkun, 2017:911), construction remains one of the predominant industries in the world. Tsai and Chang (2012:127) assert that the

construction industry and, primarily, the building industry is vital in boosting societal transformation towards sustainable growth. The view was further concurred by Tabassi, Roufechaei, Ramil, Abu Baker, Ismail, and Pakir (2016) as they endorsed the industry as one of the central stimulants for societal transformation towards sustainable development at the international level. Most construction projects are done at a mega level and involve technically complex requirements. Many involve a combination of specialised skills and expertise to execute them successfully. Likewise, construction teams comprise multidisciplinary team members from different disciplines and backgrounds.

3.2.   The South African Construction Industry

The construction industry in South Africa has been a major driver of socio-economic development, especially in 2022 when it showed signs of substantial expansion and recovery with investments in several industries and post-COVID-19 economic recovery plans expected to propel the industry's 9.1% real growth (Business Wire, 2022). Government funding was significant in supporting this expansion; the 2022 budget allocated R812.5 billion for infrastructure investment, highlighting the industry's significance in the national economic plan (GlobeNewswire, 2022).

According to Adugna (2009), the post-apartheid era saw the South African government developing construction policies and procedures to ensure more standardised practices in the industry. The government implemented a housing provision policy to curb the increasing demand for housing (Khumalo, 2012). The government introduced the RDP houses, social housing and informal settlements mainly directed at all provinces' low- and middle-income earners. The introduction of the RDP housing program in 1994 resulted in the South African government being one of the primary clients of the construction industry. The government embarked on many construction projects in all provinces of the country to address housing shortages and improve marginalised societies' livelihoods. In South Africa, the construction industry contributes a large share to the national economy as it employs the least trained elements of society. Costin and Telzer (2015) acknowledged that the construction industry plays a significant part in South Africa's economic growth and performance, employing roughly 1.4 million people, consequently enhancing the employment rate.

The research examined the crucial role the construction industry has played in South Africa's socio-economic development, particularly post-apartheid, as highlighted by Ofori, Hindle, and Hugo (1996), Giang and Sui Pheng (2011) by incorporating these perspectives into the research on the construction industry in Durban. The large government investment and legislative initiatives like the RDP housing program, the construction industry is now a key driver of employment and economic growth in the country. This research examined how leadership styles impact the growth of this business, especially in Durban, and how this industry addresses issues such as housing scarcity while also contributing to socio-economic development.

3.3. The Durban Construction Industry

The research considered the ways that post-apartheid urban growth and globalization have changed the city, as stated by Hannan and Sutherland (2015). According to Maharaj, Khan and Desai (2021), the transformation of Durban's construction industry in the post-apartheid era, amidst globalization, has been marked by significant socio-spatial changes. These transformations have been driven by neoliberal policies, leading to the development of megaprojects that have impacted the socio-economic landscape. This research looked at the role that authentic leadership played in the management and effective completion of these intricate construction projects in Durban's dynamic urban environment. The research looked at how these intricate initiatives' success was impacted by the need for competent leadership, especially authentic leadership.

3.4. Construction Industry Challenges

The construction industry in Durban is aware of the major difficulties and unpredictability's that come with construction projects, as noted by Deng et al. (2014), Shojaei and Haeri (2019). The research examined how these elements such as problems with operations, issues with quality, and delays in project completion date affected project management. The focus of this research was how authentic leadership resolved these problems, especially when it comes to handling the dangers and complexity that come with building construction projects. The purpose of the research was to determine how leadership affected one's capacity to overcome these obstacles and make a positive impact on the completion of projects in the construction industry in Durban.

The research addressed the important problem of cost overruns in residential as mentioned by Flyvbjerg, Skamris, and Buhl (2002) and Khodeir and El Ghandour (2019). According to their studies, cost variation was a common issue in construction projects throughout the globe, with many projects going far over budget. This problem was especially pertinent to the construction industry in South Africa. The research looked at the effect that leadership, particularly authentic leadership had in preventing these cost overruns and finishing projects on time and within budget. The goal of this research was to comprehend how good leadership affected Durban construction projects' cost control.

Windapo (2016) asserted that the South African skills industry is experiencing a shortage of skills within state-owned enterprises. The country's public industry is currently experiencing incapacity affecting infrastructure delivery and sustainable growth in the South African construction industry.

The research confirmed Gamil and Abd Rahman's (2021) emphasis on the critical role that excellent communication plays in project management. Their research emphasized the connection between ineffective communication and project delays, cost overruns, and quality problems. In this context, this research examined how open and transparent communication, which is a key component of authentic leadership improved collaboration and understanding among project stakeholders. In most cases this improves project execution and lowers the chance of communication breakdowns. To fully understand the characteristics of effective project management in Durban's construction industry required a focus on this area.

This investigation used Eskander's (2018) assertion that Project Management Professionals must constantly adapt through training and experience. This viewpoint was consistent with the research's emphasis on the role of leadership in construction projects, as stated by Podgórska and Pichlak (2019), who claimed that the complexity of construction projects needs strong leadership techniques. This research investigated how developing and refining leadership qualities, particularly authentic leadership, might help to the effective execution of construction projects in Durban, despite the industry's specific constraints.

3.5. Project Success Overview

In the modern world, projects are the accepted and preferred method of managing and completing almost all new endeavours with a specific scope and outcome and must be completed within a particular time (du Plessis, 2014). According to Besner and Hobbs (2006), research on success factors contributing to project success proved difficult. Many researchers came up with different factors that contribute to the success of a project. Cooke-Davis (2004) posits that three ways contribute to project success: doing the project right, doing the right project and doing the right project in the right way every time.

Systematic research by Charles, Chang-Richards, and You (2021) identified the need for a greater knowledge of success elements in construction project management to produce good outcomes. Another research found 31 essential factors classified as technical, financial, and qualification, highlighting the importance of financial components in project performance (Naji, Gunduz, and Falamarzi, 2022). The scientific identification of these success characteristics was critical to boosting construction project performance was validated by empirical research (Wan and Wang, 2010).

This research addressed Williams' (2016:97) notion of project success that centred on the "iron triangle" of time, cost, and quality. This research was intended to bridge this gap by exploring not just the factors that contribute to project success, but also the causal linkages that underpin these accomplishments. This entailed investigating how authentic leadership, may affect these causal linkages, resulting in more effective and sustainable project findings in Durban's complex construction industry.

In the 21st century, our ideas about what makes a project successful are changing even more, including how well it meets the client's strategic goals and helps the business succeed. Even though researchers do not agree on how to define project success, there are some things that both researchers and practitioners agree on, and that helps us understand what it means (Mir and Pinnington, 2014:203)

There are practical benefits that are linked to analysing project performance for businesses. Companies need to document project outcomes for future reference and improvement. It is nearly impossible in project management to achieve absolute success; however, some success can be attained in the eyes of the stakeholders. Different people

involved in a project will have different opinions on its success. According to Kloppenborg (2014:9), the project manager and his team have the success of a project riding on previous successes in which the project sponsor plays an important role. Over time, there is a shift in how the project's success is evaluated. The performance of construction projects cannot be evaluated without an appropriate definition of project success. However, what exactly does "construction project success" entail?

3.6.   Construction Project Success

Projects generally involve large, expensive, unique, or high-risk endeavours that must be performed by a specified date, for a certain sum of money, within a given budget and a certain level of performance. This tripartite success criterion—meeting cost, time, and performance objectives have, over the decades, become the norm. It has since become a widespread standard. Project success is the basis for managing and directing ongoing projects and planning and organising future projects (Silva and Warnakulasooriya, 2016:698). Therefore, it is crucial to evaluate project success in the construction industry to gain a better perspective on key project result areas; evaluate project managers based on their track records of managing successful projects and performance bonuses, raises, and promotions.

The absence of an agreed-upon criterion for project success is one of the key causes of failures in defining and assessing success. The subject becomes complex in the context of the construction business. In the construction business, the idea of project success has remained vaguely defined. Due to the wide variety of project locations, the strong pressure on demanding construction time and cost, the large number of project respondents with diverse goals, and the rising complexity of construction processes, construction projects are inherently high risk and complicated.

Project Management (PM) is the application of knowledge, skills, tools, and methods to project activities to achieve project requirements (Project Management Institute, 2017). Project success factors are those that affect, comprise, and decide the success of a project. It is nearly impossible to attain absolute success in a project; however, only a perception of success can be attained. Each participant has a unique understanding of what constitutes a successful project, but all agree on the success of achieving the project's objectives and meeting stakeholders' expectations. These objectives and

expectations include, but are not limited to, technological, monetary, educational, social, and professional concerns.

The undertaken research used Niazi and Painting's (2017) and Turner and Zolin's (2012:89) definitions of construction project success. They suggested that project success is determined by how well stated performance objectives, such as scope, cost, and time, are reached, as well as if the project's output fits the stipulated criteria. This understanding informed my inquiry into how leadership, particularly authentic leadership, helps to attain these success metrics in the context of Durban's construction project.

This inquiry was based on Serrador and Turner's (2015) definition of time and cost. Time is measured in terms of construction duration, speed, and overruns, whereas cost includes not only the initial budget, but also additional costs incurred because of alterations, modifications, and legal claims. This approach enabled me to investigate how authentic leaders navigated these critical components of time and cost, influencing the total success of construction projects in the Durban setting.

3.7. Leadership In Construction

This research addressed the leadership problems as stated by Liphadzi, Aigbavboa, and Thwala (2015), as well as the project manager preferences reported by Bon-Gang (2018). The inquiry considered Bygballe and Swärd's (2019) observations on stakeholder participation in construction projects. The research addressed how reinventing leadership approaches, particularly authentic leadership, might improve project performance in the face of such problems. This involves analysing the efficacy of various leadership techniques in the specific setting of Durban's construction industry, as well as measuring the influence of leadership styles on managing human assets, which are crucial but difficult to measure.

There are no reservations about the contribution of technical aspects of Project Management to project success; nevertheless, soft skills are equally important. In recent years, this approach seems to have been gaining ground. The research incorporated Toor and Ogunlana's (2009:150) perspective that the success of construction projects heavily relies on the capabilities, personalities, characteristics, skills, and leadership styles of Project Management Professionals. This point of view emphasized the

significance of leadership in project management, motivating my inquiry into how these characteristics, particularly within the framework of authentic leadership, contributed to the success of construction projects in Durban's complex and dynamic environment.

This research was motivated by the findings of Skipper and Bell (2006), Crawford (2007), and Thompson (2012), all of which emphasized the importance of leadership abilities in the success of projects. The inquiry stressed the significant link between Project Management Professionals' abilities, particularly their leadership characteristics, and the findings of construction projects. The research investigated this correlation in the construction industry in Durban focusing on how project managers' authentic leadership traits influenced project success thus providing knowledge on the impact of a project manager's leadership style and skills on the performance of construction projects.

The research combined the perspectives of different studies all of whom highlighted the importance of leadership in project success. Kouzes and Posner (2013) emphasized the need of executive cooperation and empowerment, whereas Liphadzi et al (2015) identified a correlation between leadership styles and project success. Tabassi et al (2016:725), further emphasized that leadership style and project and team management may considerably improve productivity and, critically, contribute to successful project delivery. This paradigm led the investigation of how different leadership styles influenced project findings in the Durban construction industry.

The inquiry acknowledged the global recognition of leadership in defining visions and goals and encouraging followers to works towards common goals. Leadership is essential in directing team members in the construction industry. However, it was observed that the South African construction industry, notably in Durban, has yet to achieve its pinnacle in terms of effective project execution. This is due to the industry always encountering new problems, which complicates project completion. This approach provides a different perspective on how leadership in this setting may solve these issues and increase the rate of successful project execution.

3.8. Authentic Leadership and Project Success

Recently, projects have become the widely acceptable means to manage and complete new initiatives with specific scopes and requirements (du Plessis, 2014). According to Besner and Hobbs (2006:38), research on success factors affecting project success has proved challenging. Many researchers have come up with different combinations of project success factors. Cooke-Davis (2004) posited that three ways contribute to project success: doing the project right, doing the right project and doing the right project in the right way every time. Thite and Simpsons, as cited by du Plessis (2014), pointed out that an appropriate leadership style can lead to better performance; they further confirmed that projects require effective leadership to be successful.

The research investigated the significant correlation between project success and the competency of Project Management Professionals within the South African construction industry as noted by Crawford (2005). Crawford's emphasis on leadership skills was expanded and aligned with Ong et al. (2009)'s multifaceted skill set for effective leadership, which includes vision, emotional intelligence, credibility, adaptability, innovative problem-solving, and tolerance for ambiguity. The investigation looked specifically at how these characteristics were manifested and modified by project managers and leaders in Durban, as well as the continuum of leadership styles in response to the distinct local difficulties. The research offered a distinct contribution through the investigation of the impact of authentic leadership in Durban's construction environment. This ultimately led to the research contributing to the current literature and expanding on Crawford and Ong et al.'s core ideas. The inquiry provides fresh insights into the use and efficacy of authentic leadership, it also highlights the significance of authentic leadership in boosting project success in Durban construction projects.

An authentic leader is positive, optimistic, resilient, truthful, future-focused, moral/ethical, and places a premium on training other team leaders (Luthans et al., 2003:298). Moreover, authentic leaders not only conduct themselves according to their principles, but they also establish credibility and acquire the respect and trust of their workers (Avolio and Gardner, 2005:316). Employees who are led by management with authentic leadership assign good traits to their leaders and, as a result, absorb their views and ideals and act morally. Moreover, people perceive authentic leadership behaviour as a

greater degree of justice and honesty. As a result, employees exhibit a higher degree of incentive to behave positively by carrying out their duties as anticipated and desired (Ilies et al., 2005). We assume that authentic leadership affects the success of the project favourably. The self-awareness of authentic leaders is elevated. People better understand their strengths and weaknesses through self-reflection on their personality, emotions, motivations, values, cognition, feelings, behaviours, and actions.

Based on the findings by Forner et al. (2020) this research investigated the importance of self-awareness in leadership with a focus on the Durban construction industry. According to Forner et al., leaders who are more aware of their own behaviours, principles and convictions are more likely suitable candidates for leading their teams. Expanding on this idea, the research thoroughly investigated how project managers' self-awareness affects team dynamics and project success. This strategy provided clarity on the necessity of self-awareness as a fundamental element of successful leadership. This research adds important regional viewpoints to the continuing discussion regarding effective project management in Durban's construction industry.

Employees with the relational transparency of an authentic leader effectively perform, which boosts the project's performance, and benefit greatly from these relational traits when used in project activities. Moreover, earlier empirical research revealed that authentic leadership inspires people by modelling and expressing a strong feeling of responsibility in employees to perform and deliver the desired outcomes, namely project success (Walumbwa et al., 2010:902).

The purpose of this research was to investigate the unique contributions of authentic leadership to project success in the Durban construction industry. While project managers play an important role as project scope administrators and in managing project interpersonal elements, this research identified how their authentic leadership attributes impact the success of construction projects. The goal was to investigate the distinct influence of authentic leadership on project outcomes, offering significant industry insights.

3.9.   Summary and Conclusions

The construction industry is vitally important in the South African labour market. In South Africa, the construction industry provides a large share of the national economy by employing the least trained elements of society. With at least 1.38 million people working in the construction industry either on a contract or permanent basis, there is a mounting concern that the lack of effective leadership competencies affects the successful completion of construction projects.

The industry faces several challenges that threaten performance, development, and growth, with cost and timeline overruns as the prominent issues. This is a critical issue in residential construction when actual costs diverge significantly from budgeted costs. Project Management Professionals are ultimately responsible for delivering projects within budget, on time, and fulfilling requirements. However, little research has been conducted on the causal chains leading to project success. A project's success is how well it meets the client's strategic goals and helps the business succeed. Therefore, evaluating project success in the construction industry is crucial to better understanding key project result areas.

It is nearly impossible to attain absolute success in a project; however, only a perception of success can be attained. Each participant has a unique understanding of what constitutes a successful project, but all agree on the success of achieving the project's objectives and meeting stakeholders' expectations. Unfortunately, South Africa's construction industry has not reached its peak regarding successful delivery. As a result, there is a growing concern about the suitability of focusing on hard approaches to enhance project success. Despite the difficulty quantifying human assets as success criteria, they are an important addition to the easily measurable technical parameters.

In response, there's a growing recognition of the importance of leadership style in project performance. Effective project leadership, as characterized by vision, emotional intelligence, credibility, adaptability, innovative problem-solving, and tolerance for ambiguity, is crucial. Leadership in this context is not static; it is a continuum offering endless possibilities tailored to the individual, context, and situation. The role of authentic leadership, especially, is increasingly acknowledged. Ilies et al. (2005) highlighted the elevated self-awareness of authentic leaders and its positive impact on employees,

fostering a culture of commitment and open communication. This approach emphasizes learning and transparency, essential components for adapting to the dynamic demands of the construction industry in South Africa.

CHAPTER 4

RESEARCH METHODOLOGY

4.1. Overview

This chapter begins with an outline of the research approach adopted in this research. This is followed by an explanation of the methods of data collection, which includes the selection of respondents, a description of the research setting and an overview of the data collection setting, which includes procedures adopted. After that, considerations around trustworthiness and reflexivity are outlined, and a description of the data analysis is offered.

4.2. Problem Statement

The 2022 Research and Markets report emphasized the construction industry's critical position in South Africa's economy, which is facing leadership skill shortages, as noted by Alade (2022). These deficiencies have an influence on project and business performance with a significant lack of leadership training contributing to high project failure rates in construction. Existing research such as Pretorius, Steyn, and Bond-Barnard (2018) recognized the relevance of leadership in project management, but the precise effect of authentic leadership in Durban construction is fairly known. This research addressed this need by investigating how authentic leadership attributes among project managers in Durban's construction industry impact project performance, with an emphasis on components such as transparency, moral standards, and balanced processing. This inquiry is critical for building successful leadership models and policies in the construction industry, with the goal of improving project management and lowering costs.

4.3. Research Objectives

This research aimed to investigate whether a relationship exists between the constructs of authentic leadership and the   elements of project success in construction projects. As clearly defined in Chapter 1, the objectives of the research would be as follows:

- To examine the role of authentic leadership in successfully delivering construction projects.
- To identify specific authentic leadership traits and how they impacted project success in the construction industry.
- To identify similarities and differences in leader and manager attributes required by construction project managers.
- To develop a project leadership and management framework for effective project performance in construction projects.
- To develop a leadership development strategy that augmented the leadership capabilities of construction project managers.
- To critically examine how construction project managers evolved their leadership skills to handle challenges in the construction industry.

4.4. Research Design and Approach

Research by Saunders, Lewis and Thornhill (2019) described research design as a common course for carrying out research. The data collection, analysis, interpretation, and presentation methods form part of the research design. Different methods can be used to carry out research. Different methodologies can be applied to collect data in social sciences. According to Teddlie (2020), researchers can conduct their studies using various methodologies, including qualitative, quantitative, and combined approaches. A thorough investigation of the relevant literature indicates that most of the research on leadership is quantitative and typically explores the characteristics and methods of leadership that are most effective in various fields. Other researchers used qualitative methodologies that allowed them to interact in-depth with the individuals.

Considering the above context, the research was undertaken using the quantitative paradigm. The research solely involved a quantitative, non-experimental, correlational inquiry employing regression analysis. This proved the most effective way to comprehend the link between authentic leadership and project success. Correlational research allowed the researchers to examine the degree of association between two variables and establish a link between authentic project managers and project success. Correlational design was the most suitable tool for researching this relationship without manipulating variables or controlling extraneous factors.

The most defining characteristic of quantitative research is that it establishes organised cause-and-effect relationships (Gray,2018). Quantitative research provides solid findings about the aims of the research. Since respondents do not need to report to a particular site, the paradigm also made it possible to conduct the research remotely. A quantitative approach using a questionnaire-based survey design was used.

This approach allowed the researcher to concentrate on a relatively limited number of ideas and analyse numerical data using statistical techniques. It also enabled the collection of direct information from the respondents. Due to the research being widely dispersed around Durban, a quantitative method was the most practical, as questionnaires were simpler to administer online and at workplaces. The research utilised both an online survey and a paper-based survey. The questions were developed in a manner that helped the research to achieve the research objective and provide answers to the research questions. The survey questions were kept straightforward with no bias.

The research conducted a pilot test with a small group comprised of 12 respondents who were researching with MANCOSA and working in the Durban construction industry. 7 respondents were project managers and 5 were team leaders. The questionnaires were distributed via email, social media platforms such as WhatsApp Groups and LinkedIn and in person by the researcher. In addition, all respondents signed a consent form to ensure the confidentiality and anonymity of their responses and comply with any relevant ethical guidelines and regulations.

4.5. Research Methods/Processes

According to Gray (2018), the total number of distinct units or components accounted for in the research is referred to as the population. Researchers must specify the sampled components, the geographic limits, and the location. This will provide the research with a target population representing a pool of examples that the research wishes to analyse (Neuman 2003).

This research concentrated on project management professionals and people on the project team who undertake project management duties, either as formally designated project managers or as unofficial leaders who fulfil a project manager position.

Potential project management professionals for this research were identified through Project Management Institute (PMI) chapters and through MANCOSA students who were involved in Project Management and Project Management groups on social media. PMI is a U.S.-based professional, premier project management organisation headquartered in the United States. As PMI is a big worldwide organisation for project management (Project Management Institute, 2021), it was fair to invite fellow PMI members to participate in this research.

4.6. Sample Frame

The quantitative non-experimental research's sample frame comprised PMI members in the Durban Chapter, MANCOSA students who work on construction industry projects, and people who belong to LinkedIn and other social media groups dedicated to project management. This sample frame served as the basis for participant selection, and it appropriately represented the population under research to guarantee the validity of the research's findings. In addition, the sample frame consisted of individuals who are project management professionals or who serve as project managers within their businesses. Possession of an email account and access to a device for responding to the Survey Monkey or Google Questionnaire were additional qualifying conditions.

4.7. Sampling Method

The research used a quantitative research strategy, concentrating particularly on the sampling methods. The basic goal of sampling in quantitative research is twofold: first, to properly measure variables, and second, to generalize findings from a well selected representative sample to the larger population. A representative sample is one that has all the important features of the population from which it was collected.

Nonprobability sampling was used to acquire data from a specific population. The emphasis was on people working in the Durban construction industry in project management or similar responsibilities. Purposive sampling was used to choose respondents, with a particular emphasis on expert sampling. According to Trochim (2007), purposive sampling is useful for swiftly picking a sample based on preset criteria. The researcher used this non-probabilistic strategy to choose individuals who have certain attributes relevant to the research subject. In contrast to attempting statistical

generalizations applicable to a wider population, such a strategy is critical for acquiring significant insights into the subject matter.

The research required people involved in projects in the construction industry in Durban. These people were mostly identified through the PMI Durban Chapter, MANCOSA part-time students who work in construction projects and people who belong to LinkedIn and other social media groups dedicated to project management. The respondents provided rich and detailed information on the research topic.

4.8.   Sample Size

Effect size estimate is a statistical metric that measures the strength of the association between two variables or the degree of the difference between two groups. In addition to statistical significance, it helps assess the practical importance of a finding by providing an understanding of the scale of the impact and its practical ramifications. For example, according to Ferguson (2009:534), we can determine that for correlational investigations, an effect size of 0.40 is acceptable for conveying the amount of link between dependent and independent variables.

According to research by Bhalerao and Kadam (2010:55), the alpha level is a statistical term for the significance threshold used in hypothesis testing. It is the likelihood of rejecting the null hypothesis when it is true. In other words, alpha is the degree of risk one is ready to accept for committing a Type I error, which is the incorrect rejection of a valid null hypothesis. The most frequent alpha level is 0.05, corresponding to a Type I error probability of 5%.

