

DURBAN UNIVERSITY OF TECHNOLOGY

**THE INFLUENCE OF JOB DESIGN ON EMPLOYEE JOB SATISFACTION AT
TRANSNET PORT TERMINALS**

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THE INFLUENCE OF JOB DESIGN ON EMPLOYEE JOB SATISFACTION AT TRANSNET PORT TERMINALS

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ABSTRACT

Transnet Port Terminals (TPT) is a critical organisation in South Africa's port sector. The organisation has experienced persistent job satisfaction challenges, resulting in high employee turnover and reduced organisational performance. Without effective job satisfaction strategies, TPT risks losing its competitive advantage and failing to meet its operational objectives.

The aim of this study was to investigate the influence of job design on job satisfaction at TPT Durban Container Terminal, Pier 2. To achieve this, a quantitative survey design was used. Data were collected through a structured questionnaire distributed to 319 employees selected using simple random sampling from a target population of 1 865 employees. Of the distributed questionnaires, 288 were returned, representing a response rate of 90.3%.

The results showed that job design has a statistically significant positive relationship with job satisfaction, explaining 46.3% of the variance in job satisfaction. The primary factor associated with job satisfaction was employees perceiving that their job contributes to the overall attainment of company objectives. Effective feedback, utilisation of employee skills, and provision of training and support were also identified as key contributors to job satisfaction.

This study contributes new empirical evidence on the influence of job design on job satisfaction in the South African port sector, an area that has received limited scholarly attention. The findings provide TPT management with a practical basis for developing targeted job design interventions.

In summary, improving job design at TPT can meaningfully enhance job satisfaction, employee commitment, and organisational performance, making it a strategic priority for human resource management in the port sector.

DECLARATION

I hereby declare that this dissertation submitted for the degree in Management Sciences: Human Resources Management in the Department of Human Resources Management is my own original work and has not previously been submitted to any other institution of higher education. I further declare that all cited or quoted information sources are indicated and acknowledged in the comprehensive bibliography.

Nontobeko Khoza

DEDICATION

I dedicate this thesis to my late mother, Busisiwe Khoza, who always motivated me to become a better version of myself. Your love and encouragement continue to guide me every day.

To my siblings, for their unwavering support throughout this journey, your encouragement meant more than words can express.

To my beloved children, Khayaletu Dlamini and Blessing Dlamini, thank you for allowing this thesis to be my third child. This work is a reminder that there is nothing you cannot achieve, and I hope it inspires you to pursue your own dreams with courage and determination.

I also dedicate this to myself, for the resilience, perseverance, and faith that carried me through every challenge. This achievement is a testament to my growth, determination, and belief in the power of education.

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I extend my appreciation to the management of Transnet Port Terminals for approving this research and to the employees who took part, despite their busy schedules, for their time and contributions, which were essential to the success of this study.

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LIST OF ABBREVIATIONS

DCT – Durban Container Terminal

DUT – Durban University of Technology

HR – Human Resources

IREC – Institute for Research and Continuing Education

KMO – Kaiser-Meyer-Olkin

KZN – KwaZulu-Natal

MPT – multi-Purpose Terminal

SPSS – Statistical Package for the Social Sciences

TPT – Transnet Port Terminals

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Job satisfaction has become challenging because the world of work has changed faster than most organisations have adapted, and it plays out through poor design, mismatched expectations, and inadequate management responses (Parker and Grote 2022). This has resulted in organisations exploring solutions such as job design to enhance job satisfaction, believing that this will increase firm performance and survival (Bakker and Demerouti 2018). However, few studies have been conducted on the influence of job design on job satisfaction, particularly in South Africa (Hernaus, Dragičević and Hauff 2024). Therefore, this research examines the influence of job design and employee satisfaction, focusing on Transnet Port Terminals (TPT), one of South Africa's leading port providers.

Job satisfaction has become problematic in the South African port sector (Tsepetsi *et al.* 2019). Most organisations have failed to meet their performance targets, while some have lost employees to competitors due to poor job satisfaction (Hee *et al.* 2018). While job design is envisaged to be one of the strategies to enhance job satisfaction, there have been limited studies in the South African port sector on the influence of job design on job satisfaction (Maniram 2023). Hence, this research bridged this gap on the influence of job design on job satisfaction in the South African port sector.

This chapter provides an overview of the whole research. The chapter discusses the background of the research, defines key terms, and states the research problem. The chapter outlines the research aim, objectives, and questions. The chapter also provides an overview of the literature review and research methodology.

1.2 BACKGROUND OF THE STUDY

Job satisfaction remains one of the most extensively researched constructs in organisational behaviour, owing to its profound implications for employee engagement, productivity, and organisational sustainability. Job satisfaction is critical for employee engagement, retention, and performance in various sectors. Without job satisfaction, it is difficult for an organisation to survive and keep up with its competitors (Paredes-Saavedra *et al.* 2024). This is particularly pertinent in capital-intensive and operationally complex environments such as port terminals, where the efficiency of human resources is as vital as physical infrastructure. In the context of increasing global competition, technological advancement, and evolving workforce demographics, organisations are under mounting pressure to cultivate work environments that foster employee satisfaction (Parker and Grote 2022). Transnet TPT, as a state-owned enterprise and the primary port terminal operator in South Africa, is not immune to these pressures.

Job satisfaction is a multidimensional construct that reflects the extent to which employees derive positive affect from their work experiences (Judge, Zhang and Glerum 2020). It encompasses intrinsic factors such as the nature of the work itself, autonomy, and opportunities for growth, as well as extrinsic factors such as remuneration, supervision, and working conditions (Al-Musadieq *et al.* 2018). When these factors are not adequately addressed through deliberate organisational strategies, the consequences can be severe. Ineffective job design can lead to demotivation and high labour turnover (Rasheed *et al.* 2020). According to Mishra (2024), poor job design leads to boredom and dissatisfaction. According to Moeletsane (2020), there are indicators of poor job satisfaction at Transnet, such as high labour turnover and failure to meet organisational goals. These outcomes are particularly damaging in port terminal environments where operational continuity, safety compliance, and precision are non-negotiable requirements. This concern is further amplified by the observation that job satisfaction is a critical ingredient in organisational performance (Judge, Zhang and Glerum 2020). Other researchers, such as Al-Musadieq *et al.* (2018), demonstrate that job design can solve the problem of poor job satisfaction. According to Mishra (2024) poor job design leads to boredom

and dissatisfaction. The interplay between poorly designed jobs and deteriorating satisfaction levels creates a cyclical problem, wherein dissatisfied employees underperform or exit the organisation, placing heavier workloads on the remaining workforce and further eroding overall morale and satisfaction. This can be fatal given that job satisfaction is argued to be a critical ingredient in organisational performance (Judge, Zhang and Glerum 2020).

Complementing the JCM, the Job Demands-Resources (JD-R) model, advanced by Bakker and Demerouti (2017), provides additional explanatory power for understanding job satisfaction in demanding work environments. The JD-R model posits that job satisfaction is determined by the balance between job demands, which include physical, psychological, and organisational pressures, and job resources, which encompass social support, autonomy, and developmental opportunities. In high-pressure environments such as port terminals, where employees routinely manage time-sensitive cargo operations, equipment-intensive tasks, and safety-critical procedures, ensuring adequate job resources through thoughtful job design becomes an imperative rather than a discretionary consideration (Jayawarna, Azam and Yusoff 2024).

Al-Musadieq *et al.* (2018) observes that job design is essential as it helps make jobs align with global changes in the market. Jayawarna, Azam and Yusoff (2024) show that both job satisfaction and job design are critical factors in the performance of organisations in the port sector. This is substantiated by Onyango (2019) who observes that organisations that perform better have proper job designs, thereby enhancing job satisfaction. Job design is critical in job satisfaction because of many changes in the global workforce (Mququ 2022). The rise in technology requires job designs that accommodate flexible work arrangements within the port environment (Luzipho, Joubert and Dhurup 2023). In addition, the rise of women in the labour force in the port also necessitates the need for job design to enhance job satisfaction (Dyasi *et al.* 2024).

These findings collectively underscore that job design is not merely an administrative function but a strategic lever through which organisations can optimise human capital outcomes. In the context of TPT, which plays a pivotal role in facilitating South Africa's international trade and contributing to national economic development, the strategic

alignment of job design with employee satisfaction is of critical organisational importance.

Job design is critical in job satisfaction because of many changes in the global workforce (Mququ 2022). The rise in technology requires job designs that accommodate flexible work arrangements within the port environment (Luzipho, Joubert and Dhurup 2023). The Fourth Industrial Revolution (4IR) has introduced automation, digitalisation, and artificial intelligence into port operations globally, fundamentally altering the skill sets required of port workers and the nature of their daily tasks. Parker and Grote (2022) argue that as automation assumes more routine and manual tasks, job design must be reconceptualised to preserve meaningful human work, skill development, and employee agency, all of which are central to sustained job satisfaction. At TPT, where digital port management systems and automated equipment are increasingly integrated into operations, this challenge is both immediate and practically significant.

In addition, the rise of women in the labour force in the port also necessitates the need for job design to enhance job satisfaction (Dyasi et al. 2024). Historically male-dominated, the port sector in South Africa has seen growing gender diversification, driven both by equity legislation and deliberate transformation initiatives within state-owned enterprises. Research consistently demonstrates that women in physically demanding and traditionally male-oriented industries report unique job satisfaction challenges related to workplace culture, access to flexible arrangements, and the design of roles that accommodate their needs (Dyasi et al. 2024). Inclusive job design that addresses these concerns is therefore critical to retaining female talent and unlocking the full potential of a diverse workforce at TPT.

Furthermore, South Africa's broader labour market context adds a unique dimension to this study. The country faces persistently high unemployment rates, significant skills shortages in technical and managerial roles, and complex labour relations characterised by a strong union presence, all of which influence how job design can be implemented and how it shapes employee satisfaction (Mququ 2022). Within this environment, organisations such as TPT must navigate the tension between operational efficiency and the human need for meaningful, well-structured work. The South African legislative framework, including the Labour Relations Act (66 of 1995)

and the Employment Equity Act (55 of 1998), further imposes obligations on employers to ensure fair and equitable work conditions, obligations that are fundamentally connected to how jobs are designed and experienced by employees.

However, despite these challenges, there have been limited studies on the influence of job design on job satisfaction in the port sector in South Africa. While global literature on job design and satisfaction is extensive, much of it is situated in manufacturing, healthcare, and service industries in developed economies. The application of job design frameworks to Southern African port logistics, particularly within the unique institutional and operational context of TPT, remains a notably underexplored area of scholarly inquiry. This study therefore seeks to address this gap by investigating the influence of job design on job satisfaction at TPT, thereby contributing to both the academic literature on work design and the practical human resource management strategies of one of South Africa's most strategically significant state-owned enterprises.

1.3 DEFINITION OF TERMS

Key terms of the research are defined below.

1.3.1 Job design

Job design is structuring tasks, duties, roles, and responsibilities within an organisation to make employees more productive (Bratton *et al.* 2021). Al-Musadieq *et al.* (2018) state that job design is structuring roles and responsibilities within the enterprise to enhance performance.

1.3.2 Job Satisfaction

Irabor and Okolie (2019) explain job satisfaction as being the level at which the employee is happy about his or her job, and Judge, Klinger and Li (2023) state that job satisfaction is the degree to which employees are happy with their jobs.

1.4 PROBLEM STATEMENT

Job satisfaction is important in employee motivation, retention, and performance (Hidayah and Tobing 2018). Lack of job satisfaction negatively impacts the organisation (Knight, Kaur and Parker 2022). TPT is essential in South Africa's port sector. The organisation is strategically important for national trade and infrastructure development in South Africa. However, the organisation is facing job satisfaction challenges, resulting in poor performance and high labour turnover. Researchers such as Judge, Klinger and Li (2023) state that where job satisfaction challenges persist, the organisation may struggle to survive. Other researchers, such as Riyanto *et al.* (2023) hint that there are unresolved issues regarding strategies to enhance job satisfaction. Without solutions, TPT may continue to struggle with job satisfaction. Researchers such as Irabor and Okolie (2019) have indicated that effective job design can enhance employee job satisfaction. Nevertheless, significant gaps remain in understanding the relationship between job design and job satisfaction. This study his study seeks to address existing gaps by examining the relationship between job design strategies and employee job satisfaction within TPT. Understanding this relationship will enable TPT to develop strategic HR interventions that enhance job satisfaction and attain organisational competitiveness.

1.5 AIM OF THE STUDY

The study aimed to research the influence of job design on employee job satisfaction at Transnet Port Terminals, specifically TPT Durban DCT Pier 2, KwaZulu-Natal (KZN) province, South Africa.

1.6 OBJECTIVES OF THE STUDY

To answer aim of the study, the key objectives of the study were as follows:

- To investigate factors that influence job satisfaction of employees at TPT Durban DCT Pier 2.
- To explore the relationship between job design and job satisfaction at TPT Durban DCT Pier 2.

- To explore the strategies of job design and their influence on job satisfaction at TPT Durban DCT Pier 2.
- To evaluate the benefits of job design on employee performance and organisational effectiveness at TPT Durban DCT Pier 2.

1.7 RESEARCH QUESTIONS

The following research questions were examined to support the outlined research objectives:

- What are the job design factors that influence job satisfaction of employees at TPT Durban DCT Pier 2?
- What is the relationship between job design and employee job satisfaction at TPT Durban DCT Pier 2?
- What are the strategies of job design and their influence on job satisfaction at TPT Durban DCT Pier 2?
- What are the benefits of implementing job design on employee performance and organisational effectiveness at TPT Durban DCT Pier 2?

1.8 SIGNIFICANCE OF THE STUDY

This research makes a significant contribution to academic literature and organisational practice. It extends the current knowledge on job design and job satisfaction in the South African port sector. According to Čizmić *et al.* (2022), many studies have shown the connection between job satisfaction and job design. However, there is a contextual gap in this relationship in the port environment. Generating insights on the relationship between job design and job satisfaction helps TPT develop data-driven strategies to improve job satisfaction. The findings of this research contribute to the broader human resource management practices in the port environment.

1.9 LITERATURE REVIEW

This section provides an overview of the literature reviewed in Chapter 2.

1.9.1 Theoretical framework

The job characteristics model (JCM) guides this research. Lawler's motivational job design theory and Herzberg's two-factor theory supplemented the JCM.

1.9.1.1 Job characteristics model

The main theory guiding this research was the job characteristics theory developed by Hackman and Oldham (Demerouti and Bakker 2023). According to the theory, five job dimensions influence job satisfaction: skill variety, task identity, task significance, autonomy, and feedback (Nagrath 2019). Skill variety is the level at which the job allows the application of various skills. Task identity is the degree to which the job holder can handle the task from start to finish (Nagrath 2019). Task significance is the extent to which the job is important to the organisation and its stakeholders. Autonomy is the extent to which the employee independently executes tasks (Mustafa, Ramos and Zainal Badri 2023). Feedback is the degree to which employees are given information about their efforts (Parker and Grote 2022). The theory shows that high levels of these five job dimensions lead to high job satisfaction. The JCM was used in this research because it explains the relationship between job design and job satisfaction (Bakker and Demerouti 2018). In addition, the model has been tested and validated by other researchers such as Tang and Do (2019).

1.9.1.2 Lawler's motivational job design theory

In addition to the job characteristics theory, Lawler's motivational job design theory was used in the study. Hackman and Lawler (1971) developed the theory, which refined Hackman and Oldman's JCM. According to the theory, to attain job satisfaction job elements should first help employees attain intrinsic motivation, not just only driven by external factors (Mustafa, Ramos and Zainal Badri 2023). According to Lawler's motivational job design theory, the five job dimensions of task identity, autonomy task significance, skill variety, and feedback should enhance innate motivation and attain job satisfaction. This theory was adopted as a supplementary theory in this study because it elaborates on the influence of job design on job satisfaction (Lawler 2018).

This theory was adopted as a supplementary theory in this study because it elaborates on the influence of job design on job satisfaction (Lawler 2018). A detailed justification for the adoption of this theory is provided in Chapter 2.

1.9.1.3 Herzberg's two-factor theory

This study also used Herzberg's two-factor theory as a supplementary theory. Herzberg developed the theory by categorising factors into hygiene factors and motivators. The hygiene factors are extrinsic factors such as salary, working conditions, and job security (Bevins 2018). If not provided by the employer, these factors lead to job dissatisfaction, but they do not generate job satisfaction. On the other hand, motivators are intrinsic factors such as job satisfaction, achievement, recognition, and personal development (Alrawahi *et al.* 2020). According to the theory, these factors, if provided, generate motivation. Herzberg's two-factor theory was used in this research because it shows that not all factors lead to job satisfaction (Ghafoor and Yaseen 2019). Furthermore, researchers such as Peramatzis and Galanakis (2022) have tested and validated the theory. A detailed justification for the adoption of this theory is provided in Chapter 2.

1.9.2 Factors that influence job satisfaction

Researchers such as Zhou *et al.* (2021) have highlighted various factors influencing job satisfaction, noting that these factors operate at both the individual and organisational level and are shaped by the broader work environment in which employees' function. The identification of these factors is particularly important in operationally demanding environments such as port terminals, where the nature of work is physically intensive, safety-critical, and subject to constant operational pressure (Jayawarna, Azam and Yusoff 2024). Within the theoretical framework of the Job Characteristics Model (JCM) advanced by Hackman and Oldham, job satisfaction is primarily influenced by intrinsic job-related factors, namely skill variety, task identity, task significance, autonomy, and feedback (Demerouti and Bakker 2023). However,

contemporary scholars have expanded this understanding to include a broader range of intrinsic and extrinsic factors that collectively shape the job satisfaction experiences of employees across various sectors.

One of the most consistently documented factors influencing job satisfaction is the clarity of job descriptions and specifications. For example, Wulandari (2023) shows that a clear job description and specification enhance job satisfaction. This is reinforced by Peramatzis and Galanakis (2022), who observes that job satisfaction is high with a clear job description and specification are clearly defined and consistently communicated to employees. From the perspective of the JCM, clearly defined job descriptions contribute directly to task identity and task significance, as employees who understand the full scope and purpose of their roles are better positioned to derive meaning from their work (Nagrath 2019). In the context of TPT Durban DCT Pier 2, where roles are highly specialised and operationally interdependent, the absence of clear job descriptions can create role ambiguity that directly undermines satisfaction and performance (Barkhuizen and Gumede 2021). Compensation is another critical factor that influences job satisfaction among employees. Mabaso and Dlamini (2021) demonstrate that fair compensation is essential to job satisfaction. This is substantiated by Ramli (2018) who asserts that fair and equitable compensation can be used as a deliberate strategy to attain and sustain job satisfaction. This is consistent with Herzberg's two-factor theory, which classifies salary and financial remuneration as hygiene factors, wherein inadequate compensation does not merely fail to generate satisfaction but actively produces dissatisfaction among employees (Bevins 2018). In capital-intensive industries such as port operations, where employees are exposed to elevated occupational risks and physically demanding conditions, the expectation of commensurate financial reward is particularly pronounced (Luzipho, Joubert and Dhurup 2023). At TPT Durban DCT Pier 2, compensation structures that are perceived as inequitable or inconsistent with the demands of the work environment are therefore likely to constitute a significant source of job dissatisfaction among the workforces. Opportunities for learning, development, and career advancement represent a further factor of considerable influence on job satisfaction. Mququ (2022) observes that offering employees developmental opportunities is significant for job satisfaction, a position supported by Nagrath (2019), who shows that where employees are given developmental opportunities, they tend to have high levels of job satisfaction. Within

the JCM, developmental opportunities are closely associated with the concept of skill variety, as employees who are afforded the chance to acquire new competencies and apply diverse skills in their roles experience higher levels of intrinsic motivation and satisfaction (Parker and Grote 2022). Furthermore, Lawler's motivational job design theory posits that job elements must support intrinsic motivation, of which developmental opportunity is a central component, in order for sustained job satisfaction to be achieved (Mustafa, Ramos and Zainal Badri 2023). In the context of TPT, where the Fourth Industrial Revolution is reshaping the technical demands of port operations, access to relevant training and upskilling opportunities is increasingly critical to employee satisfaction and organisational competitiveness (Luzipho, Joubert and Dhurup 2023).

Autonomy and the degree of employee independence in executing work tasks constitute another important determinant of job satisfaction. Mustafa, Ramos and Zainal Badri (2023) observe that autonomy is the extent to which employees independently execute tasks, and that higher levels of autonomy are associated with greater feelings of personal responsibility, competence, and satisfaction. This is affirmed by Gagné *et al.* (2022), who show that job designs incorporating autonomy, task significance, and task identity result in higher levels of job satisfaction amongst employees. Autonomy is a core dimension of the JCM and is directly linked to the psychological state of experienced responsibility for work outcomes, which in turn drives intrinsic motivation and satisfaction (Demerouti and Bakker 2023). In port terminal environments such as TPT Durban DCT Pier 2, where operational decisions must often be made swiftly and independently, providing employees with appropriate levels of decision-making authority is essential to cultivating a satisfied and engaged workforce.

Working conditions, supervisory support, and interpersonal relationships at work also significantly influence job satisfaction. Herzberg's two-factor theory classifies working conditions, supervision, and interpersonal relations as hygiene factors, the inadequacy of which produces dissatisfaction even in the presence of motivating work content (Alrawahi *et al.* 2020). Researchers such as Peramatzis and Galanakis (2022) have validated this position, confirming that poor working conditions and inadequate supervisory support are among the most frequently cited sources of dissatisfaction

across various occupational contexts. In the port sector, where employees are routinely exposed to hazardous equipment, extreme weather conditions, and shift-based work schedules, the quality of the physical work environment and the nature of the supervisory relationship are particularly salient determinants of satisfaction (Jayawarna, Azam and Yusoff 2024). Additionally, recognition and acknowledgement of employee contributions represent an intrinsic motivator that, according to Herzberg's framework, actively generates satisfaction rather than merely preventing dissatisfaction (Ghafoor and Yaseen 2019). At TPT Durban DCT Pier 2, where employees perform operationally critical functions that are central to South Africa's trade facilitation capacity, the provision of meaningful recognition constitutes an important and often underutilised lever for enhancing job satisfaction.

Furthermore, the demographic and contextual characteristics of the workforce at TPT Durban DCT Pier 2 add additional dimensions to the factors influencing job satisfaction. Dyasi *et al.* (2024) highlight that the increasing participation of women in the port labour force introduces unique satisfaction related considerations, including the need for gender-sensitive job design, equitable access to advancement opportunities, and workplace cultures that are inclusive and respectful. Similarly, generational diversity within the workforce means that different employee cohorts may prioritise different satisfaction factors, with younger employees placing greater emphasis on developmental opportunities and flexible work arrangements, while more experienced employees may prioritise job security and recognition (Mququ 2022). However, despite these observations about factors influencing job satisfaction, there has been a gap in the research pertaining to the port environment in South Africa (Barkhuizen and Gumede 2021). This study was therefore necessary to systematically interrogate the specific factors influencing job satisfaction at TPT Durban DCT Pier 2, thereby contributing contextually grounded empirical evidence to an area of inquiry that remains insufficiently explored in the South African port logistics literature.

