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**THE INFLUENCE OF PERCEPTIONS OF ORGANISATIONAL JUSTICE
ON JOB SATISFACTION AMONG ADMINISTRATIVE STAFF AT A
UNIVERSITY OF TECHNOLOGY IN SOUTH AFRICA**

by

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DEDICATION

The dissertation is dedicated to my mother, Nomathamsanqa Evelyn Philadelphia Cana who believed in my abilities throughout my academic journey.

I would like to express my appreciation for her endless care, inspiration and limitless support that contributed to the completion of this dissertation.

Mostly, I wish to show my sincere gratitude for her keeping faith and seeing in me what I, at times, cannot.

DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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STATEMENT 1

This dissertation is being submitted in fulfilment of the requirements for the degree of Magister Technologiae: Human Resource Management.

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ABSTRACT

Keywords: organisational justice, distributive justice, procedural justice, interactional justice, job satisfaction

The purpose of this study was to determine the perception of organisational justice on job satisfaction among administrative staff members at a university of technology in South Africa. A critical function of the administrative staff at a university of technology is to ensure that all students and other staff members are assisted as effectively and efficiently as possible. Administrative staff at a university of technology in South Africa needs to be committed and have a high morale to ensure that the vision of the University of Technology is fulfilled. This study promotes the application of the Equity Theory. People prefer to work in an environment that is perceived as just. Employees will experience satisfaction with their job in terms of Equity when the Equity Theory is applied fairly. However, inequity will lead to tension at the workplace. In order for the administrative staff at a university of technology in South Africa to function effectively, it is essential for a university of technology to ensure that their administrative staff is satisfied.

In this study, a quantitative approach was undertaken to gain an understanding of the perception of organisational justice and its dimensions on job satisfaction. This involved distributing questionnaires to 200 administrative staff at a university of technology in South Africa.

Two primary tests were used to assess the suitability of the data for factor analysis. These tests are the Kaiser-Meyer Olkin measure of sampling adequacy and Bartlett's test of sphericity. The Pearson correlation coefficient was used to examine the correlations among the constructs. A means analysis was conducted to assess the perceptions of the employees in respect of distributive justice, procedural justice, interactional justice and job satisfaction. Regression analysis was executed to examine whether the independent variables of distributive justice, procedural justice and interactional justice predict the dependent variable job satisfaction. The Cronbach alpha coefficient test provided an adequate indication of reliability of the instrument. Face/content, construct and convergent validity methods were applied to establish validity of the study.

A positive relationship between organisational justice and job satisfaction was found in this study. The administrative staff will be able to improve the job satisfaction levels of other administrative staff by making positive improvements when applying organisational justice to influence the

various elements of job satisfaction identified in this study. This will effectively enable administrative staff to meet the challenge of providing improved service.

The proper implementation of organisational justice will, ultimately, lead to the organisations' success, as well as the progression of its employees. Since a university of technology depends on human resources, the organisation is required to assess the current organisational justice practices and create a working environment that stimulates and motivates employees so that their job satisfaction levels increase.

The recommendations proposed for this study offer vital information on organisational justice practices that could assist a university of technology to improve the perceptions of administrative staff. Accordingly, the application can improve employees' low morale resulting from perceived unfairness and injustice, thereby increasing the job satisfaction levels among administrative staff. The findings of the research may generate guidelines for organisational justice practices. Recommendations include a systematic and transparent reward system that recognises employees' excellent performance and rewards them accordingly. Another recommendation is the creation of a well-structured consultative forum to grant employees an opportunity to provide management with their perceptions of unfair practices. Future research should extend to other sectors within the public sector environment, as well as expanding the research to include several other job satisfaction elements. Further, research using both mediation and moderation to investigate the associations between organisational justice and job satisfaction is recommended.

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LIST OF ACRONYMS

ANOVA	Analysis of variance
AVE	Average variance extracted
CR	Cronbach reliability
DJ	Distributive justice
IJ	Interactional justice
JS	Job satisfaction
KMO	Kaiser-Meyer-Olkin
MI	Modification indexes
OJ	Organisational justice
PAF	Principal axis factoring
PJ	Procedural justice
SA	South Africa
SEM	Structural equation modelling
VIF	Variance inflation factor

CHAPTER 1

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

This study focuses on the influence of perceptions of organisational justice (OJ) on job satisfaction (JS) among administrative staff at a university of technology in South Africa (SA). It would appear that one of the main problems lies with the construction of ‘perceptions’ of OJ, as it is human nature to feel affronted if one attains an unfavourable rating. Greenberg (1996) defines OJ as a term which expresses the employees’ perceptions about how fairly they are treated in the organisations.

Organisational justice focuses on employees and their evaluations of three categories of OJ. First, distributive justice (DJ) evaluation of the outcomes employees receive from the organisation; secondly, procedural justice (PJ) evaluation of the formal policies or procedures by which outcomes are allocated; and, thirdly, interactional justice (IJ) evaluations of the interpersonal treatment employees receive from supervisors (Saunders & Thornhill 2003:325). Organisational justice can be perceived as employees’ observations of PJ, DJ and IJ (Ikramullah, Shah, Hassan, Zaman & Khan 2011:92). Perceptions of OJ depend on the employee’s view of his/her job. Furthermore, OJ should be seen as a system used to assess whether an employee has performed his or her overall work (Sedarmayanti 2015:260). Consequently, the institution should have procedures and processes in place, which are reliable and free from deficiencies. For example, if there are any deficiencies in the OJ processes then this could influence the level of employee JS. However, when employees see and understand the fairness in the system, they could be motivated because their efforts do not go unnoticed, which may have a positive influence on JS.

One of the early definitions by Locke (1976:1304) describes JS as a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience. A study by Sutrisno (2014:74) states that JS is an employee’s attitude towards work related situations, teamwork between employees and incentives received. Employees have different needs to fulfil and once these needs are satisfied it affects their level of JS. According to McShane and Glinow (2010:108), employees who are content with their work will be extra creative and dedicated to their organisation, as organisations with more satisfied employees tend to be more efficient than organisations with fewer satisfied employees. Herzberg’s theory (1959) states that there are two broad factors which contribute to JS, namely a motivating factor and a hygiene factor. The theory

is based on the notion that the presence of one set of job characteristics or incentives leads to employee satisfaction at work, while another and separate set of job characteristics leads to dissatisfaction at work. However, Herzberg indicates that the opposite of JS would not be job dissatisfaction but rather no job dissatisfaction and similarly the opposite of job dissatisfaction is no job dissatisfaction – not JS. This suggests, in the opinion of this researcher, that JS is not a just a single bi-polar dimension but two separate unipolar dimensions, such as aspects that enhance JS and aspects that impede JS. Hence, if you only include positive aspects in your questionnaire one is likely to obtain only one dimension, as is the case in this research. Should one include aspects that inhibit JS then one is likely to obtain two dimensions.