This research's sample size was estimated using the G*Power 3.1 program with the following parameters: effect size estimate (r = 0.40), alpha level (α = 0.05), and power level (1 - β = 0.85). G*Power is a statistical power analysis software program that provides sample size calculations for various research designs. The program determined the number of respondents required for a research based on the desired level of statistical power. The research employed a sample size of 80 respondents against the recommended 40 from the software, as shown in figure 4.8, to accurately represent the target demographic.
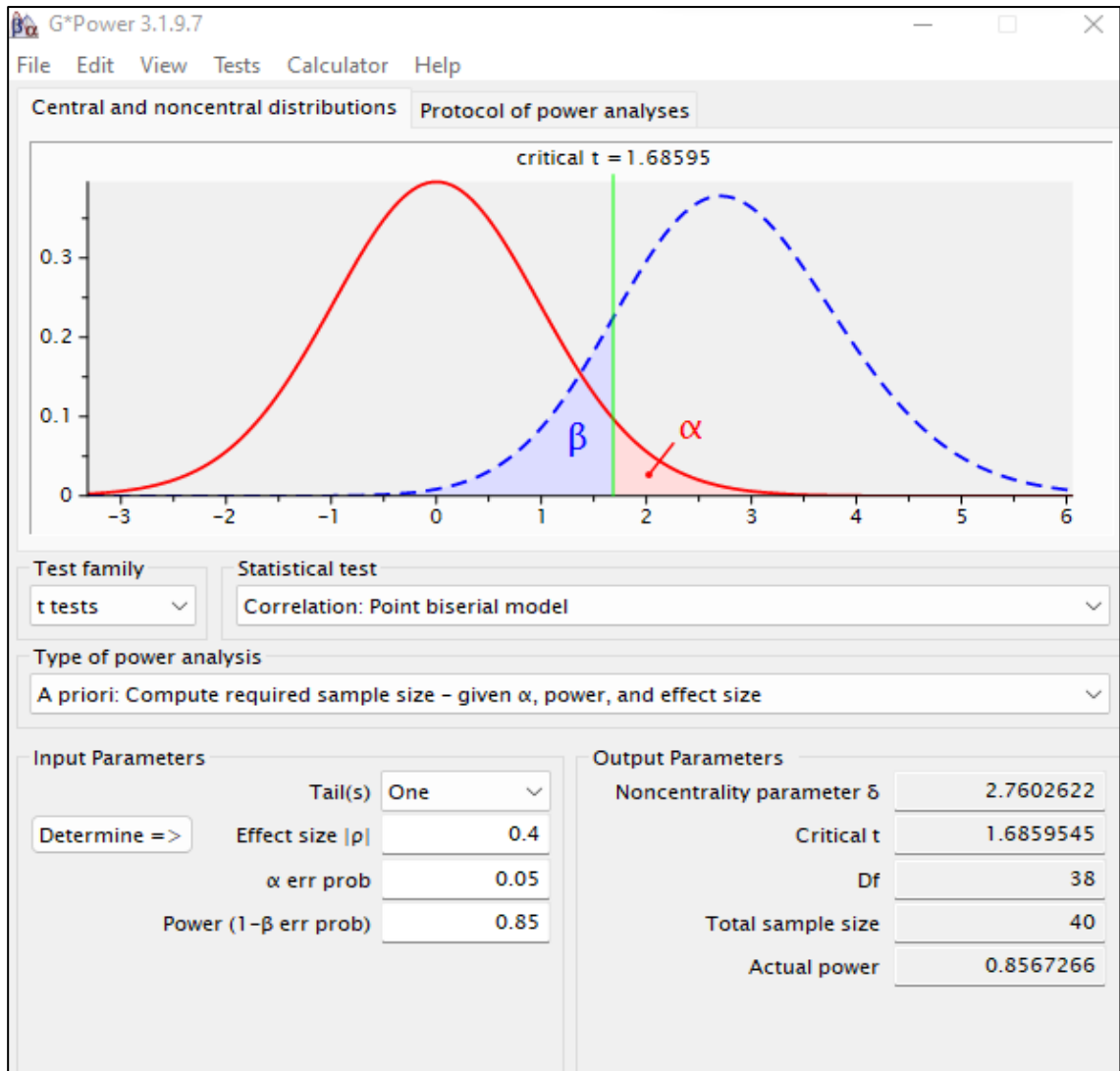
Figure 2 G- Power Sample Determination

4.9. Data Collection Instruments

Structured questionnaires were used to facilitate the gathering of consistent data from a large population across all respondents in the research. The researcher sent invitations to participate to potential respondents who provided their email addresses, and the invitation was on the social media sites including LinkedIn and WhatsApp. Respondents who accepted the invitation were given access to a web-based informed consent form and a questionnaire. Statements included in the questionnaire were constructed based

on the operationalisation of the variables, and respondents were required to indicate the frequency with which they participated in the behaviour described. According to Zohrabi (2013:255), questionnaires are an effective method of collecting primary data in any research.

The questionnaire was divided into three sections. Respondents ' eligibility was determined in the first portion, "Section A", where specific demographic information was requested. In addition, they were asked about their job title, education, years of experience working on projects, their own ideas about what makes a project successful, their impressions of the project portfolio at their company, the most worthwhile projects completed there over the past five years, and the project management approach their company employs.

In the second section (Section B), they rated statements about their level of self-awareness, self-regulation, relational transparency, and balanced processing using a Likert scale. A Likert scale was also used in the third segment (Section C), with respondents ranking comments about how they measure the effectiveness of projects inside their organisations. The Likert scale employed in section B and C were a 5-point for the responses where:

1 = Strongly Disagree, thus suggesting the respondent believes the statement does not at all reflect their experience or opinion.

2 = Disagree thereby implying the respondent generally finds the statement unrepresentative of their experience or opinion.

3 = Neutral suggesting the respondent is in middle ground where they can neither agree nor disagree.

4 = Agree thus indicating that it aligns well with the respondent's experience or opinion.

5 = Strongly Agree, this being the highest suggesting that the respondent believes the statement very accurately represents their experience or opinion.

4.9.1. Data collection/fieldwork

How a survey is carried out will directly influence the questionnaire format (Saunders et al., 2012). When determining which approach would be most suited for the research, the research considered a variety of resources, including budget and time. As a result, the surveys for the research were conducted online and as well as issued in hard copies. The distribution of questionnaires for this research began in mid-August 2022, following the issuance of the necessary ethical clearance certification. This process began in strict accordance with the stated ethical rules and regulations relevant to the research topic. For the online survey, the questionnaires were made available to respondents in the form of a link to the Survey monkey website as well as google documents. Because of the large number of individuals who have access to the internet, these distribution strategies were selected. On the other hand, delivery and collection were also employed to prevent the underrepresentation of certain demographic groups.

4.9.2. Data coding and analysis

Quantitative data from questionnaires were analysed using the following techniques:

4.9.2.1. Descriptive statistics

Descriptive statistics are techniques for calculating, describing, and summarising research data logically, comprehensibly, and effectively (Vetter, 2017:1798). Data collection, analysis, interpretation, presentation, and summarising are all topics covered by descriptive statistics, a subfield of statistics. The research used descriptive statistics to understand better the central tendency, variability, and distribution of the data gathered from questionnaires. The research conducted data preparation by cleaning and organising data to be ready for analysis using SPSS 29. This data was screened for missing or inaccurate data and converted into the appropriate format.

The fundamental statistical measurements, such as the mean, median, mode, standard deviation, and range, were calculated and presented through histograms, bar charts, and scatter plots. The visual presentation assisted in interpreting and summarising the data. Lastly, the research conducted data interpretation and presented the findings clearly and succinctly using tables, graphs, or textual summaries. This enabled the research to gain

a better knowledge of the properties of datasets and make informed judgments based on the data.

4.9.2.2. Correlation and Regression Analysis

According to Park and Yi (2021), regression analysis is a statistical approach for modelling the connection between one or more independent variables and a dependent variable. It is a quantitative research method used when modelling and analysing several variables in a relationship that comprises a dependent variable and one or more independent variables.

The research used regression analysis to evaluate the connections between a dependent variable (project success) and the independent variables (authentic leadership). The fundamental structure of regression models involves unknown parameters (), independent variables (X), and the dependent variable (Y). In essence, a regression model explains the relationship of a dependent variable (Y) to a function combination of independent variables (X) and unknown parameters (). It predicts the value of a dependent variable using the values of one or more independent variables.

The research implored research and regression analysis to address issues such as:

- What happens to the project's success when they are varying degrees of authentic leadership?
- What is the degree of dependence between the project success, authentic leadership, and independent variables?
- Can the link between project success and authentic leadership be utilised to forecast future project success values?

The research determined the dependent and independent variables and defined the research questions. Then, after collecting the data and examining it for outliers, missing numbers, and distribution normalcy, the research used linear regression. This made it simpler to understand the correlations between the two variables better and make data-driven conclusions.

The research acquired a more comprehensive picture of the data and the relationships between variables by combining descriptive statistics with linear regression. Using

descriptive statistics allowed the research to detect outliers or skewness in the data, while linear regression helped to model the connection between the variables.

4.10. Ethical Consideration

During this research, a code of conduct or an anticipated social standard of behaviour was considered to fall under the category of "research ethics. "Institutions, organisations, companies and individual members should abide by ethical standards at all times during the research process.

The research ensured that the research was conducted in good faith and in a considered manner and that it gave attention to the findings. The research reflects ethical conduct in the behaviour of the research who conducted the research, provided the findings, presented the findings, interpreted the findings, and suggested alternative solutions, and the respondents provided the data. In addition, the research considered ethical issues that could potentially harm the research respondents, such as sensitive questions, confidentiality and anonymity of the interviewee, and the legal issue of holding research data.

The research took into consideration ethics and governance when conducting the research. As a result, the research had the utmost respect for all research respondents and remained authentic throughout the research period. In addition, the research was carried out under the auspices of the ethical clearance committee of the Cape Peninsula University of Technology, and the university issued an Ethics Clearance certificate attached in Appendix C.

By adhering to the ethical processes and principles that govern research with people, the research made certain that the required precautions were taken to safeguard the rights of those who participated in the research as subjects. These values include, but are not limited to, respect for the autonomy of respondents, their agreement to participate in the research, confidentiality and ownership of the information collected.

The research ensured that all respondents were adequately informed about the research through an informed consent letter. In addition, the research made use of recommendations from Creswell (2006) which include:

- Non-disclosure of confidential information about the research respondents (respect for privacy) - code names were used for the focus group interviews.
- Usage of numbers to reflect the respondents in the research.
- Informed consent is obtained when the participant signs indicating an agreement to participate in an interview voluntarily.
- Freedom of choice or the right to decide whether to continue the interview.

4.11. Limitations

The data collection from just one city may limit the generalizability of the findings to other cities or countries that differ from Durban. While conducting this research in Durban provided a rich and relevant context for the research, the unique socio-economic, cultural, and industrial dynamics of the city meant that the findings and findings gathered may not be directly applicable to other urban settings with different dynamics.

These differences can potentially influence how leadership traits impact project success, resulting in different outcomes in different contexts. Therefore, while the research's findings offer valuable insights into leadership in construction projects within Durban, drawing conclusions on other cities or countries should be done with caution.

4.12. Demarcation/Delimitation

The boundaries of the research were strategically chosen to focus on Durban, a city with many development projects, making it an ideal setting for understanding the research problem of leadership in construction project management. With respect to the respondents, the research focused primarily on project management professionals and leaders in the construction industry in Durban. This research concentrated on project management professionals who undertake project management duties, either as formally designated project managers or as unofficial leaders who fulfil the project manager position and any other project personnel involved in construction projects. This ranged from Project Managers, Portfolio Managers, Project Administrators, Project Management Office personnel, Construction Managers, Site Managers, Design Managers, Procurement Managers and Contracts Managers. This perspective was chosen to ensure that the insights and data collected were directly relevant to the city's

unique architectural context and could provide specific insights into leadership development in this context.

4.13. Summary and Conclusions

This chapter provided a summary of the research methodology, beginning with a description of the research technique used in the research. This was followed by an explanation of the data gathering methods, which included participant selection, a description of the research environment, and an overview of the data collection protocols. Considerations for trustworthiness and reflexivity were also discussed, as was the data analysis procedure.

The research adopted a quantitative, correlational approach using regression analysis to analyse the link between authentic leadership and project success. The research targeted project management professionals in Durban's construction industry, using purposive nonprobability sampling to select respondents from PMI members, MANCOSA students, and LinkedIn groups. The sample size, set at 80 respondents, was determined using G*Power 3.1 based on defined statistical parameters.

Data collection involved structured questionnaires focusing on respondents ' demographics, leadership traits, and perceptions of project effectiveness. Ethical standards were strictly followed to ensure participant confidentiality and informed consent. The chapter acknowledged the research's limitations due to its geographical focus on Durban, which might limit the applicability of findings elsewhere. This research provided valuable insights into the influence of authentic leadership in project management within Durban's construction industry.

CHAPTER 5

DATA ANALYSIS AND ILLUSTRATION

5.1. An Overview

This section pertains to the visualisation of data following its cleaning process. The research instruments, such as questionnaires, were disseminated through various channels, including electronic mail, hard copies to ensure a diverse and representative sample. The returned questionnaires were exclusively printed to facilitate the subsequent scanning process.

The questionnaires were quickly screened for a completeness rate of over 90% in the quantitative analysis section. A minimum of 40 responses was required to meet the prescribed sample size. The final response rate culminated in 96 respondents, of which 80 surveys were completed. All the questionnaires with incomplete data were disregarded to prevent the findings from being skewed. This was particularly due to the requirements of SPSS 29. The software strictly requires that any missing data be replaced with zeroes.

The questionnaire was divided into three sections, namely Sections A, B and C. Each section was designed to solicit the experiences and perspectives of the respondents. Section A of the questionnaire was designed to determine whether the respondents were eligible by gathering certain demographic data. The research used a set of questions to solicit data to get a sense of the respondents ' backgrounds and opinions on projects. Some of the questions sought to capture respondents' occupations, educational backgrounds, and years spent in the workforce. The research also inquired how respondents assessed their company's project portfolio and their perspective on project success. The research also inquired about the preferred method of project management at the respondent's organisation and the most successful projects it has completed over the last five years.

Section B enabled the research to determine how well the respondents understood themselves and their ability to regulate their emotions. The section also assessed the

respondents on the ability to interact honestly with team members and made fair assessments. Respondents were given a series of statements and asked to indicate how strongly they agreed or disagreed with each one on a scale from "strongly disagree" to "strongly agree."

Finally, Section C employed a Likert scale to elicit the respondents ' opinions on the effectiveness of projects within their respective organisations. The research gave the respondents a list of questions and observations to rate. The research could comprehend the respondents ' opinions on assessing projects in their organisations.

The Likert scale employed in section B and C were a 5-point for the responses where:

1 = Strongly Disagree, thus suggesting the respondent believes the statement does not at all reflect their experience or opinion.

2 = Disagree thereby implying the respondent generally finds the statement unrepresentative of their experience or opinion.

3 = Neutral suggesting the respondent is in middle ground where they can neither agree nor disagree.

4 = Agree thus indicating that it aligns well with the respondent's experience or opinion.

5 = Strongly Agree, this being the highest suggesting that the respondent believes the statement very accurately represents their experience or opinion.

The data gathered from the respondents ' responses were put into SSPS 29, which made it simple to carry out an in-depth analysis of the information they provided. The data was presented using a variety of graphs, such as bar charts, pie charts, and histograms, to represent the findings.

5.2. Descriptive Statistics and Analysis: Section A

Section A of the questionnaire aimed to acquire more information about the participant's experience and viewpoint on project management. It also helped to understand the respondent's comprehension of project success and their respective organisational setting. This information was essential in determining whether there is a possible

correlation between authentic leadership and project success. Furthermore, by analysing the data collected, the research had a better understanding of the impact of authentic leadership on the success of a project.

The research made use of various graphs specifically tailored to the kind of data that was being displayed. For example, the research used bar charts and pie charts to represent categorical data, such as the proportion of respondents who replied "yes" or "no" to a question or the number of successful projects. The research also employed histograms to describe continuous data, such as the distribution of responses to questions posing a variety of potential values. In addition, scatterplots helped demonstrate the relationship between two continuous variables, such as the number of successful projects and the amount of time engaged in projects at a specific level.

This section further analysed the responses of respondents based on what each question was attempting to accomplish and present the findings using a suitable graphical representation tool.

5.2.1. What is your position in the organisation?

Table 1: Survey Respondents by Organisational Position.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Construction Manager	6	7.5	7.5	7.5
	Contract Manager	2	2.5	2.5	10.0
	Design Manager	4	5.0	5.0	15.0
	Health and Safety Manager	3	3.8	3.8	18.8
	Portfolio Manager	6	7.5	7.5	26.3
	Procurement Manager	3	3.8	3.8	30.0
	Project Administrator	14	17.5	17.5	47.5
	Project Management Office	10	12.5	12.5	60.0
	Project Manager	22	27.5	27.5	87.5
	Quality Control Manager	5	6.3	6.3	93.8
	Site Manager	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

Figure 3: Organisational Position.

Position in Organization

Legend:
- Construction Manager
- Contract Manager
- Design Manager
- Health and Safety Manager
- Portfolio Manager
- Procurement Manager
- Project Administrator
- Project Management Office
- Project Manager
- Quality Control Manager
- Site Manager
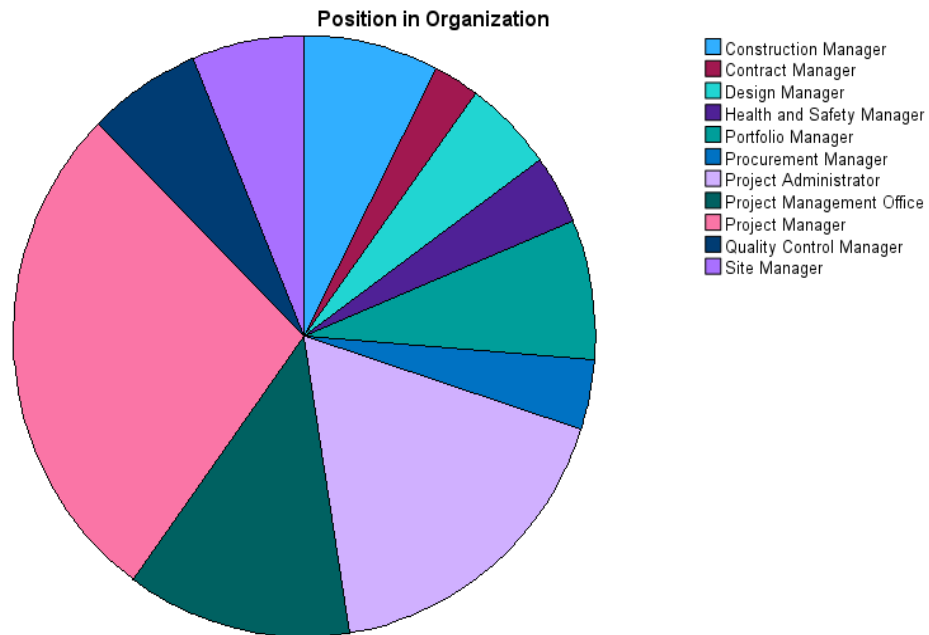
The research revealed a wide variety of organizational positions across the 80 respondents. This question was essential for evaluating how authentic leadership affects project success. 27.5% of the respondents were Project Managers who offered crucial insights into leadership and its influence on project execution. Project Administrators and Project Management Office staff made up 17.5% and 12.5% respectively. They provided perspectives on support and operations within their project leadership responsibilities.

Roles like Construction Managers, Portfolio Managers, and Quality Control Managers, each representing about 6-7% of the sample provided their viewpoints in the context of their leadership roles in various project management areas. The inclusion of roles such as Contract Managers and Procurement Managers despite having less representation with 2.5% and 3.8% respectively provided a more nuanced understanding of leadership's impact in term of the financial and logistical aspect of project execution.

Overall, this diverse range of roles among the 80 respondents provided a comprehensive data set which was crucial for developing effective leadership models and strategies for Durban's construction industry. This aligned with the research's goal of enhancing leadership skills in this field.

5.2.2. What is your level of education?

Table 2: Survey Respondents by Educational Level.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Apprenticeship	3	3.8	3.8	3.8
	Certificate	16	20.0	20.0	23.8
	Diploma/Degree	32	40.0	40.0	63.7
	Honours/Masters	14	17.5	17.5	81.3
	PHD	6	7.5	7.5	88.8
	Professional Ce	3	3.8	3.8	92.5
	Trade Certifica	2	2.5	2.5	95.0
	Vocational Trai	4	5.0	5.0	100.0
	Total	80	100.0	100.0	

Figure 4: Educational Level.
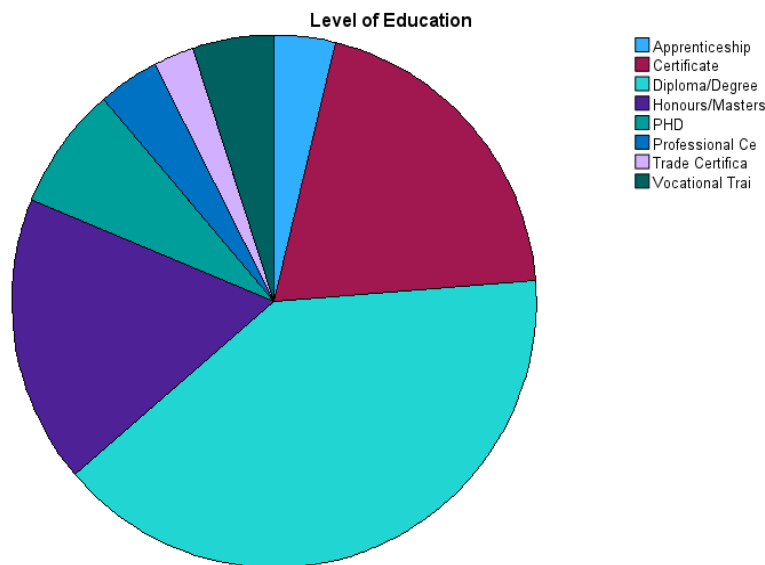
The question was intended to elicit educational qualifications of the survey respondents. A significant 40% of the respondents had a Diploma or Degree. This was an indication that a substantial number of professionals in the Durban construction industry had undergone significant academic training which might have influenced their approaches to project management and leadership. Out of the 80 respondents, 17.5% held Honours or master's degrees potentially endowing them with a more in-depth understanding of

leadership theories and project management approaches and their applications to yield maximum project findings.

20% of the sample had Certificates, this implied the respondents had practical qualifications thus possibly offering a more hands-on perspective to leadership within project management. PhD holders comprised 7.5% of the respondents suggesting a research-oriented approach to leadership. The remaining respondents were individuals who completed Apprenticeships, Professional Certifications, Trade Certifications, and Vocational Training thus suggesting an emphasis on the practical application of leadership skills.

The educational backgrounds of all 80 respondents revealed a diverse range of knowledge and capabilities among the Durban construction professionals. This diversity was vital in providing a cross-sectional view of leadership across various educational backgrounds. This view was essential in the development of leadership models and strategies that were inclusive and representative of the industry's educational spectrum.

5.2.3. How long have you been involved in projects at this level?

Table 3: Survey Respondents by level of involvement in projects.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11- 15 Years	26	32.5	32.5	32.5
	6 - 10 Years	23	28.7	28.7	61.3
	0 - 5 Years	12	15.0	15.0	76.3
	16- 25 Years	11	13.8	13.8	90.0
	Above 25 Years	8	10.0	10.0	100.0
	Total	80	100.0	100.0	

Figure 5: Level of involvement in projects.
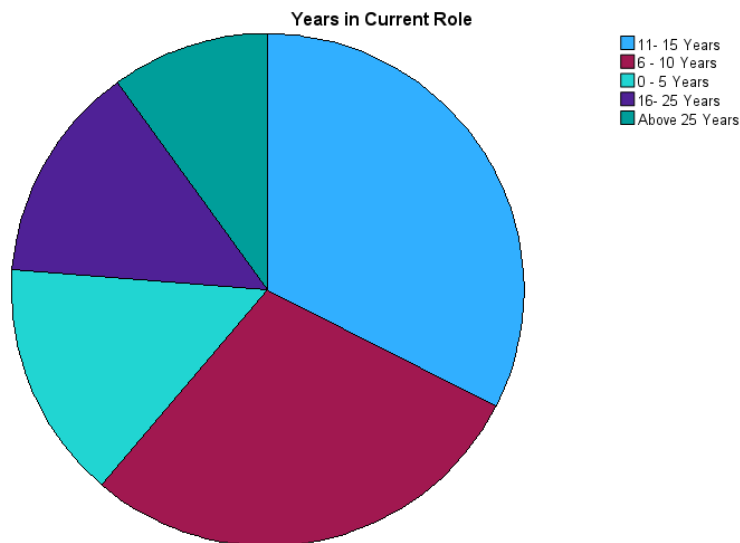
The survey data regarding the duration respondents have held their current positions provided insights into their experience level within the construction industry. The most represented group with 11-15 years of experience constituted 32.5% of the respondents. This indicated that a sizeable fraction of the survey respondents had substantial experience which potentially linked them with a profound comprehension of project management and a more seasoned approach to leadership.

Those who had been in their current role for 6-10 years accounted for 28.7% thus potentially suggesting a well-established understanding of the industry and reflective of developed leadership skills. Respondents with 0-5 years of experience made up 15.0% thus implying the research's incorporation of perspectives from less seasoned professionals. This inclusivity provided the research with a perspective on how emerging leaders perceive effectiveness and project success.