1.9.3 Job design and job satisfaction

Researchers such as Raharjo and Fernandes (2018) have shown positive relationships between job design and job satisfaction. This is supported by observations by Gagné *et al.* (2022) who show that job designs with autonomy, task

significance, and task identity result in higher levels of job satisfaction amongst employees. This is also observed by Ali and Zia-ur-Rehman (2021), who demonstrate that jobs with skill variety result in more job satisfaction. However, other researchers such as Barkhuizen and Gumede (2021) do not show a positive relationship between job design and job satisfaction. Despite research on job satisfaction and job design, little is known about this relationship in the port environment in South Africa. Hence, this research explores this relationship at TPT in South Africa.

1.9.4 Job design strategies

Researchers such as Siruri and Cheche (2021) have investigated job design strategies. For example, Adiarani (2019) shows that job enlargement is a job design strategy that results in adding tasks. Bruning and Campion (2018) show that job enlargement is important for reducing boredom. Hong, Zhao and Stanley Snell (2019) observe that job enrichment is a frequently used job design strategy. This is similar to observations by Rasheed *et al.* (2020), who further state that offering challenging and complex tasks motivates employees. Job rotation is a frequently used job design strategy (Siruri and Cheche 2021) with most employers moving employees from one job to another or department to another to enhance their job satisfaction (Knight, Kaur and Parker 2021). However, despite research on job design strategies, there has been limited research on this area in the port environment in South Africa; hence, this research investigates job design strategies at TPT Durban DCT Pier 2.

1.9.5 Benefits of job design

Researchers such as Bratton *et al.* (2021) and others have studied the benefits of job design. Job design is key to increasing job satisfaction (Böckerman *et al.* 2020; Raharjo and Fernandes 2018 Putra (2024)). Job design promotes job enhancement and skills development (Afriyie *et al.* 2024; Ndiango, Gabriel and Changalima 2024) and helps attain organisational goals (Irlabor and Okolie 2019). However, despite studies on the benefits of job design, there are limited studies on this subject in South Africa, particularly in the port environment. Therefore, this research studies the benefits of job design at TPT in South Africa.

1.10 SCOPE OF THE STUDY

This research focused on the relationship between job design and job satisfaction at TPT Durban DCT Pier 2, KZN province, a Transnet SOC limited division.

1.11 RESEARCH METHODOLOGY

This section provides an overview of the research methodology used in this research.

1.11.1 Research philosophy

Research philosophy provides a framework for research (Walliman 2022). According to Privitera and Ahlgrim-Delzell (2018), the researcher's worldview influences how the research will be conducted. There are three main types of research philosophy: positivism, interpretivism, and pragmatism. Positivist research philosophy is the belief that the world is objective (Stratton 2021). Interpretivist philosophy is the belief that the world is subjective (Denscombe 2021). Pragmatism mixes the interpretivist and positivist philosophies (Walliman 2022). The positivist philosophy guided this research due to the need to generate objective conclusions.

1.11.2 Research approach

A research approach is the overall research strategy (Tamayo, Lane and Dewart 2020). There are three types of research methods: quantitative research, qualitative research, and mixed-methods research (Schreier 2018). Quantitative research is collecting and analysing numerical data (Sheard 2018). Qualitative research generates insights based on meanings, motivations, and experiences (Bell, Harley and Bryman 2022). Mixed methods utilize qualitative and quantitative (Stratton 2021). This study adopted a quantitative research approach because it allowed the collection of numerical data to test the relationship between job design and job satisfaction quantitatively.

1.11.3 Research design

Research design is the overall research plan (Pallant 2020). Numerous research designs exist, including experimental, descriptive, quasi-experimental, and survey

designs. In this research, the survey design was used. Survey design uses a questionnaire to collect numerical data from a large sample (Lohr 2021). The reason for using the survey research design was because it allows for collecting numerical data from a large sample in a short period (Walliman 2022).

1.11.4 Target population

The target population is the aggregate number of individuals the researcher intends to study (Willie 2024). The target population for this research consisted of 1 865 employees at TPT Durban DCT Pier 2. The target population was obtained from the internal staff list from the Human Resource Department at TPT.

1.11.5 Sampling

It is not feasible to study the entire population (Walliman 2021). Sampling is the process of selecting members of the population to form a small group representing the entire population (Bhardwaj 2019).

1.11.5.1 Sampling method

There are two sampling methods, non-probability sampling method and probability sampling (Berndt 2020). Non-probability sampling is a sampling method that does not give each participant of a population an equivalent chance to be selected for the sample (Stratton 2021). According to Arias *et al.* (2023), probability sampling is a technique which every unit of the population has a known and equal chance of being included. In this study probability sampling was used because it is objective and aligns with quantitative research.

1.11.5.2 Sampling technique

There are numerous probability sampling techniques, including systematic, random, and stratified (Lohr 2021). Simple random sampling was used in this study. In simple random sampling, the researcher randomly selects the items into a sample (Berndt 2020).

1.11.5.3 Sampling size

Sekaran and Bougie's (2019) table was used to determine the sample size in this research. According to the table, an appropriate sample size for a population of 1 865 is 319. Therefore, the sample size for this research was 319.

1.11.6 Inclusions and exclusions of the study

The research was limited to TPT in Durban, KZN. This research only included employees from Durban Container Terminal Pier 2, and excluded Pier 1 Container Terminal, Maydon Wharf Terminal, Durban RORO Terminal, Multi Point Purpose Terminal (Point MPT), and Durban Car Terminal. The study also excluded top management and those at other Transnet SOC Operating Divisions, Transnet Engineering, Transnet Pipelines, Transnet Freight Rail, Transnet Port Authority, Transnet Properties, Transnet Corporate Services, Transnet Academy, and all their respective locations.

1.11.7 Data collection and measuring instrument method

Data collection is the organised process of gathering information for research purposes (Asenahabi 2019). This research data was collected through a self-administered closed-ended questionnaire (Appendix C). Three hundred and nineteen questionnaires (Appendix C) were hand-delivered, and the respondents were allowed time to complete the questionnaire. Using the personal approach enhanced response the rate and data quality (Heap and Waters 2019). The researcher used a self-developed, closed-ended structured questionnaire designed on a 5-point Likert scale, with response options ranging from strongly disagree to strongly agree. In addition to the sample demographics section, other sections of the questionnaire corresponded to the research objectives of the study.

1.11.7.1 Primary data

Primary data is new data collected for the first time for research purposes (Ajayi 2023) This primary data can be gathered through questionnaires, interviews, observations,

or experiments. This research gathered primary data using a closed-ended questionnaire (Appendix C).

1.11.7.2 Secondary data

According to Bell, Harley and Bryman (2022) secondary data is information already available that individuals and organisations have collected for other purposes. This research used secondary data in the literature review and discussion sections. The secondary data for this research was sourced from textbooks, online resources, scholarly journal articles, media publications, government reports, trade magazines, internal company records, and other relevant periodicals.

1.11.8 Data analysis

Fadele and Rocha (2025) state that data analysis is a systematic process of inspecting, cleaning, transforming, and interpreting data collected during the research. Data in this study was analysed using the Statistical Package for Social Sciences (SPSS) Version 30 for Windows. Descriptive statistics were used for demographics and descriptive research objectives. The researcher used inferential statistics to analyse the relationship between job satisfaction and job design.

1.11.9 Validity and reliability

This section overviews how validity and reliability were ascertained in this research.

1.11.9.1 Validity

Validity refers to the degree to which a research instrument accurately measures what it is intended to measure (Vu 2021). Ensuring validity is key in research so that the findings can be generalisable to the broader population (Sürücü and Maslakci 2020). In this research, content validity was used. In terms of content validity, all construct dimensions were included in the research instrument (Sürücü and Maslakci 2020). Kaiser-Meyer-Olkin (KMO) and Bartlett's tests were also conducted to measure validity.

1.11.9.2 Reliability

According to Shodiya and Adekunle (2022), reliability is the extent to which the research instrument is consistent, such that similar results can be generated if the same instrument is administered. In this research, the Cronbach's alpha coefficient was computed to determine the reliability of the research instrument. All constructs were above the acceptable threshold of 0.7.

1.11.9.3 Pilot study

A pilot test is preliminary research conducted to check whether the research instrument is adequate (Bell, Harley and Bryman 2022). A pilot test was conducted with ten respondents from TPT who did not participate in the final study. The Cronbach's alpha coefficient results from the pilot test show that all constructs in the research instrument were above 0.7, demonstrating that all constructs were reliable.

1.11.10 Ethical considerations

Ethical considerations are important in every research process (Žukauskas, Vveinhardt and Andriukaitienė 2018). Before undertaking this research, ethical clearance was obtained from Durban University of Technology and the Institutional Research Ethics Committee (IREC) (Appendix E). Gatekeeper's permission was obtained from the participating organisation (TPT) prior to commencing data collection, thereby ensuring that the research was conducted with the full knowledge and authorisation of the relevant organisational authority (Appendix B). In addition, informed written consent was obtained from the research respondents (Appendix D). Respondents also completed a confidentiality agreement form which guaranteed their confidentiality (Appendix D). The principle of anonymity was observed during and after the research process. Respondents' identities were not revealed during and after the research process. The respondents were also informed that participation was voluntary, and they could withdraw from the study at any time.

1.11.10.1 Data storage

Data disposal procedures were established and will be enforced to protect the organisation and individual interests (Bos 2020). The completed questionnaire will be securely stored in a locked cabinet for at least five years for potential future research. After the designated retention period, all filled questionnaires will be destroyed by shredding them, and electronic copies will be permanently deleted. Any future use of the data will require additional ethical approval through relevant review processes. There was compliance with DUT policies and procedures as confirmed by DUT's ethical clearance (Appendix E).

1.12 STRUCTURE OF DISSERTATION

Chapter 1: Introduction

Chapter 1 introduces the research by discussing the background and the problem statement. The chapter also shows the research aim, objectives, and questions. The chapter explains the significance and the research scope. The chapter also provides the literature overview of the review and research methodology.

Chapter 2: Literature review

The chapter explores existing literature on job design and job satisfaction. First, the chapter discusses the theoretical framework (JCM, Lawler's motivational job design theory, and Herzberg's two-factor theory). The chapter also explores empirical literature guided by the research objectives, thereby identifying research gaps.

Chapter 3: Research methodology

Details and justifies all steps including procedures undertaken during the research process. Firstly, the chapter shows the research philosophy, approach, and design, which is purely quantitative. Secondly, the chapter elaborates on the population and sampling techniques. Thirdly, the data collection process and the measurement instrument used are elucidated. Finally, the chapter elaborates on the data analysis process and ethical considerations.

Chapter 4: Findings and discussions

In this chapter, findings and discussions are shown based on data analysis carried out using SPSS version 30.0. The chapter begins by showing the response rate and sample demographics. Secondly, the chapter illustrates results from reliability analysis and exploratory factor analysis, which were computed using Cronbach's alpha coefficient and KMO and Bartlett's tests, respectively. Thirdly, the chapter presents the results of descriptive and inferential statistics leading to regression analysis. The chapter also discusses results by referring to the literature reviewed.

Chapter 5: Conclusion and recommendations

Chapter 5 provides the conclusion, recommendations, and suggestions for future research based on the findings.

1.13 CONCLUSION

This chapter outlined the contextual background and problem statement of the study. The study's aims, objectives, research questions, methodology, and ethical considerations were clarified. Chapter two also provided an overview of the literature review and research methodology. The following chapter presents a detailed review of existing literature relating to how job satisfaction is influenced by job design.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The preceding chapter presented the research by explaining the study's background and the research problem. This chapter explores literature on job design and job satisfaction. The chapter begins by exploring the theoretical framework for job design and satisfaction. The chapter then discusses existing empirical literature on job design and job satisfaction. The chapter ends by developing a conceptual framework for job design and satisfaction.

2.2 THEORETICAL FRAMEWORK

The theoretical framework refers to theories used to guide the research (Varpio *et al.* 2020). The theoretical framework helps to determine the research gap (Wang, Liu and Parker 2020). In addition, the theoretical framework provides variables that can be tested in a quantitative study (Mugizi 2019). The main theoretical framework of this study was the JCM. However, the motivational job design theory and the job enrichment theory were used as supplementary theories to explain the relationship between job design and job satisfaction.

2.2.1 Job characteristics model

The main theory that guided this research is the JCM. This model is a product of Hackman and Oldham's seminal work (Hackman and Oldham 1976). The relevant theory is key in understanding the effect of job design on employee job satisfaction. According to the JCM, five job dimensions enhance job satisfaction: task identity, task significance, skill variety, autonomy, and feedback (Demerouti and Bakker 2023). According to Nagrath (2019), skill variety refers to the extent to which a diverse set of skills can be applied to the job. The model demonstrates that the higher the skill variety, the better the employee job satisfaction. On the other hand, task identity is the degree that the worker can finish a task from start to finish (Hackman and Oldham

1976). This allows employees to generate a sense of achievement by observing the impact of their efforts (Nagrath 2019).

The third dimension of the JCM is task significance which denotes to how individuals perceive their work to impact the organisation and others (Raihan 2020). Higher level of employee job satisfaction is associated with a higher level of job significance. The fourth dimension of the JCM is autonomy, which is the extent to which employees have independence in executing their tasks (Mustafa, Ramos and Zainal Badri 2023). Greater autonomy results in job satisfaction ingredients such as self-esteem and pride amongst employees (Hackman and Oldham 1976). Finally, feedback describes the degree that employees are given information pertaining to their work by their supervisors (Parker and Grote 2022). Hackman and Oldham's model shows that the greater the feedback the more the job satisfaction.

These five dimensions collectively influence three critical psychological states among employees. Skill variety, task identity, and task significance generate the experienced meaningfulness of work, wherein employees perceive their work as valuable and worthwhile. Autonomy produces the experienced responsibility for outcomes of the work, wherein employees feel personally accountable for the results of their efforts. Feedback generates knowledge of the actual results of the work, enabling employees to understand the effectiveness of their performance (Hackman and Oldham 1976; Demerouti and Bakker 2023). These three critical psychological states collectively produce four personal and work outcomes, namely high internal work motivation, high quality work performance, high job satisfaction, and low absenteeism and turnover (Yildirim, Dilekçi and Manap 2024). However, the model recognises that these outcomes are not uniform across all employees. Employee growth need strength, which refers to the degree to which an individual desires personal development and challenge through their work, moderates the relationship between the job dimensions, the psychological states, and the resultant outcomes, such that employees with higher growth need strength respond more positively to enriched job designs (Hackman and Oldham 1976) (Figure 2.1).

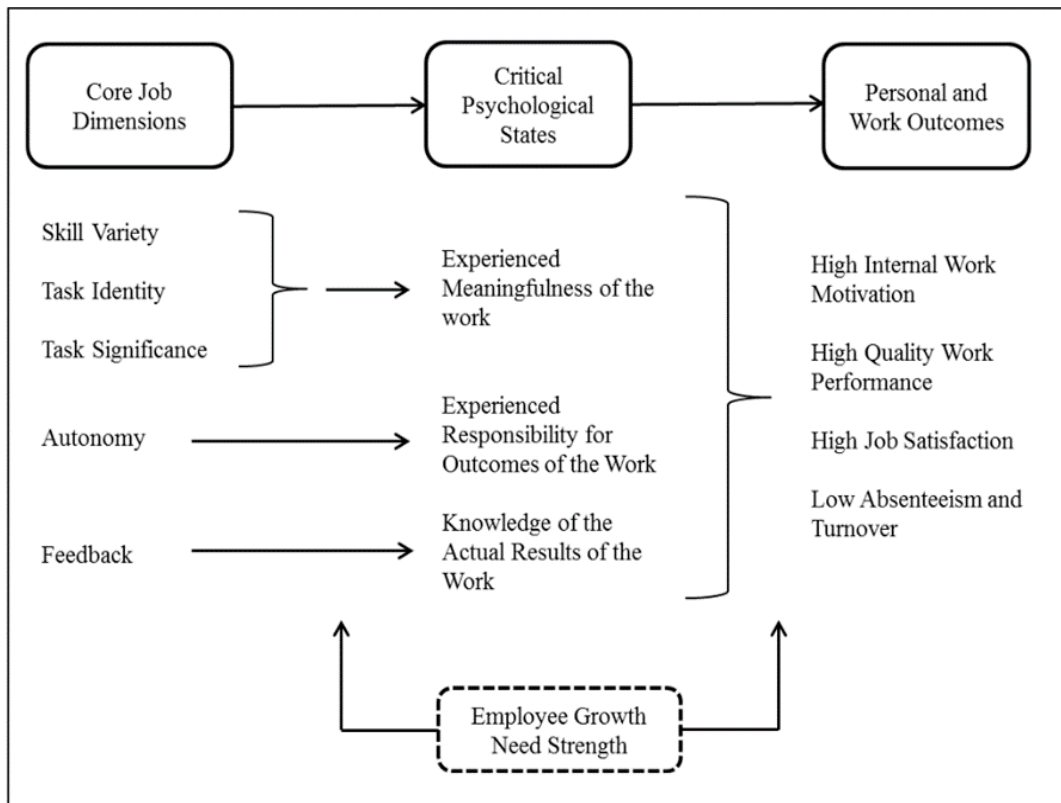


Figure 2.1: The job characteristics model
 Source: Adapted from Liere-Netheler *et al.* (2017)

2.2.1.1 Justification for job characteristics model

The JCM is key in studying job design and satisfaction (Bakker and Demerouti 2017). The theory prescribes how jobs should be designed to enhance job satisfaction (Hackman and Oldham 1976). The theory provides insights into designing jobs based on the five key dimensions of task identity, task significance, skill variety, autonomy, and feedback (Demerouti and Bakker 2023). Furthermore, the JCM explains the nexus between job satisfaction and job design (Demirkol and Nalla 2018). Researchers such as Tang and Do (2019) have validated the JCM. Hence, the JCM was the main theoretical framework for this research on the effects of job design and job satisfaction.

2.2.2 Lawler’s motivational job design theory

The JCM was considered too simplistic to fully understand job design and satisfaction. One of the critics of the JCM, Lawler, criticised it based on it undermining intrinsic motivation in explaining job design and job satisfaction (Butler, 2025). Therefore,

Lawler (1971) refined Hackman and Oldham's JCM by proposing a motivational job design theory. According to this theory, job design should have elements that increase intrinsic motivation to enhance job satisfaction. The theory adds an aspect of intrinsic motivation to the link connecting job design and job satisfaction (Oerlemans and Bakker 2018). According to Lawler's model, the dimensions of autonomy, variety, feedback, and task identity proposed by the JCM are key. However, they should be positioned in a way that enhances intrinsic motivation, and job satisfaction becomes a byproduct (Behraves, Tanova and Abubakar 2020). Thus, the goal of job design should be to increase intrinsic motivation, with job satisfaction as the long-term goal.

2.2.2.1 Justification for using Lawler's motivational job design theory

Lawler's theory was used to supplement the JCM because it provides critical insights into the relationship between job design and job satisfaction. Unlike the JCM, which provides a simplistic and linear relationship between job design and job characteristics, this theory shows that the relationship is complex (Behraves, Tanova and Abubakar 2020). The theory explains that job design must first achieve intrinsic motivation to enhance job satisfaction (Sarla 2020). Furthermore, Lawler's theory has been substantiated and validated by other researchers on job design and job satisfaction, such as Ali and Zia-ur-Rehman (2021). Therefore, Lawler's theory of motivational job design has been adopted as a supplementary theory in this research.

2.2.3 Herzberg's two factor theory

The study also adopted Herzberg's two-factor theory as a supplementary theory to this research. This is because the Lawler (1971) does not clarify which factors are satisfiers. Herzberg provides a theory that differentiates satisfiers from dissatisfiers. Aggarwal *et al.* (2023) show that Herzberg's two-factor theory is a key theoretical lens for understanding job design and satisfaction. The theory separates factors influencing job satisfaction from those leading to job dissatisfaction (Thant and Chang 2021). The theory groups the factors into two categories: motivators and hygiene factors. Rahman, Fatema and Ali (2019) explain that motivators provide job satisfaction, including achievement, recognition, and personal development. On the other hand, hygiene factors lead to dissatisfaction if not provided, but do not lead to job satisfaction

(Lee and Lee 2018). These hygiene factors involve working conditions, salary, and job security.

2.2.3.1 Justification for using Herzberg's two factor theory

Herzberg's two-factor theory was included in the study as a supplementary theory because Van Wingerden, Derks and Bakker (2018) elaborate that this theory is key in explaining the elements of job design that improve job satisfaction. The theory clarifies that not all factors lead to job satisfaction (Ghafoor and Yaseen 2019). Other factors, such as job security and company policies merely lead to job dissatisfaction if not provided (Lee and Lee 2018). The theory clarifies which factors are proper ingredients for job satisfaction, including achievement, recognition, and personal development. Furthermore, many researchers on job design and satisfaction have validated Herzberg's two-factor theory, such as Peramatzis and Galanakis (2022). Hence, Herzberg's two-factor theory was adopted as a supplementary theory guiding this research on job design and satisfaction.

2.3 FACTORS THAT INFLUENCE JOB SATISFACTION

Literature provides diverging insights into the factors that influence job satisfaction amongst employees. Therefore, this section explores influences of job satisfaction based on empirical studies.

2.3.1 Clear job description and specification

Job specification refers to the list of tasks that the job holder is expected to carry out (Titin *et al.* 2024), including the attributes, skills, qualifications, and competencies an individual should have to be given a job (Wulandari 2023). Wang, Liu and Parker (2020) mention that both job description and specification are vital in job satisfaction. Bayona, Caballer and Peiró (2020) substantiate that job specification mediates the effects of job description on job satisfaction. Zhenjing *et al.* (2022) state that job description and specification are not enough to enhance job satisfaction, they must be clear. Titin (2024) states that job specifications and descriptions should not be ambiguous for jobholders to have job satisfaction.

Regardless of researchers demonstrating that clear job descriptions and specifications enhance job satisfaction, other researchers, such as Ramhit (2019) dispute this. For example, Katebi *et al.* (2022) show that only a clear job description is adequate, and there is no relationship between a precise job specification and job satisfaction. On the other hand, Dhir, Dutta and Ghosh (2020) demonstrate that clear job descriptions and specifications have no impact on employee satisfaction. Their study treats job description and specification as hygiene factors, which, if not provided, lead to dissatisfaction, but if provided, decrease dissatisfaction but do not result to increased job satisfaction. Therefore, there is inconsistency amongst researchers on job description and specification as an aspect influencing job satisfaction. Hence, this research was needed to investigate factors influencing job satisfaction at TPT Durban DCT Pier 2.