1.2 THEORETICAL FRAMEWORK

1.2.1 Equity theory

The Equity theory was first developed in the 1960s by J. Stacy Adams, a workplace and behavioural psychologist, who asserted that employees seek to maintain equity between the inputs that they bring to a job and the outcomes that they receive from it against the perceived inputs and outcomes of others (Adams 1963). Equity is measured by comparing the ratio of contributions (or costs) and benefits (or rewards) for each person (Guerrero, Peter & Walid 2014:263); for example, input is made up of time, effort, ability and loyalty in exchange for payments, bonuses, benefits, security and enjoyment. The equity theory suggests that employees feel most comfortable when they are getting exactly what they deserve from their input, no more or no less. Employees develop beliefs that they will be recognised for their hard work. However, when equity is not perceived as fair there is a desire, whether conscious or subconscious, to take remedial action to make the situation more equitable (Emberson 2002:29). Adams and Freedman (1976) posit that individuals become demotivated or unsatisfied when their inputs are not compensated fairly, as compared to someone who is performing a comparable job. The result of inequity is tension; if an individual experiences a deficit, it results in anger, if he or she receives more than others, a feeling of guilt develops (Al-Zawahreh & Al-Madi 2012:159).

1.2.2 Organisational justice

Organisational justice refers to the equity in the rules and social norms that govern companies, particularly in terms of DJ, PJ and IJ (Ndjaboué, Brisson & Vézina 2012:694). According to Greenberg (1987), OJ emphasises the views of fairness in an organisation, by classifying employees' opinions and feelings about their behaviour and that of others within an organisation. The theory suggests that an employee's feelings should be taken into consideration in the

organisation. Employees want to be treated equally and with respect. If employees' behaviour complies with their expectations, it is considered fair; whereas, failure of the supervisor to comply with the employee expectations is considered unfair (Beugre 2005:301; Greenberg 2001:271). Perceived OJ is defined as an employee's subjective perception of fairness of allocation (Gelens, Dries, Hofmans & Pepermans 2013:343) and the perceived fair implementation of the theory of OJ can have a positive effect on the employee's level of JS. Khan, Kamal, Ullah, Khan, Ullah and Pervez (2017:14) suggest that OJ owns the possibilities to be helpful for institutions and employees everywhere, thus these advantages take into account more prominent trust and commitment of representatives towards associations.

1.2.3 Distributive justice

Distributive justice is defined as the perceived fairness on the outcomes distribution that involves the goods and conditions which might affect an employee's wellbeing (Deutsh 1985). Distributive justice describes the degree to which wages and rewards are allocated to employees in a non-discriminatory manner (Lamprakis, Alamani, Malliari & Grivas 2018:66); the distribution of scarce resources where employees expect to receive a fair share of output from their input.

1.2.4 Procedural justice

Procedural justice is concerned with the fairness of the process that leads to the outcome or reward (Warokka, Gallato & Moorthy 2012:7). According to Poon (2012:1507), PJ emphasises the "fairness of the procedures used in making resource-distribution decisions". Procedural justice is perceived fair when the policies and procedures are clear and understood by the employee. When there is an open door policy, employees are able to express their emotions without fear of being judged. However, when employees see the method as unfair and the fact that their status is disregarded, they will respond firmly to the procedural injustice (Irfan, Nawaz, Qamar & Zakeer 2016:3).

1.2.5 Interactional justice

According to Bies and Moag (1986), IJ refers to the interpersonal treatment quality received during the implementation of institutional procedures. This statement indicates that employees perceive IJ on a more personal level. It relates to the perceived treatment and respect they receive from their supervisors or managers during the performance appraisal process. On the other hand, when supervisors are polite, kind and show respect and dignity towards their subordinates, the

supervisors are conveying messages that those subordinates involved and affected by the conflict are significant and worthy of their respect (Abas, Otto & Thurasamy 2018:84).

1.2.6 Job satisfaction

Job satisfaction was conceptualised in theories of work motivation by Maslow (1943), Vroom (1964) and Herzberg (1959). Davis and Nestrom (1985:109) state that JS represents a combination of positive or negative feelings that workers have towards their work. According to Ileri (2016:164), JS has a positive influence on employee confidence, loyalty and productivity, which ultimately results in higher organisational profit. Chen, Sparrow and Cooper (2016:946) define JS as a term expressing one's thinking, feeling and attitude toward work. A worker may be satisfied with some aspects of his/her job, while being dissatisfied with other aspects and Hong, Hamid and Salleh (2013:26) show that there was a significant relationship between salary, work environment, promotion and level of JS. Joung, Goh, Huffman, Jingxue and Surles (2015:1618) indicate both positive and negative emotional responses of employees to their jobs and work performance.

1.3 PROBLEM STATEMENT

The main problem that this research will investigate is the influence of perceptions of OJ on JS of administrative staff at a university of technology in order to bring greater clarity on the importance of perceptions of administrative staff regarding OJ and its influence on their JS. In this journey of arriving at a satisfactory solution to this main problem, the following sub-problems would also need to be unravelled, namely:

- What does the literature reveal about the influence of perceptions of OJ?
- What does the literature divulge about JS and the various factors involved in its composition?
- How can the influence of perceptions of OJ be measured and what issues are involved?
- How can JS be measured and which aspects are relevant to administrative staff at a university of technology?
- Is there a significant association between influences of perceptions of OJ on JS of the administrative staff at a university of technology?
- What are the possible implications from the findings of this investigation for future OJ for administrative staff and their perceptions of JS at universities of technology?

1.4 CONCEPTUAL FRAMEWORK FOR THE RESEARCH

In the light of what has been stated above, the researcher will attempt to show that there is a significant association in influence of perceptions of OJ on JS of the administrative staff at a university of technology in SA. However, this postulation will also have to take the possible counterfactual effect of JS on perceptions of OJ into consideration. This is shown in Figure 1.1.