Respondents with 16-25 years of experience and those with over 25 years of experience gave considerable views and perspective to the research. Their contribution was useful for an in-depth understanding of enduring trends in leadership and project management. The diverse range of experience among the respondents provided a holistic overview of the Durban construction industry across various career stages. This overview allowed the research to further explore how varying lengths of experience affect authentic leadership in construction projects.

5.2.4. What would you consider a successful project?

Table 4: Survey Respondents by Individual Consideration of Project Success.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Within time, budget, and scope	39	48.8	48.8	48.8
	On Budget	16	20.0	20.0	68.8
	Within Scope	11	13.8	13.8	82.5
	Other	9	11.3	11.3	93.8
	On-Time	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

Figure 6: Individual Consideration of Project Success.
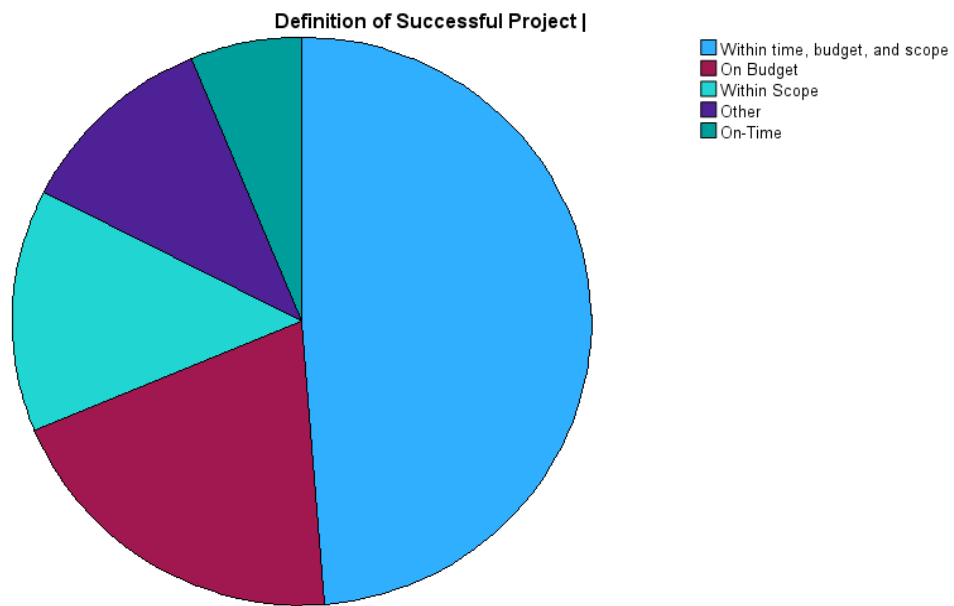
The survey findings revealed that the majority made up of 48.8% of the respondents considered a project successful if it satisfied its schedule, budget, and scope requirements. This implied that this group of respondents preferred a more holistic approach to project management which emphasises the equal relevance of all primary goals.

20% of the research's respondents defined success primarily in terms of budget adherence thus highlighting the importance completing the project within the allocated

budget in their perception of project success. 13.8% of the respondents emphasized on the adherence to project scope to their impression of success. 11.3% had other ideas about what constituted project success with consideration of client acceptance, team dynamics and other industry specific qualitative benchmarks. This range of viewpoints demonstrated the complexities of determining project success in the construction industry. Furthermore, 6.3% of respondents considered a timely delivery as a crucial and non-negotiable indicator of success. They emphasized on the significance of sticking to the project timeline.

The differing perspectives on project success reflected the complex and multi-dimensional nature of project management in the construction industry. The research findings highlighted the importance of an all-encompassing leadership and project management strategy. This approach goes beyond balancing time, budget, and scope to acknowledge other factors that impact the overall success of a construction project.

5.2.5. How successful do you perceive your organisation's project portfolio?

Table 5: Survey respondents by organisational project portfolio success

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mostly Successful	32	40.0	40.0	40.0
	Very Successful	18	22.5	22.5	62.5
	Slightly Successful	14	17.5	17.5	80.0
	Unsuccessful	13	16.3	16.3	96.3
	Other	3	3.8	3.8	100.0
	Total	80	100.0	100.0	

Figure 7: Organisational project portfolio success
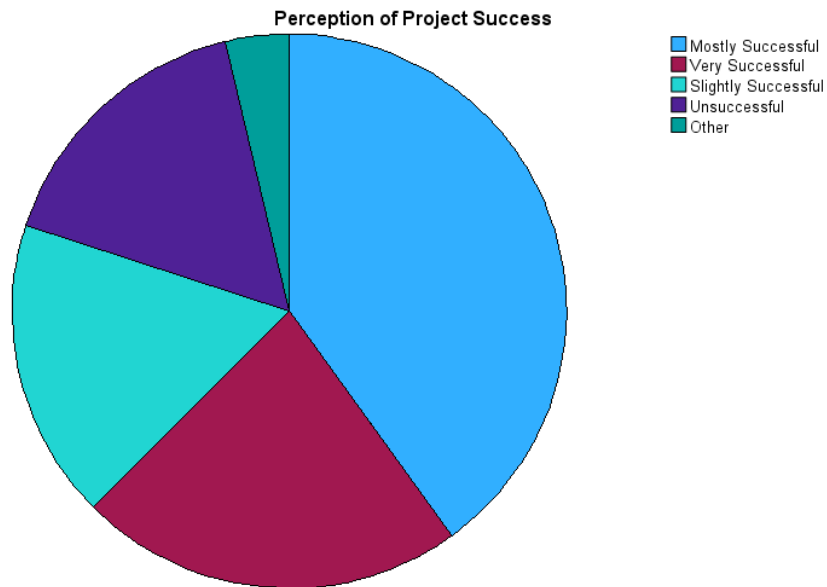
The findings from this survey on how respondents viewed project success within their respective organizations revealed a varied landscape. 40% of the survey respondents perceived their projects as mostly successful. This pointed to a generally positive trend in project completion though it was clear there is still room for improvement. 22.5% of respondents rated their projects as very successful. This rating shows that the respondents had high confidence in their organization's ability to manage projects effectively which is a positive testament to robust project management skills.

At the other end, 17.5% felt that their projects were slightly successful. This gave a hint at certain shortcomings in project execution or management within their respective organizations. These findings could be a call to action for better leadership or more refined management techniques. Close to this, 16.3% of respondents rated their projects as unsuccessful which was a clear sign of challenges in project management. This meant that the respondents' organizations require significant changes in strategy or process improvement to improve their project execution for better results.

A small segment, 3.8%, chose 'Other' to describe their project success. This possibly pointing to unique standards or goals specific to their organization or industry. This wide range of perceptions underscores the critical role of effective leadership in achieving project success, especially in the construction industry. The survey findings supported

the research's objective to examine the impact of authentic leadership on project outcomes thus giving a hint at a link between leadership approaches and how project success is perceived in these organizations.

5.2.6. How many successful projects have been delivered in the past 5 years?

Table 6: Survey Respondents by the number of successful projects in the past 5 years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Above 25 Projects	33	41.3	41.3	41.3
	16- 25 Projects	20	25.0	25.0	66.3
	6 - 10 Projects	12	15.0	15.0	81.3
	11- 15 Projects	10	12.5	12.5	93.8
	0 - 5 Projects	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

Figure 8: Successful projects in the past 5 years
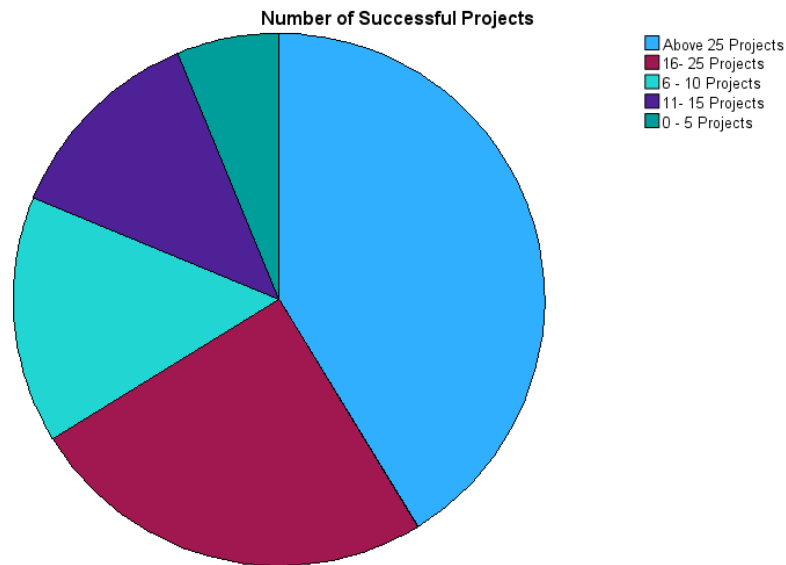
The survey findings regarding the completion of successful projects in the last five years highlighted that a larger proportion of respondents at 41.3%, indicated that their organizations successfully completed more than 25 projects. This level of output and

accomplishment reflects a notable degree in terms of productivity within their respective organization but also in the construction industry.

A further 25.0% of respondents had seen the successful completion of 16-25 projects thus illustrating commendable project delivery proficiency within their organizations. In addition, 15.0% of respondents acknowledged between 6-10 successful projects, while 12.5% reported between 11-15 successful projects over the past five years thus signifying moderate achievement in project completions. A smaller fraction of the respondents that is 6.3% reported a tally of 0-5 successful projects, which might be indicative of smaller or newer organizations or difficulties in project execution.

The collected data pointed to the fact that most of the the respondents' organizations had a substantial rate in project delivery. We can perceive this as an indication of effective leadership and project management methods. These findings are relevant to the research's investigation into the role of leadership in project results and they contribute significantly to the formulation of leadership frameworks and models that promote project success within the construction industry.

5.2.7. Does your organisation have an official Project Management Office (PMO)?

Table 7: Survey Respondents by PMO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	43	53.8	53.8	53.8
	No	37	46.3	46.3	100.0
	Total	80	100.0	100.0	

Figure 9: Presence of PMO

Presence of PMO
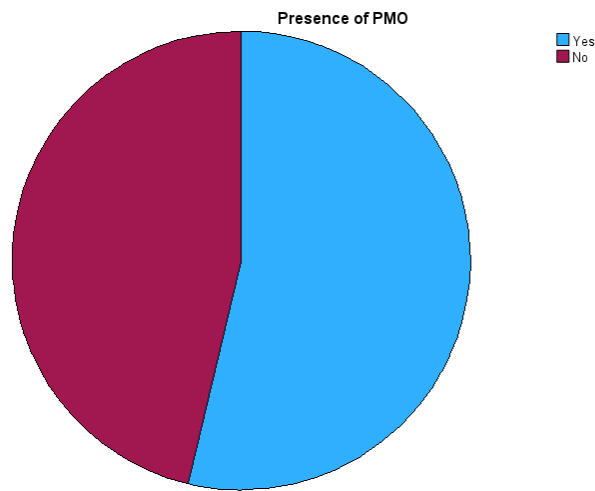
According to the survey data, 53.8% of the participants stated that their firms have a well-established Project Management Office (PMO). This can result in more consistent and potentially more effective project outcomes.46.3% of the respondents revealed that their organizations lack a Project Management Office (PMO). The lack of a structured Project Management Office (PMO) may indicate the organization's preference for a more flexible approach to the way it manages its projects.

A Project Management Office (PMO) can have a substantial impact on the overall success of projects. This aspect of the survey findings is relevant to the research's focus on the influence of authentic leadership in project management. The survey findings provided insights into the effectiveness of different management frameworks in the construction industry.

5.2.8. Which Project Management Methodology does your organisation use?

Table 8: Survey Respondents by Project Management Methodology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PMBOK	32	40.0	40.0	40.0
	Agile	16	20.0	20.0	60.0
	Prince 2	16	20.0	20.0	80.0
	Scrum	10	12.5	12.5	92.5
	Other (Specify)	6	7.5	7.5	100.0
	Total	80	100.0	100.0	

Figure 10: Project Management Methodology
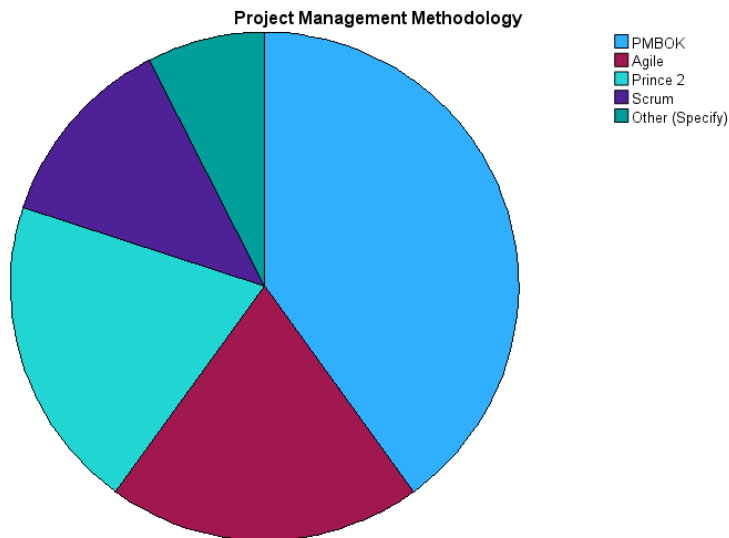
According to the survey findings, the predominant project management approach among the organizations represented by the respondents was PMBOK with 40%. This demonstrates a tendency for organized and uniform procedures recommended by the Project Management Institute. Both Agile and Prince2 techniques were employed by 20% of the organizations. This suggests that a considerable number of professionals were using flexible and iterative approaches together with process-focused frameworks to manage their projects. Scrum, which is a specific component of the Agile approach was utilized by precisely 12.5% of the respondents. This statistic emphasized Scrum's popularity in settings that prioritize gradual and repetitive project management. Finally, 7.5% of the participants employed 'Other' strategies which encompassed less prevalent

and more specialized project management techniques. These findings offer useful understanding of the many approaches used in the construction industry. The diversity in approaches highlights the significance of flexibility in leadership to accommodate various project management frameworks.

5.2.9. Conclusion

The descriptive statistics and analysis of Section A of the research questionnaire yielded useful insights with regards to the experience levels, educational backgrounds, opinions of project success and organizational contexts of survey respondents. The findings presented a wide array of positions within the construction industry, educational qualifications and years of experience thus highlighting the industry's diversity. The presence of several perspectives allowed us to gain a comprehensive understanding of project management and leadership.

Project Managers being the most significant group of respondents provided valuable insights into the direct impact of leadership on project implementation. The substantial proportion of respondents who had certificates or degrees suggested a level of academic rigour that could have influenced their leadership and project management approaches. Most participants with significant expertise recommended a deep understanding of project management and a seasoned approach to leadership. The impression of project success revealed a range of perspectives with most respondents deeming projects successful provided if they were delivered within the specified schedule, budget, and scope criteria. However, some individuals employed alternative measures which are organization specific to deem a project successful.

The research revealed that most of the organizations had accomplished a substantial number of successful projects in the last five years. This gave an indication of the presence of efficient leadership and project management strategies. The existence of a Project Management Office (PMO) in slightly more than 50% of the participants' organizations indicated a connection between well-organized project management methods and the achievement of project objectives. The PMBOK methodology was the most widely adopted project management strategy, with Agile and Prince2 following closely behind. This indicated a tendency for both structured and adaptable methods in project management.

To summarize, the descriptive statistics and analysis section of the questionnaire supported the research's emphasis on the relationship between authentic leadership and project success. The diverse approaches, criteria for project success, and organizational frameworks mentioned by participants highlighted the intricate nature of project management in the construction industry. The findings indicated that it is required to have leadership styles that are flexible and adaptable to navigate the varied project management approaches that were observed. The data obtained from the participants was extremely important in the development of leadership models and tactics that improved the outcomes of project delivery in Durban's construction industry.

5.3. Overview and Analysis: Section B

The first component of Part B of Section B was aimed at assessing the degree of self-awareness and self-regulation the respondents possess concerning their job positions as professionals in project management. This was relevant in addressing Research Question 2, which intended to determine the specific authentic leadership aspects directly impacting project success in the construction industry. The goal was to ascertain the extent to which the respondent's self-awareness and balanced processing contributed to project success. The question sought to determine the specific authentic leadership aspects directly impacting project success in the construction industry. The section evaluated all aspects of an individual's self-awareness and self-regulation. Some of the aspects for evaluation were recognition of one's emotions, understanding one's strengths and weaknesses, ability to make rational decisions and set and sustain goals.

The second component of the questionnaire of Section B, was designed to assess the extent to which respondents demonstrated behavioural patterns associated with authentic leadership. To be more specific, the questions were designed to evaluate the respondent's level of transparency, honesty, openness to feedback, readiness to confess mistakes, and consideration of the opinions of others. In addition, the self-awareness and self-regulation competencies of the respondents were evaluated using a Likert scale that measured from 1 to 5. This enabled a quantitative analysis of the respondents' assessments of these skills.

The section offered useful information for solving Research Question 2 and assessing the hypotheses linked with it. The questions presented in this section were deemed

appropriate and relevant to the research topic. They contributed positively to the literature on authentic leadership and successful project completion in the construction industry. The findings shed light on the specific authentic leadership components contributing to project success in the construction industry. Furthermore, the findings helped to develop strategies to assist project managers and leaders to pinpoint areas in which they might enhance their self-awareness and self-regulation abilities.

5.3.1. You are better able to understand your strengths and weaknesses.

Table 9: Survey Respondents by Ability to understand strengths and weaknesses.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	2	2.5	2.5	3.8
	3	6	7.5	7.5	11.3
	4	36	45.0	45.0	56.3
	5	35	43.8	43.8	100.0
	Total	80	100.0	100.0	

Figure 11: Able understand strengths and weaknesses.
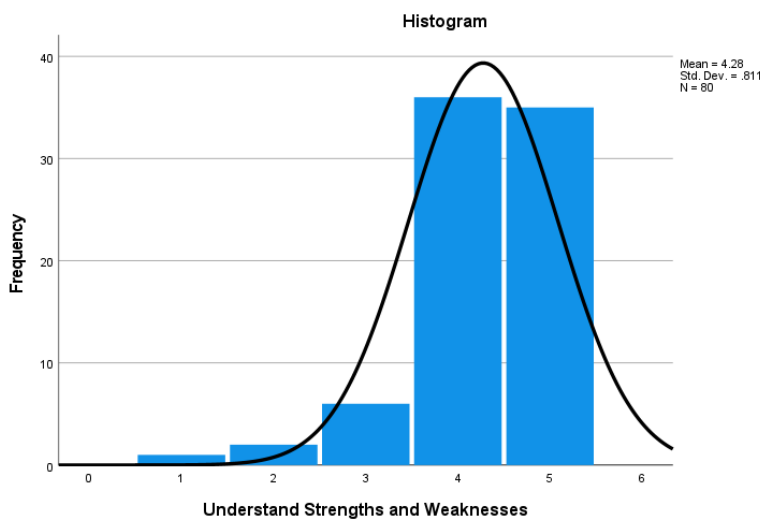
45% of the respondents rated their self-awareness a [5] meaning highly aware. A further 43.8% rated themselves a [4] meaning they are very aware. This suggests a strong

64

sense of self-reflection among respondents, which is a key aspect of authentic leadership. Most of the respondents were highly confident in their ability to identify both their strength and weaknesses for growth. Only 7.5% of the respondents reported a moderate level of self-awareness with a rating of [3]. A reassuringly low percentage indicated a lack of self-understanding with 1.3% rating themselves a [1] and 2.5% rating themselves a [2]. The mean score is 4.28 with a standard deviation of 0.81, suggesting a positive skew. The score also points to a high level of self-awareness among respondents. This aligns with the attributes of authentic leaders potentially influencing successful project delivery within the Durban construction industry.

5.3.2. You are more aware of your emotions and understanding their impact on others.

Table 10: Survey Respondents by Emotional awareness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	3	3.8	3.8	5.0
	3	7	8.8	8.8	13.8
	4	41	51.2	51.2	65.0
	5	28	35.0	35.0	100.0
	Total	80	100.0	100.0	

Figure 12: Aware of emotions and its impact

Histogram

Mean = 4.15
Std. Dev. = .828
N = 80

x-axis: Aware of Emotions
y-axis: Frequency
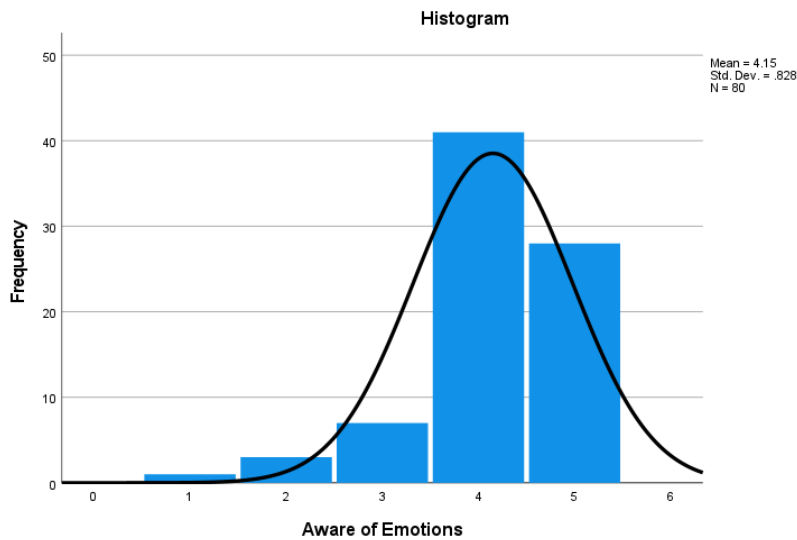
Respondents demonstrated a high level of self-awareness. Self-awareness is an important aspect of emotional intelligence in leadership. A significant number of respondents rating their emotional awareness quite high with 51.2% rating [4] and 35% rating [5]. This is a clear indication of robust self-perceived emotional awareness. This high level of emotional awareness can impact their decision-making and interactions in a project environment. 8.8% rating themselves as [3] which suggests an average level of emotional awareness. Only a small number of respondents rated their emotional awareness as low. 3.8% rating [2] and just 1.3% rating [1]. A mean of 4.15 and a standard deviation of 0.828 suggests a consensus among respondents on their emotional awareness. This underscores its potential importance in the context of leadership within the Durban construction industry. Understanding and acknowledging one's emotions is crucial for authentic leadership. It enables leaders to effectively manage complex interpersonal relationships within project teams.

5.3.3. You can instil trust and cooperation in people that report to you.

Table 11: Survey Respondents by Instilling trust and cooperation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	4	5.0	5.0	6.3
	3	12	15.0	15.0	21.3
	4	38	47.5	47.5	68.8
	5	25	31.3	31.3	100.0
	Total	80	100.0	100.0	

Figure 13: Instil trust and cooperation
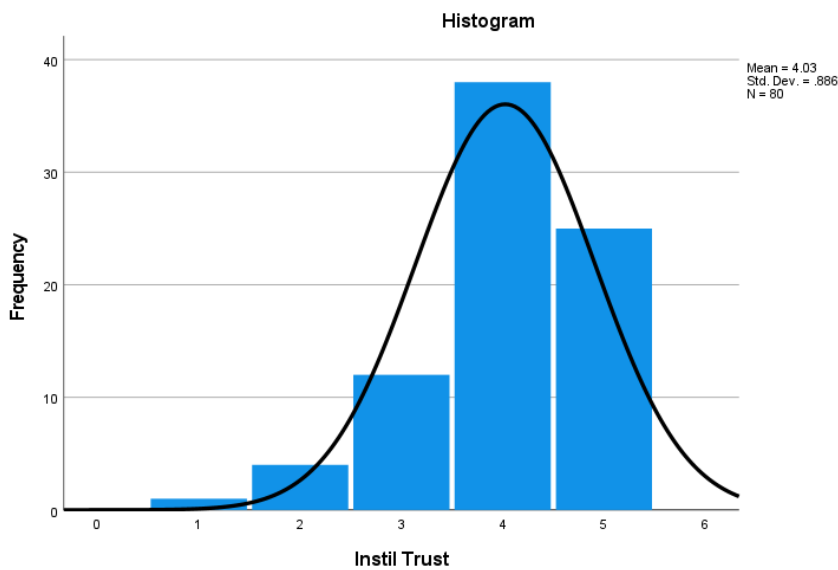
47.5% of the respondents rated themselves as a [4] while 31.3% rated themselves a [5]. This suggests a high level of confidence in their ability to build trust in their teams or organizations.15% of respondents rated themselves a [3]. This is an indicating of a moderate level of effectiveness in building trust. A smaller percentage of the sample, 5%, rated their ability to stimulate trust as low with a [2]. A very small fraction, 1.3%, rated the lowest rating [1]. The findings are an indication that a sizable number of respondents are self-assured in their capacity to establish trust. This attribute is considered a crucial

trait of authentic leadership especially when overseeing projects that require trust and team cohesion. A mean score of 4.03 with a standard deviation of 0.886 points to a culture of trust and strong interpersonal skills within the Durban construction industry. This is a positive reflection on project management dynamics.