2.3.2 Fair compensation

Fair compensation is widely regarded as influencing job satisfaction (Gonzalez Navarro, Selva, and Sunyer 2022). Fair compensation is any compensation that matches the demands of the job (Mabaso and Dlamini 2021) and is equal to the compensation given to other employees occupying the same position within the organisation (Gibbs, Mengel and Siemroth 2023), or what others occupying the same position in other organisations are getting (Mabaso and Dlamini 2021). Fair compensation is a significant ingredient of job satisfaction (Adanlawo, Nkomo and Vezi-Magigaba 2023) which would be absent without fair compensation (Lee and Lee 2019). This is consistent with Mabaso and Dlamini (2021), who note that fair compensation is critical for job satisfaction, especially in developing countries. Hee *et al.* (2018) found that fair compensation is the basis for job satisfaction, and the relationship between other aspects and job satisfaction is mediated by fair compensation.

However, there are researchers such as Gonzalez Navarro, Selva, and Sunyer (2022) who dispute the view that fair compensation is a factor that influences job satisfaction. For example, Hee *et al.* (2018) asserts that fair compensation is a mere hygiene factor that causes dissatisfaction if absent but does not lead to satisfaction if present. This is substantiated by Mabaso and Dlamini (2021) who state that in developed countries,

fair compensation is not considered a factor that enhances job satisfaction. Job satisfaction goes beyond the provision of fair compensation (Khoshnaw and Alavi 2020). Thus, researchers debate the status of fair compensation as a factor influencing job satisfaction and research was necessary to investigate factors influencing job satisfaction at TPT Durban DCT Pier 2.

2.3.3 developmental opportunities

Researchers have shown that developmental opportunities are critical for job satisfaction (Mququ 2022). Developmental opportunities enhance employees' skills and abilities (Rubery and Dundon 2021) and position employees to be promoted to a better position (Sinambela *et al.* 2023). Being offered and taking advantage of developmental opportunities increases job satisfaction (Marchington *et al.* 2025; Nagrath 2019; Judge, Zhang and Glerum 2020).

However, other researchers, such as Poljašević and Todorović (2021) do not view developmental opportunities as key to job satisfaction. For example, Raihan (2020) observes that most employees are interested in salaries rather than developmental opportunities. This is substantiated by Wang, Liu and Parker (2020) who elaborate that developmental opportunities are a weaker factor in influencing job satisfaction. Ashraf (2019) suggests that developmental opportunities must be mediated by other factors, such as fair compensation and a clear job description, to increase job satisfaction. Hence, there is a debate amongst researchers on developmental opportunities as an influence of satisfaction. Thus, this study was needed to clarify factors influencing job satisfaction at TPT Durban DCT Pier 2.

2.3.4 Transparent processes and systems

Transparent processes and systems improve job satisfaction (Morgeson and Campion, 2021). Transparency in processes and systems such as job evaluation, performance management, and human resource management improve job satisfaction (Putra and Asnur 2020; Souza and Beuren 2018; Neirotti, Raguseo and Gastaldi 2019). Judge, Zhang and Glerum (2020) recommend that employers must involve employees in processes and systems such as job evaluation to increase job

satisfaction, and Roberts (2018) supports this by stating that transparency alone is not enough, as employees need to be involved in these processes.

However, some researchers such as Ajayi (2018) oppose the view that transparent processes and systems are a key factor influencing job satisfaction. Their study shows that transparent processes and systems are a mere peripheral factor in job satisfaction. This is also maintained by Raihan (2020), who asserts that important factors influencing job satisfaction are salaries, job design, and supervision. This is similar to Mququ (2022), who excludes transparent processes and systems when identifying factors influencing job satisfaction. It can thus be observed from the literature review that there is divergence in the status of transparent processes and systems as a factor influencing job satisfaction. Hence, this study was needed to elaborate on factors influencing job satisfaction by investigating TPT Durban DCT Pier 2.

2.3.5 Control and responsibility

Control and responsibility influence the level of job satisfaction amongst employees (Hee *et al.* 2018). Control is the extent to which employees have autonomy and influence over their work tasks, decisions, and methods (Zhenjing *et al.* 2022). Responsibility is the extent to which employees can account for the outcomes of their work, such as successes, failures, and the impact on the organisation's long-term objectives (Hendri 2019). Zychová, Fejfarová and Jindrová (2024) found that the more control and responsibility employees have, the more they are satisfied with their jobs.

However, some researchers have diverged on the view that control and responsibility influence job satisfaction (Poljašević and Todorović 2021). For example, Adeoye (2023) makes similar conclusions to McGregor's theories X and Y, which show that some employees are not interested in control and responsibility. Mabaso and Dlamini, (2021) also observe that there are other primary factors of job satisfaction, such as compensation. These impact more than control and responsibility (Souza and Beuren 2018). Nagrath (2019) shows that control and responsibility have a greater effect on job satisfaction in established countries like the United States of America. This means that in developing countries, employees are less interested in control and

responsibility. Thus, there is controversy pertaining to the influence of control and responsibility on job satisfaction. Hence, this study was needed to clarify factors affecting job satisfaction by looking at TPT Durban DCT Pier 2.

2.3.6 Job security

Researchers such as Umrani *et al.* (2019) demonstrate that job security is an essential factor in enhancing job satisfaction. This is supported by researchers such as Nagrath (2019), Alsafadi and Altahat (2021) and Gibbs, Mengel and Siemroth (2023) who indicate that job security improves both job satisfaction and employee motivation. Feng, Lagakos and Rauch (2024) and Aman-Ullah (2022) show that in developing countries job security is important due to high levels of unemployment. Dhamija, Gupta and Bag (2019) highlight that job security in developing countries is one of the main factors enhancing job satisfaction. Raihan (2020) and Mabaso and Dlamini (2021) recommend that organisations improve job security in order to improve job satisfaction and competitiveness.

Despite some studies showing job security an influence of job satisfaction, there is an emerging knowledge base that disputes job security as a factor regarding job satisfaction (Wang, Liu and Parker 2020). The first criticism of job security as a factor for job satisfaction is that it is more of a hygiene factor (Rhoda and Idubor 2024). Researchers such as Putra (2024) and Hee *et al.* (2018) are of the view that job security only reduces dissatisfaction if provided rather than increasing job satisfaction. Other researchers such as Govender (2021) state that job security is a weak factor when it comes to enhancing job satisfaction. This is also sustained by Ntshela (2021) who shows that job security as a factor is insignificant in improving job satisfaction. Du Toit and de Klerk (2023) assert that the connection among job security and job satisfaction must be moderated by other factors such as meaningful work and autonomy for it to be positive. Hence, there are divergences amongst researchers on the status of job security as a factor influencing job satisfaction.

2.3.7 Relationships with colleagues

Research indicates that a good relationship with work colleagues generates job satisfaction amongst employees (Dhamija, Gupta and Bag 2019; Hee *et al.* 2018; Bella 2023; Putra 2024; Raihan 2020). Mququ (2022) found that poor relationships with colleagues may reduce job satisfaction and ultimately reduce levels of productivity. This is confirmed by Govender (2021) who shows that poor relationships with coworkers is detrimental to both job satisfaction and productivity. Hence, Zhenjing *et al.* (2022) recommend that organisations facilitate the establishment of good relationships amongst employees to improve job satisfaction.

However, some researchers such as Irabor and Okolie (2019) have deviated from research traditions that show relationships with work colleagues to be a factor influencing job satisfaction. According to Ndaleni-Sibiya, Fagbadebo and Mbandlwa (2024), job satisfaction is enhanced by factors that are part of the job such as flexibility and autonomy, not external factors such as relationships with work colleagues. This is supported by Adanlawo, Nkomo and Vezi-Magigaba (2023) who found an insignificant relationship between relationships with work colleagues and job satisfaction. Dhamija, Gupta and Bag (2019) show individuals whose tasks are individualistic, their job satisfaction levels are not determined by relationship with work colleagues. This is supported by Triansyah, Hejin and Stefania (2023) who show that initiatives such as flexible work arrangements cause relationship with work colleagues to have little or no impact on job satisfaction. Utami *et al.* (2021) categorise relationship with work colleagues as a weak factor when it comes to enhancing job satisfaction. Thus, it is clear from the existing literature that there are differing conclusions on relationship with work colleagues as a factor influencing job satisfaction, hence the need for this research to interrogate factors influencing job satisfaction at TPT in South Africa.

2.3.8 Supervisory support

Supervisory support is key for job satisfaction (Rhoda and Idubor 2024; Matveichuk, Voronov and Samul 2019; Neirotti, Raguseo and Gastaldi 2019). Hernaus, Dragičević and Hauff (2024) highlight that a supportive supervisor is one who provides guidance and support for his or her subordinates. The supervisor is always there for employees

to attain their individual goals (Dhir, Dutta and Ghosh 2020). Such type of supervision is essential for the growth and job satisfaction of employees (Sinambela *et al.* 2023). Gibbs, Mengel and Siemroth (2023) also found that job satisfaction is positively influenced by supervisory support and recommend that supervisors be trained on skills that result in effective supervision which in turn improves the level of job satisfaction amongst employees.

Despite researchers showing that supervisory support has a constructive impact on job satisfaction, some researchers such as Wang, Liu and Parker (2020), Zhenjing *et al.* (2022) and Raihan (2020) who found that supervisory support has no significant impact on job satisfaction. According to Govender (2021), factors such as flexibility, compensation and meaningful work have more impact on job satisfaction than supervisory support. Du Toit and de Klerk (2023) state that for supervisory support to have more impact on job satisfaction it should be accompanied by other factors such as remuneration, job design and autonomy. This is similar to observations by Ntshela (2021) that supervisory support is a peripheral factor when it comes to influencing job satisfaction. Hence, literature shows that there are divergences in terms of supervisory support as a factor influencing job satisfaction, thus there was a need to investigate factors influencing job satisfaction at TPT Durban DCT Pier 2.

2.3.9 Teamwork and collaboration

Teamwork and collaboration are another key factor in determining the level of job satisfaction (Putra 2024). Gibbs, Mengel and Siemroth (2023) state that the more the teamwork and collaboration, the more the job satisfaction. There is a positive correlation between teamwork and collaboration and employee job satisfaction (Raihan 2020; Ndaleni-Sibiya, Fagbadebo and Mbandlwa 2024; Wang, Liu and Parker 2020; Irabor and Okolie 2019). Chen (2023) asserts that in organisations that are in collectivist cultures, teamwork and collaboration is a major factor in influencing job satisfaction. Mququ (2022) recommends that organisations should facilitate employees to work in teams and to collaborate with others, and this in turn will generate high levels of commitment. This is supported by Elrehail *et al.* (2020) (2018) who submits that employees enjoy in working as teams, and this is key to implement in organisation as it can be a source for both job satisfaction and competitiveness.

However, other researchers such as Hernaus, Dragičević and Hauff (2024) and Nagrath (2019) do not regard teamwork and collaboration as vital for job satisfaction. Teamwork and collaboration are culture dependent (Indrayani *et al.* 2024). Where the culture is individualistic teamwork and collaboration are not essential for job satisfaction (Chen 2023). According to Driskell, Salas and Driskell (2018) teamwork and collaboration is also personality dependent. Teamwork and collaboration are key for employees who are extroverted (Chen 2023), while for employees that have an introverted personality their level of job satisfaction cannot be determined by teamwork and collaboration (Du Toit and de Klerk 2023). Thus, the literature available shows that a debate exists on the status of teamwork and collaboration as factors influencing job satisfaction.

2.3.10 Organisational culture

Organisational culture is also regarded as a factor that influences job satisfaction amongst employees (Janićijević, Nikčević and Vasić 2018; Putra 2024). An organisational culture that is flexible is ideal for employees (Hernaus, Dragičević and Hauff 2024; Nagrath 2019; Wang, Liu and Parker 2020), and a rigid culture is not desired by employees (Ajayi 2018) Researchers such as Gibbs, Mengel and Siemroth (2023) recommend that human resource practitioners address organisational culture first if they are serious about improving job satisfaction. Paredes-Saavedra *et al.* (2024) show that organisational culture is the foundation for job satisfaction, and if the culture is bad job satisfaction amongst employees will be low. This resonates with Govender (2021) who points out that organisations often ignore culture in searching for interventions to improve job satisfaction.

Fidyah and Setiawati (2020) do not recognise organisational culture as a key factor influencing job satisfaction. Zhenjing *et al.* (2022) assert that essential factors such as significant work, need for achievement, flexibility and autonomy are more important in determining job satisfaction than organisational culture. According to Adanlawo, Nkomo and Vezi-Magigaba (2023) organisational culture is one of the supplementary interventions an organisation may use to enhance job satisfaction. This implies that it is not a key factor. Elrehail *et al.* (2020) and Ntshela (2021) show that employees are interested more in salaries than organisational culture. Hence, the existing literature

clearly shows that there are debates on the role of organisational culture on job satisfaction. This has resulted in a gap in research on the factors influencing job satisfaction.

2.3.11 Communication

Dhir, Dutta and Ghosh (2020) identify communication as a significant factor that influences job satisfaction. According to Roberts (2018) employees want transparent and open communication within the organisation. Neirotti, Raguseo and Gastaldi (2019) demonstrate that provision of communication demonstrates that employees are valued, and this is vital in enhancing job satisfaction. Hernaus, Dragičević and Hauff (2024) support this by showing that communication has positive effects on job satisfaction. Sinambela *et al.* (2023) state that there should be communication in both good and bad times within the organisation. Raihan (2020) states that organisations should establish clear communication channels to facilitate open and transparent communication systems within the organisation, as this may be key in enhancing job satisfaction of employees within the organisation. Wang, Liu and Parker (2020) recommend that supervisors and the organisation's leadership should implement two-way communication within organisations. Two-way communication has been found to be important in improving job satisfaction among employees. Du Toit and de Klerk (2023) advise organisations to invest in communication training for managerial staff so that they can improve their communication styles and skills.

However, some researchers such as Dhir, Dutta and Ghosh (2020) do not identify communication as an essential factor for job satisfaction. Govender (2021) identifies communication as a hygiene factor therefore only necessary for reducing dissatisfaction rather than increasing job satisfaction. Putra (2024) states that other factors such as compensation and autonomy have more impact than communication. This is supported by Nagrath (2019) who shows that in as much as communication is essential it has a limited role when it comes to enhancing job satisfaction. Du Toit and de Klerk (2023) state that organisations do not need to rely entirely on communication when they intend to improve job satisfaction. An array of factors may be key in solving problems of job satisfaction other than communication Hee *et al.* (2018). Thus, divergences in literature exist on communication as a factor influencing job

satisfaction. Hence, the need for this research to clarify factors influencing job satisfaction.

2.3.12 Organisational policies

Organisational policies are important for job satisfaction (Hung and Huy 2023 Wang, Liu and Parker 2020; Du Toit and de Klerk 2023; Triansyah, Hejin and Stefania 2023). According to Raihan (2020) the more inclusive the organisational policies are the higher the job satisfaction levels are within the organisation. Sinambela *et al.* (2023) recommend organisations to have fair and inclusive organisational policies for higher job satisfaction levels. Organisational policies should be clear for them to result in job satisfaction amongst employees (Mira, Choong and Thim 2019; Putra 2024; Neirotti, Raguseo and Gastaldi 2019).

Despite researchers such as Neirotti, Raguseo and Gastaldi (2019) showing that organisational policies are essential for increasing job satisfaction levels, researchers such as Adanlawo, Nkomo and Vezi-Magigaba (2023) have discredited organisational policies' significance in job satisfaction. Utami *et al.* (2021) show that organisational policies is a hygiene factor that does not improve job satisfaction. This is similar to Chen (2023) who observes that organisational policies are necessary but cannot enhance job satisfaction. Putra (2024) does not identify organisational policies as a key factor in enhancing job satisfaction. Mququ (2022) recommends other strategies such as leadership style for improving job satisfaction other than organisational policies. It is thus clear from the literature that there are divergences on organisational policies as a mechanism for improving communication. Thus, the need for this study to investigate factors influencing job satisfaction.

2.3.13 Physical work environment

Researchers such as Budie *et al.* (2019) elaborate that the physical work environment is essential for job satisfaction. Employees want a healthy and clean work environment (Wang, Liu and Parker 2020; Gibbs, Mengel and Siemroth 2023). The physical work environment can positively impact on job satisfaction (Aggarwal *et al.* 2023). According to Zhenjing *et al.* (2022) employees are more worried about their health than anything

else. Hence, Sinambela *et al.* (2023) recommended organisations to present employees with a healthy physical environment. Dziuba, Ingaldi and Zhuravskaya (2020) aver that employees want healthy facilities and safe equipment, and this generates more job satisfaction. Provision of a healthy and safe workplace communicates to employees that the employer is concerned about employee health and safety (Asad 2023). This in turn generates more job satisfaction and commitment amongst employees (Dhir, Dutta and Ghosh (2020). Utami *et al.* (2021) recommends that organisations invest in healthy and safe environments.

However, a study by Zhenjing *et al.* (2022) show that physical work environment is not key in enhancing job satisfaction. Budie *et al.* (2019) categorises physical work environment as a hygiene factor which is important for decreasing dissatisfaction amongst employees Ndaleni-Sibiya, Fagbadebo and Mbandlwa (2024) do not identify physical work environment as a significant factor influencing job satisfaction. According to Rhoda and Idubor (2024). job satisfaction is more intrinsically generated, and extrinsic factors such as physical work environment are not of greater importance. According to Budie *et al.* (2019) physical work environment is necessary but does not impact on job satisfaction. This is also observed by Putra (2024) who advocates for human resources interventions such as meaningful work and flexible work arrangements. Thus, literature shows inconsistencies amongst researchers on physical work atmosphere and job satisfaction, hence the need for this study to elucidate the factors that influence job satisfaction at TPT Durban DCT Pier 2.

2.3.14 Autonomy

Utami *et al.* (2021) states that autonomy is significant for job satisfaction. Zhenjing *et al.* (2022) aver that employees want more responsibility and control over decisions pertaining their work. Dettmers and Bredehöft (2020) found that the more the autonomy amongst employees the more the job satisfaction, while Nagrath (2019) found employees with less autonomy have less job satisfaction compared to employees that have autonomy. There is a significant and a positive correlation between autonomy and employee job satisfaction (Govender 2021; Neirotti, Raguseo and Gastaldi 2019; Zychová, Fejfarová and Jindrová 2024). According to Putra (2024), job satisfaction is often intrinsically generated and pinpoints factors such as autonomy

as key factors in influencing job satisfaction. Wang, Liu and Parker (2020), recommend organisations give employees more autonomy as a mechanism to increase levels of job satisfaction.

However, other researchers such as Dettmers and Bredehöft (2020) show that autonomy is not significant in enhancing job satisfaction. Onyango (2019) found that in developing countries job satisfaction is more derived from offering better salaries than autonomy. Ajayi (2018) assert that some employees do not want autonomy as it results in more responsibility. This is similar to Zhang and He's (2022) observations that autonomy can be a source of stress and work pressure to employees thereby decreasing the level of job satisfaction. Gibbs, Mengel and Siemroth (2023) state that in developing countries job satisfaction is derived from extrinsic factors, thereby disqualifying autonomy which is an intrinsic factor. Zychová, Fejfarová and Jindrová (2024) show that autonomy can increase job satisfaction amongst employees in managerial positions but has little consequence on the job satisfaction of employees in non-managerial position. This means that there are differences amongst researchers on the effect of autonomy on job satisfaction. Thus, there is a knowledge gap on factors influencing job satisfaction.

2.3.15 Meaningful work

Meaningful work is an important factor for job satisfaction (Utami *et al.* 2021; Wang, Liu and Parker 2020; Raihan 2020; Du Toit and de Klerk 2023). According to Zhenjing *et al.* (2022), Wang, Liu and Parker (2020), employees want meaningful work that has a clear impact on the organisation's long-term goals and want to see the connection between their efforts and the organisation's vision and mission. Employees are also interested in work that makes an impact on organisation's stakeholders such as customers, and the community (Govender 2021). Raihan (2020) shows that meaningful work has a positive effect on job satisfaction. Hence, Allan *et al.* (2019) recommend that organisations provide employees with meaningful work.

However, some researchers such as Putra (2024) dispute the status of meaningful work as a factor influencing job satisfaction. Čizmić *et al.* (2022) assert that in many countries, particularly those still developing, it is the extrinsic factors that amount to

job satisfaction. This is similar to observations by Ajayi (2018) who show that factors such as job security and salaries have more of an impact on job satisfaction than intrinsic factors such as meaningful work. Budie *et al.* (2019) states that the effect of meaningful work on job satisfaction depends on the job level of the employee. When an employee is in managerial position, this effect is positive and significant (Rhoda and Idubor 2024). However, when the employee occupies a job which is at a shop floor level the impact of meaningful work on job satisfaction is limited. Thus, the existing literature does not clearly provide conclusions on the impact of meaningful work on job satisfaction, thereby resulting in a knowledge gap on factors influencing job satisfaction.

2.3.16 Job variety

Job variety is a key factor influencing job satisfaction (Du Toit and de Klerk 2023; Neirotti, Raguseo and Gastaldi 2019). Mabaso and Dlamini (2021) and Wang, Liu and Parker (2020) submit that employees want a job that has many tasks. According to Sever and Malbašić (2019), the more the tasks the more the job satisfaction. Having more tasks reduces boredom amongst employees (Allan *et al.* 2019; Kumar *et al.* 2023). Nagrath (2019) found that doing a single task on a daily basis is monotonous, Gibbs, Mengel and Siemroth (2023) assert that job satisfaction is enhanced by intrinsic factors such as job variety. Hence, Sever and Malbašić (2019) recommend that organisations use job variety as a strategy for increasing levels of job satisfaction amongst employees.

However, some researchers such as Utami *et al.* (2021) criticise job variety as a factor influencing job satisfaction. Chen (2023)) avers that job satisfaction is more enhanced by extrinsic factors such as salaries and job security. This disqualifies job variety which is an intrinsic factor. According to Hafeez *et al.* (2024) job variety may reduce job satisfaction levels. This is because job variety can be challenging to employees who do not have the skills to execute the tasks that are added to their jobs (Zychová, Fejfarová and Jindrová 2024) This can be worsened by a situation where salaries are not matching the level of job variety (Putra 2024). Hence, Ndaleni-Sibiya, Fagbadebo and Mbandlwa (2024) show that for job variety to have a substantial impact on job satisfaction, it has to be accompanied by factors such as salaries and training. This

demonstrates that job variety alone cannot generate job satisfaction. Hence, the literature clearly shows that there are inconsistencies pertaining to the impact of job variety and job satisfaction. This has resulted in a knowledge gap on the factors influencing job satisfaction, which this study intended to fill.