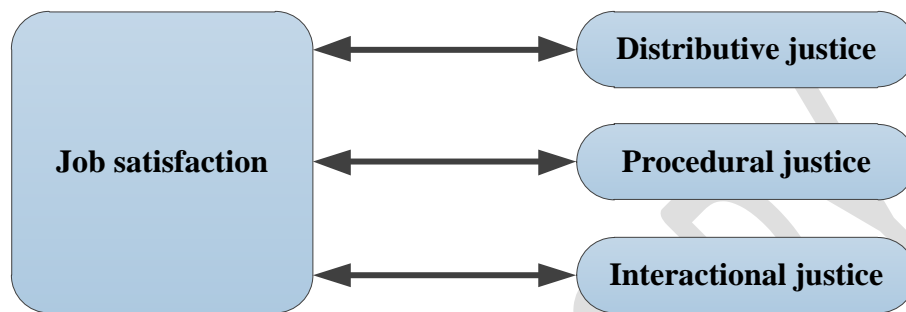


Figure 1.1: The conceptual framework association between JS and OJ

From the conceptual framework, the following research hypotheses are formulated, namely:

- H₁: Distributive justice has a significant relationship with JS
- H₂: Procedural justice has a significant relationship with JS
- H₃: Interactional justice has a significant relationship with JS
- H₄: Job satisfaction has a significant relationship with DJ
- H₅: Job satisfaction has a significant relationship with PJ
- H₆: Job satisfaction has a significant relationship with IJ

1.5 OBJECTIVES OF THE STUDY

1.5.1 Primary objective

The primary objective of the research is to determine the relationship between OJ and JS of administrative staff at a university of technology.

1.5.2 Theoretical objectives

- To conduct a literature review on the dimension of OJ
- To provide an overview of the construct on JS

- To analyse the literature on the relationship between OJ and JS and the methodology used measure it

1.5.3 Empirical objectives

- To determine the perceptions of OJ of administrative staff at a university of technology
- To establish the level of JS of administrative staff at a university of technology
- To establish the relationship/s between the dimensions of OJ and JS

1.6 RESEARCH DESIGN

Research design, data analysis, reliability and validity as well as ethical issues all of these sections will be discussed in detail in Chapter 3.

1.7 CHAPTER OF CLASSIFICATION

Chapter 1: Introduction and problem orientation: This chapter presented an introduction and background to the study. The research design was discussed briefly. Statistical analysis, reliability and validity and ethical issues were highlighted.

Chapter 2: Organisational justice and job satisfaction: This chapter discussed the relationship organisational justice and job satisfaction.

Chapter 3: Research methodology. This chapter focused on the sampling and data collection, as well as how the data was analysed.

Chapter 4: Analysis and interpretation of the research findings. This chapter covered the research findings. They were evaluated against previous studies.

Chapter 5: Conclusions and recommendations of the study. This chapter offered an outline of the study. Restrictions and the implications for further research was highlighted. Concluding remarks were presented.

CHAPTER 2

ORGANISATIONAL JUSTICE AND JOB SATISFACTION

2.1 INTRODUCTION

In Chapter 1, the focus was the background and scope of the study. The research design was briefly explained and the problem statement and research objectives were discussed. In addition, an outline of the statistical analysis, reliability, validity and ethical issues pertaining to the study were highlighted.

In this chapter, the literature review on OJ, its various elements and JS are discussed. A discussion regarding the perceptions of OJ and JS is provided.

2.2 ORGANISATIONAL JUSTICE

The concept of OJ refers to the extent to which employees are treated with fairness in the workplace (Colquitt & Greenberg 2003:166). OJ, according to Greenberg (1990:455), refers to the study of fairness within organisational settings. Moorman (1991:846) defines it as the term used to describe the role of fairness as it directly relates to the workplace. Aryee, Budhwar and Chen (2002:269) defines the individual's and the group's perception of the fairness of treatment received from an organisation and their behavioural reaction to such perceptions. For example, the employees may perceive that their supervisors treat them justly and without any discrimination.

According to Greenberg (1987), OJ consists of three dimensions, namely:

- **Distributive justice (DJ):** Organisational outcomes affect the organisation positively or negatively depending on the perception of justness in the distribution of justice in the organisation.
- **Procedural justice (PJ):** Organisational practices affect the perception of justice through the processes used by the organisation.
- **Interactional justice (IJ):** Organisational practices affect the perception of justice through behaviour exhibited and statements made by the authorities within an organisation.

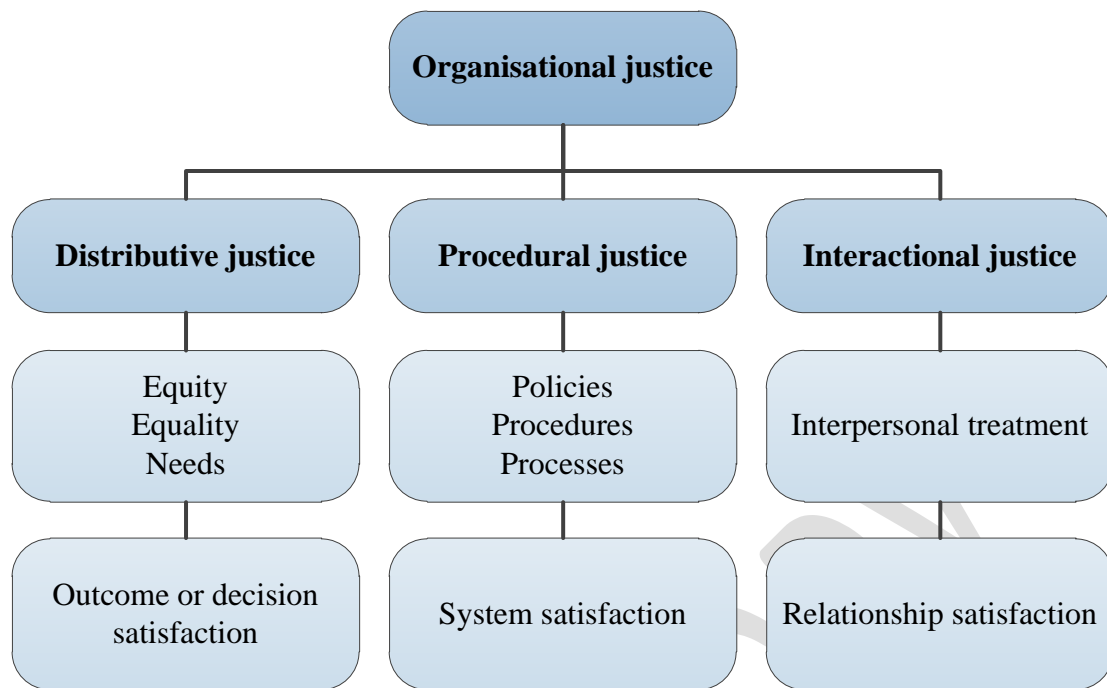


Figure 2.1: Dimensions of organisational justice

Source: Adapted from Greenberg (1990)

Rawls (1971:3) notes that fairness in organisations was the “first virtue of social institutions”. Organisation justice is a significant aspect of the organisations, which is described as common classifications in which employees are an asset, it is concerned with the fair treatment of employees (Randeree 2008:57).