5.3.4. You use emotional awareness for problem solving and less rigid decision making.

Table 12: Survey Respondents by use of emotional awareness for problem solving.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	4	5.0	5.0	6.3
	3	13	16.3	16.3	22.5
	4	40	50.0	50.0	72.5
	5	22	27.5	27.5	100.0
	Total	80	100.0	100.0	

Figure 14: Use emotional awareness for problem solving.
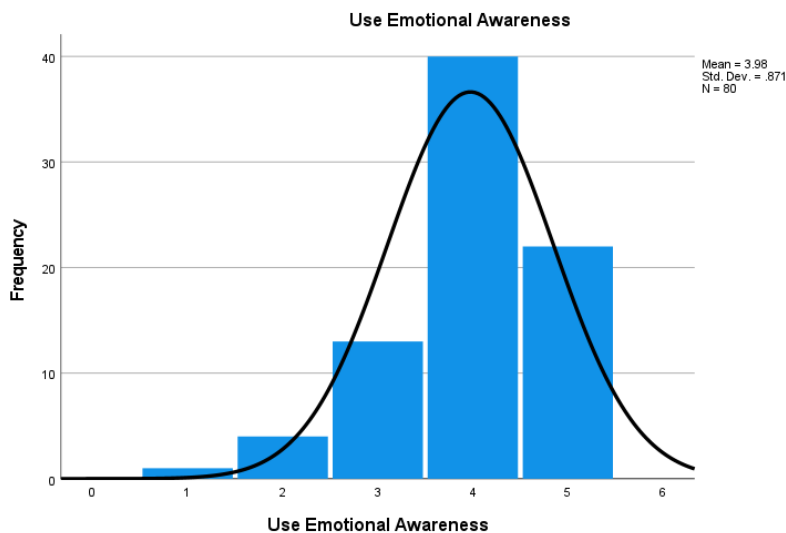
A significant number of respondents considered themselves competent in using emotional awareness for problem-solving. 50% rated themselves a [4] whilst 27.5% rated

themselves a [5]. This represents a strong inclination towards emotional intelligence among respondents. This aligns with traits of effective leadership. A small subset of respondents rated themselves lower. Only 1.3% rated [1], 5% a [2] and 16.3% a [3]. The mean rating of 3.98 with a standard deviation of 0.871 illustrates a positive self-perception of emotional awareness among respondents. This is most likely to contribute positively to project management success in the Durban construction industry.

5.3.5. You are more effective in conducting your work.

Table 13: Survey Respondents by effectiveness in conducting work.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	2.5	2.5	2.5
	3	7	8.8	8.8	11.3
	4	40	50.0	50.0	61.3
	5	31	38.8	38.8	100.0
	Total	80	100.0	100.0	

Figure 15: Effective in conducting work
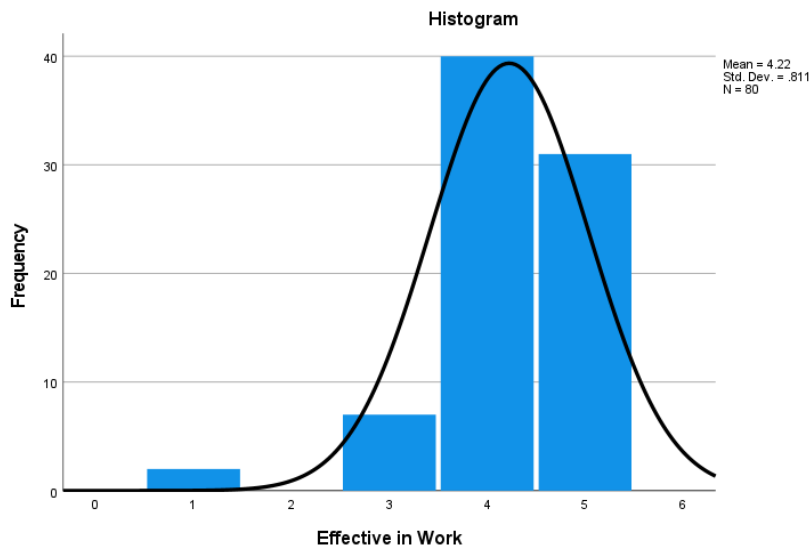
A significant number of respondents rated their own perceptions of work effectiveness as high. Half of them rated themselves [4], a further 38.8% gave themselves the highest

rating of [5]. These high ratings demonstrate a strong sense of capacity in their professional duties. Only 2.5% of the respondents felt less successful. An average rating of 4.13 and the standard deviation of 0.879 points to a workforce that believes it is knowledgeable and efficient. These findings highlight a tendency of confidence that may be associated with authentic leadership.

5.3.6. You can accurately recognise emotions; realise the impact they have on your behaviour which allows better follower relationships.

Table 14: Survey Respondents by recognition of emotions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	3	3.8	3.8	5.0
	3	9	11.3	11.3	16.3
	4	39	48.8	48.8	65.0
	5	28	35.0	35.0	100.0
	Total	80	100.0	100.0	

Figure 16: Effective in recognising emotions and their impact.

Mean = 4.13
Std. Dev. = .848
N = 80
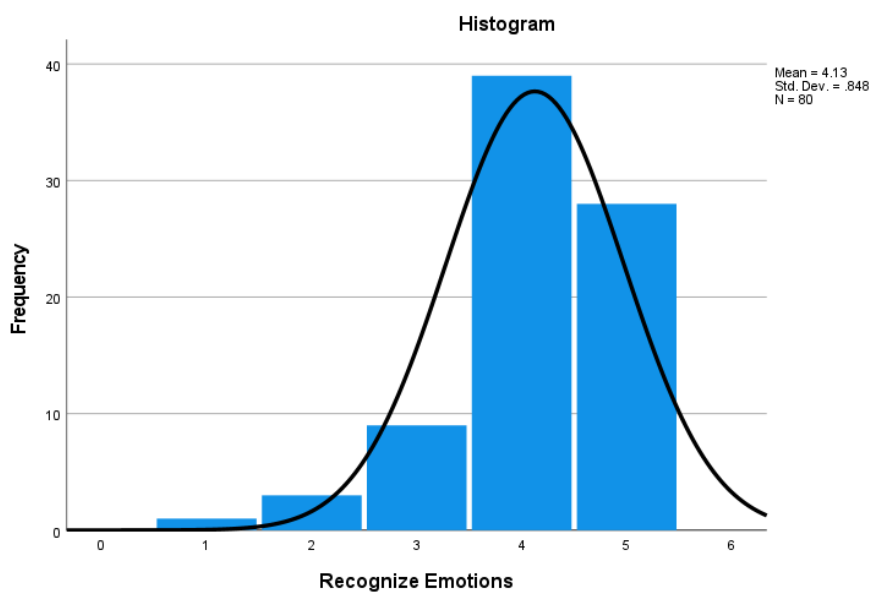
Most respondents believed they are effective when it comes to recognizing emotions. 35% of respondents rated themselves [5]. Furthermore, 48.8% rated themselves a [4]. Only 1.3% of respondents thought they were ineffective thus rating a [1]. In the middle was 3.8% and 11.3%, who were marginally more successful with a rating of [2] and [3] respectively. The findings indicate a concentration of self-perceived skill in emotional recognition closer to the higher end of the scale. A mean score of 4.13 and a standard deviation of 0.848 implies that the respondents perceive themselves as emotionally intelligent which is essential for authentic leadership.

5.3.7. You can recognise mistakes.

Table 15: Survey Respondents by recognition of mistakes.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	3	3.8	3.8	5.0
	3	6	7.5	7.5	12.5
	4	34	42.5	42.5	55.0
	5	36	45.0	45.0	100.0
	Total	80	100.0	100.0	

Figure 17: Ability to recognize mistakes.

71
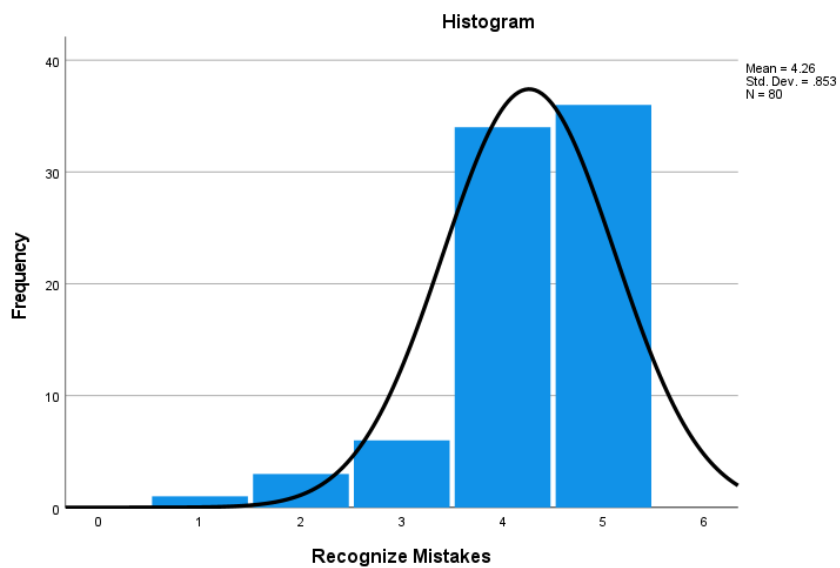
A combined total of 87.5% of respondents rate themselves highly thus underscoring the prevalence of insightful practices among respondents in the industry. Specifically, 42.5% rated [4] and 45% rated themselves at the top of the scale with a [5]. This is a clear suggestion of a strong inclination towards self-awareness and continuous improvement. 7.5% rated [3] ,3.8% rated [3] and 1.3% rated [1]. The findings indicate the survey respondents have a high level of self-perceived ability to recognize mistakes. This is a critical aspect of self-regulation which is one of the components of authentic leadership. An average score of 4.26 with a standard deviation of 0.853 suggest a relatively concentrated set of responses closer to the high end of the scale. This reinforces the notion that survey respondents are attuned to the importance of learning from mistakes for project success and leadership effectiveness.

5.3.8. You are a more effective decision maker.

Table 16: Survey Respondents by effective decision making.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	3	3.8	3.8	5.0
	3	9	11.3	11.3	16.3
	4	43	53.8	53.8	70.0
	5	24	30.0	30.0	100.0
	Total	80	100.0	100.0	

Figure 18: Ability to make decisions
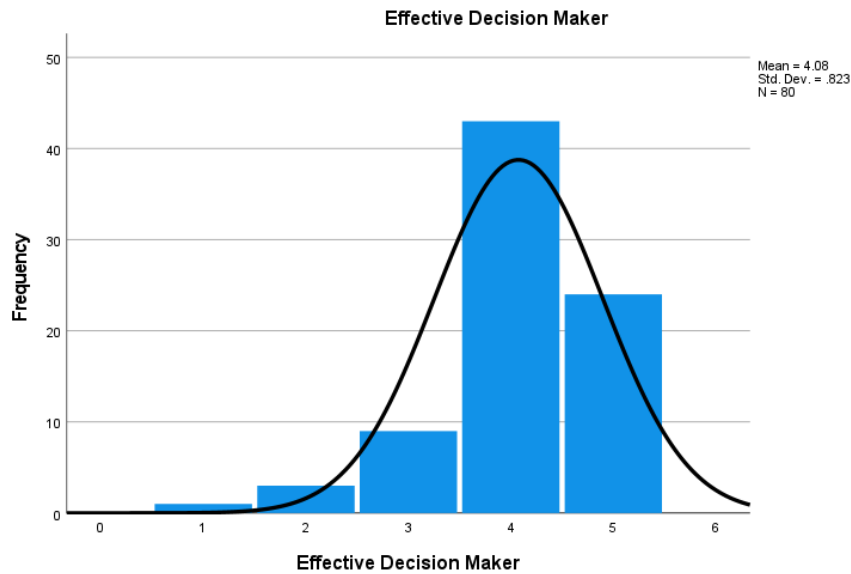
A major portion of respondents believed they can make successful decisions. This is an essential component of leadership in the construction industry. 30% of the respondents rated themselves a [5] while 53% rated themselves a [4]. In the middle, 11.3% rated themselves [3]. A further 3.8% and 1.3% rated themselves [2] and [1] respectively. This demonstrates a high degree of confidence in respondent's capacity for making decisions. It is an indication of leadership abilities present in the Durban construction industry. In summary, a large number of professional strongly believe they can make choices that will result in effective project completion. A standard deviation of 0.823 and a mean score of 4.08 supports the survey respondents' self-assessed efficacy in making decisions.

5.3.9. You keep track of your progress toward goals.

Table 17: Survey Respondents by tracking progress

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	3	3.8	3.8	5.0
	3	8	10.0	10.0	15.0
	4	36	45.0	45.0	60.0
	5	32	40.0	40.0	100.0
	Total	80	100.0	100.0	

Figure 19: Tracking progress effectiveness
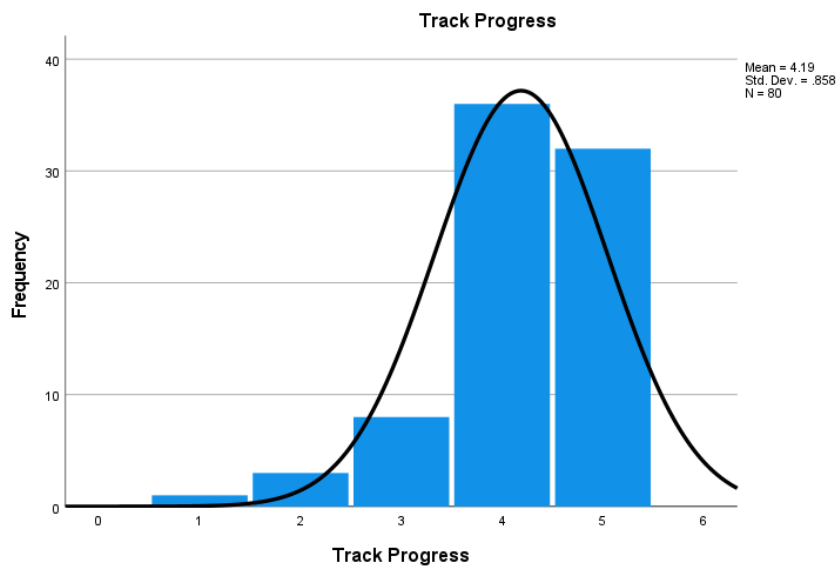
A notable number of respondents perceived themselves to be effectively monitoring their progress. This is a key component of authentic leadership. 45% rated a [4] and a significant 40% rated themselves a [5] for tracking progress effectively. Only a small number of respondents perceived their progress tracking as less effective. 1.3% rated [1] and 3.8% rated [2]. An average rating of 4.19 and a standard deviation of 0.858 suggests that professionals in the Durban construction industry are confident in their project management skills. This is particularly in relation to setting of goals and achievement. This positive trend is encouraging for the research as it highlights the

potential alignment of self-assessment with the authentic leadership trait of self-regulation.

5.3.10. You don't notice the effects of your actions until it's too late.

Table 18: Survey Respondents by recognition of effects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	7.5	7.5	7.5
	2	14	17.5	17.5	25.0
	3	29	36.3	36.3	61.3
	4	21	26.3	26.3	87.5
	5	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

Figure 20: Recognition of action effects
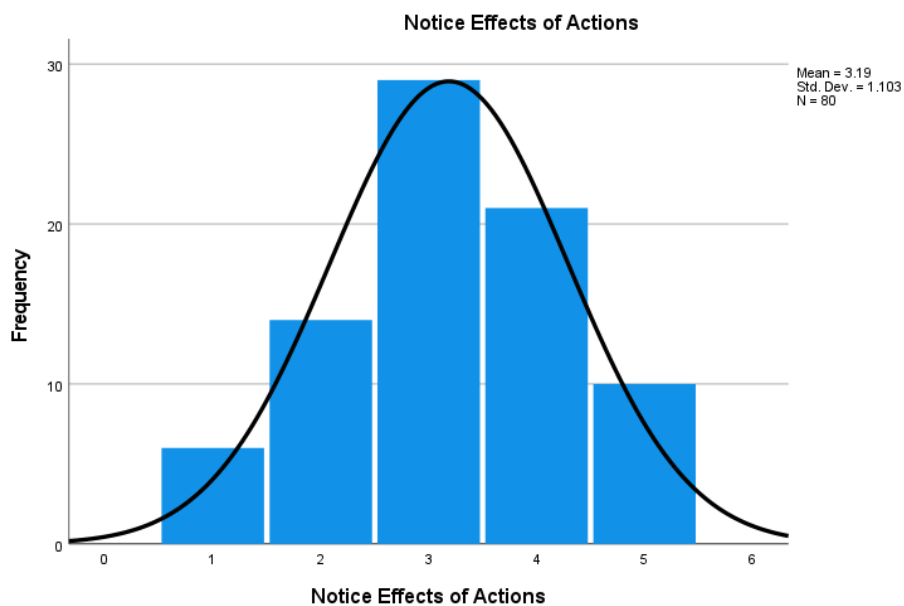
A sizeable proportion of respondents had a moderate perception of awareness of the consequences of their actions. 36.3%, rated themselves a rating of [3]. This shows that

they occasionally become aware of the consequences of their behaviors after a while. In addition, 26.3% rated themselves a [4]. This reflects an above-average awareness of the repercussions of their actions.17.5% rated [2] and 7.5% rated [1] indicating a lack of awareness. 12.5% of the respondents rated [5], this implies they are acutely aware of the consequences of their decisions and actions. As indicated by the mean score of 3.19 and standard deviation of 1.103, the respondents' self-perceived recognition abilities were variable. These findings present opportunities for growth in the Durban construction industry in the areas of self-awareness and reflexive leadership.

5.3.11. You have personal standards and try to live up to them.

Table 19: Survey Respondents by personal standards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	2.5	2.5	2.5
	3	7	8.8	8.8	11.3
	4	31	38.8	38.8	50.0
	5	40	50.0	50.0	100.0
	Total	80	100.0	100.0	

Figure 21: Adherence to personal standards
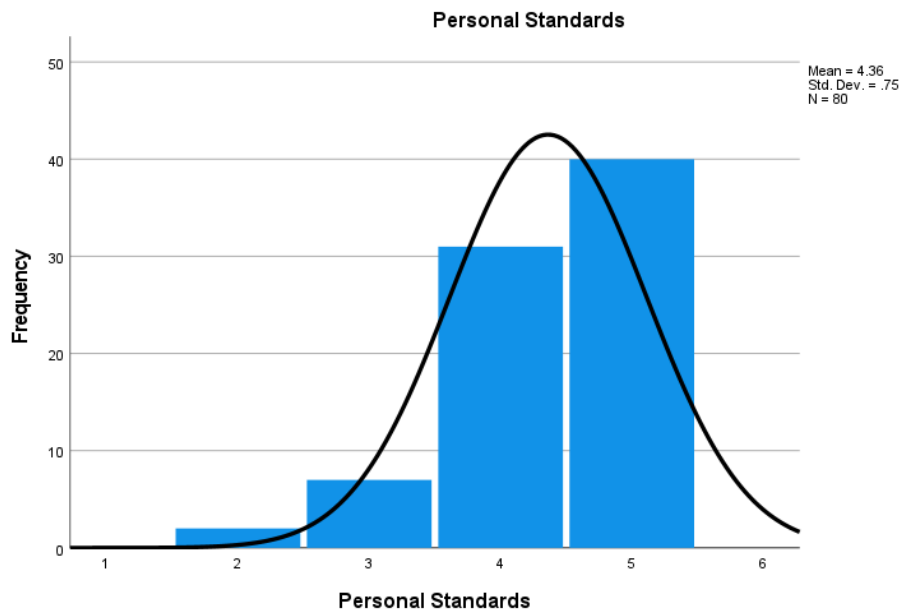
50% of the respondents evaluated themselves as a [5], indicating a significant dedication to their personal standards. Furthermore,38.8% of respondents rated themselves as [4], which further highlights their strong commitment to personal standards. Only a small proportion gave lower ratings, with 8.8% rating a [3] and 2.5% rating a [2]. The data indicates a highly favorable self-assessment of the respondents' capacity to meet their personal criteria. With an average score of 4.36 and a low standard deviation of 0.75, it indicates a work setting that values individual honesty and personal responsibility. This view is crucial for developing leadership skills and achieving project success in the construction industry. Dedication to high personal standards can have a favorable impact on project management outcomes by improving reliability, ethical conduct, and accountability.

5.3.12. You try to be like people around you.

Table 20: Survey Respondents by conformity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	7.5	7.5	7.5
	2	17	21.3	21.3	28.7
	3	35	43.8	43.8	72.5
	4	17	21.3	21.3	93.8
	5	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

Figure 22: Conformity levels
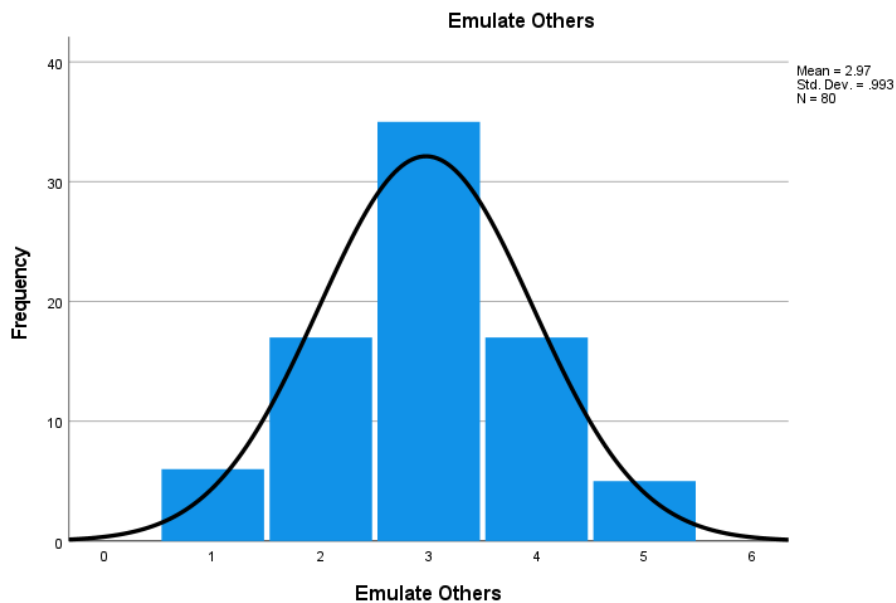
The survey data on conformity indicates that 43.8% rated themselves at a level of [3] in terms of their efforts to imitate others. This moderate score suggests a well-balanced attitude towards conformity in the professional setting. It shows how individuals are influenced by their colleagues but still retain a significant degree of originality. 21.3% rated themselves as both [2] and [4], implying there is some variation in the extent to which individuals adhere to peer behaviours. 7.5% rated themselves as [1], this implies a minimal inclination to conform. Lastly ,6.3% rated themselves as [5], suggesting a

strong inclination to imitate others. The mean score is approximately 2.97 with a standard deviation of 0.993. This points to a general inclination towards moderate conformity among the participants. The pattern of conformity is important for understanding leadership dynamics as it can influence the adoption and adaptation of innovations and best practices. These findings suggest moderate conformity with a workforce that appreciates individual competence while being open to external influences. This can be useful for collaborative projects and the development of leadership skills in the construction industry.