2.4 FACTORS INFLUENCING JOB SATISFACTION IN SOUTH AFRICA

The factors influencing job satisfaction discussed in section 2.3, including compensation, developmental opportunities, autonomy, working conditions, and supervisory support, are broadly applicable across organisational contexts, including South Africa. However, research conducted within the South African context demonstrates that these factors are experienced and prioritised differently owing to the country's unique socioeconomic, historical, and labour market conditions (Du Toit and de Klerk 2023). Research has therefore been conducted on factors influencing job satisfaction in organisations in South Africa to understand how these general factors manifest within this specific context (Triansyah, Hejin and Stefania 2023). Research has been conducted on factors influencing job satisfaction in organisations in South Africa (Triansyah, Hejin and Stefania 2023). For example, Elshahoryi *et al.* (2022) established that financial and non-financial benefits are key in influencing job satisfaction for employees in South Africa. This is consistent with Mfeketho (2021), who shows that financial remuneration is a significant determinant of job satisfaction among employees in South Africa, with higher salary levels being associated with greater levels of reported job satisfaction.

Additionally, some researchers have found that employees' job satisfaction in South Africa depends on job enlargement, job enrichment, and task complexity (Barkhuizen and Gumede 2021) and job enrichment (Utami *et al.* 2021).

Mokhtar *et al.* (2023) show that factors external to the job, such as leadership style, are also key in enhancing employee job satisfaction in South Africa. Relationships with co-workers, supervision, and company resources are essential for job satisfaction in South Africa (Mamokhere 2022; Ndaleneni-Sibiya, Fagbadebo and Mbandlwa 2024). Technology and innovation also influence job satisfaction (Ndaleneni-Sibiya, Fagbadebo and Mbandlwa 2024; Ntshela 2021). Thus, while the general factors influencing job satisfaction identified in section 2.3 remain applicable within the South African context,

there is divergence amongst researchers regarding how these factors are experienced and weighted by employees in South Africa (Du Toit and de Klerk 2023; Govender 2021). Furthermore, there is a dearth of research on how these factors specifically influence job satisfaction in the South African port environment. Therefore, this study seeks to contribute contextually grounded evidence on the factors influencing job satisfaction at TPT Durban DCT Pier 2, within the broader theoretical framework established in section 2.3.

2.4.1 Factors influencing job satisfaction in the port sector

Researchers have investigated job satisfaction in a port environment (Putra 2024). Leadership style influences job satisfaction among employees in the port environment (Sukri, Ngah and Yiau 2023). Job design, job enlargement, job enrichment, and task complexity emanating from job design are essential for job satisfaction (Vlachos, Pantouvakis and Karakasnaki 2024; Putra 2024). Ndiango, Gabriel and Changalima (2024) demonstrate that the conditions of work influence job satisfaction. This is consistent with Shang *et al.* (2024) who found salaries essential in enhancing job satisfaction in logistics companies in port areas. The higher the salaries, the higher the job satisfaction (Rajesh *et al.* 2023).

Iswandi, Gurnato and Andriyansah (2024) shows that communication with employees is important for job satisfaction in port companies. This is elaborated upon by Dabral, Arijit and Purihit (2022), who identify feedback as essential in influencing job satisfaction in port firms. Employees prefer to be given feedback on their efforts (Antwi-Boampong *et al.* 2022). However, Vlachos, Pantouvakis and Karakasnaki (2024) also postulate that control and responsibility are necessary for job satisfaction. A study by Susanto *et al.* (2023) substantiates that transparency in handling employees is key to job satisfaction in port companies. Hence, there is a divergence amongst researchers on the exact aspects that pilot to job satisfaction in companies operating in the port environment. Furthermore, most studies on factors influencing job satisfaction in companies in the port environment have been conducted in countries other than South Africa. Hence, there is a need to research a port company on factors influencing job satisfaction in South Africa.

2.5 JOB DESIGN AND JOB SATISFACTION

Researchers such as Alias *et al.* (2018) have investigated the relationship between job design and job satisfaction. For example, Jankeitey (2018) observes that job design is critical for job satisfaction. Dettmers and Bredehöft (2020) show that autonomy is another essential dimension of job design. Autonomy is the extent to which an employee controls their work processes (Wang, Liu and Parker 2020). Gagné *et al.* (2022) found that autonomy satisfies the innate needs for self-direction, generating higher employee motivation and satisfaction. Autonomy empowers employees to make decisions and assume responsibility, which is key to job satisfaction (Demerouti and Bakker 2023).

Job design is key to employee job satisfaction (Morgeson, Brannick and Levine 2019). Proper job design reduces monotony and fosters engagement, resulting in sustained job satisfaction over time (Knight and Parker 2019). Elements of job design, such as task variety and autonomy, are essential in enhancing job satisfaction (Ali and Zia-ur-Rehman 2021; Njeri and Mary 2020). Laaser and Bolton (2022) show that employees who are afforded task variety and decision-making authority have a sense of pride and ownership in their work.

Onyango (2019) found that job enlargement, a component of job design, increases the responsibilities of employees and thus enhances job satisfaction. This is supported by Msofe (2019) who observes that job enlargement reduces boredom. Employees with diverse tasks and duties have higher job satisfaction (Alias *et al.* 2018) and job enlargement enhances employees' feelings of competence, increasing job satisfaction (Tantua 2022). Job enlargement promotes involvement and a sense of accomplishment, which is critical for job satisfaction (Tumi, Hasan and Khalid 2022).

Another essential dimension of job design in enhancing job satisfaction is job enrichment (Onyango 2019). Khan *et al.* (2021) elaborate that growth opportunities and job enrichment are key to job satisfaction. This is consistent with Judge, Klinger and Li (2023) who show that employees who are afforded skill development, career progression, and complex tasks have great job satisfaction.

Regular feedback and recognition/acknowledgement of employee accomplishments make employees feel valued (Jawaad *et al.* 2019), improves the understanding of their performance (Onyango 2019), and increases organizational commitment (Dalkrani and Dimitriadis 2018). A well-structured feedback system significantly contributes to job satisfaction (Morgeson, Brannick and Levine 2019).

However, some studies show that job design positively affects job satisfaction only if this relationship is accompanied by other factors (Putra 2024). For example, Susanto *et al.* (2023) show that job design is key to job satisfaction if salaries mediate this relationship. Vlachos, Pantouvakis and Karakasnaki (2024) demonstrate that job design cannot single-handedly lead to job satisfaction, as employees are also interested in money. Dabral, Arijit and Purihit (2022) show that other factors, such as those emanating from the organisational context, mediate this relationship between job satisfaction and job design. For example: Antwi-Boampong *et al.* (2022) show that leadership style mediates the relationship; Sukri, Ngah and Yiaaw (2023) contend that relationships with co-workers mediate the relationship; and Shang *et al.* (2024) postulate that the provision of equipment enhances the relationship. Hence, literature shows that the relationship between job design and job satisfaction is not linear, as some other factor has to be present for it to be positive.

Some researchers have shown that job design does not impact job satisfaction (Rajesh *et al.* 2023). For example, Ndiango, Gabriel and Changelima (2024) show that job design is a mere hygiene factor that only reduces dissatisfaction when provided but does not increase satisfaction. Barkhuizen and Gumede (2021) observe that job design does not enhance job satisfaction. This aligns with Govender (2021) who shows that leadership style is more critical in job satisfaction than job design. Hence, this study sought to clarify the relationship between job design and job satisfaction using TPT Durban DCT Pier 2.

2.5.1 Job design and job satisfaction in South Africa

Researchers have investigated the relationship between job design and job satisfaction in South Africa and found diverse results (Luzipho, Joubert and Dhurup, 2023). Irabor and Okolie (2019) and Shongwe, Downing and Nene (2024) found a

positive relationship between job design and job satisfaction in organisations in South Africa. According to Masuku (2024) attributes of job design, such as autonomy, job enrichment, and job enlargement, are key to enhancing job satisfaction amongst employees in South Africa.

However, some studies in South Africa have shown that job design alone does not significantly impact job satisfaction (Dyasi *et al.* 2024). For example, Rasheed *et al.* (2020) shows that salaries combined with job design improve job satisfaction amongst employees in South Africa, and Makina-Zimalirana *et al.* (2023) found that South African employees need both a good leadership style and job design to generate higher levels of job satisfaction. Aghimien *et al.* (2025) aver that health and safety are key in moderating the relationship between job design and job satisfaction.

Some researchers in the South African context state that there is no relationship between job design and job satisfaction (Rasheed *et al.* 2020). For example, Ndou and Agbenyegah (2024) show that job design does not impact job satisfaction by showing that it is ethical leadership affects job satisfaction in South Africa. Ndaleni-Sibiya, Fagbadebo and Mbandlwa (2024) also conclude that a competitive salary is the sole factor enhancing job satisfaction in South Africa. Therefore, there is an evolving debate on the correlation between job design and job satisfaction in South Africa. Moreover, most studies on job design and job satisfaction in South Africa have been in contexts other than the port environment. Hence, this study bridges this gap by examining the connection between job design and job satisfaction at TPT Durban DCT Pier 2.

2.5.2 Job design and job satisfaction in the port sector

Researchers have investigated the relationship between job design and job satisfaction in the port environment and show diverging results. Bottalico (2022), Ndiango, Gabriel and Changelima (2024), Vlachos, Pantouvakis and Karakasnaki (2024), and Putra (2024), found that dimensions of job design, such as task complexity and job enlargement, enhance job satisfaction in the port environment. This concurs with findings by Oladeinde (2025) that job design dimensions such as creativity and innovation are essential attributes of job satisfaction.

However, some researchers assert that the relationship between job satisfaction and job design in the port environment must be mediated for it to be influential (Bottalico, Vanelslander and Verhoeven 2022). For example, Bartlett, Kabir and Han (2023) show that for the relationship between job design and job satisfaction is substantial, but technology and other resources should be provided to employees in port organisations for this to occur. Dabral, Arijit and Purihit (2022) show that competitive salaries are key in the relationship between job design and job satisfaction in the port environment. Hence, there are debates pertaining to the effects of job design on job satisfaction in the port environment. Researchers, such as Putra (2024), show that job design is significant, whereas other researchers, such as Bartlett, Kabir and Han (2023), show that this relationship has to be mediated by another factor. There is a knowledge gap on job design and job satisfaction in port environments in South Africa. Hence, this research closes this gap by investigating the relationship between job design and job satisfaction at TPT Durban DCT Pier 2.

2.6 JOB DESIGN STRATEGIES

Research has been conducted on efficient and effective job design strategies (Bakker, Demerouti and Sanz-Vergel 2023). According to Siruri and Cheche (2021), job design strategies such as task identity, significance, complexity, job rotation, job enrichment, and job enlargement are essential for attaining job satisfaction. This section is devoted to discussing empirical literature on different job design strategies.

2.6.1 Job enlargement

Job enlargement is a fundamental job design strategy (Adiarani 2019). Job enlargement is defined as increasing tasks by adding responsibilities similar to those the employee already has (Bakker, Demerouti and Sanz-Vergel 2023). Thus, job enlargement is the parallel expansion of the job to make it interesting to the employee. An example of job enlargement is when a driver is given an additional task to clean the car he or she drives. According to Bruning and Campion (2018), job enlargement enhances performance, especially when jobs are repetitive. Adiarani (2019) shows that job enlargement must ensure alignment between the employee's skills and the

additional tasks being given. Butler (2025) shows that competence and purpose are promoted when there is this alignment.

Thompson and Kossek (2018) state that implementing job enlargement must include training for the employees to have the skills to perform the added duties. Tumi, Hasan and Khalid (2022) affirm that the training programmes improve the employees' technical skills and promote employee confidence in performing their tasks. Tang and Do (2019) state that job enlargement can have some negative ramifications regardless of the benefits. For example, it can lead to task overload, which increases the employees' stress levels, negatively impacting employee well-being. Thus, job enlargement needs to be balanced with a realistic workload and adequate resources (Knight and Parker 2019).

2.6.2 Job enrichment

Job enrichment is another key job design strategy. Job enrichment refers to the increase in depth of the job by adding challenging and more complex tasks and responsibilities that foster autonomy, decision making, and personal growth (Rasheed *et al.* 2020). Job enrichment is the vertical growth of a job, unlike job enlargement, which is horizontal growth. Job enrichment promotes intrinsic motivation (Rogers *et al.* 2021) by providing challenging and meaningful tasks leading to a sense of accomplishment (Hong, Zhao and Stanley Snell 2019).

According to Rogers *et al.* (2021), implementing job enrichment requires careful planning to ensure the task aligns with the organisation's objectives. Wang, Liu and Parker (2020) attest that organisations should adopt an inclusive approach by allowing employees to design the job enrichment strategy according to their needs. However, it is important to support employees transitioning into job enrichment roles (Vlachos, Pantouvakis and Karakasnaki 2024). Susanto *et al.* (2023) concur that employees may feel overwhelmed with their newly acquired responsibilities without training or resources. An example of job enrichment is when a security guard is also given the function of determining who enters the business premises without consulting superiors.

2.6.3 Job rotation

Job rotation is another key job design strategy (Ndiango, Gabriel and Changelima 2024). According to Sukri, Ngah and Yiauw (2023), job rotation includes transferring employees across different roles or departments to allow them to engage in diverse tasks to broaden their skills. Adiarani (2019) states that job rotation reduces monotony and prepares employees for future roles. Siruri and Cheche (2021) demonstrate that job rotation is significant in developing a versatile and resilient workforce to meet the needs of a dynamic business environment. Furthermore, Wang, Liu and Parker (2020) affirm that job rotation enhances career development since employees are exposed to new challenges and skills, which increases their chances for promotional opportunities.

However, Luzipho Joubert and Dhurup (2023) state that job rotation must be carefully controlled to ensure employees are prepared for their new roles. Organisations should provide training and create clear transition plans to facilitate smooth role changes (Rasheed *et al.* 2020). An example of job rotation is when a secretary is rotated from the stores department to the ICT department.

2.6.4 Flexible work arrangements

Flexible work arrangement is another essential job design strategy and are positively associated with employee job satisfaction (Hunter, 2019). (Hunter 2019). Flexible work arrangements allow employees to work anywhere and anytime (Hopkins and Bardoel 2023). This was a popular management tool during the COVID-19 pandemic, when remote work, flexible hours, and compressed workweeks gained popularity (Weideman and Hofmeyr 2020). Flexible work arrangements can assist workers to balance their life and work (Shockley, Allen and Grant 2024; Grzegorzczuk *et al.* 2021). However, Hunter (2019) points out the pitfalls in flexible work arrangements, such as a lack of coordination. Hence, organisations using flexible work arrangements as a job design strategy must ensure that employees going for this scheme are trained and well-resourced.

2.6.5 Job crafting

Job crafting is when employees can proactively shape their roles by adjusting tasks, relationships, and perceptions of their work, aligning jobs with their strengths, interests, and values (Lee and Lee 2018, Petrou, Demerouti and Schaufeli 2018). When employees engage in job crafting, they view their work as meaningful because they can reshape their roles to line up with career objectives and their skills (Peral and Geldenhuys 2019), which enhances job satisfaction (Lee and Lee 2018). However, organisations should ensure that job crafting is properly done and does not result in ineffectiveness and inefficiency (Lee and Lee 2018).

2.6.6 Team-based job design

Team-based job design focuses on sharing responsibility (Morgeson and Campion 2021; Salas, Reyes and McDaniel 2020) and involves structuring work around teams to create a sense of belonging (Iswandi, Gurnato and Andriyansah 2024). Wang, Liu and Parker (2020) found that team-based job design improves employee productivity and satisfaction. Team-based job design leads to role clarity and cohesion in the distribution of tasks amongst team members (Salas, Reyes and McDaniel (2020), leading to lower levels of burnout and greater adaptability in ever-changing work environments (Mathieu *et al.* 2019).

2.6.7 Job simplification

Job simplification involves breaking down complex tasks into smaller, more manageable tasks (Marchington *et al.* 2025) which enhances efficiency and reduces cognitive workload (Van Wyk, Swarts and Mukonza 2018). This can improve productivity and decrease training time and promote autonomy and provide opportunities for employee growth (Soegiarto, Sihite and Usmany 2024), but it may also result in adverse psychological effects for employees (Marchington *et al.* 2025). The downside is that the oversimplification of jobs can result in high employee turnover as employees seek engaging and complex jobs Berman *et al.* (2021). To avoid this problem, some employers use job rotation, job enlargement, and job enrichment instead (Putra 2024).

2.7 STRATEGIES OF JOB DESIGN IN SOUTH AFRICA

Researchers such as Luzipho, Joubert and Dhurup (2023) have investigated job design strategies in South Africa. Job enrichment is one of the key strategies used for job design in South African organisations Ntshela (2021), with organisations broadening the scope of their jobs to allow employees to make conclusions about their work (Ndaleni-Sibiya, Fagbadebo and Mbandlwa 2024).

Job enrichment is one of the key strategies used for job design in South African organisations (Ntshela 2021), with organisations broadening the scope of their jobs to allow employees to make decisions about their work, take ownership of outcomes, and participate in planning and problem-solving processes that were previously reserved for management (Ndaleni-Sibiya, Fagbadebo and Mbandlwa 2024). In practice, this has been implemented through the delegation of greater responsibility to employees, the inclusion of employees in decision-making processes, and the provision of opportunities for skill development and career advancement (Barkhuizen and Gumede 2021).

Utami *et al.* (2021) found that job enlargement is practised in South Africa. This aligns with Mfeketho (2021), who explains that organisations add tasks to employees to make jobs more challenging and enjoyable. In practice, job enlargement in South African organisations has been implemented by horizontally expanding job roles to include additional tasks of a similar nature, thereby reducing monotony and increasing the breadth of employee contribution to organisational objectives (Mququ 2022).

Austin-Egole, Iheriohanma and Nwokorie (2020) and Messenger (2018) found that many employers are using the strategy of flexible work arrangements, allowing employees to work anywhere and anytime as long as they remain productive. In the South African context, this has been implemented through compressed work weeks, flexi-time scheduling, and remote or hybrid working arrangements, particularly following the disruptions occasioned by the COVID-19 pandemic, which accelerated the adoption of flexible work practices across various sectors (Luzipho, Joubert and Dhurup 2023).

Thus, the empirical literature shows that researchers diverge in terms of job design strategies in South Africa. In addition, few studies have been conducted on job design strategies in the port environment. Hence, there is a need to investigate job design strategies in an organisation in the port environment in South Africa.

2.8 STRATEGIES OF JOB DESIGN IN THE PORT SECTOR

Researchers such as Sukri, Ngah and Yiau (2023) have investigated strategies for job design in port organisations. For example, Putra (2024) demonstrates that job enlargement is a widely used strategy for job design. Vlachos, Pantouvakis and Karakasnaki (2024) found that organisations use job enlargement to eliminate boredom. Rajesh *et al.* (2023) show that flexible work arrangement is another key strategy of job design in use. This aligns with Ndiango, Gabriel and Changalima (2024), who demonstrate that the rise in technology has resulted in employers offering adaptable work provision to enhance employee motivation and satisfaction. Dabral, Arijit and Purihit (2022) document that port companies use job enrichment to enhance job satisfaction. Antwi-Boampong *et al.* (2022), who elaborate that employees are empowered to make decisions about their jobs to motivate them.

Susanto *et al.* (2023), illustrate that job rotation is used in port organisations. This is consistent with Iswandi, Gurnato and Andriyansah (2023), who found that employees are provided with job rotation to make them versatile and more engaged. Shang *et al.* (2024) found that some port firms simplify jobs, whereby employees can break down their primary responsibilities into simple tasks. This is substantiated by Bottalico, Vanelslander and Verhoeven (2022).

It is evident from the literature that differences exist amongst researchers on the strategies for job design in use in port companies. Hence, there is a need for a study that clarifies job design strategies in port companies. Furthermore, most studies on job design strategies in port organisations have been done in organisations outside South Africa. Thus, there was need to investigate job design strategies in an organisation in the port environment in South Africa to close the knowledge gap.

2.9 BENEFITS OF JOB DESIGN

Bratton *et al.* (2021) state that job design is a systematic approach to developing roles that meet employee and organisational needs. Researchers have elaborated on a plethora of benefits of job design for organisations. For example: Raharjo and Fernandes (2018) show that job design is important for reducing job dissatisfaction; Böckerman *et al.* (2020) show that job design benefits job satisfaction and resource allocation; Judge, Zhang and Glerum (2020) show that job design enhances skills development and increases job satisfaction; and Ndiango, Gabriel and Changalima (2024) and Parker and Grote (2022) show that job designing promotes employee skills development. Job design indirectly provides a platform for training for employees, making them flexible and more versatile (Parker and Jorritsma 2021).

Job design strategies, such as job simplification, can help employees identify efficient methods to execute tasks (Dyasi *et al.* 2024; Parker and Grote 2022; Konz 2018), and enhance job descriptions and specifications (Bratton 2020; Vlachos, Pantouvakis and Karakasnaki 2024). Job design enhances employee motivation and satisfaction (Putra 2024) and productivity and reducing absenteeism (Vlachos, Pantouvakis and Karakasnaki 2024) thereby helping the organisation achieve its objectives (Irabor and Okolie 2019). Armstrong and Taylor (2020) postulate that poor job designs negatively impact the organisation.

Incorporating flexibility and autonomy through job design helps employees to manage their work (Shang *et al.* 2024) and reduce employee stress and burnout (Ndiango, Gabriel and Changalima 2024). Aziz-Ur-Rehman and Siddiqui (2019) observe that employees' quality of life is improved due to good job design, such as opportunities for flexible work arrangements. Luzipho, Joubert and Dhurup (2023) state that not only is the physical presence of employees improved, but also their mental presence.

2.10 BENEFITS OF JOB DESIGN IN SOUTH AFRICA

Numerous researchers, such as Makina-Zimalirana *et al.* (2023), Luzipho, Joubert and Dhurup (2023), Afriyie *et al.* (2024), and Shongwe, Downing and Nene (2024), have elaborated on the benefits of job design in South Africa. Wilmans and Rashid (2021) assert that job design reduces job ambiguity amongst employees in South Africa, while

Shongwe, Downing and Nene (2024) state that developing job descriptions without job design would be challenging. Dyasi *et al.* (2024) show that job design initiatives empower employees, resulting in employee motivation and satisfaction that enhances the organisation's performance.

Job design reduces employee turnover in South African organisations (Ogony and Majola 2018; Ndou and Agbenyegah 2024). Job design strategies such as job enlargement, enrichment, and rotation offer in-house employee training (Maow 2024; Wilmans and Rashid, 2021; Luzipho, Joubert and Dhurup 2023). Thus, research indicates diverging benefits of job design in South Africa, resulting in a gap in studies specifying the exact benefits of job design. Furthermore, there is limited research on the benefits of job design in the port sector in South Africa. Hence, this study closes this gap by researching the benefits of job design at the TPT Durban DCT Pier 2.