Greenberg (1990:399) argues that perceptions of OJ are a basic requirement for the effective functioning of organisations and the personal satisfaction of the individuals they employ and these perceptions in turn, shape employees’ attitude. The components of the dimensions of OJ are further illustrated in Table 2.1.

Table 2.1: Components of organisational justice

1. Distributive justice: Appropriateness of outcomes
• Equity: Rewarding employees based on their contributions
• Equality: Providing each employee roughly the same compensation
• Need: Providing a benefit based on one's personal requirements
2. Procedural justice: Appropriateness of the allocation process
• Consistency: All employees are treated the same
• Lack of bias: No person or group is singled out for discrimination or ill treatment
• Accuracy: Decisions are based on accurate information
• Representation of all concerned: Appropriate stakeholders have input into a decision
• Correction: There is an appeal process or other mechanism for fixing mistakes
• Ethics: Norms of professional conduct are not violated
3. Interactional justice: Appropriateness of the treatment one receives from authority figures
• Interpersonal justice: Treating an employee with dignity, courtesy and respect
• Informational justice: Sharing relevant information with employees

Source: Adapted from (Cropanzano, Bowen, & Gilliland 2007:36)

The first category, namely DJ, will be discussed in the following section.

2.3 DISTRIBUTIVE JUSTICE

Luo (2007:646) defines DJ as the extent to which inter-party sharing of the rewards from cooperation is fair in view of each party's contribution, commitment and assumption of

responsibility. Distributive justice can be defined as how people perceive the distribution of rewards among employees in the organisation (Krishnan, Loon, Ahmad & Yunus 2018:469) and is related to the evaluation of the results of decision-making including evaluation of performance, salaries and rewards (Srivastava 2015:666). Folger and Konovsky (1989:115) state that DJ refers to the perceived fairness of the amounts of compensation. When DJ is lacking equal amount work does not produce equal amount of outcomes and in the next section the input-output relationship is discussed more in detail below.

2.3.1 The input-output relationship

The Equity Theory was first developed in 1963 by Stacey Adams, while working as a research psychologist with the general Electric Company in Crotonville, New York. He developed and tested an equity theory of motivation. The key to the Equity Theory is the ratio of inputs to outcomes. Inputs include factors such as education, effort and experience that a person perceives as relevant in obtaining some return. Outcomes include factors seen as returns on the individual's job investment. The value of the exchange to the individual, then, is a function of the outcomes to input ratio. It is from this ratio that the formulation of equity and inequity arises (Cosier & Dalton 1983:312). Figure 2.2 illustrates the input-output relationship of DJ.



Figure 2.2: Distributive justice: Input-output relationship

Source: Own

The various concepts in Figure 2.2 are briefly elucidated in the following section.

2.3.1.1 Input

All the effort and strength applied in order to complete or finalise the job in a good and satisfactory manner. Typical inputs include time, effort, loyalty, hard work, commitment, ability, adaptability, flexibility, tolerance, determination, enthusiasm, personal sacrifice, trust in superiors, support from co-workers and colleagues' skills.

2.3.1.2 Output

The reward of all the work one has put in to complete or finish the job, for example, security, esteem, salary, employee benefits, expenses, recognition, reputation, responsibility, sense of achievement, praise, thanks and stimuli.

2.3.1.3 Distributive justice

When the input (effort) and output (reward) are equal, employees view distributive processes in the workplace as fair, meanwhile if the input is more than the output it is seen or interpreted as unfair.

The second category, namely PJ, will be discussed in the following section.

2.4 PROCEDURAL JUSTICE

Folger and Konovsky (1989:115) explain that PJ refers to the perceived fairness of the means used to determine the amount of compensation employees receive. Moorman (1991:845) defines procedural fairness as the fairness of the procedures used in determining employee outcome. The process, which leads to fair outcome or reward in the organisation is referred to as PJ (Warokka, Gallato & Moorthy 2012:7). It is related to employees' feeling of justice about policies, processes and methods (Lim & Loosmore 2017:96). It also refers to how decisions affecting staff are made and whether the outcomes from those decisions are correct and fair (Greenberg, 1994).

If people believe that procedures operate on a fair basis, they are more satisfied with their rewards, even if these rewards are not attractive. Such a sense of justice means that employees demonstrate positive behaviours in return for their fair treatment by the organisation (Lamprakis, Alamani, Malliari & Grivas 2018:67). The criteria and the description of each criterion related to PJ are reflected in Table 2.2.

Table 2.2: Criteria for procedural justice

Criteria for procedural justice	
Criteria	Description
Consistency	All employees are treated the same and exposed to the same procedure when the need arises.
Neutrality	The person making the decision must not have a vested interest in the matter at hand.
Accuracy	Decisions are based on accurate information that is presented honestly by all parties involved.
Correctability	Provisions exist for challenging and reversing ill-advised decisions, such as grievance or appeal procedures

Criteria for procedural justice	
Criteria	Description
Representation	All parties concerned must be given an opportunity to input into a decision to ensure process control.
Morality and ethicality	Norms of professional conduct reflecting morals and ethics must be adhered to.

Source: Adapted from Leventhal (1980:22)

2.4.1 Procedural justice equation

One way of thinking about PJ is considering the equation illustrated in Figure 2.3.

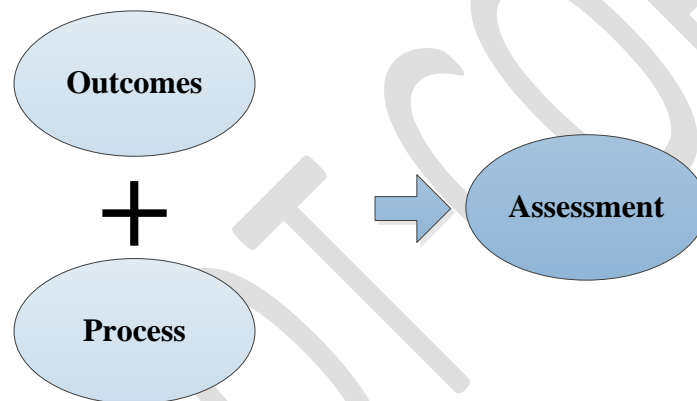


Figure 2.3: A simple equation of procedural justice

Source: Adapted from Kunard and Moe (2015:3)

The opinion of employees about a specific interaction with their supervisors is based on the outcome of the encounter and the process of the encounter (Kunard& Moe2015:3). Procedural justice is therefore concerned not only with what employees do, but also with the way they do it.