5.3.13. You have trouble making up your mind about things.

Table 21: Survey Respondents by decisiveness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	3.8	3.8	3.8
	2	11	13.8	13.8	17.5
	3	31	38.8	38.8	56.3
	4	25	31.3	31.3	87.5
	5	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

Figure 23: Ability to make decisions
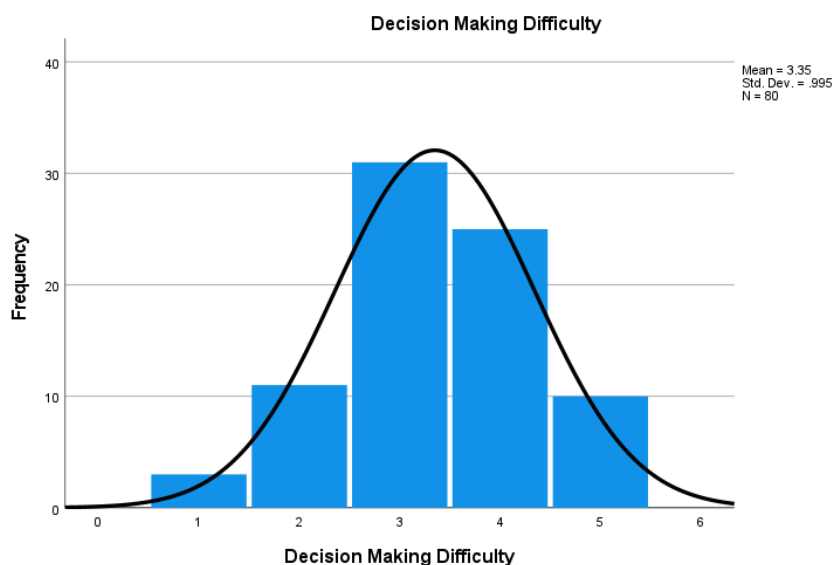
The findings indicate a notable disproportion in respondents' capacity to make decisions. Only 3.8% considered decision-making to be exceedingly effortless and rated it a [1]. 13.8% had a certain level of proficiency in decision-making which suggests that they face few difficulties, 38.8% of the respondents reported facing a moderate amount of difficulty and rated a [3] to their decision-making issues. This implies that although decision-making may present certain challenges, these difficulties can typically be overcome. A notable 31.3% of respondents felt they encountered major obstacles, as shown by their assessment of [4]. Lastly, 12.5% considered decision-making to be exceedingly challenging and rated it [5]. The mean score of 3.35 and a standard deviation of 0.995 on the decisiveness scale indicate the varying degree of decision-making capacity among respondents. These findings suggest that a significant proportion of participants have major challenges in making decisions. This assessment is vital in the construction industry, where making good decisions is important for achieving project success.

5.3.14. When it comes to deciding about a change, you feel overwhelmed by the choices.

Table 22: Survey Respondents by choice overload

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	11.3	11.3	11.3
	2	25	31.3	31.3	42.5
	3	29	36.3	36.3	78.8
	4	14	17.5	17.5	96.3
	5	3	3.8	3.8	100.0
	Total	80	100.0	100.0	

Figure 24: Handling choice overload

LessOverwhelmed by Choices
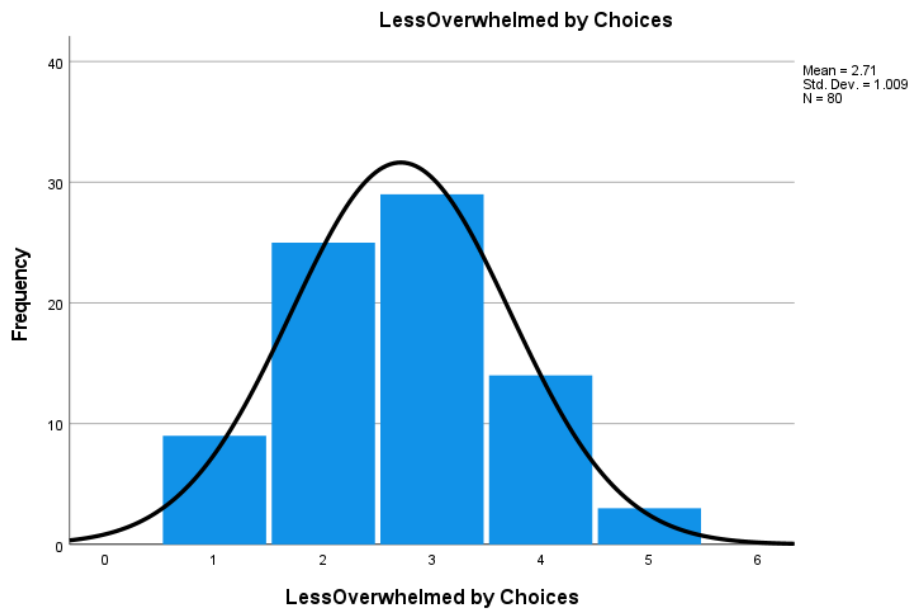
Only 11.3% of the respondents occasionally felt overwhelmed by choices and rated their experience a [1]. A sizeable 31.3% felt overwhelmed with a rating of [2] indicating feelings of being overwhelmed less often. The majority, which accounted for 36.3% reported experiencing a moderate level of overwhelm and rated their experience a [3]. 17.5% reported feeling considerably overwhelmed as evidenced by their rating of [4]. Additionally, 3.8% expressed experiencing acute overwhelm, as indicated by a rating of [5]. An average score of 2.73, with a standard deviation of 1.099 demonstrates the range of difficulties individuals encounter when presented with multiple options. This highlights a crucial aspect of decision-making dynamics in project management within the construction industry. assistance in properly managing choice overload in their professional positions.

5.3.15. You can accomplish goals you set for yourself.

Table 23: Survey Respondents by goal achievement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	1	1.3	1.3	2.5
	3	3	3.8	3.8	6.3
	4	39	48.8	48.8	55.0
	5	36	45.0	45.0	100.0
	Total	80	100.0	100.0	

Figure 25: Goal achievement rates
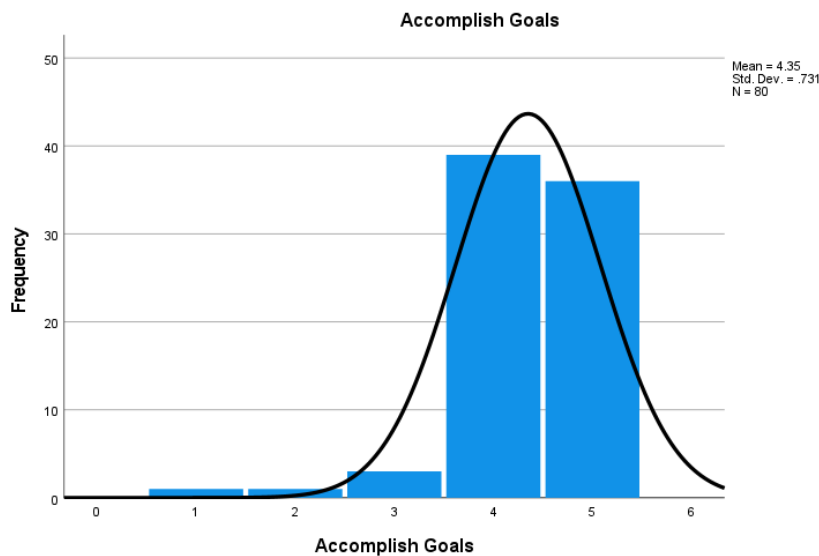
Majority of the respondents assessed their capacity to achieve objectives as high .48.8% rated their efficacy at [4], an additional 45% rated it at [5]. The findings reveal that 93.8% of participants believe they have been highly effective in attaining their goals. This is an indication that there is a significant ability to accomplish objectives among respondents. In contrast, 1.3% rated their achievement of objectives as [1] and an additional 1.3% as [2]. Furthermore, 3.8% of individuals rated themselves a [3]. This denotes a moderate level of accomplishment among respondents in attaining their objectives. The average score of 4.39, along with a standard deviation of 0.779 points to a significant level of objective achievement perceived by the

participants. This implies that most individuals possess a strong belief in their capacity to fulfill or surpass their personal and professional aspirations. This is of utmost importance in the realm of project management and leadership within the construction industry.

5.3.16. As soon as you see a problem or challenge, you start looking for possible solutions.

Table 24:Survey Respondents by problem-solving

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3	1.3
	2	1	1.3	1.3	2.5
	3	5	6.3	6.3	8.8
	4	44	55.0	55.0	63.7
	5	29	36.3	36.3	100.0
	Total	80	100.0	100.0	

Figure 26: Problem-solving effectiveness
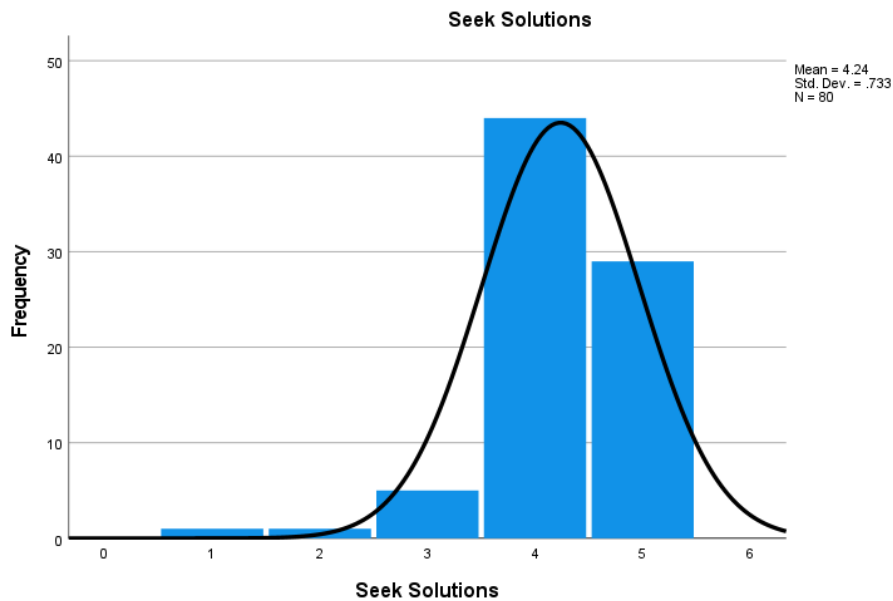
Seek Solutions

65.0% of respondents ranked their ability to seek solutions as high at [4]. A further 36.3% rated it even higher at [5]. This points to a significant proportion of respondents being actively and effectively engaged in problem-solving when faced with challenges. The findings demonstrate a proactive attitude and strong problem-solving abilities. Only 1.3% perceived themselves as having low proficiency in their problem-solving skills and rated themselves at [1]. Similarly, another 1.3% rated themselves at [2]. An additional 6.3% of individuals rated themselves at [3. This indicates a moderate level of effectiveness in their efforts to find solutions. Overall, the findings point to strong problem-solving capabilities among respondents. This is crucial for successful project management and leadership within their professional roles. A mean score of 4.39 and a standard deviation of 0.729 indicates that a considerable proportion of the survey respondents possess the necessary skills and abilities to effectively manage and tackle issues. This trait is crucial as it makes a positive contribution to the success of projects and operations in the construction industry.

5.4.   Overview and Analysis: Section C

Section C of the questionnaire was formulated to evaluate the success of construction projects in the Durban construction industry. The selected questions were carefully chosen as they were pivotal in measuring project success, which is the goal of any construction project and is directly influenced by effective leadership. The questions were also tailored to suit the unique challenges faced by the Durban construction industry, which is grappling with a shortage of competent leadership. Section C of the questionnaire was tailored to assess project success in the Durban construction industry, which is fundamental to the research on the impact of authentic leadership on construction project success. The questions were selected based on their relevance to the industry and importance in measuring project success.

5.4.1. Time

The first question was centred on the timely completion of projects. This question was deemed essential as timely project completion is a key indicator of success. Furthermore, completing a project on time can lead to cost savings and prevent delays in reaping the project's intended benefits. Thus, it was imperative to determine if the respondents believed that the project was completed within the stipulated timeline.

Table 25: Survey Respondents by project completion time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	7.5	7.5	7.5
	2	10	12.5	12.5	20.0
	3	18	22.5	22.5	42.5
	4	26	32.5	32.5	75.0
	5	20	25.0	25.0	100.0
	Total	80	100.0	100.0	

Figure 27: Project completed on time
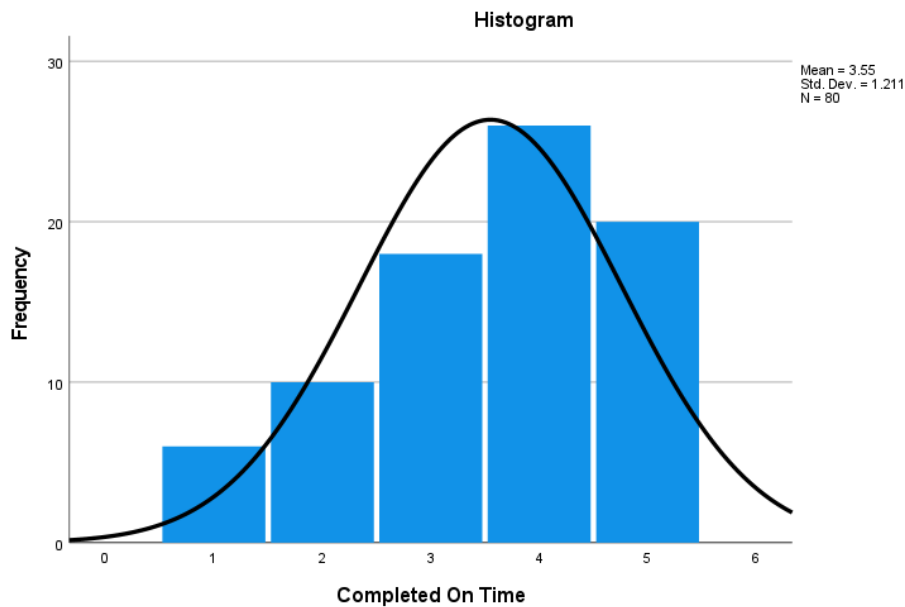
The survey responses revealed that project management professionals have different opinions on how timely projects are completed. 7.5% of the respondents rated their projects as being rarely completed on time by rating it a [1]. A further 12.5% showed slight improvements and rated it a [2]. Approximately 22.5% of respondents rated their project completion timing as neutral, indicating a modest level of satisfaction and rate dt a [3]. A significant 32.5% held the belief that projects typically adhere to the anticipated deadlines and rated it [4]. Lastly, 25% evaluated their projects as usually finishing on or before the designated time with a rating of [5]. The range in responses indicates quite a substantial disparity in the efficacy of project time management among various teams or projects within the industry. The findings suggest that although a significant number of projects are completed within the expected timelines, there is still room to improve.

5.4.2. Budget

The second question sought to establish if the project was completed within the allocated budget. This question was crucial as construction projects often experience cost overruns, which can negatively affect their success. Completing a project within the budget can mitigate financial losses and ensure it achieves its intended objectives.

Table 26: Survey Respondents by budget adherence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	10.0	10.0	10.0
	2	14	17.5	17.5	27.5
	3	16	20.0	20.0	47.5
	4	24	30.0	30.0	77.5
	5	18	22.5	22.5	100.0
	Total	80	100.0	100.0	

Figure 28: Project completed within budget
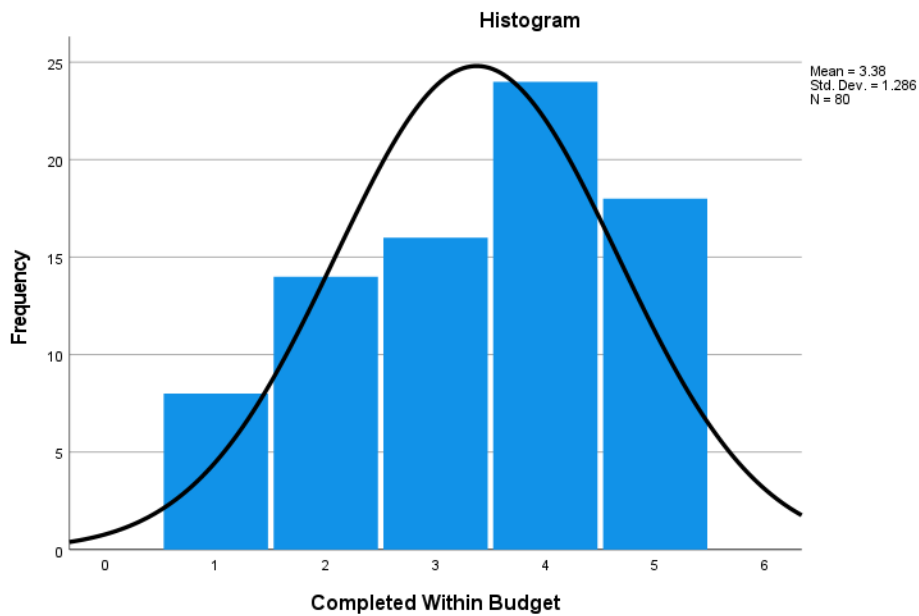
The findings indicate that 10% of the respondents rated a [1], meaning they considered their projects to rarely conform to the budget. 17.5% rated a [2], pointing to modest adherence. 20% of the respondents rated a [3], indicating that their projects sometimes matched budget objectives, which signifies a moderate degree of financial management. 30% recognized a persistent adherence to budget limitations, as indicated by their rating of [4]. A further 22.5% of the respondents reported that projects often finished within the assigned financial resources. These findings suggest that a significant proportion of projects are being efficiently managed within the allocated budget.

5.4.3. Address problems.

The third question aimed to determine if the project successfully addressed the problem for which it was developed. This question was of great significance as the success of a construction project is not solely measured by its completion on time and within budget but also by its ability to solve the problem it was meant to address. Therefore, it was important to establish whether the respondents believed the project adequately addressed the identified problem.

Table 27: Survey Respondents by project addressing problem.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	5.0	5.0	5.0
	2	10	12.5	12.5	17.5
	3	14	17.5	17.5	35.0
	4	28	35.0	35.0	70.0
	5	24	30.0	30.0	100.0
	Total	80	100.0	100.0	

Figure 29: Project addressing problem.
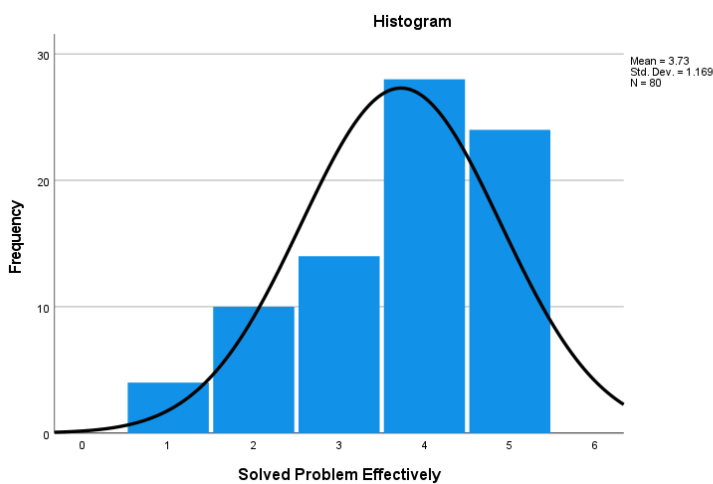
Most respondents perceived their projects as moderately to highly effective in solving the problems they were intended to address. 65% of respondents rated the effectiveness as [4] or [5]. This reflects a positive overall perception. However, the moderate variability

and the 17.5% of respondents who rated effectiveness as [1] or [2] suggest areas for improvement. These findings highlight the importance of authentic leadership traits, such as relational transparency, self-awareness, and balanced processing in enhancing project outcomes and addressing challenges more effectively within the Durban construction industry.

5.4.4. Specifications

The final question was designed to assess if the project specifications were met before handover to the intended beneficiaries. This question was critical as the primary aim of any construction project is to meet its intended objectives. Therefore, it was crucial to determine if the specifications were met to ensure that the project aligned with the intended beneficiaries' needs and successfully achieved its objectives.

Table 28: Survey Respondents by project meeting specifications

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	5.0	5.0	5.0
	2	11	13.8	13.8	18.8
	3	17	21.3	21.3	40.0
	4	26	32.5	32.5	72.5
	5	22	27.5	27.5	100.0
	Total	80	100.0	100.0	

Figure 30: Specifications met by handover
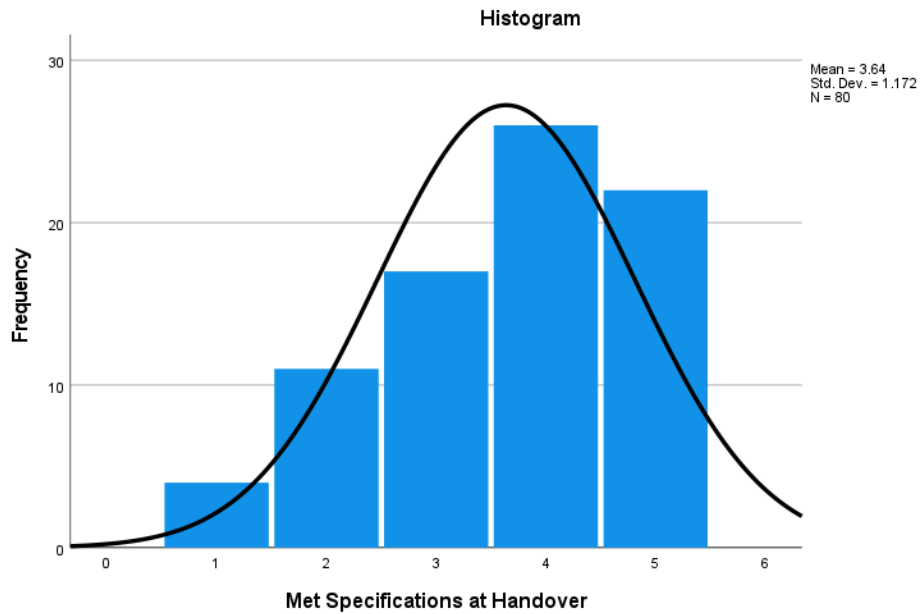
The findings showed that 28% of respondents strongly agreed that project specifications were met by handover to the target beneficiaries, while 32% agreed, 21% were neutral, 14% disagreed, and 5% strongly disagreed. The findings showed that a significant proportion of respondents felt that project specifications were met by the time of handover to the target beneficiaries. However, a considerable percentage of respondents were neutral or disagreed with this statement. This may suggest that while some projects are successful, there is still room for improvement in meeting project specifications.

5.5. Correlation Analysis on elements of Authentic Leadership and Project Success.

5.5.1. Self-Awareness and Project Success

Table 29: Self Awareness and Project Success.

		SelfAwarenes sLabel	ProjectSucce ssLabel
SelfAwarenessLabel	Pearson Correlation	1	.545**
	Sig. (2-tailed)		<.001
	N	80	80
ProjectSuccessLabel	Pearson Correlation	.545**	1
	Sig. (2-tailed)	<.001	
	N	80	80

**. Correlation is significant at the 0.01 level (2-tailed).

Using Pearson correlation analysis, the results indicate a strong and positive relationship between project success and self-awareness. With a Pearson correlation value (r) of 0.545 the research reveals a strong positive link. This implies that rising self-awareness among project leaders corresponds with a better success rate in their project activities. This association shows statistical relevance as its significance level (2-tailed) is less than 0.001, well below the approved threshold of 0.01. The correlation results show that random chance is not likely to produce it.

The strong correlation between these two factors highlights the need of self-awareness in determining project success in the construction industry. First, effective leadership depends on self-awareness, that is conscious knowledge of one's own character, feelings, goals and aspirations. This outcome is consistent with the corpus of present leadership studies, which generally stress self-awareness as a prerequisite for effective leadership.

Self-aware leaders are more suited to identify their strengths and weaknesses, know how they impact others and make more informed decisions. Such leaders make a great difference in team dynamics, communication, which raises the project success rate.

Furthermore, the capacity of self-aware leaders to reflect on their actions and learn from their errors helps project management to be effective and always developing.

This study validates the need of self-awareness for good project implementation. Consequently, in the construction industry, project professionals and executives need to have self-awareness. Reaching desired project results and enhancing project performance could depend on this in major part.

This study confirms that effective project delivery depends on self-awareness and fits the more general conversation on leadership. Therefore, in the construction industry, developing self-awareness among project professionals could be a key component in improving project performance and reaching intended project results.

5.5.2. Self-Regulation and Project Success

Table 30: Self-Regulation and Project Success.

		ProjectSucce ssLabel	SelfRegulatio nLabel
ProjectSuccessLabel	Pearson Correlation	1	.102
	Sig. (2-tailed)		.368
	N	80	80
SelfRegulationLabel	Pearson Correlation	.102	1
	Sig. (2-tailed)	.368	
	N	80	80

The results of Pearson correlation analysis point to a weakly positive link between project success and self-regulation. With a little positive link between these two variables, the Pearson correlation coefficient (rr) is 0.102. With a 2-tailed significance level of 0.368 the connection exceeds the 0.05 normal threshold. This implies there is no statistically significant association.

The lack of a strong link implies that, in the setting of this research, self-regulation does not obviously affect project success. This outcome is interesting as most people believe that strong leadership depends on self-control. Project success could be more determined by other factors including self-awareness or relational transparency.

Conversely, it could be that a basic correlation analysis finds more subdued and challenging results for the benefits of self-regulation.

5.5.3. Relational Transparency and Project Success

Table 31: Relational Transparency and Project Success.

		ProjectSucce ssLabel	RelationalTra nsparencyLa bel
ProjectSuccessLabel	Pearson Correlation	1	.256[*]
	Sig. (2-tailed)		.022
	N	80	80
RelationalTransparencyL abel	Pearson Correlation	.256[*]	1
	Sig. (2-tailed)	.022	
	N	80	80

*. Correlation is significant at the 0.05 level (2-tailed).