2.11 BENEFITS OF JOB DESIGN IN THE PORT SECTOR

Researchers such as Vlachos, Pantouvakis and Karakasnaki (2024) and Putra (2024) have investigated the benefits of job design in port organisations and have reached diverse conclusions. Sukri, Ngah and Yiau (2023) state that job design initiatives, such as job enrichment, give employees more responsibility and power. Ndiango, Gabriel and Changanlima (2024) note that job design benefits employees in port organisations as it helps them balance work and life, where flexible work arrangements have been introduced due to job design. Job design schemes such as job enlargement and job rotation result in the acquisition of important skills and competencies amongst employees (Rajesh *et al.* 2023), and helps employees reach their career goals, as their skills are enhanced (Susanto *et al.* 2023).

Shang *et al.* (2024) show that job design benefits employers in the port environment. For example, Ndiango, Gabriel and Changanlima (2024) demonstrate that job design initiatives such as task complexity and autonomy enhance employee motivation and satisfaction. This increases employee performance, ensuring the organisation meets its intended objectives (Dabral, Arijit and Purihit 2022). Iswandi, Gurnato and Andriyansah (2024) show that proper job designs help employers in the port sector to retain their best employees, thereby attaining a sustained competitive advantage.

Research on job design benefits presents many diverging benefits in the port sector. Moreover, most of these studies on the benefits of job design in port organisations have been conducted in countries other than South Africa. Therefore, this study closes this knowledge gap by researching the benefits of job design at the TPT Durban DCT Pier 2.

2.12 CONCEPTUAL FRAMEWORK

Various gaps exist in existing theories and literature on job design and satisfaction. First, theories such as the JCM and Herzberg's two-factor theory tend to elucidate factors that enhance job satisfaction without elaborating on the relationship between job design and job satisfaction. Second, existing theories and literature have focused on the relationship between job design and job satisfaction in contexts other than South Africa. Finally, the existing literature and theories on job design and satisfaction have focused on contexts other than the port sector.

Figure 2.2 depicts the conceptual framework of the research on job design and job satisfaction at TPT in South Africa. The conceptual framework was developed based on the theoretical and empirical literature.

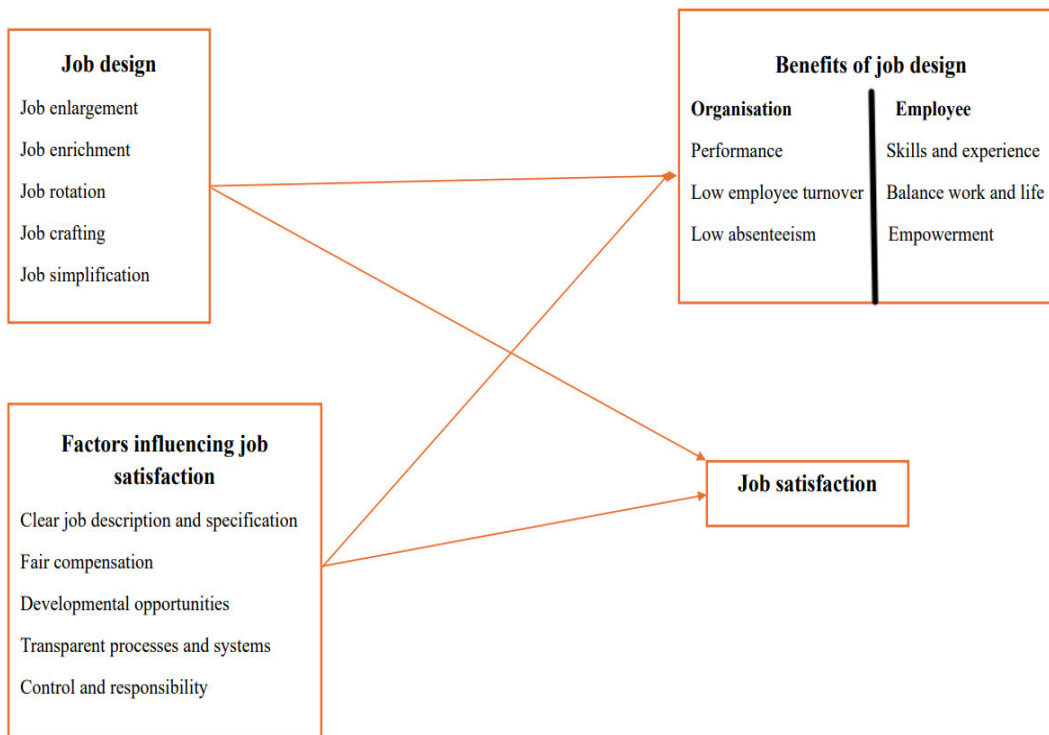


Figure 2.2: Conceptual framework

Source: Researcher

Figure 2.2 shows the conceptual framework of the research. The independent variable of the study is job design. Job designing is a systematic approach to developing jobs within the organisation to meet employee and organisational needs (Govender 2021). Sub-variables of job design, as depicted in the conceptual framework, are job enlargement, job enrichment, job crafting, and job simplification. Job enlargement is the addition of tasks and responsibilities to the job holder to make the job enjoyable, thereby eliminating boredom Alias et al. (2018). Job enrichment is another job design indicator involving additional control and responsibility for a job holder to empower the employee (Ndaleni-Sibiya, Fagbadebo and Mbandlwa 2024). Du Toit and de Klerk (2023) show that job rotation is another dimension of job design that involves moving employees from one job to another, or from one department to another within the organisation. Job crafting is when employees can adjust tasks, relationships, and perceptions of their work, align their jobs with their strengths, interests, and values (Petrou, Demerouti and Schaufeli 2018). Job simplification is a sub variable of job

design that involves breaking down complex tasks into smaller, more manageable tasks (Marchington *et al.* 2025).

The study's dependent variable, as shown by the conceptual framework, is job satisfaction. Job satisfaction is the contentment employees feel about their job (Ntshole 2021). Alias *et al.* (2018) show that proper job design positively affects job satisfaction. The more ideal the job design, the greater the level of job satisfaction (Ndaleni-Sibiya, Fagbadebo and Mbandlwa 2024).

Apart from the relationship between job design and job satisfaction, the conceptual framework also shows the other factors influencing job satisfaction. Five factors have been identified based on literature and theoretical framework: clear job description and specification, fair compensation, developmental opportunities, transparent processes and systems, and control and responsibility. Job description refers to the list of tasks to complete a job (Mfeketho 2021). Job specification refers to the requisite skills, competencies, and qualifications required to occupy a job position (Shang *et al.* 2024). The clearer the job description and specification, the higher the job satisfaction (Vlachos, Pantouvakis and Karakasnaki 2024). Fair compensation refers to compensation commensurate with the employee's effort and in relation to other employees occupying the position within and outside the organisation (Daniel 2019). The fairer the compensation, the higher the level of job satisfaction among employees (Aghimien *et al.* 2025). Putra (2024) explains that developmental opportunities as offering initiatives for employees to grow in skills, knowledge, and abilities. Employees with access to developmental opportunities record higher levels of job satisfaction (Ndou and Agbenyegah 2024). Transparent processes and systems involve being open and including employees in issues involving the management of employees (Rajesh *et al.* 2023). Hofmann and Strobel (2020) show that the more transparent the processes and systems, the greater the job satisfaction. Control and responsibility are the extent to which one has autonomy, influence over their work, and the ability to account for failures and successes of their effort (Susanto *et al.* 2023). Putra (2024) observes that the more the employees are afforded control and responsibility, the higher the level of job satisfaction.

The conceptual framework also shows other outcomes of job design besides job satisfaction. These are categorised as benefits to the employees and the organisation. The employee benefits from skills and experience (Ndiango, Gabriel and Changelima 2024). Good job design results in employees acquiring skills and knowledge (Luzipho, Joubert and Dhurup 2023). Shongwe, Downing and Nene (2024) elaborate that good job designs provide flexibility, enabling employees to balance work and life. Finally, job design empowers employees. This is substantiated by Bottalico *et al.* (2022) who state that well-crafted job designs give employees authority and autonomy.

Job design impacts the organisation. First, proper job design improves organisational performance (Rajesh *et al.* 2023). Second, good job design reduces employee absenteeism (Shang *et al.* 2024), and finally, job design leads to low employee turnover (Putra 2024).

2.13 GAPS ADDRESSED BY THE CONCEPTUAL FRAMEWORK

The conceptual framework closes numerous knowledge gaps. Firstly, most theories and frameworks, such as the JCM, outline factors influencing job satisfaction. This conceptual framework depicts the relationship between job design and job satisfaction. Secondly, most researchers, such as Putra (2024), do not break down job design into its strategies. This conceptual framework elaborates job design strategies such as job enlargement, job enrichment, job crafting, and job simplification. Thirdly, the conceptual framework shows the benefits of job design by separating benefits to the employee from benefits to the organisation.

The conceptual framework results from a literature review of job design and job satisfaction in South Africa and the port sector. Thus, the resultant conceptual framework elaborates the connection between job design and employee job satisfaction in a port organisation in South Africa, a context largely ignored in the literature.

2.14 CHAPTER SUMMARY

This chapter was devoted to exploring the literature related to the topic of the study. The starting point was discussion of the theoretical framework. The main theory used

was the JCM, which shows essential characteristics for enhancing job satisfaction. However, because the JCM is too simplistic, Lawler's motivational job design theory and Herzberg's two-factor theory were also adopted. The chapter progressed by discussing empirical literature for the four objectives. Three issues were identified from the existing literature. Firstly, there is inconsistency and divergence among researchers regarding their observations on the objectives. Secondly, there is limited research on these objectives in the South African context, and thirdly, there is limited research on these objectives in the port sector. This motivated the carrying out of this research. Finally, the researcher developed a conceptual framework that depicts the relationship between job design and job satisfaction, the strategies of job design, other factors influencing job satisfaction, and the benefits of job design. The next chapter elaborates on and justifies the research methodology implemented in the study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter examined existing literature on job design and job satisfaction by discussing the theoretical and empirical literature and proposing a conceptual framework. Research methodology is a systematic set of data collection and analysis methods to. This chapter explores the research framework and elucidates the methods and strategies used in information collection and analysis. Bell, Harley and Bryman (2022) assert that developing a robust research methodology is essential to generating reliable and valid conclusions.

This chapter explains and justifies the research philosophy, approach, design, the target population, sampling methods, data gathering techniques, research tools, and research procedures for testing validity and reliability. Furthermore, the chapter elaborates on the data analysis method, including descriptive and inferential statistics. Finally, this chapter also accounts for steps and measures carried out during the research procedure to ensure the study adhered to ethical standards.

3.2 RESEARCH PHILOSOPHY

Walliman (2022) states that researchers must determine the research philosophy before starting. Research philosophy guides researchers in selecting research methods and techniques (Berndt 2020). The research philosophy is thus a framework for the research process (Bell, Harley and Bryman 2022; Srivastava and Harita; Privitera and Ahlgrim-Delzell 2018).

There are three research philosophies: positivist, interpretivist, and pragmatist (Gannon, Taheri, and Azer 2022). Positivist research philosophy is a position that the world is objective and is primarily appropriate for quantitative research (Stratton 2021). Interpretivist philosophy is the belief that the world is subjective, and this philosophy suitable for qualitative research (Denscombe 2021). Pragmatism is the view that there

is no absolute truth, as the world can be subjective or objective (Berndt 2020). This type of philosophy is associated with mixed methodologies.

3.2.1 Positivism

The positivist position is one of the fundamental research philosophies (Anselmi, Efanagely and Robusto 2019). Positivism is a belief that the world is objective (Bell, Harley and Bryman 2022). Researchers guided by positivism believe that perceptions and attitudes significantly impact relationships between variables (Ali 2024). Therefore, quantitative researchers prefer numbers as these are believed to be truthful, thus the idiom “numbers do not lie”. This research shares a similar perspective that the world is objective, and numbers can help understand relationships between variables. Hence, positivist research philosophy was the foundation of this research. This approach ensures that the research was free from researcher and respondent bias.

3.3 RESEARCH APPROACH

Research approach is then overall strategy that outlines how data is collected, analysed and interpreted to achieve the study’s objectives (Tamayo, Lane and Dewart 2020). This section presents an overview of the research process, paving the way for analysis choices and data collection. There are three main types of research, namely qualitative, quantitative, and mixed methods, each type of research has its own distinct processes and procedures (Bell, Harley and Bryman 2022). Quantitative research focuses on collecting and analysing numerical data (Sheard 2018). Thus, quantitative research quantifies responses to reach conclusions. On the other hand, qualitative research is an approach used to explore and generate deeper insights into a phenomenon by collecting non-numeric data (Schreir 2018). According to Amirrudin, Nasution and Supahar (2021), qualitative research generates insights into individuals' or groups' underlying meanings, motivations, and experiences. Mixed methods research constitutes an integrative approach that systematically combines both qualitative and quantitative methodologies in a single study to provide a comprehensive understanding of the research problem (Hair, Page and Brunsveld 2019). Thus, mixed methods involve numerical and non-numerical data to reach

research conclusions. The main argument for using mixed methods is for triangulation purposes, where important insights not picked up by one type of research are picked up by the other (Tashakkori, Johnson and Teddlie 2020).

3.3.1 Quantitative research approach

The research approach used in this study is quantitative research approach which used numerical data to investigate the relationships between variables (Ali 2024; Ahmed 2024). Quantitative research was adopted because it is appropriate for determining relationships. Given that this study aimed at determining the relationship between job design and job satisfaction, it was appropriate to adopt a quantitative research approach. In addition, a quantitative research approach was used because it is objective. Furthermore, a quantitative research approach enables the data collection from many respondents to be generalised. Finally, a quantitative research approach was adopted because it helps reach conclusions in a shorter period compared to qualitative research.

3.4 RESEARCH DESIGN

Research design refers to the structured plan that outlines the entire research process (Pallant 2020; Kim 2024). In quantitative research, numerous designs can be used, including experimental, descriptive, quasi-experimental, and survey designs. Experimental design involves the researcher controlling one independent variable to test cause and effect (Sileyew 2019). A quasi-experimental design is a design that is partially experimental (Lohr 2021). Descriptive research design focuses on describing variables using descriptive statistics (Willie 2023). A survey design uses questionnaires to gather data from a large sample (Sileyew 2019). This research adopted a survey research design.

3.4.1 Survey research design

A survey research design is a widely used quantitative research design (Bell, Waters and Egan 2019). A survey research design uses a questionnaire to gather quantitative data on attitudes, feelings, and opinions from a large sample (Walliman 2022). This research design was selected because it enabled quick data generation from a large

sample on the topic of job design and satisfaction. Furthermore, survey research design helps to collect quantitative data in a short period of time. A survey research design was chosen as it aligns well with the quantitative approach adopted in the study.

3.5 TARGET POPULATION

The target population is the aggregate set of people, items, and groups within the specified boundaries of the research, which is the over-all total of the potential respondents of a study (Willie 2023, 2024). This research's target population comprised TPT DCT Pier 2 employees in KZN province. The target population was identified through the internal staff list provided by the Human Resources Department at TPT Durban. According to these records provided, the target population was 1 865.

3.6 SAMPLING PROCESS

Due to constraints related to time and financial resources, it is often impractical to conduct research involving the entire population (Rahman *et al.* 2022). Hence, researchers resort to studying a sample representative of the entire population (Bell, Harley and Bryman 2022).

3.6.1 Sampling methods

Sampling methods in research are broadly categorized into probability and non-probability sampling (Stratton 2021). Non-probability sampling does not give every item in the population an equal chance to be selected into the main sample (Bhardwaj 2019). Non-probability sampling aligns with qualitative research because of its subjectivity and bias (Arias *et al.* 2023). Common techniques in non-probability sampling include purposive sampling, convenience sampling, and snowball sampling. Probability sampling is a technique in which every unit within the population has an equal and known chance of being selected for inclusion in the sample (Denscombe 2021). This study utilised probability sampling.

3.6.1.1 Probability sampling

Probability sampling method is a sampling method that affords all items in a population an equal chance to be selected to be part of the research (Walliman 2022), with every member of the population having a known non-zero probability of being elected to the sample (Bhardwaj 2019). Probability sampling was used because it is less subjective and unbiased than non-probability sampling. Furthermore, probability sampling was used because it aligns with quantitative research methodology. Probability sampling techniques are simple random, stratified, systematic, cluster, and multi-stage (Lohr 2021).

3.6.2 Sampling techniques

As demonstrated in the previous section, there are numerous sampling techniques in probability sampling. For example, stratified sampling divides the population into different sub-groups before selecting items for the sample to afford each demographic an equal chance of being represented (Stratton 2021). On the other hand, simple random sampling randomly selects the sample's constituents, and systematic sampling uses a system such as selecting an item after a sampling interval (k) (Lohr, 2021). This study used simple random sampling to select respondents to be part of the sample.

3.6.3 Simple random sampling

To apply simple random sampling without replacement in this study, the sampling frame obtained from the Human Resources Department of TPT Durban was used as the basis for selection. All employees in the target population were assigned a unique number and listed once in alphabetical order. A random number generator was then used to select the required number of respondents from the numbered list, ensuring that each employee had an equal and independent chance of being selected (Saunders, Lewis and Thornhill 2019). Once a respondent was selected, their name was removed from the list to prevent the possibility of being selected again, consistent with the principle of sampling without replacement (Etikan and Babatope 2019). This procedure ensured that the sample was representative of the target population at TPT Durban DCT Pier 2 and that the selection process was free from researcher bias (Lohr

2021). The sampling frame for the quantitative study was obtained from the Human Resources Department of Transnet Port Terminals in Durban, KZN. Each analysis unit, representing the target population's components, was listed once in alphabetical order. The sampling approach used in this study was simple random sampling without replacement.

3.6.4 Sample size

Determination of sample size is another key step in the sampling exercise. Sekaran and Bougie's sample size table is widely used in determining sample size in business and social research, where the confidence level is 95% and the margin of error is 5%. The table depicts the sample size proportionate to the populations. According to Bell, Harley and Bryman (2022) Sekaran and Bougie's table offers practical solutions for determining sample size. Table 3.1 is an extract of Sekaran and Bougie's table showing that a sample size 319 represents a target population of 1 865. This is further supported by Cochran's (1977) sample size formula, which, when applied with a 95% confidence level, a margin of error of 5%, and a population proportion of 0.5, yields an initial sample size of 384, subsequently adjusted to 319 through the finite population correction formula to account for the known population size of 1880 employees at TPT Durban DCT Pier 2 (Saunders, Lewis and Thornhill 2019). Hence, 319 self-developed closed-ended questionnaires (Appendix C) were distributed to the selected respondents.

Table 3.1: Sekaran and Bougie sample size table

Target Population Size	Recommended Sample Size
10	10
20	19
30	28
40	36
50	44
75	63
100	80
150	108
200	132

250	152
300	169
400	196
500	217
600	234
700	248
800	260
900	269
1000	278
2000	322
3000	341
4000	351
5000	357
10000	370
100000	384

Source: Adapted from Sekaran and Bougie (2019)

3.6.5 Inclusion and exclusions

The inclusion and exclusion criteria for this study were determined prior to data collection to ensure that the sample was appropriate and relevant to the research objectives (Saunders, Lewis and Thornhill 2019). The following criteria were applied:

In terms of inclusion criteria, all permanently and contractually employed workers at TPT Durban DCT Pier 2 at the time of data collection were eligible to participate in the study. Eligible participants included employees across all occupational levels, namely operational, supervisory, and middle management levels, who were directly involved in the daily functions of the terminal.

In terms of exclusion criteria, top management was excluded from the study on the basis that their roles and job design experiences differ significantly from those of the broader workforce and would therefore not be representative of the general employee population at TPT Durban DCT Pier 2. Employees from other TPT terminals, including Pier 1 Container Terminal and Durban Car Terminal, were also excluded as the study was specifically focused on TPT Durban DCT Pier 2. Furthermore, employees who were on extended leave or secondment at the time of data collection were excluded

to ensure that only actively engaged employees participated in the study (Sekaran and Bougie 2019).

3.7 DATA COLLECTION METHODS

Data collection is the strategic information gathering necessary to address the research questions (Walliman 2021). For this research, a structured questionnaire was developed by the researcher based on the theoretical framework of the Job Characteristics Model (Hackman and Oldham 1976) and the relevant empirical literature reviewed in Chapter 2. The questionnaire was not adopted from an existing instrument but was specifically designed to address the research questions and objectives of this study (Sekaran and Bougie 2019).

To ensure the validity of the questionnaire, the instrument was subjected to content validity assessment through a panel of subject matter experts and the supervising team, who reviewed the questionnaire items for relevance, clarity, and alignment with the research objectives prior to data collection (Saunders, Lewis and Thornhill 2019). Construct validity was further assessed through factor analysis, which confirmed that the questionnaire items loaded appropriately onto their intended constructs (Field 2024). The reliability of the questionnaire was assessed using Cronbach's Alpha coefficient, with all scales yielding coefficients above the accepted threshold of 0.70, thereby confirming the internal consistency of the measurement instrument (Sekaran and Bougie 2019).

Data was collected manually through hard copy questionnaires distributed directly to respondents at TPT Durban DCT Pier 2. Respondents self-administered the questionnaires without the researcher's presence, with completed questionnaires subsequently collected in person. Each questionnaire was accompanied by a covering letter (Appendix A) which provided instructions for proper completion. The data collection process was carried out over a period of 30 days (Appendix C).

3.7.1 Primary data

Primary data refers to information obtained directly from sources to address the specific objectives of the research study (Bell, Harley and Bryman 2022). It is

characterised as firsthand data collected by the researcher (Walliman 2021). Standard methods for gathering primary data include questionnaires and interviews, which facilitate direct insights from participants. This study used closed-ended questions (Appendix C) to collect primary data, ensuring structured responses aligned with the research objectives.

3.7.2 Secondary data

Secondary data pertains to information that other individuals have previously collected for a specific purpose (Walliman 2021). This is consistent with Walliman's (2021) characterisation of secondary data as data derived from existing sources. Gathering pertinent and reliable information relevant to the research topic was important. The secondary data in this research were acquired through examination of textbooks, online resources, scholarly journal articles, media publications, government reports, internal company records, and other periodicals. Secondary data was used in the literature review to articulate existing knowledge on job design and job satisfaction.

3.8 MEASURING INSTRUMENT

To ensure the validity of the measuring instrument, content validity was established through a review of the questionnaire items by a panel of subject matter experts and the supervising team prior to data collection, who confirmed that the items were relevant, clear, and adequately representative of the constructs being measured (Saunders, Lewis and Thornhill 2019). Construct validity was further assessed through exploratory factor analysis, which confirmed that the questionnaire items loaded appropriately onto their intended constructs, thereby demonstrating that the instrument measured what it was designed to measure (Field 2024). The reliability of the measuring instrument was assessed using Cronbach's Alpha coefficient, which measures the internal consistency of the scale items (Sekaran and Bougie 2019). All scales yielded Cronbach's Alpha coefficients above the widely accepted threshold of 0.70, confirming that the measuring instrument produced consistent and dependable results (Pallant 2020).