2.4.2 Four pillars of procedural justice

Procedural justice refers to the knowledge of fairness in the process of solving disagreements and distribution of resources. It is a concept that, when utilised, encourages positive organisational change and strengthens better relationships and comprises four pillars as illustrated in Figure 2.4.

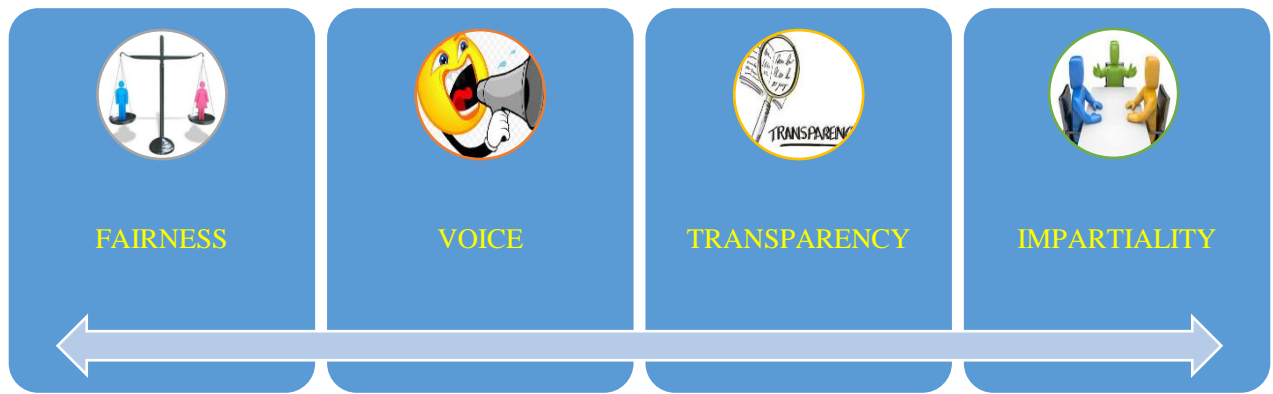


Figure 2.4: Four pillars of procedural justice

Source: Adapted from Kunard& Moe (2015:5)

The four pillars of PJ are briefly explained below.

2.4.2.1 Fairness

Perceptions of fairness are driven not only by outcomes but also by the perceived fairness and consistency of the processes used to reach those outcomes (Kunard & Moe 2015:4). The right implementation of organisational processes result in positive outcomes, for example human resource policies.

2.4.2.2 Voice

Each employee wants to feel as though s/he has a measure of control over their fate and is giving some consideration to his/her concerns, for example new ideas, complaints and suggestions (Kunard& Moe 2015:6). Every employee wants to be heard and be involved in the decisions that affect their given situation.

2.4.2.3 Transparency

Transparency means that the processes by which decisions are made do not rely upon secrecy or deception (Kunard& Moe 2015:6). Employees want to feel as if their future is dependent upon themselves and not on someone else. For example, employees like to be able to see how things are unfolding so that we can come to understand the ultimate result of a decision. When management is as transparent as possible, employees are more likely to accept managements' decisions, even if they are unfavourable.

2.4.2.4 Impartial

Impartial decisions are made based on relevant evidence or data rather than on personal opinion, speculation and guesswork (Kunard & Moe 2015:9). Employees would like to be treated equally and when decisions are made, a fair process should be used.

The third dimension, namely IJ, is discussed in the following section.

2.5 INTERACTIONAL JUSTICE

Bies and Moag (1986:44) suggest that IJ refers to people's sensitivity to the quality of interpersonal treatment they receive during the enactment of organisational procedures. Perceptions of IJ may be understood as evaluations regarding the informational and interpersonal components of decision makers' behaviour in communicating decisions (Greenberg 1993). Interactional justice is defined as the interpersonal treatment received at the hands of decision-makers with a focus on social sensitivity and informational justification (Hefferman & Dundon 2016:5). Interactive justice is related to mutual respect and honesty in social interactions with others (Srivastava 2015:666). According to Greenberg (1993:79) and Colquitt, Conlon, Wesson, Porter & Ng (2001:427), IJ is divided into two categories, namely:

- **Interpersonal justice**, which attempts to explain the nature of treatment of the employee by supervisor and top management. Furthermore, interpersonal justice stresses issues of politeness and respect.
- **Informational justice** refers to the information provided to employees by the supervisor and top management about the issues of procedural and distributive justice. Furthermore, informational justice focuses on issues such as the adequacy of explanations.

When employees are treated with respect and sensitivity and the rationale for a particular decision is explained clearly, IJ is said to have been fostered. Interpersonal justice is concerned with sincerity and respectfulness of authorities involved in implementing procedures or determining outcomes.

Greenberg, Roberge, Ho, Rousseau and Joseph (2004:8) further explicate that interpersonal justice refers to the degree of concerns and social sensitivity demonstrated about an individual. In other words, interpersonal justice is concerned with sincerity and respectfulness of authorities involved in implementing procedures or determining outcomes. In short, it concerns the use of honest and adequate explanations for decisions and outcomes. Basically, the two elements that are central to

perceptions of IJ are whether the reasons underlying the resource allocation decisions are clearly, truthfully and adequately explained to the affected parties and whether those responsible for implementing the decisions treat the affected individuals with dignity and respect (Bies & Moag 1986). The criteria as well as a description for each criterion related to IJ are reflected in Table 2.3.

Table 2.3: Criteria for interactional justice

Criteria for interactional justice	
Criteria	Description
Truthfulness	Information that is given must be realistic and accurate and presented in an open and forthright manner
Respect	Employees should be treated with dignity, with no recourse to insults or discourteous behaviour
Propriety	Questions and statements should never be ‘improper’ or involve prejudicial elements such as racism or sexism
Justification	When a perceived injustice has occurred, giving a ‘social account’ such as an explanation or apology can reduce or eliminate the sense of anger generated

Source: Adapted from Bies & Moag (1986:44)

This research project utilises a structured questionnaire to capture the perceptions of administrative staff at a university of technology. Items in Section B probe perceptions of DJ, items in Section C survey perceptions of PJ while items in Section D explore perceptions of IJ.