The analysis results show a Pearson correlation coefficient (rr) of 0.256 implying project success and relational transparency have a positive relationship. Consequently, project success rate tends to increase with relational transparency increase. The significance level (2-tailed) of 0.227 falls below the 0.05 criterion. This suggests that at the 0.05 level, the correlation is statistically significant, thus reducing the less than 5% possibility that this association results from chance.

These results have significant pragmatic consequences. Higher degrees of relational transparency among project professionals are attributed to the high rates of project success as highlighted by the positive connection. Better team collaboration, improved communication and higher stakeholder satisfaction can result from relational transparency. Effective execution of projects depends on these elements.

5.5.4. Balanced Processing and Project Success

Table 32: Balanced Processing and Project Success.

		ProjectSucce ssLabel	BalancedProc essingLabel
ProjectSuccessLabel	Pearson Correlation	1	.047
	Sig. (2-tailed)		.677
	N	80	80
BalancedProcessingLab el	Pearson Correlation	.047	1
	Sig. (2-tailed)	.677	
	N	80	80

Project success and balanced processing show quite a weak positive link according to the Pearson correlation results. With a Pearson correlation coefficient of 0.047, these two variables show a minor positive relationship. With a significance level (2-tailed) of 0.677, this correlation is much above the 0.05 standard criterion. This suggests that the link is not statistically significant, thereby implying a great likelihood that the noted relationship could have developed by chance.

The absence of a strong link suggests that, in the framework of this research, balanced processing which is defined as the capacity to objectively evaluate data and consider several points of view before making decisions does not clearly affect project success. Given that good leadership is sometimes attributed with balanced processing, this result is intriguing. Several possible reasons exist for these outcomes. Other elements, such self-awareness or relational transparency, could be more important in deciding project success. On the other hand, it could be that a basic correlation study cannot adequately reflect the more subdued advantages of balanced processing.

5.5.5. Authentic Leadership and Project Success

Table 33: Authentic Leadership and Project Success.

		ProjectSucce ssLabel	AuthenticLea dershipLabel
ProjectSuccessLabel	Pearson Correlation	1	.369**
	Sig. (2-tailed)		<.001
	N	80	80
AuthenticLeadershipLabe l	Pearson Correlation	.369**	1
	Sig. (2-tailed)	<.001	
	N	80	80

**. Correlation is significant at the 0.01 level (2-tailed).

Project success and authentic leadership show a statistically significant positive link according to a Pearson correlation result. With a modest positive correlation between these two variables, the Pearson correlation coefficient (rr) is 0.369. This implies that the success rate of project professionals' initiatives usually rises along with the degree of authentic leadership among them. This connection has a significance level (2-tailed) less than 0.001, much below the conventional 0.01 criterion. This suggests that the correlation is statistically significant, so the found relationship is improbable to have happened by chance.

The modest and strong link suggests that the success of projects in the construction industry is much influenced by authentic leadership which is characterized by openness, moral behaviour and consistency between words and acts. This result is consistent with current leadership theories that stress the need of authenticity in developing trust, encouraging honest communication and, hence promoting a good organizational culture. Being real, dependable and ethical will help authentic leaders inspire and drive their followers. They foster a situation whereby team members feel appreciated and understood, therefore improving cooperation and output. Such leaders also excel in managing problems and making decisions that represent the best interests of the team and the project, therefore raising the possibility of project success.

5.6. Regression Analysis on elements of Authentic Leadership and Project Success.

Table 34: Dependent Variable (Project Success) – Independent Variables
(Self-Regulation, Self-Awareness, Relational Transparency, Balanced Processing)

Model	Variables Entered	Variables Removed	Method
1	BalancedProcessingLabel, SelfRegulationLabel, SelfAwarenessLabel, RelationalTransparencyLabel[b]	.	Enter

a. Dependent Variable: ProjectSuccessLabel

b. All requested variables entered.

The model includes four predictor variables that is Balanced Processing, Self-Regulation, Self-Awareness, and Relational Transparency. The dependent variable for this analysis is Project Success. The analysis aims to determine the extent to which each of these aspects of authentic leadership contributes to predicting the success of projects.

Table 35: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.583[a]	.340	.305	.94121

a. Predictors: (Constant), BalancedProcessingLabel, SelfRegulationLabel, SelfAwarenessLabel, RelationalTransparencyLabel

According to the model summary, project success is greatly influenced by the predictors taken together. Project success's R value of 0.583 points to a modest to strong connection between the dependant variable, project success and the predictors. With a R Square value of 0.340, the model clearly explains about 34% of the variance in project performance, therefore suggesting a significant contribution of the predictors to project success. With an adjusted R Square value of 0.305, the number of predictors in the model is taken into consideration, therefore offering a more realistic estimate of the actual R Square. With a lower value implying a better fit of the model to the data, the standard error of the estimate 0.94121 represents the average distance that the observed values fall from the regression line.

Table 36: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.209	4	8.552	9.654	<.001[b]
	Residual	66.440	75	.886		
	Total	100.649	79			

a. Dependent Variable: ProjectSuccessLabel

b. Predictors: (Constant), BalancedProcessingLabel, SelfRegulationLabel, SelfAwarenessLabel, RelationalTransparencyLabel

The overall significance of the regression model is evaluated by the ANOVA table. While the residual sum of squares is 66.440, indicating the variation not explained by the model. The sum of squares due of regression is 34.209 thus indicating the variation described by the model. For residual and regression correspondingly, the mean squares are 0.886 and 8.552. With a significance level of less than 0.001, the F statistic of 9.654 confirms the statistical relevance of the model. This confirms the robustness of the model in forecasting project success depending on the predictor variables since it suggests a very low possibility that the observed link in the sample happened by chance.

Table 37: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.471	1.871		-.786	.434
	SelfAwarenessLabel	1.016	.200	.525	5.084	<.001
	SelfRegulationLabel	-.098	.472	-.020	-.208	.836
	RelationalTransparencyLabel	.352	.233	.221	1.511	.135
	BalancedProcessingLabel	-.028	.213	-.019	-.130	.897

a. Dependent Variable: ProjectSuccessLabel

The coefficients table offers comprehensive information on the way every predictor variable contributes to the regression model. With a p-value of 0.434 the constant value is -1.471 however it is not statistically significant. With an unstandardized coefficient of 1.016, a standardized coefficient (Beta) of 0. 525, and a significance level of less than 0.001, self-awareness stands out as the most important predictor of project success among the others. This significant positive influence emphasizes the need of self-awareness for attaining project success. Conversely, self-regulation does not significantly influence project success with an unstandardized coefficient of -0.098, a standardized coefficient (Beta) of -0.020, and a p-value of 0.836. In this model, relational transparency with an unstandardized coefficient of 0.352, a standardized coefficient (Beta) of 0.221, and a p-value of 0.135, and balanced processing with an unstandardized coefficient of -0.2800, a standardized coefficient (Beta) of -0.019, and a p-value of 0.897, show no significant effects on project success.

5.7. Summary and Conclusions

The detailed demographic and professional backgrounds of the Durban construction industry respondents revealed in the descriptive statistics was insightful. There was a wide spectrum of roles represented, 27.5% of respondents were Project Managers, followed by Project Administrators (17.5%) and Project Management Office staff (12.5%). 40% of the respondents had Diplomas or Degrees, a good percentage additionally possessed Honours or master's degrees (17.5%). With 32.5% of respondents having 11–15 years of experience, suggesting a well-experienced workforce, a considerable number of respondents had great knowledge in project

management. If a project satisfied its scope, budget and timeline, almost half of the respondents, that is 48.8% considered it to be successful. 40% of the respondents claimed to be most often using the PMBOK approach. Indicating generally excellent project outcomes, most respondents felt their initiatives were either mostly successful (22.5%) or very successful (40%). These descriptive data underlined the variety and experience in the industry as well as the need of educational background and experience in shaping opinions of project success.

Examining the correlations between several elements of authentic leadership and project success, the correlation results found higher self-awareness is linked to increased project success, as shown by a significant positive connection observed between self-awareness and project success ($r = 0.545$, $p = 0.01$). Self-regulation by itself does not clearly affect project success ($r = 0.102$, $p = 0.368$). Relational transparency and project success showed a positive association ($r = 0.256$, $p = 0.05$), implying that relational transparency helps to define project success. Balanced processing did not significantly affect project performance ($r = 0.047$, $p = 0.677$). These results imply that some elements of authentic leadership especially relational transparency and self-awareness are more likely to help projects in the Durban construction industry succeed.

Multiple independent variables, self-awareness, self-regulation, relational transparency, and balanced processing were evaluated by the regression analysis on the dependent variable, project success. With an R-squared value of 0.340, the significance ($F = 9.654$, $p = 0.000$) regression model indicates that 34% of the variance in project success can be attributed to the model. Project success ($\beta = 1.016$, $p = 0.001$) was much improved by self-awareness, suggesting that better project results follow from increased self-awareness. Relational transparency was not statistically significant ($\beta = 0.352$, $p = 0.135$), but being favourably correlated. Neither balanced processing nor self-regulation were major predictors (self-regulation: $\beta = -0.098$, $p = 0.836$; balanced processing: $\beta = -0.328$, $p = 0.897$). These findings show that among the elements of authentic leadership, self-awareness is important for determining project success, other elements like self-regulation and balanced processing might not directly affect it.

Ultimately, the study gave important new perspectives on the part that authentic leadership plays in Durban's construction projects' success. These results highlight the

need of focused leadership development initiatives emphasizing on improving relational transparency and self-awareness among project managers. More research is required to confirm these results in other sectors and environments and investigate the subtle effects of many components of authentic leadership. All things considered, the study emphasizes the need for specific authentic leadership qualities in promoting project success and offers a basis for creating successful leadership development and implementation plans inside the construction industry.

CHAPTER 6

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.1.   An Overview

This last chapter concludes the research, offers recommendations based on the research findings, and highlights areas for future studies. The construction industry is a major player in the global Gross Domestic Product (GDP) and a major influence on the labour market in South Africa. Notwithstanding its significance, the industry has various fundamental issues that compromise its growth, including a lack of leadership skills. Lack of leadership skills affects project success and business development; moreover, the lack of leadership training for construction project professionals has greatly added to the high project failure rates. This discrepancy offered a gap to investigate authentic leadership in Durban construction projects by looking at the correlation between project professionals displaying authentic leadership qualities and their industry's successful project delivery rate.

The research found the elements of authentic leadership that affect project success in the construction industry, balanced processing, self-regulation, self-awareness, and relational transparency of project professionals. Particularly, the findings underlined the important part self-awareness plays in attaining project success since self-awareness and project success show a strong positive link. In this specific setting, it was determined that other elements such as self-regulation and balanced processing did not significantly affect project outcomes. Although it was favourably linked with project success, relational transparency had no meaningful bearing on the regression model. The research also looked at how these authentic leadership qualities help construction project professionals to overcome obstacles in the construction industry sand produce a great degree of success.

This research is important since it helped create suitable models and policy tools for the growth of leaders in the construction industry, therefore improving project results and project delivery. Moreover, since leadership is becoming more important in project management, the research offers understanding of the function of authentic leadership

in the construction industry. Developing successful leadership training programs and policies that promote self-awareness among project managers depends on these realizations, therefore enhancing project success rates and general industry performance.

In summary, the findings highlight the need of encouraging self-awareness among construction industry project professionals to improve the success of the projects. The research helps to clarify how authentic leadership may be used to close the leadership competency gap in the construction industry. Future studies should concentrate on investigating other possible elements affecting project success and additional validation of the findings in many industries and environments. More research is also required to grasp the complex effects on project results of relational transparency and other leadership elements. This study emphasizes overall the need of focused leadership development programs stressing self-awareness and ethical behaviour to increase effective project delivery in the construction industry.

6.2. Overall Research Findings

The general research findings derived from the responses to the research questionnaire are presented in this part. The data gathered revealed the respondents' positions inside their companies, their degree of education, experience in project management, opinions on project success, views of their organizations' project portfolio success, the quantity of successful projects delivered in the past five years, the presence of a Project Management Office (PMO) and the project management techniques used by their companies. The study also looked at elements including relational transparency, balanced processing, self-regulation, and self-awareness among project professionals.

There were 80 participants in total; 28% identified as project managers, 18% as project administrators, and 13% from the Project Management Office. Educationally, 15% had various degrees whereas 8% held a PhD. About project management experience, 15% had 0–5 years of experience and 33% had been involved in projects spanning 11–15 years.

49% of respondents said that a successful project is one finished within the given time, money, and scope when asked what exactly makes a project successful. This consensus emphasizes the need of following the basic project management limitations. Regarding the project portfolio's apparent success of their company, 23% of respondents said it was extremely successful while 40% said it was just generally successful. On the other hand, 16% felt their company's project portfolio failed.

Respondents past five years' worth of successful project delivery ranged in count. Especially, 41% of respondents said they have successfully finished more than 25 projects, suggesting a high degree of output and effectiveness inside their companies. About the existence of a PMO, 54% of respondents said their companies had an established PMO, implying many companies understand the need of organized project management techniques. With 40% of respondents citing its use, the PMBOK methodology was the most often used way of project management. Agile and Prince2 approaches followed, suggesting a taste for methodical, iterative project management.

According to the study, most of the participants showed good self-awareness and self-control. Particularly, 89% said they understood their strengths and shortcomings, 86% said they were aware of their emotions and how they affected others, and 89% said they had personal standards and attempted to live up to them. Moreover, 89% agreed or strongly agreed that they were efficient in doing their task; 79% agreed or strongly agreed that they could build trust and cooperation in their teams; and 88% agreed or strongly agreed that they could accept their faults. Only 35% strongly agreed, though, and 49% said they could correctly identify emotions and see how they affected behaviour, thereby pointing up a possible area for development.

The Pearson correlation results gave us an understanding of the links between project success and qualities of authentic leadership. Self-awareness and project success had a significant ($r = .545$, $p < .001$) strong positive association. This implies that increased project success relates to increased self-awareness among project professionals. Relational transparency also revealed a notable positive link with project performance ($r = .256$, $p = .222$), hence stressing the need of transparency in leadership for effective project results. The lack of statistically significant relationships between self-regulation ($r = .102$, $p = .368$) and balanced processing ($r = .047$, $p = .677$) with project success

103

suggests that these characteristics might not directly influence project success within this population.

The influence of several authentic leadership qualities on project success was investigated by the regression analysis as well. With an R-squared value of.340, the general model was significant (F (4, 75) = 9.654, p <.001). The independent variables (self-awareness, self-regulation, relational transparency, and balanced processing) seemed to be able to explain almost 34% of the variance in project performance. Self-awareness was the sole significant predictor among these factors (β =.525, p =.001), implying that it is quite important for the success of the project. In this model the remaining variables—self-regulation (β = -.020, p =.836), relational transparency (β =.221, p =.135), and balanced processing (β = -.019, p =.897)—were not significant predictors.

Overall, the results show that respondents have a generally favourable view of project success; many of the projects finished on schedule and under budget, and standards were satisfied. Still, fiscal control and emotional awareness might use work. PMOs and the application of methods such as PMBOK underline the industry's will to enhance project management techniques. The study emphasizes the need of self-regulation, self-awareness, and authentic leadership in reaching project success and implies that leadership development should concentrate on strengthening these qualities to improve general project outcomes. Particularly self-awareness has a major role that suggests the necessity of training and development initiatives meant to improve this quality among construction industry project professionals.

6.2.1. How findings addressed research questions

The findings of this research offer thorough understanding of the main research issues raised. By means of data gathered from the respondents, every research question is answered, therefore stressing the vital need of authentic leadership in the success of construction projects in Durban.

Research Question 1: What is the role of authentic leadership in successfully delivering construction projects?

The findings of the research highlight the need for authentic leadership for the effective completion of construction projects. Self-awareness and project success show a substantial positive link according to the Pearson correlation analysis (r =.545, p =.001), meaning that project professionals who have high degree of self-awareness are more likely to produce successful projects. This implies that self-aware leaders may better grasp their strengths and shortcomings, make wise judgments, and properly run their teams all of which help the project to be successful.

Furthermore, underlining the need of openness in leadership, relational transparency demonstrates a notable positive link with project success (r =.256, p =.222). Openly sharing information and being honest with their teams by transparent leaders can help to build trust and cooperation qualities important for the effective completion of projects. The general findings highlight that some elements of authentic leadership, especially self-awareness and relational transparency are very crucial for project delivery.

Research Question 2: What specific authentic leadership traits impact project success in the construction industry?

The research finds that the specific authentic leadership qualities that greatly affect the success of projects in the construction industry are self-awareness and relational transparency. The regression analysis supports this even more; self-awareness turns out as the only statistically significant predictor of project success (β =. 525, p <.001). This result suggests that self-aware project professionals are more suited to manage the complexity of construction projects, make wise judgments, and guide their followers toward success.

Though not a strong predictor in the regression model (β =.221, p =.135), relational transparency nevertheless demonstrates a positive link with project performance, implying that it is a critical quality for project professionals. All of which help to meet project goals include transparent leaders' ability to foster trust inside their teams, enable honest communication, and establish a cooperative workplace.

Research Question 3: How do leader and manager attributes differ in construction project management?

The findings show that although managers and leaders alike depend on authentic leadership qualities, these traits show differently in construction project management. Research participants with high degrees of self-awareness and relational transparency were more likely to produce effective projects. Leaders who can properly control their emotions, identify their strengths and shortcomings, and openly interact with their followers are therefore more suited to guide initiatives toward success.

On the other hand, characteristics like self-regulation and balanced processing did not demonstrate any appreciable relationships with project success, implying that these qualities might be more pertinent in other spheres of management or in alternative settings. The focus on self-awareness and relational transparency emphasizes the difficulties and expectations of construction project management, where success depends critically on effective communication, trust-construction and emotional intelligence.

Research Question 4: How can a project leadership and management framework be developed for effective project performance in construction projects?

Research findings allow one to create a project leadership and management framework stressing the need of self-awareness and relational transparency. Development projects and training courses ought to concentrate on improving these qualities among project professionals. Reflective practices, feedback systems, and coaching help one develops self-awareness; activities fostering open communication, honesty, and trust-construction help one enhance relationship transparency.

Strategies for ongoing learning and development should also be included of the framework so that project managers might change with the times and meet new obstacles. Construction a culture of authentic leadership can help construction companies to raise general project performance and improve project outcomes.

Research Question 5: What leadership development strategies can augment the leadership capabilities of construction project managers?

The findings imply many leadership development techniques that could improve the capacity of managers of construction projects. Organizations should first fund training initiatives emphasizing on increasing self-awareness and relational openness. Projects

professionals can learn how to be open with their teams by means of seminars, workshops, and coaching sessions, thereby enabling a better awareness of their emotions, strengths, and shortcomings.

Second, by means of mentoring initiatives whereby seasoned project professionals guide and assist less experienced ones, information transfer and skill development can be promoted. Mentoring can also give project professionals chances to see and grow under real leaders in action.

Third, establishing a feedback-rich atmosphere whereby supervisors, team members, and peers provide regular, helpful comments to project leaders can help to foster self-awareness and ongoing development. Encouragement of honest communication and feedback will enable project managers to build the relational transparency required for good leadership.

Research Question 6: How do construction project managers evolve their leadership skills to handle challenges in the construction industry?

According to the research findings, construction project managers develop their leadership abilities by means of self-awareness, ongoing education, and practical experience mixed. Self-aware and open in their communication, project managers help themselves to negotiate the complexity and difficulties of the construction sector. They can create capable, cooperative teams, make wise decisions, and change with the times regarding project surroundings.

Evolution of leadership qualities also depends on constant learning and improvement. Seeking out fresh knowledge, skills, and best practices to improve their leadership capacity, project managers should be always in professional development. Reflective practices and feedback combined with practical experience lets project managers grow from their achievements and mistakes, therefore improving their leadership qualities.

Finally, the research findings answer the research questions by stressing the need of self-awareness and relational transparency in the success of projects, pointing out specific authentic leadership qualities that influence project results, and offering understanding of the evolution of leadership models and strategies for the construction

sector. Encouragement of authentic leadership can help construction companies to increase project success and performance.

6.2.2. How findings addressed hypotheses

Hypothesis 1

H0: Relational transparency and morals of the project manager do not impact project success in the construction industry.

H1: Relational transparency and morals of the project manager have a positive impact on project success in the construction industry.

Relational transparency is among the predictor variables in the regression analysis. Though the correlation is not statistically significant at the 0.05 level, the coefficient for relational transparency ($\beta = 0.352$, $p = 0.135$) shows a positive link with project success. This implies that the evidence is insufficient to reject the null hypothesis (H0), even if relational transparency would help to improve project success. Therefore, the study does not give enough evidence to prove that project success is much influenced by relational transparency and morals.

Hypothesis 2

H0: Project managers with high levels of self-awareness and balanced processing skills are not more likely to achieve successful project outcomes in the construction industry.

H1: Project managers with high levels of self-awareness and balanced processing skills are more likely to achieve successful project outcomes in the construction industry.

Self-awareness and balanced processing are predictor variables in the regression analysis. Higher self-awareness among project managers is linked to increased project success; the coefficient for self-awareness ($\beta = 1.016$, $p = 0.000$) demonstrates a notable positive relationship between project success and this regard. Still, balanced processing ($\beta = -0.28$, $p = 0.897$) has no discernible effect. Thus, for self-awareness the null hypothesis (H0) may be rejected; for balanced processing it cannot. This implies that balanced processing is not a major predictor of project success while self-awareness is a major predictor of project success.

Hypothesis 3

H0: There is no correlation between authentic leadership behaviours exhibited by project managers and the level of success achieved in construction projects in Durban.

H1: There is a positive correlation between authentic leadership behaviours exhibited by project managers and the level of success achieved in construction projects in Durban.

With authentic leadership behaviours (self-awareness, self-regulation, relational transparency, and balanced processing), the total regression model has an R-squared value of 0.340. This suggests that the model helps to explain around 34% of the variation in project success. The model fits the data well according to the substantial F-statistic (F = 9.654, p = 0.000). More especially, self-awareness significantly increases the success of projects. The Pearson correlation coefficient for authentic leadership generally (r = 0.369, p = 0.001) suggests even more a positive link between authentic leadership practices and project success. Thus, the null hypothesis (H0) can be rejected, so verifying a positive link between project success and authentic leadership practices.

Overall, the research highlights the importance of specific authentic leadership traits, particularly self-awareness and relational transparency, in achieving successful project outcomes. These findings contribute to the understanding of how authentic leadership can enhance project performance and provide valuable insights for developing leadership development programs in the construction industry.

6.2.3. How findings addressed research objectives

The research aimed to explore the impact of authentic leadership traits on project success in the construction industry, specifically focusing on the Durban area. The results of the data analysis provide thorough understanding of every one of the study aims.

Objective 1: To examine the role of authentic leadership in successfully delivering construction projects.

The findings of the research show that effective execution of construction projects depends much on authentic leadership, especially regarding self-awareness and

relational transparency. Self-awareness and project success (r = 0.545, p = 0.001) showed a high positive link; relational transparency and project success showed a modest positive relationship (r = 0.256, p = 0.227). These findings show that project professionals who show great degrees of relational transparency and self-awareness are more likely to lead effective projects. With β = 0.525, p < 0.001, the regression analysis confirmed even more the relevance of self-awareness as a major determinant of project success.

Objective 2: To identify specific authentic leadership traits and how they impact project success in the construction industry.

The research revealed numerous important authentic leadership qualities and how they affected the effectiveness of projects. With a substantial positive association to project success, self-awareness turned up as the most important quality. Though to a less degree, relational transparency also exhibited good effects. The findings imply that project success is not much affected directly by self-regulation or balanced processing. These realizations can direct the creation of leadership development initiatives and help one to grasp which qualities lead most to effective project results.

Objective 3: To identify similarities and differences in leader and manager attributes required by construction project managers.

The findings provide a whole picture of the qualities of construction industry professionals and leaders. The findings showed that although technical knowledge and project management methodologies such as PMBOK are vital, authentic leadership qualities like self-awareness and relational transparency greatly help projects to be successful. This emphasizes the requirement of a well-rounded strategy combining authentic leadership qualities with technical skills to reach best project results.

Objective 4: To develop a project leadership and management framework for effective project performance in construction projects.

The findings allowed for development of a project leadership and management framework stressing the inclusion of authentic leadership qualities into conventional project management techniques. The positive effect of self-awareness on the success of projects implies that programs for developing leaders should concentrate on raising

110

self-awareness among project professionals in leadership positions. Moreover, encouraging relational transparency helps project teams to develop trust and collaboration, therefore enhancing the results of the projects.