3.9 ADMINISTRATION OF QUESTIONNAIRE

The questionnaires were administered manually through hard copy distribution directly to respondents at TPT Durban DCT Pier 2. To recruit respondents, the researcher obtained the sampling frame from the Human Resources Department of TPT Durban, which contained a list of all eligible employees. Selected respondents were approached individually at their respective workstations and departmental areas during working hours, with the permission of the relevant supervisors and management. Respondents were briefed on the purpose of the study and provided with the information letter (Appendix A) explaining their rights regarding privacy and voluntary participation before being handed the questionnaire. Completed questionnaires were collected in person by the researcher after an agreed period, ensuring a satisfactory response rate (Saunders, Lewis and Thornhill 2019). Respondents provided written informed consent prior to participating in the study (Appendix D).

3.10 VALIDITY AND RELIABILITY

Bougie and Sekaran (2019) explain that validity and reliability assess the degree to which findings accurately reflect the phenomenon under study, ensuring that the data analysis yields statistically significant results and allows for meaningful and well-founded conclusions to be drawn.

3.10.1 Validity

Validity is the extent to which the study results are accurate (Heale and Twycross 2018). Validity also measures the extent to which the research instrument used measures the constructs intended to be measured (Khosla 2021). Several methods can be used to assess validity, including face validity, content validity, construct validity, and criterion validity. (Denscombe 2021). In this study, content validity was adopted.

3.10.2 Content validity

Content validity refers to the degree to which a research instrument accurately and comprehensively represents the construct it is intended to measure (Bell, Harley and Bryman 2022; Ajayi 2023). Research credibility usually relies on high content validity. In this research, content validity was used to ensure that all critical and relevant dimensions of job design and job satisfaction are measured. Exploratory factor analysis was conducted using the Kaiser-Meyer-Olkin (KMO) test using SPSS version 30.0 to test validity.

3.10.3 Reliability

While validity is concerned with the accuracy of the research instrument, it also refers to the consistency and stability of a research instrument throughout the research process. (Heale and Twycross 2021). Ahmed (2024) states that reliability measures whether the research instrument is consistent and error-free. In this research, both Cronbach's alpha coefficient and a pilot test were used to ensure reliability.

3.10.4 Pilot study

In addition, to the Cronbach's alpha test, a pilot test was used to guarantee that the study is reliable. A pilot test is a primary study that informs the main study (Walliman 2021). In this research a pilot test was conducted with 10 respondents from TPT. These respondents were excluded from the main study. The Cronbach's alpha test results for the pilot test are (see Table 3.2).

Table 3.2: Pilot test results

Dimension	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Factors influencing job satisfaction	0.821	0.842	15
Benefits of job design	0.768	0.771	5
Job design	0.783	0.800	7
Job satisfaction	0.792	0.805	5
Strategies of job design	0.720	0.752	7

The results show that all the scales used in the research instrument scored above the acceptable threshold of 0.7. Hence, they were all retained and used in the main study.

3.11 DATA ANALYSIS

SPSS version 30 for Windows was used to analyse data. According to Rahman and Muktadir (2021), SPSS effectively and efficiently analyses large datasets derived from questionnaires. Both descriptive and inferential statistics were used. To achieve the first objective, descriptive statistics including mean, standard deviation, skewness, and kurtosis were used to profile the factors influencing job satisfaction. To achieve the second objective, regression analysis was used to explore the relationship between job design and job satisfaction. To achieve the third objective, descriptive statistics were used to identify the strategies of job design and their influence on job satisfaction. To achieve the fourth objective, descriptive statistics were used to evaluate the benefits of job design on employee performance and organisational effectiveness. Prior to the main analysis, reliability was assessed using Cronbach's Alpha coefficient, and factor analysis was conducted using KMO and Bartlett's tests to ensure the validity of the measuring instrument (Pallant 2020).

3.12 ETHICAL CONSIDERATIONS

Prior to commencing data collection, gatekeeper's permission was obtained from the participating organisation, TPT, to access employees and conduct research on the premises (Appendix B). This ensured that the research was carried out with the full knowledge and authorisation of the relevant organisational authority (Saunders, Lewis and Thornhill 2019). Throughout the research process, research ethics were observed. One of the ethical principles observed was informed consent. Before research respondents participated in the study, they were also informed about the reason of the research and advised that the study did not offer any monetary compensation. After this, respondents gave informed written consent by signing the consent form. Furthermore, throughout the research, the principle of anonymity was observed. According to this principle, research results should not be linked to participants (Walliman 2021). Hence, throughout the research procedure, the anonymity principle was observed. Furthermore, data obtained from the respondents

was kept in a password-protected laptop, and this data will be deleted permanently after five years, per the Durban University of Technology policies. Research respondents were voluntary agents who were advised prior the commencement of the study that they retained the right to withdraw at any point without incurring any penalty. Moreover, ethical clearance for the study was obtained from DUT and the Institutional Research Ethics Committee (IREC) (Appendix E), ensuring compliance with established ethical standards.

3.13 CHAPTER SUMMARY

This chapter elucidates the research methodology used and offers justifications for methodological choices. The research philosophy used was positivist because of the need to understand the relationship between job design and job satisfaction objectively. The research approach used was quantitative because of the need to test the relationship between job design and job satisfaction. A survey research design was used because of the nature of the research, which required large amounts of quantitative data to be collected through questionnaires. A structured questionnaire was used as a research instrument, and validity and reliability were ensured through content validity, Cronbach's alpha coefficient, and a pilot test. Data analysis was conducted through SPSS version 30.0. Ethical principles such as anonymity, voluntary participation, and informed consent were observed throughout the research. Chapter 4 shows the research findings and discussion thereof.

CHAPTER 4: FINDINGS AND DISCUSSIONS

4.1 INTRODUCTION

Chapter 3 demonstrated the quantitative methodologies and techniques adopted for this research. This chapter provides a detailed presentation, analysis, and interpretation of the study's findings. Quantitative data were analysed using SPSS version 30.0 to ensure methodological rigor and statistical validity. 319 questionnaires were distributed, and 288 were completed and sent back for data analysis, representing a response rate of 90.3%, which is acceptable (Walliman 2021). The chapter starts by elaborating on the sample demographics using descriptive statistics. The chapter progresses by presenting results about reliability and factor analysis. Reliability analysis was carried out using Cronbach's alpha, whereas KMO and Bartlett's tests were used for factor analysis and sample adequacy test. Regression analysis was utilised to determine relationships between variables. Results are discussed in the light of the literature reviewed in Chapter 2.

4.2 SAMPLE DEMOGRAPHICS

The first section of the questionnaire collected information on respondents' demographics, such as gender, age group, racial group, qualification, and length of service.

4.2.1 Gender

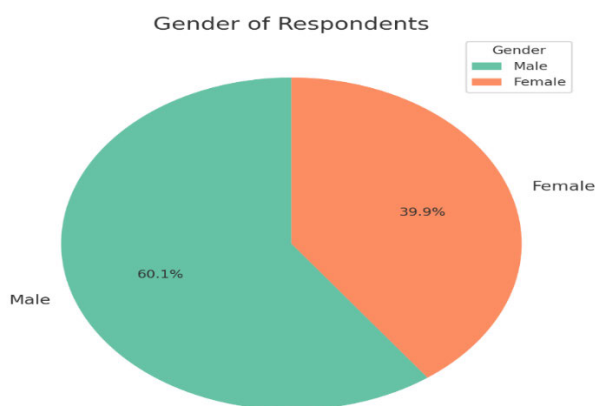


Figure 4.1: Gender of respondents

Figure 4.1 shows the gender of respondents. Most respondents were male, accounting for 60.1% of the respondents. Females were also represented, contributing 39.9% of respondents in the research. This finding demonstrates a gender gap at TPT in KZN.

4.2.2 AGE GROUP

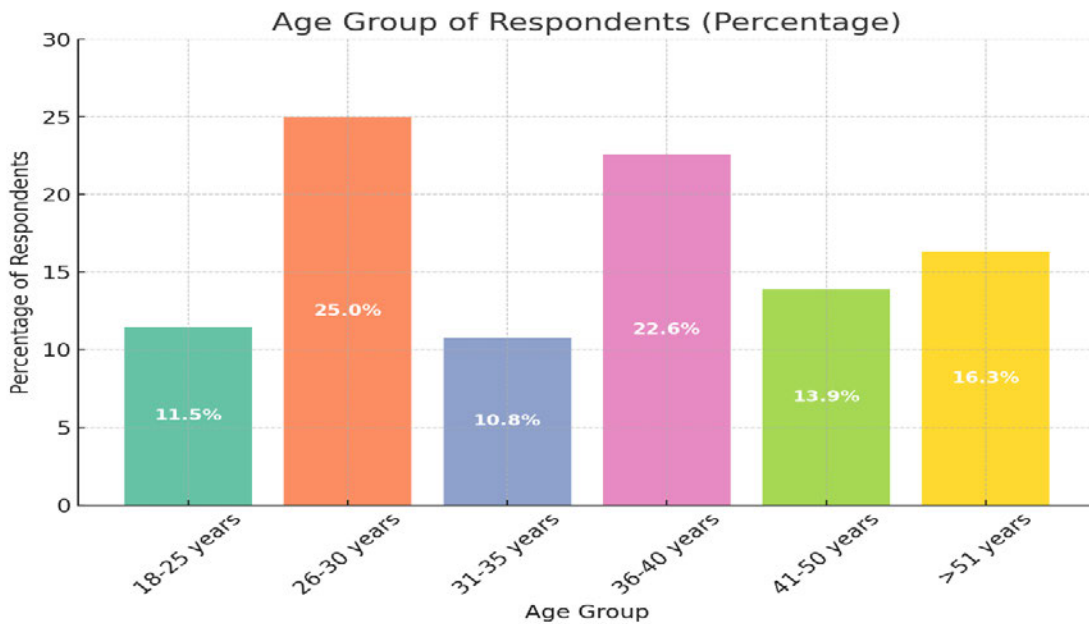


Figure 4.2: Age group of respondents

Figure 4.2 shows the various age groups to which respondents belong. Most respondents were aged between 26 and 30 years, making up 25% of respondents. The second major group comprised respondents aged between 36 and 40 (22.6%). The third group comprised respondents older than 51 years (16.3%). The fourth group consisted of respondents aged 41-50 (13.9%), and the fifth group consisted of respondents aged 18-25. The least represented group included respondents aged 31-35 (10.8%). The study comprised respondents from different age groups and can be generalised to the broader population.

4.2.3 RACIAL GROUP

Table 4.1: Racial group of respondents

Racial Group	Frequency	Percentage
African	235	81.6%

White	29	10.1%
Indian	19	6.6%
Coloured	3	1.0%
Other	2	0.7%

Table 4.1 shows the racial groups of respondents who participated in the research. The major racial group was African (81.6%). This corresponds to the country's demographics. The second major racial group in the study was white, contributing 10.1% of respondents. This was followed by the Indian racial group with 6.6%. The coloured racial group was fourth ranked as it contributed 1% to the respondents. Other races constituted 0.7% of the respondents. The research was diverse regarding respondents, as most races in South Africa were represented.

4.2.4 QUALIFICATIONS OF RESPONDENTS

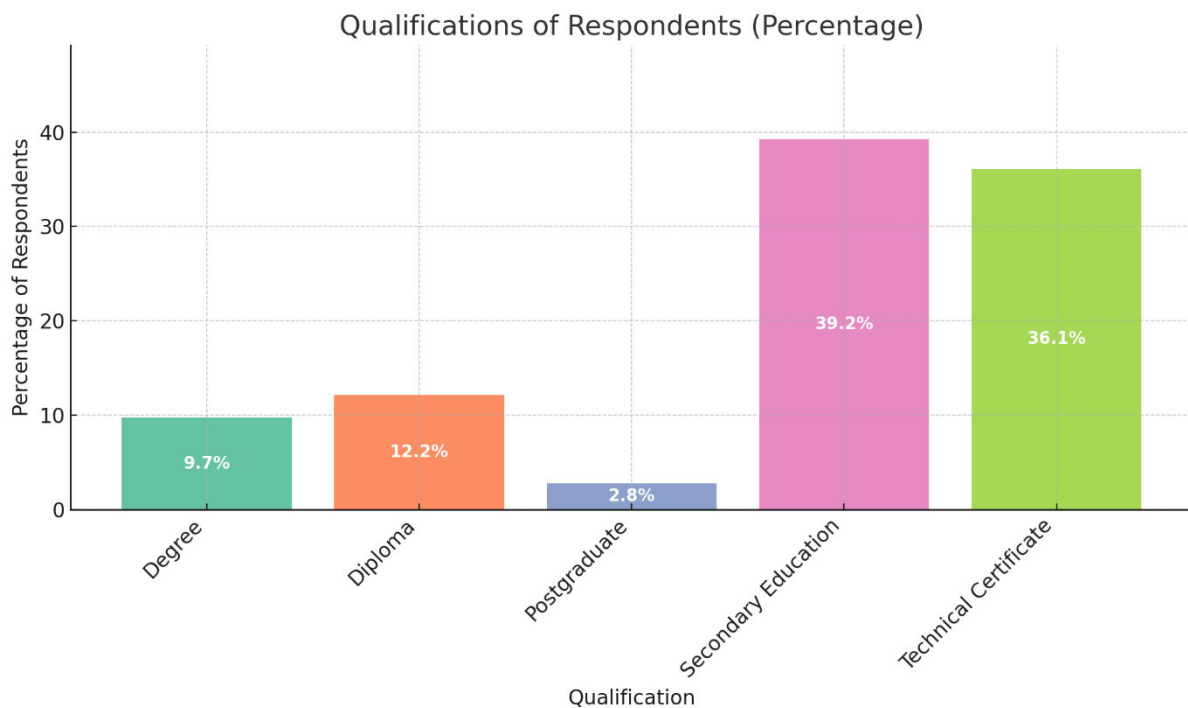


Figure 4.3: Qualifications of respondents

Figure 4.3 shows the qualifications of respondents. Most respondents (39.2%) possess secondary education. The second major group (36.1%) had a technical certificate. This was followed by respondents with a diploma qualification (12.2%). Respondents with a degree qualification constituted 9.7% of the respondents. The

smallest group had respondents who had a postgraduate qualification, consisting of 2.8% of the respondents. The research included respondents with diverse educational backgrounds, making it generalisable to the broader population.

4.2.5 LENGTH OF SERVICE OF RESPONDENTS

Table 4.2: Length of service of respondents

Length of Service	Frequency	Percentage
1-3 years	52	18.1
4-5 years	21	7.3
6 years or more	214	74.6

Table 4.2 shows the respondents' length of service. Most respondents have been at TPT for 6 years or more, signifying high levels of loyalty. The second major group consisted of respondents with TPT for 1-3 years. The final group consisted of respondents who had served TPT for 4-5 years. The mixture of respondents who are still new and those who have been with the organisation for six or more years helps the research to be more generalisable to the broader population at TPT.

4.3 RELIABILITY ANALYSIS

Reliability analysis was carried out using Cronbach's alpha coefficient. The Cronbach's alpha coefficient was interpreted using Pallant's (2020) guidelines that 0.70-0.79 is suitable, 0.80-0.89 is good, and 0.90-1 is exceptional.

4.3.1 Reliability analysis for factors influencing job satisfaction

Table 4.3: Reliability statistics for factors influencing job satisfaction

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items		N of Items		
0.839	0.840		15		
Factors influencing job satisfaction item-total statistics					
Item	Scale Mean if Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
FA1	46.07	83.086	0.407	0.166	0.834
FA2	46.28	85.215	0.425	0.181	0.832
FA3	46.13	84.245	0.428	0.183	0.832

FA4	46.50	85.171	0.370	0.137	0.836
FA5	46.02	81.933	0.546	0.298	0.825
FA6	46.09	80.661	0.522	0.272	0.826
FA7	46.26	78.916	0.568	0.323	0.822
FA8	46.01	81.167	0.589	0.347	0.822
FA10	46.26	79.414	0.536	0.287	0.825
FA11	45.96	80.901	0.563	0.317	0.823
FA12	45.80	84.777	0.527	0.277	0.827
FA13	46.16	81.763	0.456	0.208	0.831
FA14	45.72	84.663	0.455	0.207	0.830
FA15	45.42	88.231	0.382	0.146	0.840

Table 4.3 shows the Cronbach's alpha results for factors influencing job satisfaction. The Cronbach's alpha for this scale is 0.839, demonstrating good internal reliability. The item-total correlation results further substantiate this. All 15 items for this scale surpassed the minimum item-total correlation of 0.3, signifying that all items are acceptable. They were all retained for further analysis in the research.

4.3.2 Reliability analysis for benefits of job design on employee performance and organisational effectiveness

Table 4.4: Reliability statistics for benefits of job design on employee performance and organisational effectiveness

Cronbach's Alpha		Cronbach's Alpha Based on Standardised Items		N of Items	
0.721		0.735		5	
Benefits of job design on employee performance and organisational effectiveness: item-total statistics					
Item	Scale Mean if Deleted	Scale Variance if Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
BN1	12.40	13.509	0.364	0.132	0.715
BN2	12.51	13.368	0.502	0.252	0.781
BN3	12.61	12.816	0.564	0.318	0.720
BN4	13.24	9.999	0.507	0.257	0.705
BN5	13.21	10.622	0.523	0.274	0.701

Table 4.4 demonstrates Cronbach's alpha scores for the benefits of job design on employee performance and organisational effectiveness. The Cronbach's alpha result is 0.721, indicating that this scale is reliable and acceptable. Furthermore, all five items for this scale scored an item-total correlation above 0.3, making all of them satisfactory. Consequently, all five items were retained for subsequent analysis.

4.3.3 Reliability analysis for job design

Table 4.5: Reliability statistics for job design

Cronbach's Alpha		Cronbach's Alpha Based on Standardised Items		N of Items	
0.793		0.784		7	
Job design item-total statistics					
Item	Scale Mean if Deleted	Scale Variance if Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
JD1	18.63	34.220	0.387	0.150	0.817
JD2	19.08	27.951	0.577	0.333	0.756
JD3	18.37	32.819	0.371	0.138	0.807
JD4	18.97	25.753	0.736	0.542	0.723
JD5	18.86	25.532	0.750	0.563	0.719
JD6	18.90	26.704	0.669	0.448	0.737
JD7	19.53	27.693	0.470	0.221	0.780

Table 4.5 illustrates Cronbach's alpha results for the job design scale. The scale attained a Cronbach's alpha of 0.793, demonstrating an acceptable internal reliability. This is strengthened by the item-total correlation scores of the seven items above the acceptable 0.3. Hence, all seven items of job design were reserved for further analysis in the research.

4.3.4 Reliability analysis for job satisfaction

Table 4.6: Reliability statistics for job satisfaction

Cronbach's Alpha		Cronbach's Alpha Based on Standardised Items		N of Items	
0.790		0.777		5	
Job satisfaction item-total statistics					
Item	Scale Mean if Deleted	Scale Variance if Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
JS1	14.31	9.349	0.604	0.365	0.764
JS2	14.26	9.549	0.627	0.393	0.757
JS3	14.31	8.942	0.678	0.460	0.726
JS4	13.48	12.747	0.321	0.103	0.823
JS5	13.44	13.17	0.343	0.118	0.854

Table 4.6 illustrates reliability analysis results for the job satisfaction scale. Job satisfaction attained a Cronbach's alpha of 0.79, which is appropriate, meaning that the scale had internal reliability. This was reinforced by item-total correlation results of its five items, which surpassed the minimum threshold of 0.3. Hence, all five job satisfaction items were retained for further analysis.

4.3.5 Reliability analysis for strategies of job design and its influence on job satisfaction

Table 4.7: Reliability statistics for strategies of job design and their influence on job satisfaction

Cronbach's Alpha		Cronbach's Alpha Based on Standardised Items		N of Items		
0.716		0.764		5		
Strategies of job design and their influence on job satisfaction item-total statistics						
Item	Scale Mean if Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted	
ST1	14.4	8.895	0.342	0.117	0.835	
ST2	15.05	9.346	0.314	0.099	0.773	
ST3	13.83	7.979	0.397	0.158	0.790	
ST4	14.11	8.262	0.387	0.149	0.702	
ST5	14.01	7.624	0.430	0.185	0.764	

Table 4.7 shows the Cronbach's alpha coefficient of job design strategies and their influence on job satisfaction. The scale scored a Cronbach's alpha of 0.716, indicating acceptable internal reliability. This is buttressed by item-total correlation scores of the five scale items above the minimum threshold of 0.3. Hence, all five items were utilised in further research analysis.

4.4 FACTOR ANALYSIS

KMO and Bartlett's tests were used for factor analysis and sample adequacy. These were interpreted using Pallant's (2020) guidelines, which elaborate that a KMO of 0.60-0.69 is marginally acceptable, 0.70-0.79 is acceptable, 0.80-0.89 is good, and 0.90-1 is excellent. Pallant (2020) clarifies that for a scale and its items to be acceptable in factor analysis it should not have a p-value more than 0.05 in the Bartlett's test.

4.4.1 Factor analysis for factors influencing job satisfaction

Table 4.8: Factor analysis for factors influencing job satisfaction

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy			.803
Bartlett's Test of Sphericity	Approx. Chi-Square		3657.248
	Df		105
	Sig.		.000

Component Matrix ^a	
	Component 1
FA1	0.841
FA2	0.854
FA3	0.822
FA4	0.848
FA5	0.867
FA6	0.889
FA7	0.836
FA8	0.823
FA9	0.875
FA10	0.849
FA11	0.818
FA12	0.832
FA13	0.844
FA14	0.829
FA15	0.844

Extraction method: Principal component analysis

Table 4.8 shows the KMO and Bartlett's test results for factors influencing job satisfaction. The scale achieved a KMO score of 0.803, which is good and acceptable. This means that the sample was adequate for this scale. Furthermore, the Bartlett test attained a p-value less than 0.05, indicating that the factors are acceptable (df = 105, p = 0.000). This is supported by factor loadings above 0.3. Hence, all aspects were retained for further analysis.

4.4.2 Factor analysis for benefits of job design on employee performance and organisational effectiveness

Table 4.9: Factor analysis for benefits of job design on employee performance and organisational effectiveness

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy			.731
Bartlett's Test of Sphericity	Approx. Chi-Square		362.576
	Df		10
	Sig.		.000

Component Matrix^a	
	Component 1
BN1	0.462
BN2	0.521
BN3	0.495
BN4	0.477
BN5	0.306

Extraction method: Principal component analysis

Table 4.9 shows the results of a factor analysis of the benefits of job design on employee performance and organisational effectiveness. The KMO score for the scale is 0.731, which is acceptable, demonstrating no issues about sample adequacy for this scale. Bartlett's test indicates that the scale and its factors are acceptable (df = 10, p = 0.000). The factor loadings are all above 0.3 and are adequate. Hence, all five aspects of this scale were further used in the research.