The following section discusses the theories of OJ and JS in detail.

2.6 THEORIES OF ORGANISATIONAL JUSTICE AND JOB SATISFACTION

A theory is a structure of fundamental concepts and principles around which knowledge in a field is organised. Principles are regarded as fundamental truths, which can be used to describe and predict the results of certain variables in a given situation (Koontz & O'Donnell 1972:92). Theories identify important variables and link them to form tentative propositions that can be tested through research (Newstrom 2007:6). Theories offer explanations of how and why people think, feel and act in the organisation when they are faced with certain situations. Various theories have attempted to explain JS.

For this study, only three theories of JS as well as the description of each theory is summarised in Table 2.4.

Table 2.4: Three theories of job satisfaction

Theories	Description
Maslow's Hierarchy of needs theory	Maslow's Hierarchy of needs theory state that once the lowest needs which are physiological needs are satisfied, the safety needs arises, and it goes on to social needs, ego needs and finally up to self-actualisation.
The Equity Theory	The Equity Theory explains the causes of job input (efforts) and out (reward).
The Two-factor Theory	The two-factor theory refers to Herzberg's motivator and hygiene factors of job satisfaction.

Sources: Adapted from Maslow (1943:375); Ogolo, Obianuju & Chukwujama (2016:5); Herzberg, Mausner& Snyderman (1959)

The three theories, namely Maslow's Hierarchy of needs theory, equity theory and two-factor theory will be discussed further in detail.

2.6.1 Maslow's Hierarchy of Needs Theory

The first theory to be discussed is Maslow's Hierarchy of needs theory. It is the most commonly used theory in JS research. The theory states that an individual needs to be satisfied with their lowest needs in the hierarchy first before progressing to the higher-order needs. Failure to achieve these lower-order needs can result in lack of progress from the individual towards the realisation of self-actualisation as the highest need. In Figure 2.5, the levels of Maslow's Hierarchy of needs theory are illustrated and explained.

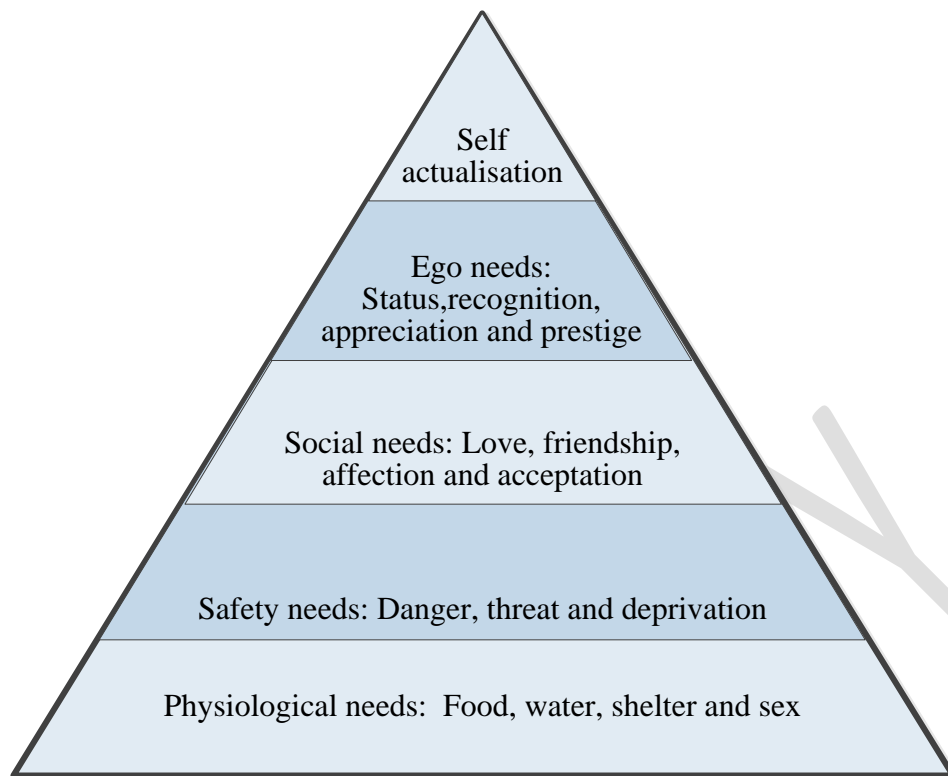


Figure 2.5: Maslow's Hierarchy of Needs Theory

Source: Adapted from Hammer and Organ (1978:138)

The different levels of needs in Maslow's hierarchy are briefly discussed and summarised below (Jerome 2013:42):

2.6.1.1 Physiological needs

These are biological needs, which consist of the need for oxygen, food, water and a relatively constant body temperature. They are the most important needs because a person needs to satisfy them in order to survive. The physiological needs specified here all have to do with how the body parts work and carry out life-sustaining activities. They are dependent on one another and indeed of human structure. Hence, Maslow described them as the most basic needs that need to be satisfied first.

2.6.1.2 Safety needs

When all physiological needs are satisfied and are no longer controlling thoughts and behaviours, the needs for security can become active. While other people have little awareness of their security needs, except in times of emergency or periods of disorganisation in the social structure, children often display the signs of insecurity and the need to be safe.

2.6.1.3 Need for love, affection and belongingness

When the needs for safety and for physiological well-being are satisfied, the next class of needs for love, affection and belongingness can emerge. People seek to overcome feelings of loneliness and alienation and this involves both giving and receiving love, affection and the sense of belonging.

2.6.1.4 Need for esteem

When the first three classes of needs are satisfied, the need for esteem can be considered. These involve needs for both self-esteem and for the esteem a person gets from others. When these needs are satisfied, the person feels self-confident and valuable as a person in the world. When these needs are frustrated, the person feels inferior, weak, helpless and worthless.

2.6.1.5 Need for self-actualisation

When all the foregoing needs are satisfied, then and only then are the need for self-actualisation activated. Self-actualisation is described as a person's need to be and do that which the person was "born to do." The person feels on edge, tense, lacking something, in short, restless. If a person is hungry, unsafe, not loved or accepted, or lacking self-esteem, it is very easy to know what the person is restless about. However, it is not always clear what a person wants when there is a need for self-actualisation.