Table 38: Project Leadership and Management Framework for Effective Project Performance

Component	Strategies
1.Self-Awareness Development	
▪ **Self-Assessment Tools**	- Personality assessments - Strengths and weaknesses analysis - Reflective journals
▪ **Feedback Mechanisms**	- Regular 360-degree feedback - Peer reviews - Supervisor evaluations
▪ **Reflective Practices**	- Post-project reflective sessions - Self-reflection exercises - Journaling
2.Relational Transparency Enhancement	
▪ **Open Communication**	- Regular team meetings - Open forums for feedback - Transparent decision-making processes
▪ **Honesty and Integrity**	- Ethical leadership training - Codes of conduct - Integrity workshops
▪ **Trust-Building Activities**	- Team-building exercises - Collaborative workshops - Trust-building retreats
3.Leadership Training Programs	
▪ **Workshops and Seminars**	- In-person workshops on leadership - Seminars on emotional intelligence - Interactive sessions on team dynamics

▪ **Online Courses**	- E-learning modules on authentic leadership - Webinars on self-awareness - Virtual training sessions on project management
▪ **Coaching and Mentoring**	- One-on-one coaching - Mentorship programs - Peer coaching networks
4.Continuous Improvement and Learning	
▪ **Professional Development Plans**	- Customized development plans - Goal setting and progress tracking - Personal growth workshops
▪ **Knowledge Sharing**	- Knowledge-sharing forums - Discussion groups - Best practice workshops
▪ **Training Updates**	- Regular updates to training materials - Incorporation of latest research - Trend analysis and adaptation
5.Integration with Project Management Methodologies	
▪ **Customized Methodologies**	- Tailored project management frameworks - Incorporation of leadership principles - Adaptive project strategies
▪ **Guidelines and Best Practices**	- Clear guidelines for project managers - Documentation of best practices - Standard operating procedures
▪ **Assessment and Evaluation**	- Regular performance assessments - Evaluation metrics for leadership - Feedback loops for continuous improvement
6.Creating a Supportive Organizational Culture	
▪ **Recognition and Rewards**	- Employee recognition programs

Component	Details
	- Leadership awards
	- Incentives for ethical behaviour
▪ **Ethical Environment**	- Ethical guidelines and policies
	- Training on ethical decision-making
	- Regular ethical audits
▪ **Leadership Forums**	- Leadership conferences
	- Forums for discussing challenges
	- Networking events for leaders

Objective 5: To develop a leadership development strategy that augments the leadership capabilities of construction project managers.

The research findings suggest that relational transparency and self-awareness should come first in focused leadership development plans. Reflective practices, feedback systems, and self-assessment tools should all be part of training courses to let project professionals grow in these areas. Improving these authentic leadership qualities can help project professionals be more suited to manage the complexity and demands of construction projects, therefore increasing the success rates.

Table 39: Leadership Development Strategy

Component	Details
1. Self-Awareness Development	**a) Comprehensive Self-Assessment** Utilize a combination of assessments (e.g., MBTI, DiSC, StrengthsFinder) for a well-rounded understanding of strengths, weaknesses, communication styles, and motivations. Administer assessments early in the program to tailor subsequent development activities. **b) Reflective Practices** ▪ *Structured Reflection* Provide guided prompts for journaling and post-project reflections, focusing on specific leadership challenges and growth areas. ▪ *Reflective Group Sessions* Facilitate group discussions where managers can share insights from their reflections, fostering a collaborative learning environment.

2. Relational Transparency Enhancement	**a) Multi-Channel Feedback** ▪ ***360-Degree Feedback*** Ensure anonymity and focus on actionable feedback by asking specific questions related to leadership behaviors. ▪ ***Regular 1-on-1s*** Establish a cadence of private meetings between managers/ leaders and their supervisors for in-depth discussions about feedback and progress. ▪ ***Stay Interviews*** Periodically interview team members to gauge their satisfaction, engagement, and perceptions of leadership transparency. **c) Open Communication Culture:** ▪ ***Ask Me Anything Sessions*** Host informal sessions where employees can ask any questions they have in a safe environment. ▪ ***Leadership Vulnerability*** Encourage leaders to share their own challenges and mistakes, modeling vulnerability and authenticity.
3. Continuous Improvement and Learning	**a) Individualized Development Plans (IDPs)** ▪ ***Collaborative Creation*** Involve both the manager and their supervisor in crafting the IDP, ensuring alignment with organizational goals and personal aspirations. ▪ ***Regular Check-Ins*** Schedule frequent check-ins to review progress, address challenges, and adjust the IDP as needed. b) **Knowledge Exchange** ▪ ***Mentoring Circles*** Form small groups of managers with diverse experience levels to share knowledge and provide mutual support. ▪ ***"Lunch and Learn" Sessions*** Invite internal and external experts to present on relevant leadership topics in a casual setting. c) **Training Evolution** ▪ ***Microlearning*** Deliver training content in short, focused modules (e.g., videos, articles) for easier consumption and retention. ▪ ***Action Learning Projects***

		Assign real-world challenges to teams of managers, encouraging them to apply new knowledge and skills in a practical context.
4. Mentorship and Coaching	a)	**Formalized Mentorship Program**
	▪	***Matching*** Carefully pair mentors and mentees based on their goals and personalities.
	▪	***Training*** Provide training for mentors on effective mentoring techniques and communication.
	b)	**Coaching for All Levels**
	▪	***Executive Coaching*** Offer executive coaching to senior leaders to address unique challenges and refine strategic leadership skills.
	▪	***Group Coaching*** Conduct group coaching sessions on specific topics (e.g., conflict resolution, delegation) to maximize learning opportunities.
5. Implementation and Monitoring	a)	**Phased Rollout with Pilot** Pilot the program with a smaller group of managers to test and refine it before a wider implementation.
	b)	**Comprehensive Evaluation**
	▪	***Surveys*** Gather feedback from participants and stakeholders at multiple stages.
	▪	***Performance Metrics*** Track changes in leadership behaviors, team engagement, project outcomes, and employee satisfaction.
	▪	***ROI Analysis*** Calculate the return on investment in the leadership development program to demonstrate its value to the organization.

Objective 6: To critically examine how construction project managers evolve their leadership skills to handle challenges in the construction industry.

According to the research findings, seasoned project managers specifically those with 11 to 15 years of experience often show better degrees of relational transparency and self-awareness. This implies that with experience and introspection, leadership abilities

may change across time. The findings also underline the requirement of continued training and assistance as well as the need of continual professional development to enable project managers to improve their leadership skills and fit to evolving industry needs.

By offering concrete findings on the value of authentic leadership qualities in the construction industry, the research successfully addressed all the research objectives. The findings highlight the need of self-awareness and relational transparency in reaching project success and provide insightful analysis for creating leadership development plans and frameworks able to improve project management techniques. Particularly in view of Durban, these achievements are noteworthy for both scholarly study and useful applications in the construction industry.

6.3. RECOMMENDATIONS

To address the concept of authentic leadership and its impact on project success in the Durban construction industry, organisations can take the following steps:

Offer comprehensive leadership training programs.

Organisations in the Durban construction industry must emphasise developing leadership competencies as one of the measures to curtail project failure. Construction companies can collaborate with credible training institutions or local universities to develop training programs designed to specifically equip the industry with relevant leadership skills to increase project delivery success rate. Specifically, this entails compulsory leadership development programs for anyone occupying a managerial or leadership post in the industry to build their abilities as actual leaders. The programs will offer respondents a comprehensive training curriculum focusing on real-world leadership qualities such as relational transparency, moral and ethical principles, self-awareness, and balanced processing. The curriculum can incorporate workshops, seminars, and online training courses tailored to the requirements of project managers and executives in the construction business. Emotional intelligence is one kind of training that may assist project managers and team leaders in understanding their feelings and their impact on others around them.

Create an environment that supports and encourages authentic leadership.

Companies and organisations in the construction industry can foster and nurture authentic leadership through a reward system that recognises and rewards project managers or employees who display authentic leadership traits. Organisations must promote and reward self-awareness and ethical and moral behaviour among project managers since these characteristics are essential components of authentic leadership.

Team leaders and project managers should be encouraged to practice introspection and self-awareness to hone their natural leadership skills. Activities like journaling, self-evaluation and 360-degree feedback surveys fall within this category. This system can be incorporated into organisational performance assessments, including regular performance reviews, feedback, and recognition for achievements.

Foster a culture of ethical leadership.

Creating an ethical leadership culture in a construction firm may be difficult, but it is critical for developing a sustainable organisation. Construction companies should promote moral and ethical judgments from the top down to foster a pleasant work environment. For example, companies may adopt a code of conduct and offer training and tools that promote open communication. Organisations can also recognise and reward ethical behaviour, hold employees responsible, perform frequent audits, and foster an environment of integrity, accountability, and openness. These actions may assist in establishing a climate in which workers can disclose any ethical problems without fear of reprisal.

Adopt authentic leadership frameworks.

Companies in the construction industry in Durban can collaborate with experts to create comprehensive leadership frameworks that focus exclusively on issues like excellent communication, stakeholder management, and problem-solving abilities. These frameworks can be incorporated into any project management methodologies adopted by an organisation to enhance project performance. Alternatively, organisations can create their own tailored project management methodology that incorporates authentic leadership principles such as ethical leadership, relational transparency, and self-

awareness. The project managers and their teams must follow the guidelines provided by these frameworks throughout the project lifecycle.

Craft intensive leadership development strategies.

As part of their organisational strategy, companies can include leadership development strategies that include mentoring, coaching, and training programs to develop authentic leadership traits among project managers and improve their communication and problem-solving skills. Project managers and team leaders can get advice and help from mentors and coaches as they deal with challenges in the industry. To facilitate the sharing of expertise and the development of true leadership abilities, companies in the industry need to set up mentorship programs that link seasoned project managers and leaders with those just entering the field. These strategies can be done on a strategic level of the organisation.

Develop a feedback mechanism.

A construction company's project managers and team leaders may benefit from increased self-awareness and enhanced leadership effectiveness by instituting a feedback process that allows team members and stakeholders to provide feedback on their leadership abilities. Objectives should be defined, a tool should be selected, the process should be communicated, team members should be trained on providing constructive feedback, and feedback should be collected, analysed, shared with project managers, followed up on and tracked for continued improvement. This mechanism, if implemented effectively, can foster better leadership, communication, and teamwork.

Foster a culture of continuous improvement.

Fostering a culture of reflection among project managers is an effective way to encourage them to develop their leadership abilities over time. Organisations in the construction industry can make use of reflection sessions to encourage project managers to think critically about their leadership styles and where they may grow. Moreover, organisations can facilitate a growth attitude by creating a culture of learning and professional growth that will assist managers and team leaders to be more effective leaders.

In conclusion, it is crucial for businesses in Durban's construction industry to invest heavily in crafting a leadership competence framework that accounts for authentic leadership qualities. Project managers may benefit from formal leadership development programs, such as mentoring and coaching schemes if they are based on this paradigm. Also, businesses should foster an environment where employees are encouraged to share ideas and information to foster the growth of authentic leadership skills in project managers. Lastly, businesses should check in on the success of their leadership training programs regularly to ensure they are reaching their objectives and satisfying the requirements of their project managers. These measures will help improve findings, save costs, and speed up projects. Construction project management education and growth will benefit from these initiatives as well.

6.4.   FUTURE RESEARCH

The findings of this research might be developed in further investigations by looking at the link between effective construction industry project completion and other facets of authentic leadership, like self-regulation and an internalized moral perspective. By looking at the effect of authentic leadership on project performance in other industries and drawing analogies with the construction industry, further studies might fill in the voids in the literature. Future research might also look at the importance of the Project Management Office (PMO) to general project performance and identify which project management techniques are most successful when implemented to the construction industry.

6.5.   CONCLUSION

The research explored how team leaders and construction project managers may learn to lead in the face of challenges and how their authentic leadership influences the outcome of their projects. Most respondents believed that their organization's project portfolio was either mostly successful or extremely successful; most of them felt that a successful project is one that is finished within time, budget, and scope. The most often utilized project management tool was the PMBOK approach, and respondents usually gave good evaluations of project performance.

The research also looked at the specific elements of authentic leadership that affect construction industry's project success. According to the research findings, two crucial authentic leadership traits that affect project success are self-awareness and relational transparency. All things considered, the results imply that authentic leadership in construction project professionals improves project success; so, the research emphasizes the need of these elements in attaining better project performance in the construction industry. These realizations can direct companies and construction project managers and leaders to create strong leadership plans to address issues in the industry and achieve successful project delivery.

REFERENCES

Abbas, M.K. (2014). The Challenges of entrepreneurial leadership in Nigeria. Journal of Leadership and Management Studies (JOLMS), [online] 1(1), pp.52–59. Available at: https://online.cput.ac.za/index.php/jolms/article/view/55 [Accessed 5 May 2022].

Adnan Enshassi, Mohamed, S. and Jaser Abu Mosa (2008). Risk management in building projects in Palestine: Contractors' perspective. [online] *ResearchGate*. Available at: https://www.researchgate.net/publication/29469526_Risk_management_in_building_pr ojects_in_Palestine_Contractors'_perspective [Accessed 8 May 2022].

Alade, K.T. (2022). Developing a leadership framework for improving construction business organisation performance in South Africa. *open.uct.ac.za*. [online] Available at: https://open.uct.ac.za/items/e76767cc-9fa2-4f8a-b040-7fa9a62e42b1 [Accessed 16 Nov. 2023].

Albtoush, A.M.F., Doh, S.I., Rahman, R.A. and Al-Momani, A.H. (2022). Critical success factors of construction projects in Jordan: an empirical investigation. *Asian Journal of Civil Engineering*, 23(7), pp.1087–1099. https://doi.org/10.1007/s42107-022-00470-8.

Amrhein, V., Trafimow, D. and Greenland, S. (2019). Inferential Statistics as Descriptive Statistics: There Is No Replication Crisis if We Don't Expect Replication. *The American Statistician*, 73(sup1), pp.262–270.https://doi.org/10.1080/00031305.2018.1543137.

Ardichvili, A. and Manderscheid, S.V. (2008). Emerging Practices in Leadership Development. *Advances in Developing Human Resources*, 10(5), pp.619–631. doi:10.1177/1523422308321718.

Ashley, G.C. and Reiter-Palmon, R. (2012). Self-Awareness Scale--Short Form. *PsycTESTS Dataset,* [online] pp.2–17. https://doi.org/10.1037/t29152-000.

Avolio, B.J. and Gardner, W.L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, [online] 16(3), pp.315–338. doi: 10.1016/j.leaqua.2005.03.001.

Beleiu, I., Crisan, E. and Nistor, R. (2015). (PDF) *Main factors influencing project success.* [online] ResearchGate. Available at: https://www.researchgate.net/publication/348488881_main_factors_influencing_project _success.

Besner, C. and Hobbs, B. (2006). The Perceived Value and Potential Contribution of Project Management Practices to Project Success. *Project Management Journal*, 37(3), pp.37–48. doi:10.1177/875697280603700305.

Bhalerao, S. and Kadam, P. (2010). Sample size calculation. *International Journal of Ayurveda Research,* 1(1), p.55. https://doi.org/10.4103/0974-7788.59946.

Bonkoungou, W., Raisinghani, M.S. and Idemudia, E.C. (2022). A Study of the Impact of Different Styles of Leadership on Project Quality Performance. *International Journal of Information Technology Project Management*, 13(1), pp.1–14. https://doi.org/10.4018/ijitpm.290424.

Business Wire. (2021). *South Africa Construction Market 2021-2025: Key Trends and Opportunities Post COVID-19 - ResearchAndMarkets.com*. [online] Available at: https://www.businesswire.com/news/home/20210423005326/en/South-Africa-Construction-Market-2021-2025-Key-Trends-and-Opportunities-Post-COVID-19---ResearchAndMarkets.com.

Bygballe, L.E. and Swärd, A. (2019). Collaborative Project Delivery Models and the Role of Routines in Institutionalizing Partnering. *Project Management Journal*, 50(2), pp.161–176. doi:10.1177/8756972818820213.

Charles, S.H., Chang-Richards, A. and Yiu, K.T.W. (2021). New success factors for construction projects: a systematic review of post-2004 literature. *Construction Innovation*, ahead-of-print(ahead-of-print). https://doi.org/10.1108/ci-02-2021-0030.

Cooke-Davies, T. (2004). *Consistently Doing the Right Projects and Doing Them Right - What Metrics Do You Need?* [online] ResearchGate. Available at: https://www.researchgate.net/publication/237514661_Consistently_Doing_the_Right_Projects_and_Doing_Them_Right_-_What_Metrics_Do_You_Need [Accessed 6 May 2022].

Cooksey, R. and McDonald, G. (2019). *Surviving and Thriving in Postgraduate Research*. Singapore: Springer Singapore. doi:10.1007/978-981-13-7747-1.

Coronel, C., Morris, S., Crockett, K. and Blewett, C. (2020). *DATABASE PRINCIPLES : fundamentals of design, implementation, and management.* Cengage.

Crawford, L. (2005). Senior management perceptions of project management competence. International *Journal of Project Management*, 23(1), pp.7–16. doi: 10.1016/j.ijproman.2004.06.005.

Creswell, J.W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 4th ed. London: Sage Publications Ltd.

Deng, X., Low, S.P., Li, Q. and Zhao, X. (2014). Developing Competitive Advantages in Political Risk Management for International Construction Enterprises. *Journal of Construction Engineering and Management*, 140(9), p.04014040. doi:10.1061/(asce)co.1943-7862.0000836.

Diddams, M. and Chang, G.C. (2012). Only human: Exploring the nature of weakness in authentic leadership. *The Leadership Quarterly*, 23(3), pp.593–603. doi: 10.1016/j.leaqua.2011.12.010.

Edum-Fotwe, F.T. and McCaffer, R. (2000). Developing project management competency: perspectives from the construction industry.

International Journal of Project Management, 18(2), pp.111–124. doi:10.1016/s0263-7863(98)90075-8 Journal of Civil engineering and Management.

Enshassi, A., Mohamed, S. and Abushaban, S. (2009). *Factors affecting the performance of construction projects in the Gaza strip.*, [online] 15(3), pp.269–280. doi:10.3846/1392-3730.2009.15.269-280.

Ferguson, C.J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice*, [online] 40(5), pp.532–538. doi:https://doi.org/10.1037/a0015808.

Flyvberg, B., Skamris, M.K. and Buhl, S. (2002). Editorial Board Page. *Journal of the American Planning Association,* 68(3), pp. C–C. doi:10.1080/01944360208976269.

Furnham, A. and Stringfield, P. (1994). Congruence of self and subordinate ratings of managerial practices as a correlate of supervisor evaluation. *Journal of Occupational and Organizational Psychology*, 67(1), pp.57–67. doi:https://doi.org/10.1111/j.2044-8325.1994.tb00549.x.

Gamiljj, Y. and Abd Rahman, I. (2021). Studying the relationship between causes and effects of poor communication in construction projects using PLS-SEM approach. *Journal of Facilities Management*, [online] 21(1). doi:https://doi.org/10.1108/jfm-04-2021-0039.

George, B. and McLean, A. (2007). Why leaders lose their way. *Strategy and Leadership*, 35(3), pp.4–11. doi:10.1108/10878570710745776.

Giang, D.T.H. and Sui Pheng, L. (2011). Role of construction in economic development: Review of key concepts in the past 40 years. *Habitat International*, 35(1), pp.118–125. doi: 10.1016/j.habitatint.2010.06.003.

Gray, D.E. (2014). *Doing Research in the Real World*. 3rd ed. London: Sage Publications.

Hannan, S. and Sutherland, C. (2015). Mega-projects and sustainability in Durban, South Africa: Convergent or divergent agendas? *Habitat International*, 45, pp.205–212. doi: 10.1016/j.habitatint.2014.02.002.

Hartzell, D. (2005). *Academic's dictionary of management*. New Delhi: Academic Publishers.

Hwang Bon-Gang (2018). Performance and Improvement of Green Construction Projects: Management Strategies and Innovations. *Elsevier Science and Technology*.

Ilies, R., Morgeson, F.P. and Nahrgang, J.D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader–follower outcomes. *The Leadership Quarterly*, 16(3), pp.373–394. doi: 10.1016/j.leaqua.2005.03.002.

Kamal, A., Abas, M., Khan, D. and Azfar, R.W. (2019). Risk factors influencing the building projects in Pakistan: from perspective of contractors, clients and consultants. *International Journal of Construction Management*, pp.1–17. doi:10.1080/15623599.2019.1683693.

Keeves, J.P. (1997). *Educational research, methodology and measurement: an international handbook.* New York, N.Y.: Pergamon.

Kernis, M.H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14(1), pp.1–26. doi:10.1207/s15327965pli1401_01.

Khodeir, L.M. and El Ghandour, A. (2019). Examining the role of value management in controlling cost overrun [application on residential construction projects in Egypt]. *Ain Shams Engineering Journal,* 10(3), pp.471–479. doi: 10.1016/j.asej.2018.11.008.

Kouzes, J.M. and Posner, B.Z. (2013). *Leadership practices inventory* [LPI]. San Francisco: Pfeiffer.

Lather, P. (1986). Issues of validity in openly ideological research: Between a rock and a soft place. *Interchange*, 17(4), pp.63–84. doi:10.1007/bf01807017.

Leall, D. (2022). *The Good, The Bad and the Struggle: 2022 Construction Industry Outlook.* [online] Building. Available at: https://building.ca/feature/the-good-the-bad-and-the-struggle-2022-construction-industry-outlook/.

Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic Inquiry.* Newbury Park; London; New Delhi: Sage Publications.

Liphadzi, M., Aigbavboa, C. and Thwala, W. (2015). Relationship Between Leadership Styles and Project Success in the South Africa Construction Industry. *Procedia Engineering*, 123, pp.284–290. doi: 10.1016/j.proeng.2015.10.091.

Lloyd-Walker, B. and Walker, D. (2011). Authentic leadership for 21st century project delivery. *International Journal of Project Management*, 29(4), pp.383–395. doi: 10.1016/j.ijproman.2011.02.004.

Luthans, F., Avolio, B.J., Cameron, K.S. and Quinn, R.E. (2003). *Authentic leadership: A positive developmental approach.* [online] ResearchGate. Available at: https://www.researchgate.net/publication/309351065_Authentic_leadership_A_positive_developmental_approach [Accessed 8 May 2022].

Markets, R. and (2022). *South African Construction Industry Trends: Building Plans Passed and Buildings Completed.* [online] GlobeNewswire News Room. Available at: https://www.globenewswire.com/en/news-release/2022/01/10/2363840/28124/en/South-African-Construction-Industry-Trends-Building-Plans-Passed-and-Buildings-Completed.html#:~:text=The%20construction%20industry%20contributed%20R134 [Accessed 16 Nov. 2023].

Mazutis, D. and Slawinski, N. (2008). Leading Organizational Learning Through Authentic Dialogue. *Management Learning*, 39(4), pp.437–456. doi:10.1177/1350507608093713.

McClelland, M., Geldhof, J., Morrison, F., Gestsdóttir, S., Cameron, C., Bowers, E., Duckworth, A., Little, T. and Grammer, J. (2017). *Self-Regulation. Handbook of Life Course Health Development*, pp.275–298. doi:10.1007/978-3-319-47143-3_12.

Mir, F.A. and Pinnington, A.H. (2014). Exploring the value of project management: Linking Project Management Performance and Project Success. International Journal of Project Management, [online] 32(2), pp.202–217. doi:https://doi.org/10.1016/j.ijproman.2013.05.012.

Mukuka, M., Aigbavboa, C. and Thwala, W. (2015). Effects of Construction Projects Schedule Overruns: A Case of the Gauteng Province, South Africa. *Procedia Manufacturing*, 3, pp.1690–1695. doi: 10.1016/j.promfg.2015.07.989.

Naji, K.K., Gunduz, M. and Falamarzi, M.H. (2022). Assessment of Construction Project Contractor Selection Success Factors considering Their Interconnections. *KSCE Journal of Civil Engineering*, 26. doi:https://doi.org/10.1007/s12205-022-1377-6.

Neuman, L.W. (2003). *Workbook for social research methods: qualitative and quantitative approaches.* Boston: Allyn and Bacon.

Niazi, G.A. and Painting, N. (2017). Significant Factors Causing Cost Overruns in the Construction Industry in Afghanistan. *Procedia Engineering*, 182, pp.510–517. doi:https://doi.org/10.1016/j.proeng.2017.03.145.

Norman, S.M., Avolio, B.J. and Luthans, F. (2010). The impact of positivity and transparency on trust in leaders and their perceived effectiveness. *The Leadership Quarterly*, 21(3), pp.350–364. doi: 10.1016/j.leaqua.2010.03.002.

Ofori, G., Hindle, R. and Hugo, F. (1996). Improving the construction industry of South Africa. *Habitat International*, 20(2), pp.203–220. doi:10.1016/0197-3975(95)00056-9.