4.4.3 Factor analysis for job design

Table 4.10: Factor analysis for job design

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy			.734
Bartlett's Test of Sphericity	Approx. Chi-Square		899.066
	Df		21
	Sig.		.000

Component Matrix ^a	
	Component 1
JD1	0.841
JD2	0.854
JD3	0.822
JD4	0.848
JD5	0.867
JD6	0.889
JD7	0.836

Extraction method: Principal component analysis

Table 4.10 demonstrates the results of the factor analysis for job design. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the job design scale is 0.734, which is acceptable according to Pallant's (2020) guidelines, indicating that the sample size was adequate to proceed with factor analysis for this scale. This means that the patterns of correlations among the seven job design items were relatively compact, thereby yielding reliable and distinct factors (Field 2024). Bartlett's test of sphericity yielded a statistically significant result ($df = 21, p = 0.000$), confirming that the correlation matrix for the job design scale was significantly different from an identity matrix, thereby justifying the appropriateness of conducting factor analysis on this scale (Pallant 2020). This result indicates that the seven job design items were sufficiently correlated with one another to warrant meaningful factor extraction. Furthermore, the seven factor loadings were all above the minimum acceptable threshold of 0.3, demonstrating that each item contributed meaningfully to the measurement of the job design construct. These results collectively confirm the construct validity of the job design scale, and all seven items were therefore retained for further analysis in the study.

4.4.4 Factor analysis for job satisfaction

Table 4.11: Factor analysis for job satisfaction

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Adequacy	Measure of Sampling	0.665
Bartlett's Test of Sphericity	784.049	784.049
	Df	10
	Sig.	.000
Component Matrix ^a		
	Component 1	
JS1	0.566	
JS2	0.584	
JS3	0.581	
JS4	0.418	
JS5	0.832	

Extraction method: Principal component analysis

Table 4.11 demonstrates the KMO and Bartlett test results for the job satisfaction scale. The job satisfaction scale achieved a KMO score 0.665, which is marginally acceptable. This means that the sample was adequate for the job satisfaction scale. In addition, Bartlett's test achieved a p-value less than 0.05, indicating that the scale and its factors are acceptable (df = 10, p = 0.000). This is supported by factor loadings for the five factors above 0.3. Hence, all aspects were retained for further analysis.

4.4.5 Factor analysis for strategies of job design and its influence on job satisfaction

Table 4.12: Factor analysis for strategies of job design and its influence on job satisfaction

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.643
Bartlett's Test of Sphericity	Chi-Square	220.782
	Df	10
	Sig.	.000

Component Matrix ^a	
	Component 1
ST1	0.322
ST2	0.313
ST3	0.518
ST4	0.551
ST5	0.570

Extraction method: Principal component analysis

Table 4.12 highlights factor analysis results for job design strategies and their influence on job satisfaction. The KMO score for this scale is 0.643, which is marginally acceptable, signifying a marginally acceptable sample adequacy. The Bartlett's test result demonstrates that this scale and all its five factors are acceptable (df = 10, p = 0.000). The factor loadings for the five factors are all above 0.3 and are adequate. Hence, all five factors were retained for analysis in the research.

4.5 DESCRIPTIVE STATISTICS

Descriptive statistics were used to measure the degree to which respondents agreed with the items presented in the questionnaires. Mean was used to compare and rank the items, and standard deviation was used to measure the dispersion of values. Skewness and kurtosis were used to demonstrate the extent of data normality.

4.5.1 Descriptive statistics for factors associated with job satisfaction.

Table 4.13: Factors that influence job satisfaction

Item	Mean	Standard Deviation	Skewness	Kurtosis
FA1	3.524	1.351	-0.581	-0.842
FA2	3.333	1.081	-0.337	-0.300
FA3	3.456	1.181	-0.510	-0.525
FA4	3.094	1.213	-0.134	-0.870
FA5	3.566	1.176	-0.425	-0.644
FA6	3.505	1.345	-0.509	-0.824
FA7	3.333	1.394	-0.394	-1.002
FA8	3.580	1.169	-0.781	-0.132
FA9	3.326	1.416	-0.474	-1.063
FA10	3.628	1.234	-0.886	-0.101
FA11	3.795	0.953	-0.940	0.759
FA12	3.903	1.100	-0.913	0.243
FA13	3.434	1.370	-0.557	-0.792
FA14	3.872	1.086	-0.762	-0.023
FA15	4.170	1.054	-1.299	1.200

FA1=company objectives are properly communicated, FA2=simplified job design, FA3=understanding of expectations, FA4=necessary materials to perform, FA5=add value to the organisation, FA6=meaningful work, FA7=job rotation, FA8=appreciation, FA9=knowledge sharing by manager, FA10=participate in decisions pertaining the job, FA11=job utilises my skills and knowledge, FA12=training and support, FA13=work environment, FA14=effective feedback, FA15=job contributes to the overall company objectives.

Table 4.13 presents the descriptive statistics for items measuring aspects associated with job satisfaction at TPT Durban DCT Pier 2. The results show that respondents agreed with ten out of fifteen items, indicating a positive perception of these aspects in relation to their job satisfaction. Respondents neither agreed nor disagreed with the remaining five items, suggesting that these aspects were not perceived as prominent contributors to their job satisfaction experience (Pallant 2020).

The primary factor affecting job satisfaction is job contribution to the overall attainment of company objectives (M = 4.17, SD = 1.054, S = -1.299, K = 1.2). Respondents agreed to this factor as a factor of job satisfaction. The standard deviation shows low

variability amongst respondents on this factor. Furthermore, the skewness and kurtosis are within 2 and -2; therefore, the data were normal. This finding converges with the JCM discussed in section 2.2.1, which asserts that task significance, defined as the extent to which a job contributes meaningfully to the organisation and its stakeholders, is a core dimension of job satisfaction (Hackman and Oldham 1976; Demerouti and Bakker 2023). This is further consistent with the discussion of meaningful work in section 2.3.15, which demonstrates that employees who perceive a clear connection between their efforts and the organisation's overall goals report higher levels of job satisfaction (Wang, Liu and Parker 2020). This study demonstrates that the more the job contributes to the overall company objectives, the more employees are likely to experience job satisfaction.

The second major factor is provision of training and support ($M = 3.903$, $SD = 1.1$, $S = -0.913$, $K = 0.243$). Although training and support is fundamentally a job design element falling under developmental opportunities as discussed in section 2.3.3, the findings demonstrate that its provision significantly shapes employees' job satisfaction experience at TPT Durban DCT Pier 2. This is consistent with Hackman and Oldham (1976), whose JCM identifies skill development as a core dimension of job design that generates intrinsic motivation and satisfaction. This finding further confirms that effective job design, through the provision of training and developmental support, is a key contributor to job satisfaction at TPT (Bakker, Demerouti and Sanz-Vergel 2023). The mean demonstrates that respondents agree that providing training and support leads to job satisfaction. This is further substantiated by standard deviation, which shows low variability, and skewness and kurtosis, which illustrate data normality. This finding converges with Myint (2019), who established that when employees are given more support and training, have higher chances of being satisfied with their jobs. This also confirms the conceptual framework which shows developmental opportunities as a key factor influencing job satisfaction.

The third major factor contributing to job satisfaction is the provision of effective feedback ($M = 3.872$, $SD = 1.086$, $S = -0.762$, $K = -0.023$). The mean attained for this factor indicates that most respondents agreed that providing effective feedback results in job satisfaction. This is further supported by a low standard deviation and acceptable data normality, as demonstrated by the results of skewness and kurtosis. This finding

is congruent with Hackman and Oldman's (2020) job characteristic model, which indicates that providing feedback results in job satisfaction.

Fourth, the study found that another key factor of job satisfaction is when a job utilises the employee's skills and knowledge ($M = 3.795$, $SD = 0.953$, $S = -0.94$, $K = 0.759$). The mean suggests that respondents agreed to this factor, and there was low variability of responses based on the standard deviation. Furthermore, data for this factor was normal as the skewness and kurtosis are within the acceptable range. This finding is congruent with Dutshke *et al.* (2019) who found that a match between skills and knowledge of the employee and the job usually results in job satisfaction.

Fifth, the study results demonstrate that participation in decision-making about the job is also a significant factor in job satisfaction ($M = 3.628$, $SD = 1.234$, $S = -0.886$, $K = -0.101$). The mean illustrates that the majority of the respondents agree with this factor. As the descriptive statistics show, this is further demonstrated by low variability and data normality. This finding matches Lawler's motivational job design theory (1971), which expresses that giving employees autonomy in decision making influences their job satisfaction.

Sixth, the descriptive statistics show that appreciation is also a factor of job satisfaction ($M = 3.580$, $SD = 1.169$, $S = -0.781$, $K = -0.132$). The mean illustrates that respondents agreed to this factor, and the low standard deviation demonstrates unanimity amongst respondents. In addition, skewness and kurtosis are within the range of 2 and -2, showing that the data for this factor was normally distributed. This finding converges with Afriyie *et al.* (2024) who demonstrated that offering appreciation to employees generates high levels of job satisfaction.

Seventh, the research shows that if employees perceive that they add value to the organisation, their job satisfaction increases ($M = 3.566$, $SD = 1.176$, $S = -0.425$, $K = -0.644$). The mean derived indicates that most respondents agreed to this factor. The standard deviation demonstrates low variation amongst the respondents, and skewness and kurtosis results illustrate data normality. This finding is consistent with Peral and Geldenhuys's (2019) research which found that employees gain job satisfaction when they believe their job and contribution add value to the organisation.

Eighth, the study demonstrates that proper communication of company objectives is a factor of job satisfaction ($M = 3.524$, $SD = 1.351$, $S = -0.581$, $K = -0.842$). The descriptive statistics show that respondents agree to this factor, which is further strengthened by low standard deviation, and skewness and kurtosis, which demonstrate data normality. This aligns with Čizmić *et al.* (2022) who found that employers must properly communicate company objectives to enhance job satisfaction.

Ninth, the research demonstrates that meaningful work is an aspect associated with job satisfaction ($M = 3.505$, $SD = 1.345$, $S = -0.509$, $K = -0.824$). The mean highlights that most respondents agreed with this item, and the low standard deviation signifies convergence amongst respondents. Skewness and kurtosis confirm data normality. While this finding may appear similar to the first item, which relates to job contribution to the overall attainment of company objectives, the two are conceptually distinct. Job contribution to company objectives refers to task significance, wherein employees derive satisfaction from knowing that their specific tasks are important to the organisation's goals (Hackman and Oldham 1976). Meaningful work, on the other hand, refers to a broader psychological experience of purpose, value, and fulfilment derived from the work itself, independent of its organisational outcomes (Parker and Grote 2022). This distinction is consistent with the literature reviewed in sections 2.2.1 and 2.3.15 respectively, which treat task significance and meaningful work as related but separate constructs in the job satisfaction literature.

Tenth, the study establishes that when employees understand expectations, they derive job satisfaction ($M = 3.456$, $SD = 1.81$, $S = -0.51$, $K = -0.525$). Respondents agreed to this dimension as a factor influencing job satisfaction, as demonstrated by the mean. There were no issues with this factor regarding variability and data normality. This finding converges with Afriyie *et al.* (2024) who found that a clear understanding of what the employer expects from employees improves job satisfaction.

The questionnaire also measured five additional items that were derived from the empirical literature reviewed in Chapter 2 and the theoretical framework of the JCM,

namely work environment, job rotation, simplified job design, knowledge sharing by managers, and provision of necessary materials. Work environment was included based on section 2.3.13, which identifies the physical work environment as a factor associated with job satisfaction (Parker and Grote 2022). Job rotation was included based on section 2.6.3, which discusses it as a job design strategy with implications for job satisfaction (Van Wyk, Swarts and Mukonza 2018). Simplified job design was included based on section 2.6.7, which discusses job simplification as a job design strategy (Čizmić *et al.* 2022). Knowledge sharing by managers was included based on its established relationship with job satisfaction in the literature (Rafique and Mahmood 2018). Provision of necessary materials was included as a resource-related factor consistent with the Job Demands-Resources framework discussed in the theoretical literature. However, the findings show that respondents neither agreed nor disagreed with these five items, indicating that they were not perceived as prominent contributors to job satisfaction at TPT Durban DCT Pier 2.

4.5.2 Strategies of job design

Table 4.14: Strategies of job design

Item	Mean	Standard Deviation	Skewness	Kurtosis
ST1	3.455	0.951	-0.458	0.037
ST2	2.799	1.505	0.088	-1.438
ST3	4.017	1.118	-1.239	0.919
ST4	3.736	1.059	-0.555	-0.227
ST5	3.844	1.163	-0.790	-0.234

ST1=existence of systems and processes, ST2=control and responsibility, ST3=clearly defined job description and specifications, ST4=developmental opportunities, ST5=fair compensation.

Table 4.14 depicts the strategies used for job design at TPT Durban DCT Pier 2. The research demonstrates that a clearly defined job description is the primary job design strategy (M = 4.017, SD = 1.118, S = -1.239, K = 0.919). These descriptive statistics demonstrate that the primary strategy of job design to influence job satisfaction is a clearly defined job description and specifications. This finding is buttressed by a low standard deviation demonstrating low variability amongst respondents, and the skewness and kurtosis show that the data were normal for this strategy. This finding

converges with (Soegiarto, Sihite and Usmany 2024), who show that providing clear job descriptions and specifications is one of employers' key strategies in job design.

The second primary strategy of job design used at TPT Durban DCT Pier 2 is fair compensation ($M = 3.855$, $SD = 1.163$, $S = -0.79$, $K = -0.234$). The descriptive statistics illustrate that the majority agreed on the use of this job design strategy, which was substantiated by low variability and data normality. The finding is consistent with Herzberg's two-factor theory, which states that fair compensation is a hygiene factor that is a key ingredient of job design, leading to job satisfaction.

The third primary job design strategy at TPT Durban DCT Pier 2 is providing developmental opportunities ($M = 3.736$, $SD = 1.059$, $S = -0.555$, $K = -0.227$). The results show that respondents agreed that this job design strategy on the use of this strategy. The standard deviation indicates there was convergence amongst respondents regarding this strategy, and skewness and kurtosis are between 2 and -2, indicating that the data was normal for this job design strategy. This finding agrees with Bakker, Demerouti and Sanz-Vergel (2023) who demonstrated that providing training, job enlargement, and job enrichment are job design opportunities that are key in enhancing job satisfaction.

The fourth strategy of job design used at TPT Durban DCT Pier 2 is transparent processes and systems of job design ($M = 3.455$, $SD = 0.951$, $S = -0.458$, $K = 0.037$). The mean suggests that most respondents agreed on the use of this job design strategy. A low standard deviation and acceptable skewness and kurtosis further substantiate this. This finding supports Bratton *et al.* (2021) who elaborate that clear and transparent job design systems and processes are key strategies in attaining job satisfaction.

However, the study found control and responsibility to be an insignificant job design strategy at TPT Durban DCT Pier 2 ($M = 2.799$, $SD = 1.505$, $S = 0.088$, $K = -1.438$). The mean demonstrates that respondents neither agreed nor disagreed, even though the standard deviation and the data normality results are acceptable. This contrasts with Tang and Do (2019) who demonstrated that control and responsibility are widely used job design strategies.

4.5.3 Benefits of job design

Table 4.15: Benefits of job design

Item	Mean	Standard Deviation	Skewness	Kurtosis
BN1	3.580	1.126	-0.561	-0.388
BN2	3.472	0.944	-0.445	0.234
BN3	3.389	0.984	-0.394	-0.125
BN4	3.710	1.255	-0.649	-0.532
BN5	2.756	1.625	0.114	-1.635

BN1=commitment, BN2=productivity, BN3=moves with time and meets global standards, BN4=attainment of organisational goals, BN5=promotes specialisation.

Table 4.15 demonstrates the benefits of job design. Three of the five benefits investigated in this study were confirmed as benefits of job design at TPT Durban DCT Pier 2. Job design's primary benefit is attaining organisational goals ($M = 3.710$, $SD = 1.255$, $S = -0.394$, $K = -0.125$). The descriptive statistics signify that respondents agreed with the benefits of this job design. This is further confirmed by a low standard deviation signifying low variability in respondent responses, and acceptable data normality as shown by the skewness and kurtosis results. This finding is consistent with Raharjo and Fernandes (2018) who demonstrated that job designs can be utilised to attain both employee and departmental and organisational goals. This corresponds to the conceptual framework which shows that the organisation benefits from job design.

The second significant benefit of job design derived from the study is the generation of commitment ($M = 3.580$, $SD = 1.126$, $S = -0.561$, $K = -0.388$). The mean attained shows that the respondents agreed, and their responses were similar, as confirmed by the standard deviation. The data normality tests further support this through skewness and kurtosis, which indicates that the data was normal. This finding is similar to Robbins and Judge's (2018) observation that job design can generate employee loyalty, which is a key ingredient in attaining a competitive advantage.

The third benefit of job design at TPT Durban DCT Pier 2 derived from the research is productivity ($M = 3.472$, $SD = 0.944$, $S = -0.445$, $K = 0.234$). The descriptive statistics demonstrate that respondents agreed that productivity is a benefit generated through

job design. This was substantiated by low variability as shown by the low standard deviation, and data normality as confirmed by skewness and kurtosis, which ranged between 2 and -2. Myint (2019) elaborates on this finding, demonstrating that organisations should prioritise job design to attain productivity.

However, the research shows that moving with time and meeting global standards does not benefit job design (M = 3.389, SD = 0.984, S = -0.394, K = -0.125). The descriptive statistics show that respondents neither agreed nor disagreed with this benefit. This finding contrasts with Böckerman *et al.* (2020) who found that job design should be flexible and adapt to ever-changing business needs. The study also indicates that job design does not promote specialisation (M = 2.756, SD = 1.625, S = -0.114, K = -1.635). Despite these factors having no issues about variability of responses and data normality, the mean shows that respondents neither agreed nor disagreed with this benefit. This aligns with Afriyie *et al.* (2024), who found that job designs should allow employees to be versatile and multitask.

4.5.4 Job design and job satisfaction

Table 4.16: Regression analysis for job design and job satisfaction

Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.68	0.463	0.461		0.579

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	82.567	1	82.567	246.512	0.000

Coefficients

Model	B	Std. Error	T
Constant	1.558	0.128	12.202
Job design	0.609	0.039	15.701

Table 4.16 shows the regression analysis of job design and job satisfaction. All seven items of job design were transformed to form the data set for job design using SPSS. The exact process transformed the job satisfaction dataset from its five items. Regression analysis was then performed. The results show an R square of 0.463, indicating that 46.3% of job satisfaction is justified by job design. The beta achieved is 0.609, signifying a positive moderate correlation among job design and job satisfaction. An increase in the quality of job design results in a mild rise in job satisfaction. This positive relationship is statistically noteworthy, as demonstrated by a p-value of less than 0.05, which is acceptable. This finding echoes observations by Onyango (2019) who found that job design is key in enhancing job satisfaction. The finding also aligns with the JCM, which indicates that fundamentals of job design are essential in attaining job satisfaction. Irabor and Okolie (2019) recommend that organisations use job design as a key strategy for achieving job satisfaction. This is in line with the conceptual framework of this study which shows a good relationship between job design and job satisfaction.

4.6 CHAPTER SUMMARY

Chapter 4 presented findings analysed by means of SPSS version 30.0 and discusses the results of the literature explored in this study. The reliability tests performed through Cronbach's alpha and factor analysis done through KMO and Bartlett tests confirmed no reliability and validity issues in any of the questionnaire items. The descriptive statistics show that the main factor influencing job satisfaction is when the job contributes to the overall company objectives. The descriptive statistics demonstrate that a clearly defined job description is TPT's primary job design strategy. The descriptive statistics also show that attaining organisational goals significantly benefits job design. The regression analysis demonstrates a positive moderate relationship between job design and job satisfaction. The next chapter summarises and concludes the research.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 4 showed the research findings and discussed them. Chapter 5 presents the conclusions and recommendations of the research. The chapter begins by elaborating the conclusion and proffering recommendations. The chapter ends by providing recommendations for future research.

5.2 CONCLUSION

The literature reviewed in Chapter 2 established that job design is a critical determinant of job satisfaction across various organisational contexts. The JCM by Hackman and Oldham (1976) identified five core job dimensions, namely skill variety, task identity, task significance, autonomy, and feedback, as essential contributors to job satisfaction. Herzberg's two-factor theory further distinguished between hygiene factors and motivators, demonstrating that not all factors generate satisfaction equally (Bevins 2018). Empirical studies such as those by Jayawarna, Azam and Yusoff (2024) and Onyango (2019) confirmed that job design positively influences job satisfaction in port organisations. Furthermore, researchers such as Barkhuizen and Gumede (2021) identified a gap in knowledge on this relationship in the South African port environment, which this study sought to address. The following conclusions are drawn in relation to each research objective. The research studied the relationship between job design and job satisfaction at TPT Durban DCT Pier 2. This relationship was explored quantitatively. This section offers conclusions in relation to the objectives.

5.2.1 Objective 1: Factors that influence job satisfaction of employees

The research determined the factors that influence employees' job satisfaction at TPT Durban DCT Pier 2. The research concludes that job contribution to the overall attainment of company objectives is the main factor influencing employees' job satisfaction. However, the research also concludes that factors such as provision of training and support, effective feedback, decision-making, utilisation of employees'

skills and knowledge, appreciation, value addition to the organisation, proper communication of company objectives, meaningful work, and clear expectations are also key factors influencing job satisfaction of employees. The research determined the factors associated with job satisfaction of employees at TPT Durban DCT Pier 2. The primary item associated with job satisfaction was the perception that the job contributes to the overall attainment of company objectives, which is theoretically grounded in the task significance dimension of the JCM discussed in section 2.2.1 and the concept of meaningful work discussed in section 2.3.15 (Hackman and Oldham 1976; Wang, Liu and Parker 2020). The research further concludes that provision of training and support, effective feedback, utilisation of employees' skills and knowledge, appreciation, decision-making participation, value addition to the organisation, proper communication of company objectives, meaningful work, and clear expectations are also key aspects associated with job satisfaction at TPT Durban DCT Pier 2, consistent with the factors identified in the literature reviewed in Chapter 2.

5.2.2 Objective 2: Relationship between job design and job satisfaction

The second objective of the research was to determine the relationship between job design and job satisfaction at TPT Durban DCT Pier 2. Regression analysis was conducted to ascertain this relationship. The results yielded an R square of 0.463, indicating that 46.3% of the variance in job satisfaction is explained by job design, with a beta coefficient of 0.609 confirming a positive moderate relationship between the two variables ($p = 0.000$). This statistically significant finding confirms that improvements in job design are associated with corresponding improvements in job satisfaction among employees at TPT Durban DCT Pier 2, consistent with the literature reviewed in sections 2.5 and 2.5.2 (Onyango 2019; Jayawarna, Azam and Yusoff 2024).