2.6.2 The Equity Theory

The Equity Theory was developed by Adams in the late 1960s. The fundamental nature of the Equity Theory is that employees compare their efforts and rewards with those of others in similar work conditions. Equity is measured by comparing the ratio of contributions and benefits for each person (Guerrer, Peter & Walid 2014:263). For example, in a higher education context, results of a process are pertinent to various outcomes such as service quality, program quality, placement, image of the institution, competent graduates, employability rate, quality research outcomes, quality academic materials, industrial link and international recognition (Martono, Nurkhin, Pramusinto, Afsari & Arham, 2020:2).

Adams (1963) is of the view that a person's JS is determined by his/her perceived equity, which in turn is determined by his/her input-output balance compared to his/her comparison of others' input-output balance. Input-output balance is the perceived ratio of what a person receives from his/her job relative to what he/she is perceived to contribute to the job.

Equity Theory states, in effect, that people will be better motivated if they are treated equitably and demotivated if they are treated inequitably (Akeem & Olatunji 2018:58). This theory of motivation is based on the assumption that individuals are motivated by a desire to be treated equitably at work. If employees perceive the ratio to be equal to that of the relevant others with whom they are compared to, a state of equity exists. If the employee perceives the ratio to be unequal and feels under-rewarded, s/he experiences equity tension. Furthermore, the under-reward causes feelings of unfair treatment, over-reward leads to feelings of guilt and discomfort (Lawler III 1973:69). Figure 2.6 further illustrates these inputs and outcomes.

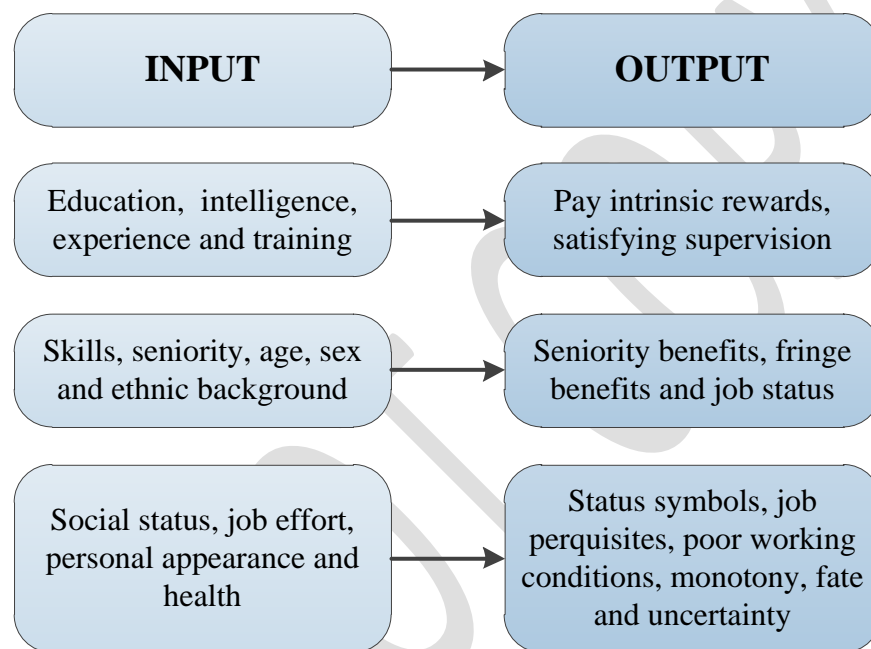


Figure 2.6: Input and outcomes of Equity Theory

Source: Al-Zawahreh & Al-Madi (2012:159)

Figure 2.6 indicates the inputs and outcomes that are expected by the employee. If an employee perceives any of them as an input then it is an input and, hence, expects a just return for it. The challenge arises if only the employee views a particular input and not the employer. In this case, employees experience a sense of injustice.

Inequalities in relationships will cause those within it to be unhappy to a degree proportional to the amount of inequality (Adams 1965:335). The equity theory seems logical but the difficulty is that it depends on the perceptions of humans and these differ. What one person perceives as effort, another would perceive as limited effort. If a state of injustice exists and it is to a person's disadvantage, that is the person experiences deprivation, s/he will, for example, display the emotional behaviour known as anger (Homans 1961:75).

An employee's perception that s/he sacrificed a great deal of effort, time and expertise in completing some or other task may not be perceived by management as undue sacrifice and as merely part of the employee's work load. This then leads to resistance from the employees as their perceptions were not equal to that of the persons providing the rewards. Fairness, itself, is a contested concept and its perception could be too complicated to measure accurately. The Two-Factor Theory is outlined below.

2.6.3 The Two-Factor Theory

This theory was developed by Herzberg, Mausner and Synderman (1959) and is commonly used to classify human motives that identified certain factors as satisfiers and dissatisfiers. Factors such as achievement, recognition, responsibility and growth are satisfiers, the presences of which cause satisfaction but their absence does not result in dissatisfaction. On the other hand, factors such as supervision, salary, working conditions and job security are dissatisfiers, the absences of which cause dissatisfaction. Their presence, however, does not result in JS. Herzberg's description of satisfiers and dissatisfiers is reflected in Figure 2.7.

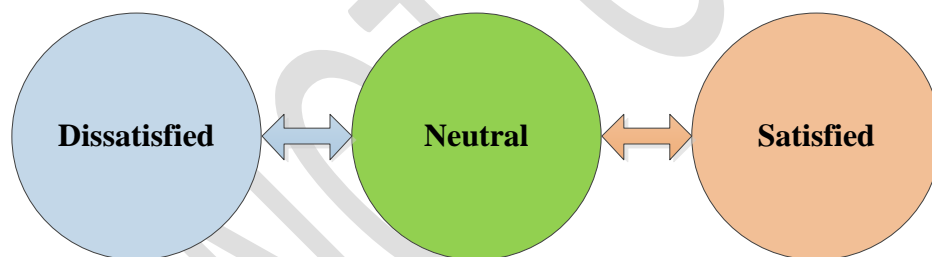


Figure 2.7: Herzberg's description of satisfiers and dissatisfiers

Source: Adapted from Collins (2002:237)

Both the hygiene and motivational factors are viewed as independent; it is possible that employees are neither satisfied nor dissatisfied. This theory postulates that when hygiene factors are low, the employee is dissatisfied, but when these factors are high it means the employee is not dissatisfied (or neutral), but not necessarily satisfied Herzberg (1976:76). Whether or not an employee is satisfied is dependent on the motivator factors. Moreover, it is thought that when motivators are met, the employee is thought to be satisfied. This separation may aid in accounting for the complexity of an employee's feelings, as they might feel both satisfied and dissatisfied at the same time; or neither satisfied nor dissatisfied Herzberg (1976:61). The Hertzberg Two-factor Theory is reflected in Figure 2.8.