Ong, V., Richardson, D., Duan, Y. and Johnson, B. (2009). *The role of leadership in achieving effective project management*. [online] ResearchGate. Available at: https://www.researchgate.net/publication/245024976_The_role_of_leadership_in_achieving_effective_project_management [Accessed 6 May 2022].

Park, S.-J. and Yi, Y. (2021). Assessing Moderator Effects, Main Effects, and Simple Effects Without Collinearity Problems in Moderated Regression Models. *SSRN Electronic Journal*. doi:https://doi.org/10.2139/ssrn.3980056.

Patel, R. (2020). *Durban's bold plan to be Africa's most liveable city by 2030*. [online] The South African. Available at: https://www.thesouthafrican.com/news/durbans-bold-plan-to-be-africas-most-liveable-city-by-2030/.

Podgórska, M. and Pichlak, M. (2019). Analysis of project managers' leadership competencies. *International Journal of Managing Projects in Business*, 12(4), pp.869–887. doi:https://doi.org/10.1108/ijmpb-08-2018-0149.

Pretorius, S., Steyn, H. and Bond-Barnard, T.J. (2018). LEADERSHIP STYLES IN PROJECTS: CURRENT TRENDS AND FUTURE OPPORTUNITIES. *South African Journal of Industrial Engineering*, [online] 29(3). doi:https://doi.org/10.7166/29-3-2057.

Project Management Institute (2017). *A guide to the Project Management Body of Knowledge: (PMBOK® guide)*. 7th ed. Newtown Square, Pennsylvania, USA: Project Management Institute.

Project Management Institute (2021). *Guide To the Project Management Body of Knowledge*. 7th ed. S.L.: Project Management Inst.

Ryan, R.M. and Deci, E.L. (2001). On Happiness and Human potentials: a Review of Research on Hedonic and Eudaimonic well-being. *Annual Review of Psychology*, 52(1), pp.141–66. doi: 10.1146/annurev.psych.52.1.141.

Saunders, M., Lewis, P. and Thornhill, A. (2019). *Research Methods for Business Students*. 8th ed. New York: Pearson.

Sengupta, A. (2018). Self-Awareness: An Essential Tool for Effective Leadership. *CSA News*, 63(4), p.29. doi:https://doi.org/10.2134/csa2018.63.0425.

Serrador, P. and Turner, R. (2015). The Relationship between Project Success and Project Efficiency. Project Management Journal, 46(1), pp.30–39. doi:https://doi.org/10.1002/pmj.21468.

Shamir, B. and Eilam, G. (2005). 'What's Your Story?' A Life-stories Approach to Authentic Leadership Development. *The Leadership Quarterly*, [online] 16(3), pp.395–417. doi: 10.1016/j.leaqua.2005.03.005.

Shojaei, P. and Haeri, S.A.S. (2019). Development of supply chain risk management approaches for construction projects: A grounded theory approach. *Computers and Industrial Engineering*, 128, pp.837–850. doi: 10.1016/j.cie.2018.11.045.

Silva, G.A.S.K. and Warnakulasooriya, B.N.F. (2016). Criteria for Construction Project Success: A Literature Review. *SSRN Electronic Journal*. doi:https://doi.org/10.2139/ssrn.2910305.

Skipper, C.O. and Bell, L.C. (2006). Influences Impacting Leadership Development. *Journal of Management in Engineering*, 22(2), pp.68–74. doi:10.1061/(asce)0742-597x (2006)22:2(68).

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, [online] 104(104), pp.333–339. doi:https://doi.org/10.1016/j.jbusres.2019.07.039.

Tabassi, A.A., Argyropoulou, M., Roufechaei, K.M. and Argyropoulou, R. (2016). Leadership Behaviour of Project Managers in Sustainable Construction Projects. *Procedia Computer Science*, 100, pp.724–730. doi: 10.1016/j.procs.2016.09.217.

Tam, C.M., Tam, V.W.Y. and Tsui, W.S. (2004). Green construction assessment for environmental management in the construction industry of Hong Kong. *International Journal of Project Management*, 22(7), pp.563–571. doi: 10.1016/j.ijproman.2004.03.001.

Teddlie, C.B. (2020). *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences*. S.L.: Sage Publications.

Timofeeva, S.S., Ulrikh, D.V. and Tsvetkun, N.V. (2017). Professional Risks in Construction Industry. *Procedia Engineering*, 206, pp.911–917. doi: 10.1016/j.proeng.2017.10.571.

Toor, S. and Ogunlana, S.O. (2009). Construction professionals' perception of critical success factors for large-scale construction projects. *Construction Innovation*, 9(2), pp.149–167. doi:10.1108/14714170910950803.

Tranfield, D., Denyer, D. and Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. British Journal of Management, 14(3), pp.207–222. doi:https://doi.org/10.1111/1467-8551.00375.

Trochim, W.M. (2007). (PDF) *The Research Methods Knowledge Base*. [online] ResearchGate. Available at: https://www.researchgate.net/publication/243783609_The_Research_Methods_Knowledge_Base.

Tsai, C.Y. and Chang, A.S. (2012). Framework for developing construction sustainability items: the example of highway design. *Journal of Cleaner Production*, [online] 20(1), pp.127–136. doi: 10.1016/j.jclepro.2011.08.009.

Turner, R. and Zolin, R. (2012). Forecasting Success on Large Projects: Developing Reliable Scales to Predict Multiple Perspectives by Multiple Stakeholders over Multiple Time Frames. *Project Management Journal*, 43(5), pp.87–99. doi:https://doi.org/10.1002/pmj.21289.

Vetrimurugan, E., Jonathan, M., Shruti, V. and Rawlins, B. (2019). A View on South Africa's KwaZulu-Natal Coast: Stressors and Coastal Management. *Coastal Management*. [online] doi:10.1016/B978-0-12-810473-6.00009-1.

Vetter, T.R. (2017). Descriptive Statistics. Anesthesia & Analgesia, [online] 125(5), pp.1797–1802. doi:https://doi.org/10.1213/ane.0000000000002471.

Walliman, N. (2010). Research Methods: The Basics. Routledge. doi:https://doi.org/10.4324/9780203836071.

Walumbwa, F.O., Avolio, B.J., Gardner, W.L., Wernsing, T.S. and Peterson, S.J. (2008). Authentic Leadership: Development and Validation of a Theory-Based Measure. *Journal of Management*, 34(1), pp.89–126. doi:10.1177/0149206307308913.

Wan, J. and Wang, R. (2010). Empirical Research on Critical Success Factors of Agile Software Process Improvement. *Journal of Software Engineering and Applications*, 03(12), pp.1131–1140. doi:https://doi.org/10.4236/jsea.2010.312132.

White, M.D. and Marsh, E.E. (2006). Content Analysis: A Flexible Methodology. *Library Trends*, 55(1), pp.22–45. doi:https://doi.org/10.1353/lib.2006.0053.

Williams, T. (2016). Identifying Success Factors in Construction Projects: A Case Study. Project Management Journal, 47(1), pp.97–112. doi:https://doi.org/10.1002/pmj.21558.

Windapo, A.O. (2016). Skilled labour supply in the South African construction industry: The nexus between certification, quality of work output and shortages. *SA Journal of Human Resource Management*, 14(1). doi:https://doi.org/10.4102/sajhrm.v14i1.750.

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, 3(2), pp.254–262. doi:10.4304/tpls.3.2.254-262.

APPENDICES

Appendix A: Consent form

Cape Peninsula University of Technology

Keizersgracht and Tennant Street

P.O. Box 652

Zonnebloem, Cape Town

31 May 2022

Dear Participant

Research Questionnaire: The Impact of Authentic Leadership on Construction Project Success in the Durban Construction Industry.

I am currently researching towards a Master of Technology (MTech) in Project Management under the supervision of Dr Larry E Jowah at Cape Peninsula

University of Technology (CPUT). In fulfilment of the research programme, I am required to conduct research in the Project Management field.

The goal of this research is to provide new knowledge to the existing body of work on authentic leadership with specific focus on Durban construction projects. The purpose of this research is to gain a more in-depth understanding about the relationship between authentic leadership traits possessed by project managers and their rate of successful project delivery.

This questionnaire is divided into three sections as follows:

Section A: Demographic Data

This section is made up of individual information that requires the participant to select the most suitable answer from a list provided by indicating the appropriate answer with a tick.

Section B: Authentic Leadership

This section is in form of a Likert Scale, here the participant is requested to rank the statements by crossing the most applicable based on your last 5 projects. The weightings are 1 to 5 on a Likert scale (1- strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree.

Section C: Project Success

This section is in form of a Likert Scale, here the participant is requested to rank the statements by crossing the most applicable based on your last 5 projects. The weightings are 1 to 5 on a Likert scale (1- strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree.

Please note that for accuracy and truthfulness of this research, respondents are asked not to focus on whether the answer is 'right' or 'wrong' but, rather focus on personal perceptions OR experiences on the given questions and / or statements.

Participation in this research is voluntary and should take you approximately 15 minutes to complete in one sitting. As is the norm in activities of this nature any information that I will have access to during my research shall remain confidential and will only be utilised for purposes of the research. Your name or identification is not required, however if any of the information that I gather should be of interest to you I undertake to avail the same.

It is my fervent hope that you participate in the research. I am available at your earliest convenience to provide any further information and/or clarity that you may require.

Thank you for your cooperation.

Sincerely

Researcher: Tsitsi M Mateko

Appendix B: Questionnaire and Interview Questions

QUESTIONNAIRE

THE IMPACT OF AUTHENTIC LEADERSHIP ON CONSTRUCTION PROJECT SUCCESS IN THE DURBAN CONSTRUCTION INDUSTRY.

This is purely an academic exercise, do not; write your name or that of your firm. No information will be passed on to any authorities, you are safe and protected.

Please cross the applicable boxes (X)

SECTION A; BIOGRAPHY

What is your position in the organisation?

Project manager	Portfolio Manager	Project Administrator	Project Management Office	Other (Specify)

Please indicate your level of education

Certificate	Diploma/Degree	Honours/ Masters	PhD	Other (Specify)

How long have you been involved in projects at this level?

0 - 5 years	6 – 10 years	11 – 15 years	16 – 25 years	Above 25 years

What would you consider a successful project?

On Time	On Budget	Within Scope	Within time, budget and scope.	Other (Specify)

How successful do you perceive your organization's project portfolio?

Unsuccessful	Slightly successful	Mostly Successful	Very Successful	Other (Specify)

How many successful projects have been delivered in the past 5 years?

0 - 5 projects	6 – 10 projects	11 – 15 projects	16 – 25 projects	Above 25 projects

Does your organization have an official Project Management Office (PMO)?

Yes		No	

Which Project Management Methodology does your organization use?

PMBOK	Prince 2	Agile	Scrum	Other (Specify)

SECTION B.

Please rank the following by crossing the most applicable based on your last 5 projects. The weightings are 1 to 5 on a Likert scale (1- strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree.

	SELF AWARENESS AND SELF REGULATION **How would you assess self-awareness and self-regulation in your yourself as a project management professional?**	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	You are better able to understand your strengths and weaknesses.	1	2	3	4	5
	You are more aware of your emotions and understanding of their impact on others.	1	2	3	4	5

You can instil trust and cooperation in people that report to you.	1	2	3	4	5
You use emotional awareness for problem solving and less rigid decision making.	1	2	3	4	5
You are more effective in conducting your work.	1	2	3	4	5
You can accurately recognise emotions; realise the impact they have on your behaviour which allows better follower relationships.	1	2	3	4	5
You can recognise mistakes.	1	2	3	4	5
You are a more effective decision maker.	1	2	3	4	5
You keep track of your progress toward goals.	1	2	3	4	5
You don't notice the effects of your actions until it's too late.	1	2	3	4	5
You have personal standards and try to live up to them.	1	2	3	4	5
You try to be like people around you.	1	2	3	4	5

You have trouble making up your mind about things.	1	2	3	4	5
When it comes to deciding about a change, you feel overwhelmed by the choices.	1	2	3	4	5
You can accomplish goals you set for yourself.	1	2	3	4	5
As soon as you see a problem or challenge, you start looking for possible solutions.	1	2	3	4	5
RELATIONAL TRANSPARENCY AND BALANCED PROCESSING **How would you assess relational transparency and balanced processing in your yourself as a project management professional?**					
You openly share your feelings with others.	1	2	3	4	5
You let others know who you truly are as a person.	1	2	3	4	5
You rarely present a "false" front to others.	1	2	3	4	5
You admit your mistakes to others.	1	2	3	4	5
You ask questions and show interest.	1	2	3	4	5

You confront difficult situations.	1	2	3	4	5
You provide access to information.	1	2	3	4	5
You openly share your feelings with others.	1	2	3	4	5
You solicit views that challenge your deeply held positions.	1	2	3	4	5
You listen carefully to different points of view before coming to conclusions.	1	2	3	4	5
You seek others' opinions before making up your own mind.	1	2	3	4	5
You listen closely to the ideas of those who disagree with you.	1	2	3	4	5
You do not emphasize your own point of view at the expense of others.	1	2	3	4	5
You consider the value of other viewpoints in a fair manner	1	2	3	4	5
You do not distort, exaggerate, or ignore information	1	2	3	4	5
You objectively analyse all the important data before deciding.	1	2	3	4	5

SECTION C.

Please rank the following by crossing the most applicable based on your last 5 projects. The weightings are 1 to 5 on a Likert scale (1- strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree.

PROJECT SUCCESS How would you assess project success in your organization	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The project was completed on time.	1	2	3	4	5
The project was completed according to the budget allocated.	1	2	3	4	5
Given the problem for which it was developed, the project seems to do the best job of solving that problem.	1	2	3	4	5
Project specifications were met by the time of handover to the target beneficiaries.	1	2	3	4	5

Anything else you want to say about the above, please write here.

1………………………………………………………………………………………………

2………………………………………………………………………………………………

THANK YOU FOR PARTICIPATING

Appendix C: Ethics Clearance Certificate
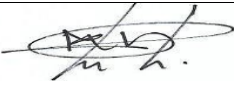
Office of the Chairperson Research Ethics Committee	FACULTY: BUSINESS AND MANAGEMENT SCIENCES

The Faculty's Research Ethics Committee (FREC) on **14 June 2022**, ethics **APPROVAL** was granted to **Tsitsi Mateko (211228826)** for a research activity at the Cape Peninsula University of Technology for **MTech: Business Admin. (Project Management).**

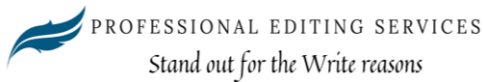| Title of project:	The Impact of Authentic Leadership on Construction Project Success in the Durban Construction Industry Supervisor (s): Dr L. E. Jowah

Decision: APPROVED

Signed: Chairperson: Research Ethics Committee	**26 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 037

Appendix D: Certificate of Editing

PROFESSIONAL EDITING SERVICES
Stand out for the Write reasons

Gerald T du Preez
PhD

22 Clivia Avenue
Brantwood, Kuils River, 7580
+27 (21) 903-3145 | +27 (83) 325 1842
geralddu9@gmail.com

Certificate of Editing

This serves to confirm that copy-editing and proofreading services were rendered to

for a master's thesis entitled

THE IMPACT OF AUTHENTIC LEADERSHIP ON CONSTRUCTION PROJECT SUCCESS IN THE DURBAN CONSTRUCTION INDUSTRY

Tsitsi Mercy Mateko

with a final word count of 27 234 on 6 March 2023

I am a member of the Professional Editors' Guild (member number DUP015) and commit to the following codes of practice (among others):

- *I have completed the work independently and did not sub-contract it out*
- *I kept to the agreed deadlines and communicated changes within reasonable time frames*
- *I treated all work as confidential and maintained objectivity in editing*
- *I did not accept work that could be considered unlawful, dishonest or contrary to public interest*

I uphold the following editing standards:

- *proofreading for mechanical errors such as spelling, punctuation, grammar*
- *copy-editing that includes commenting on, but not correcting, structure, organisation and logical flow of content, formatting (headings, page numbers, table of contents, etc.), eliminating unnecessary repetition*
- *checking citation style is correct, punctuating as needed and flagging missing or incorrect references*
- *commenting on suspected plagiarism and missing sources*
- *returning the document with track changes for the author to accept*

I confirm I have met the above editing standards and professional, ethical practice. The content of the work edited remains that of the student.

This edit was done to assist the student in paraphrasing significant portions of the thesis due to an initially high similarity index output from Turnitin.

Gerald T du Preez, PhD

APPENDIX E: Plagiarism Report

Thesis Chapters

by Tsitsi Mercy Mateko

80 vnbrims.org
Internet Source
<1 %

81 Helle Nørgaard, Annette Aagaard Thuesen. "Rural community development through competitions, prizes, and campaigns: The villagers' perspective", Journal of Rural Studies, 2020
Publication
<1 %

82 Mohammed Aboramadan, Main Naser Alolayyan, Mehmet Ali Turkmenoglu, Berat Cicek, Caterina Farao. "Linking authentic leadership and management capability to public hospital performance: the role of work engagement", International Journal of Organizational Analysis, 2021
Publication
<1 %

83 bspace.buid.ac.ae
Internet Source
<1 %

Exclude quotes   On   Exclude matches   < 5 words
Exclude bibliography   On

| 69 | Submitted to Asia Pacific University College of Technology and Innovation (UCTI)
Student Paper | <1% |

| 70 | Submitted to North West University
Student Paper | <1% |

| 71 | Submitted to University of Central Lancashire
Student Paper | <1% |

| 72 | Submitted to University of Wales Institute, Cardiff
Student Paper | <1% |

| 73 | acikbilim.yok.gov.tr
Internet Source | <1% |

| 74 | usir.salford.ac.uk
Internet Source | <1% |

| 75 | Submitted to University of Melbourne
Student Paper | <1% |

| 76 | biblio.ugent.be
Internet Source | <1% |

| 77 | cdn.atria.nl
Internet Source | <1% |

| 78 | dc.uwm.edu
Internet Source | <1% |

| 79 | researchbank.rmit.edu.au
Internet Source | <1% |

| 60 | Submitted to University of Strathclyde
Student Paper | <1% |

| 61 | journals.plos.org
Internet Source | <1% |

| 62 | www.ukessays.com
Internet Source | <1% |

| 63 | Submitted to Haliç Üniversitesi
Student Paper | <1% |

| 64 | Submitted to University of Oxford
Student Paper | <1% |

| 65 | Weischer, Anna Elisabeth, Jürgen Weibler, and Malte Petersen. ""To thine own self be true": The effects of enactment and life storytelling on perceived leader authenticity", The Leadership Quarterly, 2013.
Publication | <1% |

| 66 | dspace.stir.ac.uk
Internet Source | <1% |

| 67 | Publication | <1% |

| 68 | "Transparent and Authentic Leadership", Springer Science and Business Media LLC, 2021
Publication | <1% |

51 Submitted to South Bank University
Student Paper

<1 %

52 Submitted to The Robert Gordon University
Student Paper

<1 %

53 Submitted to University of South Africa
Student Paper

<1 %

54 Submitted to University of Sunderland
Student Paper

<1 %

55 Submitted to University of Wollongong
Student Paper

<1 %

56 Submitted to Heriot-Watt University
Student Paper

<1 %

57 Javier Blanch, Francisco Gil, Alfredo Rodriguez, Mirko Antino. "Authentic Leadership and Innovation: The Mediating Role of Affective and Cognitive Integration, and Engagement in Work Teams", International Journal of Innovation and Technology Management, 2021
Publication

<1 %

58 Submitted to The University of the West of Scotland
Student Paper

<1 %

59 Submitted to University of Greenwich
Student Paper

<1 %

<1 %

| 44 | .نوره الجريس, بثينة الحر, عبدالمحسن النعسانى "Antecedents of Organizational Commitment: The Mediating Effect of Job Satisfaction in Saudi Labor Sector", 2022 ,المجلة العربية للإدارة Publication | <1 % |

| 45 | Submitted to Northcentral Student Paper | <1 % |

| 46 | Submitted to University College Birmingham Student Paper | <1 % |

| 47 | Wan, Sammy K.M., Mohan Kumaraswamy, and Davis T.C. Liu. "Dynamic modelling of building services projects: A simulation model for real-life projects in the Hong Kong construction industry", Mathematical and Computer Modelling, 2011. Publication | <1 % |

| 48 | Submitted to Mancosa Student Paper | <1 % |

| 49 | Submitted to Cape Peninsula University of Technology Student Paper | <1 % |

| 50 | Submitted to Higher Education Commission Pakistan Student Paper | <1 % |

| 34 | **Submitted to Leeds Beckett University**
Student Paper | <1 % |

| 35 | **Submitted to Islamic University of Gaza**
Student Paper | <1 % |

| 36 | **Submitted to NHS Business Leadership Academy**
Student Paper | <1 % |

| 37 | **Submitted to Nottingham Trent University**
Student Paper | <1 % |

| 38 | **Submitted to MCI Management Centre Innsbruck**
Student Paper | <1 % |

| 39 | **Submitted to University of Warwick**
Student Paper | <1 % |

| 40 | **Claudia Peus, Jenny Sarah Wesche, Bernhard Streicher, Susanne Braun, Dieter Frey. "Authentic Leadership: An Empirical Test of Its Antecedents, Consequences, and Mediating Mechanisms", Journal of Business Ethics, 2011**
Publication | <1 % |

| 41 | **www.statssa.gov.za**
Internet Source | <1 % |

| 42 | **etd.uwc.ac.za**
Internet Source | <1 % |

| 43 | **Submitted to Yeditepe University**
Student Paper | |

23	Student Paper	<1%
24	docplayer.net Internet Source	<1%
25	Submitted to University of Leicester Student Paper	<1%
26	Submitted to Laureate Higher Education Group Student Paper	<1%
27	Submitted to Republic of the Maldives Student Paper	<1%
28	Submitted to Cyprus International University Student Paper	<1%
29	Submitted to Management Development Institute Of Singapore Student Paper	<1%
30	ijecm.co.uk Internet Source	<1%
31	repository.nwu.ac.za Internet Source	<1%
32	Submitted to ESC Rennes Student Paper	<1%
33	www.tandfonline.com Internet Source	<1%

17 Khurram Shahzad, Rimsha Iqbal, Shazia Nauman, Raheela Shahzadi, Adeel Luqman. "How a Despotic Project Manager Jeopardizes Project Success: The Role of Project Team Members' Emotional Exhaustion and Emotional Intelligence", Project Management Journal, 2023
Publication

<1%

18 Submitted to University of Northumbria at Newcastle
Student Paper

<1%

19 eprints.univ-batna2.dz
Internet Source

<1%

20 Daina Mazutis, Natalie Slawinski. "Leading Organizational Learning Through Authentic Dialogue", Management Learning, 2008
Publication

<1%

21 Namra Mubarak, Jabran Khan, Samyia Safdar, Shah Muhammad, Asim Riaz. "Ethical leadership in project-based organizations of Pakistan: the role of psychological empowerment and Islamic work ethics", Management Research Review, 2021
Publication

<1%

22 Submitted to University of Southampton
Student Paper

<1%

Submitted to Walter Sisulu University

| 8 | core.ac.uk
Internet Source | <1% |

| 9 | Submitted to University of Fort Hare
Student Paper | <1% |

| 10 | orcid.org
Internet Source | <1% |

| 11 | 1pdf.net
Internet Source | <1% |

| 12 | www.coursehero.com
Internet Source | <1% |

| 13 | Submitted to University of Pretoria
Student Paper | <1% |

| 14 | Shoukat Iqbal Khattak, Tahir Hussain Rizvi, Muhammad Anwar Khan. "Unwrapping Software Projects Success in Asia: Assessing the Role Of Authentic Leadership, Psychological Empowerment, and Job Engagement in Project Success Using a Serial-Mediation Approach", SAGE Open, 2022
Publication | <1% |

| 15 | Submitted to RMIT University
Student Paper | <1% |

| 16 | Submitted to London Metropolitan University
Student Paper | <1% |

150

Thesis Chapters

APPENDIX F: Research Consent Letter

1 Allen Place

Balito, KZN

July 25, 2022

Cape Peninsula University of Technology

Keizersgracht and Tennant Street

P.O. Box 652

Zonnebloem, Cape Town

Attention: The Ethics Committee

On behalf of Sagamu Building Contractors, I am writing to formally indicate our awareness of the research proposed by Miss Tsitsi M Mateko, a student at Cape Peninsula University of Technology. We are aware that Miss Mateko intends to conduct her research titled **The Impact of Authentic Leadership on Construction Project Success in The Durban Construction Industry** by administering a questionnaire to our employees.

As Director I grant Miss Mateko permission to conduct her research at our organization.

Sincerely

Gavin Khalima Khungwayo

Company Director