5.2.3 Objective 3: Strategies of job design and their influence on job satisfaction

The research investigated job design strategies and their influence on job satisfaction at TPT Durban DCT Pier 2. The research concludes that TPT's primary job design strategy at Durban DCT Pier 2 is a clearly defined job description. Furthermore, the research concludes that fair compensation, developmental opportunities, and transparent processes and systems are essential job design strategies.

5.2.4 Objective 4: Benefits of job design on employee performance and organisational effectiveness

The final objective of the research was to determine the benefits of job design on employee performance and organisational effectiveness at TPT Durban DCT Pier 2. It is acknowledged that employee performance and organisational effectiveness were not measured as standalone variables in this study but were operationalised through benefit indicators of job design, including attainment of organisational goals, generation of commitment, and productivity, as measured by items BN1 to BN5 in the questionnaire. The study concludes that attaining organisational goals is the primary benefit of job design at TPT Durban DCT Pier 2, followed by the generation of commitment and productivity. These findings are consistent with the benefits of job design discussed in sections 2.9 and 2.11 of Chapter 2, which demonstrate that effective job design contributes to organisational goal attainment, employee commitment, and productivity in port organisations (Raharjo and Fernandes 2018; Irabor and Okolie 2019). The inability to directly measure employee performance and organisational effectiveness as distinct constructs is acknowledged as a limitation of this study, as noted in section 5.4

5.3 RECOMMENDATIONS

Recommendations based on the research findings are elaborated in this section.

5.3.1 Job design

The regression analysis conducted in section 4.5.4 confirmed a statistically significant positive relationship between job design and job satisfaction, with job design explaining 46.3% of the variance in job satisfaction ($R^2 = 0.463$, $\beta = 0.609$, $p = 0.000$). On the basis of this finding, TPT is recommended to prioritise strategic job design interventions as a deliberate human resource management strategy to enhance job satisfaction among its employees. Job design is a deliberate organisational process that involves the structured redesign of roles, tasks, responsibilities, and work systems to align employee contributions with organisational objectives (Hackman and Oldham 1976). TPT is therefore recommended to conduct periodic job design reviews, particularly during organisational restructuring, technological changes, or when job satisfaction surveys indicate declining satisfaction levels among employees. These reviews should be guided by the five dimensions of the JCM, namely skill variety, task identity, task significance, autonomy, and feedback, to ensure that redesigned jobs generate intrinsic motivation and sustained job satisfaction among employees at TPT Durban DCT Pier 2.

5.3.2 Job satisfaction

The research shows that job satisfaction can be enhanced by job contribution to the attainment of organisational goals, provision of training and support, effective feedback, decision-making, utilisation of employees' skills and knowledge, appreciation, value addition to the organisation, proper communication of company objectives, meaningful work, and clear expectations. The findings revealed that employees at TPT Durban DCT Pier 2 already perceive a strong connection between their job contributions and the overall attainment of company objectives, recording the highest mean of all measured items ($M = 4.17$). This is a positive finding that TPT management is recommended to sustain and reinforce through consistent communication of organisational goals and regular performance feedback that

explicitly connects individual employee contributions to the organisation's strategic objectives. This will ensure that the current positive perception is maintained and further strengthened over time, thereby sustaining job satisfaction levels among employees (Parker and Grote 2022). Furthermore, organisations should empower employees with training, support, feedback, and decision-making. The findings further revealed that employees perceived their jobs as already utilising their skills and knowledge ($M = 3.795$). TPT is therefore recommended to sustain this by ensuring that job design reviews regularly assess the alignment between employee competencies and job requirements, and that where skills gaps are identified, targeted training and development interventions are implemented to maintain this alignment. This is consistent with the skill variety dimension of the JCM, which demonstrates that jobs designed to maximise the application of diverse employee skills generate higher levels of intrinsic motivation and job satisfaction (Hackman and Oldham 1976; Nagrath 2019).

5.3.3 Strategies of job design

It is acknowledged that the items measured under objective three, namely existence of systems and processes, control and responsibility, clearly defined job descriptions and specifications, developmental opportunities, and fair compensation, do not directly correspond to the classical job design strategies identified in the literature in section 2.6, such as job enlargement, job enrichment, and job rotation. This misalignment has been acknowledged as a limitation of the study in section 5.4. Notwithstanding this limitation, the findings suggest that TPT management should consider implementing the classical job design strategies discussed in Chapter 2 as deliberate human resource interventions to enhance job satisfaction. Specifically, TPT is recommended to implement job enrichment by providing employees with greater autonomy, responsibility, and opportunities for personal growth in their roles (Rasheed *et al.* 2020). TPT is further recommended to implement job enlargement by horizontally expanding employee roles to reduce monotony and increase task variety, thereby enhancing intrinsic motivation and job satisfaction (Adiarani 2019). Additionally, job rotation should be introduced as a strategy to broaden employee skills, reduce boredom, and prepare employees for future roles within the organisation (Siruri and

Cheche 2021). Future research should develop a questionnaire instrument that directly measures these classical job design strategies to generate more precise empirical evidence on their influence on job satisfaction at TPT Durban DCT Pier 2.

5.4 LIMITATIONS OF THE STUDY

The study examined the relationship between job design and job satisfaction at Transnet SOC division, Durban DCT Pier 2, KZN, using regression analysis, which confirmed a statistically significant positive relationship between the two variables (R square = 0.463, β = 0.609, p = 0.000). However, the study was limited to this single organisational unit, and there is a need to generate further insights on this relationship in other organisations in the port environment. There is a need to generate insights on the relationship between job design and job satisfaction in other organisations in the port environment. The research was limited in terms of methodology. The research utilised quantitative methodology, and findings may not apply to qualitative or mixed-methods studies on the connection between job design and job satisfaction. In addition, there was limitations in terms of literature on the link between job design and job satisfaction in the South African setting. Literature on the relationship between job design and job satisfaction in other countries was used to address this limitation. A further limitation of the study relates to the misalignment between the items used to measure job design strategies in the questionnaire and the classical job design strategies identified in the literature review. The items measured reflected broader organisational conditions rather than specific job design strategies such as job enlargement, job enrichment, and job rotation as discussed in section 2.6. This represents a limitation in the internal consistency of the measuring instrument and is recommended as an area for improvement in future research.

Furthermore, objective four sought to evaluate the benefits of job design on employee performance and organisational effectiveness. However, these two constructs were not directly measured as standalone variables in the questionnaire, which represents a limitation of the study. Future research should develop specific measurement

instruments for employee performance and organisational effectiveness to more accurately evaluate the benefits of job design on these outcomes.

5.5 SUGGESTIONS FOR FUTURE RESEARCH

The study adopted a quantitative method to investigate the connection between job design and job satisfaction. It is essential that qualitative studies be conducted to generate deeper insights on the link between job design and job satisfaction. In addition, the research was conducted at TPT Durban DCT Pier 2 in KZN province, therefore the relationship between job design and job satisfaction in other provinces in South Africa should also be investigated. Moreover, this research was based on TPT, an organisation in the port environment, therefore future research on the relationship between job design and job satisfaction should be conducted in other sectors such as mining and banking.

This study makes a notable contribution to the existing body of knowledge on job design and job satisfaction. Firstly, the study addresses a significant contextual gap in the literature by generating empirical evidence on the influence of job design on job satisfaction in the South African port sector, a context that has been largely overlooked in prior research (Barkhuizen and Gumede 2021). Secondly, the study contributes to the practical human resource management literature by identifying specific factors associated with job satisfaction at TPT Durban DCT Pier 2, providing TPT management with an empirical basis for developing targeted job design interventions. Thirdly, the study validates the applicability of the JCM, Lawler's motivational job design theory, and Herzberg's two-factor theory in the South African port terminal context, thereby extending the theoretical reach of these frameworks beyond the developed economy contexts in which they have predominantly been tested (Hackman and Oldham 1976; Lawler 2018; Peramatzis and Galanakis 2022).

In conclusion, this study investigated the influence of job design on job satisfaction at TPT Durban DCT Pier 2, KZN province, South Africa. The findings confirmed a statistically significant positive relationship between job design and job satisfaction, with job design explaining 46.3% of the variance in job satisfaction. The study further identified key aspects associated with job satisfaction, including job contribution to company objectives, provision of training and support, effective feedback, and utilisation of employee skills and knowledge. These findings collectively demonstrate that deliberate and well-structured job design interventions have the potential to meaningfully enhance job satisfaction, employee commitment, and organisational effectiveness at TPT. It is hoped that the findings of this study will serve as a valuable resource for human resource practitioners, port sector management, and future researchers seeking to advance knowledge on job design and job satisfaction in the South African context.

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APPENDICES

APPENDIX A: COVER LETTER



LETTER OF INFORMATION

Title of the Research Study: The influence of Job design on employee job satisfaction at Transnet Port Terminals.

Principal Investigator/s/researcher: Nontobeko Khoza, B. Tech in Human Resources Management

Co-Investigator/s/supervisor/s: Ashnee Rajlal, D. Tech in Human Resources Management

Brief Introduction and Purpose of the Study: The purpose of this research is to determine the influence of job design on employee job satisfaction at Transnet Port Terminals.

Outline of the Procedures: Answering the questions on the questionnaire will take about 20 minutes of your time. You will be requested to complete the study independently within the allocated timeframe. By completing the questionnaire, it is assumed that you are aware of the purpose of the study, and you have given consent to participate in the study.

Risks or Discomforts to the Participant: There are no risks associated with your participation in this research.

Explain to the participant the reasons he/she may be withdraw from the Study: Participating in this study is voluntary and you are under no obligation to consent to participation. You may withdraw from this research at any time without any repercussions or prejudice. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form.

You are free to withdraw at any time and without giving a reason

Benefits: There are no benefits of participating in the study except for the recommendations that will be made because of responses given by participants.

Remuneration: There are no monetary benefits of participating in the study.

Costs of the Study: No costs will be incurred by you because of participating in this study will.

Confidentiality: All information you give in this study will be treated as confidential. Your answers may be reviewed by people responsible for making sure that research is done properly, including my research supervisor, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Results: A copy of the thesis will be available in the library. It is not for commercial gain.

A summary of the findings will be emailed to you on request.

Research-related Injury: No injuries will occur because of this research.

Storage of all electronic and hard copies including tape recordings: Hard copies of your answers will be stored by the researcher for a minimum period of five years in a locked cupboard/filing cabinet for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer using a relevant software programme.

Persons to contact in the Event of Any Problems or Queries: Please contact the researcher on **0611400968**, or the DUT-Institutional Research Ethics Administrator on 031 373 2375.

APPENDIX B: GATE KEEPER LETTER



1 August 2022
18 Rippon Road
Sydenham
Durban
4091

Email: nontobeko.khoza@transnet.net

Dear Nontobeko Khoza

Re: Request for permission to conduct research at Transnet SOC Limited

Your email of request for permission to conduct research at Transnet on "The influence of job design on employee job satisfaction at Transnet port Terminals." is acknowledged.

We duly note the conditions of the study to be for strict academic purposes, that the results of the study will be submitted to Transnet, and the research will be confidential and that anonymity for both respondents and the organisation is guaranteed. Should you or the University of KwaZulu Natal want to publish the study in any other manner than the final assignment, Transnet will be approached for permission to do so.

Based on the above conditions, your request to conduct the research study in Transnet is granted. We are looking forward to the outcome and recommendations of your study and the positive contributions towards Wellness of employees at Transnet.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Itumeleng Matsheka".

Mr. Itumeleng Matsheka
Chief of People Management & Learning
Date: *02 August 2022*

Transnet SOC Ltd	138 Eloff Street	P.O. Box 72501
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	2000	

Directors: Dr PS Molefe (Chairperson) PPJ Derby* (Group Chief Executive) UN Fikelepi ME Letlape DC Matshoga Dr FS Mufamadi AP Ramabulana GT Ramphaka LL von Zeuner
NS Dlamini* (Group Chief Financial Officer) www.transnet.net
*Executive Group Company Secretary: Ms S Bopape

"This letterhead contains personal information as defined in the **Protection of Personal Information Act, No. 4 of 2013** (the "Act"). The signatory consents to the processing of his/ her personal information and is obliged to handle other data subject's information in accordance with the requirements of the Act".

TRANSNET HAS A 'ZERO GIFTS' POLICY. NO EMPLOYEE IS ALLOWED TO ACCEPT GIFTS, FAVOURS OR BENEFITS

APPENDIX C: QUESTIONNAIRE

Instructions

1. This questionnaire comprises of two sections.
2. You are kindly requested to answer all Likert scale statements.
3. Please mark **(X)** to the relevant pre-coded response.
4. Please mark **(X)** for one response only.
5. Do not leave any statement blank.

Topic: The influence of Job design on employee job satisfaction at Transnet Port Terminals.

SECTION A: Demographic information

1. Please indicate your gender.

1.1	Male	1
1.2	Female	2

2. Please indicate your age group.

2.1	18-25 years	1
2.2	26-30 years	2
2.3	31-35 years	3

2.4	36-40 years	4
2.5	45-50 years	5
2.6	> 51 years	6

3. Please indicate your racial group.

3.1	African	1
3.2	White	2
3.3	Indian	3
3.4	Coloured	4

4. Please indicate your qualification.

4.1	Postgraduate	1
4.2	Degree	2
4.3	Diploma	3
4.4	Technical Certificate	4
4.5	Secondary education	5

SECTION B: Questions relating to Job Design: Please mark (X) for one response only. **response.**

Job design relates to how a series of tasks, or a whole job, is arranged. Job design influences what tasks are completed. How jobs are completed, Bosch (2016) .

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
5. The company's objectives are properly communicated with me.	1	2	3	4	5
6. My commitment to my job is because of satisfied with my job.	1	2	3	4	5
5. The job is designed in a motivating and satisfying manner.	1	2	3	4	5
6. There are systems and processes in place to enhance job satisfaction at Transnet.	1	2	3	4	5
7. I am currently satisfied with my overall job.	1	2	3	4	5

8. The working environment provides motivation to be more productive.	1	2	3	4	5
9. There are equal opportunities for advancement in the current job I am doing.	1	2	3	4	5
10. The company culture motivates me to be more productive in the workplace.	1	2	3	4	5
11. My job is designed in a simplified manner to allow me to carry out my duties effectively and efficiently.	1	2	3	4	5

12. I work efficiently and effectively because there's an understanding of what is expected of me as an employee.	1	2	3	4	5
13. My job is designed in a way that minimizes stress level.	1	2	3	4	5
14. The job I do is not designed in a way that overload me.	1	2	3	4	5
15. I have the necessary materials to perform my job efficiently and effectively.	1	2	3	4	5

16. My job is designed in a way that moves with time and meet global standards.	1	2	3	4	5
17. I am aware of available development activities in TPT.	1	2	3	4	5
18. My job is designed in a way that helps the organisation achieves its goals.	1	2	3	4	5
19. I believe my job is designed in a way that leads to higher quality of work.	1	2	3	4	5
20. My job is designed in a way that allows me to add value in the organisation.	1	2	3	4	5
21. My job is meaningful, and I am satisfied with the outcomes of the job.	1	2	3	4	5
22. I get the chance to rotate on the job to get more skills.	1	2	3	4	5
23. My job teaches me a variety of skills to enable me to carry out other tasks.	1	2	3	4	5
24. The design of my employment benefits and remuneration contributes to my job satisfaction.	1	2	3	4	5

25. My job is designed in a way that minimizes stress level.	1	2	3	4	5
26. My job is designed in a way that promote work and life balance.	1	2	3	4	5
27. My job is designed in a way that is in line with other people doing the same job in other Operating Divisions.	1	2	3	4	5
28. The tasks I perform are designed to be in line with my job description and workbook.	1	2	3	4	5
29. I am satisfied with the overall way that my job is designed.	1	2	3	4	5
30. I believe that my current job utilises my skills to help Transnet achieves its goals.	1	2	3	4	5
31. My job is designed in a manner that facilitates growth.	1	2	3	4	5
32. My job is designed in a way that increases experience, which increases morale.	1	2	3	4	5
33. My job is designed in a way that promotes specialization.	1	2	3	4	5

34. My job is designed in a flexible manner allow work to be done remote or in the office.	1	2	3	4	5
35. Transnet offers alternative work schedules to balance work and life.	1	2	3	4	5

<p>SECTION C: Question in relation to job satisfaction- Please mark (X) for one response only.</p> <p>Job satisfaction: Job satisfaction is defined as employees' degree of contentment with their jobs, (Pang and Lu, 2018)</p>					
36. The job description and job specification are clearly defined.	1	2	3	4	5
37. My job satisfaction has an influence on the number of days I am absent at work.	1	2	3	4	5
38. I am less absent at work because of the level of job satisfaction my job provides.	1	2	3	4	5
39. I believe the manner I carry out my tasks daily enhance job satisfaction.	1	2	3	4	5
40. Transnet offers enough development opportunities for admin staff.					
41. I am fairly compensated for the job I am doing.	1	2	3	4	5

42. I feel appreciated as an employee at Transnet Port Terminals.	1	2	3	4	5
43. I have the tools and skills to do my job effectively.	1	2	3	4	5
44. The way Transnet Port Terminals is structured allows for further development.	1	2	3	4	5
45. My manager shares his/her knowledge and skills with me to develop my skills further.	1	2	3	4	5
46. I have career growth opportunities in Transnet Port Terminals.	1	2	3	4	5

47. I feel encouraged to come up with new and better ways of doing things.	1	2	3	4	5
48. Transnet Port Terminals utilize my skills and abilities effectively.	1	2	3	4	5
49. I have the training and support to do my job right.	1	2	3	4	5
50. There is someone at work who encourages my development.	1	2	3	4	5
51. The working environment at Transnet Port Terminals is motivating.	1	2	3	4	5

52. Transnet Port Terminals provides Flexible working conditions.	1	2	3	4	5
53. I am fairly compensated for the extra effort I put in my work. E.g., Overtime	1	2	3	4	5
54. Transnet Port Terminals engage me fairly on matters that affect my working conditions or my job.	1	2	3	4	5
55. I am given full control and responsibility to carry out my duties.	1	2	3	4	5
56. I feel natured and connected to my work.	1	2	3	4	5
57. The job I do is important to Transnet and the bigger picture.	1	2	3	4	5
58. I feel motivated to do my job.	1	2	3	4	5
59. Transnet uses systems, processes and procedures to ensure jobs are satisfying.	1	2	3	4	5
60. My job develops my wellbeing and success.	1	2	3	4	5
61. My job stimulates learning and innovation.	1	2	3	4	5

62. Transnet Port Terminals takes into consideration my needs and	1	2	3	4	5
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References

Bosch, D. 2016. *Job characteristics in smart industries and the challenges for job design*. University of Twente.

Pang, K. and Lu, C.S., 2018. Organizational motivation, employee job satisfaction and organizational performance: An empirical study of container shipping companies in Taiwan. *Maritime Business Review*, 3(1), pp.36-52.

APPENDIX D: INFORMED CONSENT FORM



CONSENT

Full Title of the Study: The influence of Job design on employee job satisfaction at Transnet Port Terminals.

Researcher/s: Nontobeko Khoza

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, _____ (name of researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: _____,
- I have also received, read and understood the above written information (Participant Letter of

Information) regarding the study.

- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report. In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant Date Time Signature / Right
Thumbprint

(name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

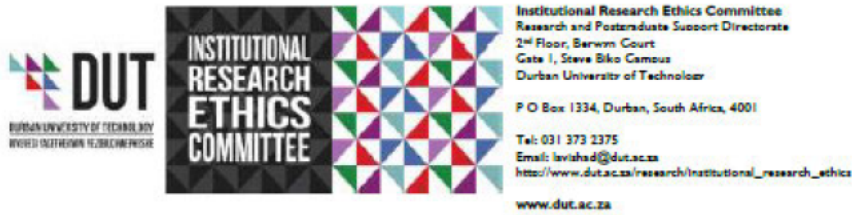
I,

Full Name of Researcher Date Signature

Full Name of Witness (If applicable) Date Signature

Full Name of Legal Guardian (If applicable) Date Signature

APPENDIX E: ETHICAL CLEARANCE



23 March 2023

Ms N C Khoza
18 Rippon Road
Sparks Road
Sydenham
4091

Dear Ms Khoza

The influence of job design on employee job satisfaction at Transnet Port Terminals
Ethics Clearance Number: IREC 292/22

The DUT-Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of your data collection tool.

Kindly ensure that participants used for the pilot study are not part of the main study.

Please note that **FULL APPROVAL** is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the DUT-IREC according to the DUT-IREC SOP's.

Please note that any deviations from the approved proposal require the approval of the DUT-IREC as outlined in the DUT-IREC SOP's.

It is compulsory for a student or researcher to apply for recertification on an annual basis. The failure to do so will result in withdrawal of ethics clearance. It is the responsibility of the researcher and the supervisor to apply for recertification.

Please note that you are required to submit a Notification of Completion of Study form together with an abstract to the DUT-IREC office on completion of your study.

Yours Sincerely

Prof J K. Adam
Chairperson: DUT-IREC

APPENDIX F: EDITING CERTIFICATE

DR RICHARD STEELE

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EDITING CERTIFICATE

Re: NONTBEKO CEDIGUGU KHOZA
DUT master's dissertation: **THE INFLUENCE OF JOB DESIGN ON JOB**
SATISFACTION AT TRANSNET PORT TERMINALS

I confirm that I have edited this dissertation and the references for clarity and language. I returned the document to the author with track changes so correct implementation of the changes and clarifications requested in the text and references is the responsibility of the author. I am a freelance editor specialising in proofreading and editing academic documents. My original tertiary degree which I obtained at the University of Cape Town was a B.A. with English as a major and I went on to complete an H.D.E. (P.G.) Sec. with English as my teaching subject. I was a part-time lecturer in the Department of Homoeopathy at the Durban University of Technology for 13 years and supervised many master's degree dissertations during that period.

Dr Richard Steele
14 October 2025
per email

APPENDIX G: STATISTICIAN CERTIFICATE

13 Apsley Court
442 Musgrave Road
Essenwood
Durban 4001

30 October 2025

To whom it may concern

Re: Statistical Analysis for Ms Nontobeko Khoza, Student number 21308011.

This letter serves to confirm that I, Dr Glenda Matthews (ID 5409050089083) assisted Ms Nontobeko Khoza with the Statistical Analysis for her Masters thesis entitled: "The influence of job design on job satisfaction at Transnet Port Terminals", in the Department of Human Resources Management, Faculty of Management Sciences.

My qualification is PhD in Statistics (University of Pretoria).

Yours faithfully

Glenda Matthews

APPENDIX H: TURNITIN REPORT

Turnitin Originality Report

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