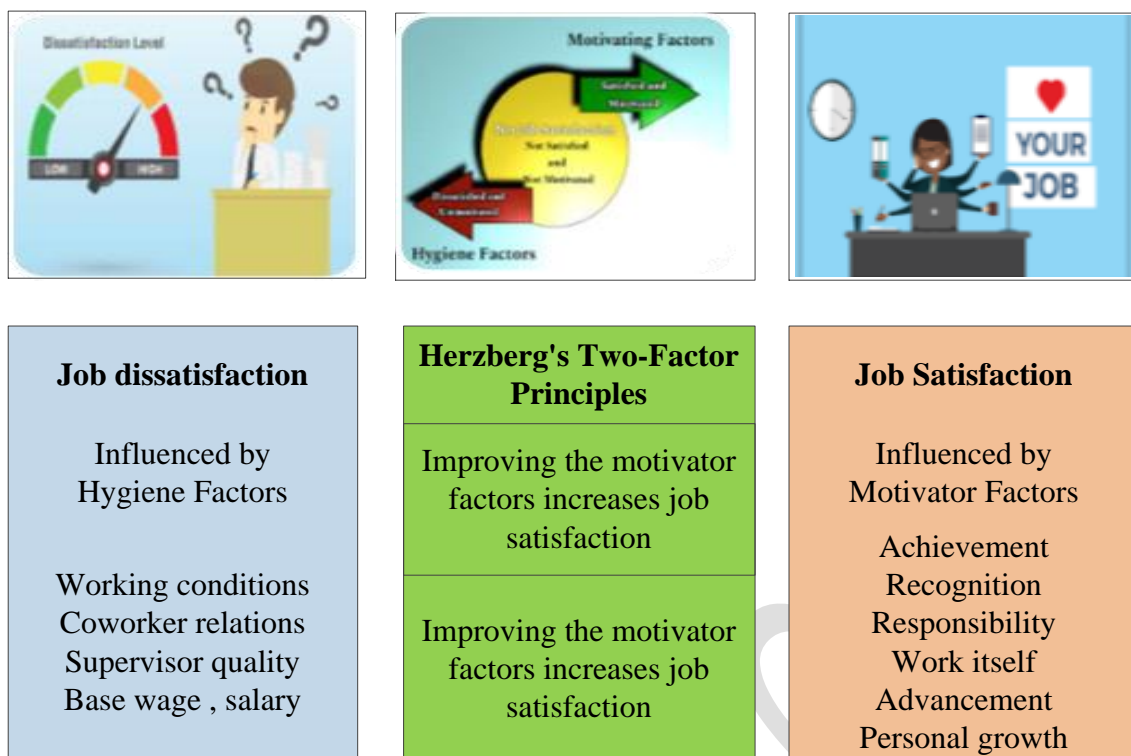


Figure 2.8: Hertzberg Two-factor Theory

Source: Adapted from Herzberg (1959:59)

The first theory is Herzberg's motivation-hygiene theory; this theory was postulated by Herzberg *et al.* (1959:59), who studied psychology. This theory holds that there are two factors that contribute to JS – a motivator (satisfier) factor and a hygiene factor (dissatisfier). Herzber *et al.* (1959) state that motivators increase JS when present, but do not necessarily increase job dissatisfaction when absent. Motivators include responsibility, achievement, recognition, growth and the work itself. These motivators promote long-term JS, while hygiene factors create dissatisfaction if they are absent.

Hygiene factors decrease job dissatisfaction when present, but do not necessarily increase job satisfaction. Conversely, if hygiene factors are absent, job dissatisfaction increases. Hygiene factors include relationships with peers, salary and relationships with superiors, personal life and relationships with subordinates, status, security, organisational policy, administration and working conditions (Herzberg *et al.* 1959). According to Herzberg's motivation-hygiene theory, a leader cannot improve employee JS by only improving hygiene factors.

Herzberg (1976:101) identifies and compares the dynamics of hygiene and motivation as follows:

Table 2.5: The dynamics of hygiene and motivation

The dynamics of hygiene are:	The dynamics of motivation are:
The psychological basis of hygiene needs is seated in the avoidance of pain from the environment	The psychological basis of motivation is the need for personal growth
There are infinite sources of pain in the environment	There are limited sources of motivator satisfaction
Hygiene improvements have short-term effects	Motivators are addictive in nature
Hygiene needs are cyclical in nature	Motivator improvements have long-term effects
Hygiene needs have an escalating zero point.	Motivator needs have a non-escalating zero point
There is no final answer to hygiene needs	There are answers to motivator needs

The three theories discussed above demonstrate the importance of equity and JS in the organisation, meanwhile it must be borne in mind lack of one of these theories can be problematic to the growth and performance of the organisation. Job characteristics is explained and discussed below.

2.7 JOB CHARACTERISTICS

The first model of job characteristics was outlined by Hackman and Oldham in 1975 and inspired thousands of research papers and its key concepts still provide the foundations of JS and job characteristics research.

The five core dimensions of job characteristics are skill variety, task identity, task significance, autonomy and feedback (Robin & Rhodes 1999:147) as illustrated in Figure 2.9.

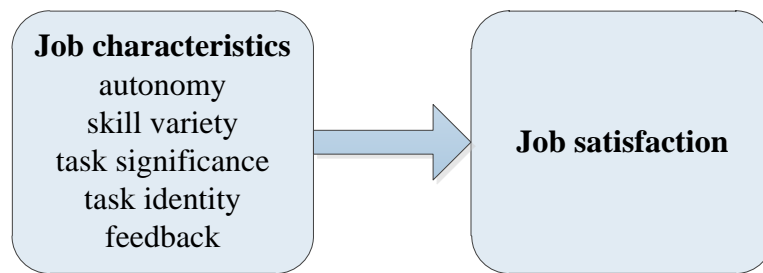


Figure 2.9: Job characteristics model

Source: Adapted from Mat Ali, Said, Yunus, AbdKader, Ab Latif and Munap (2014:48)

The various dimensions of job characteristic are briefly discussed below

2.7.1 Skill variety

Skill variety is the degree to which a job requires the employee to make use of an assortment of diverse actions to complete the task, which involves the usage of numerous different skills of the employee (Hackman & Oldham (1976:257). The employee uses all his/her skills to achieve the objectives of the organisation such as computer skills, language and communication skills.

2.7.2 Task identity

Task identity is the degree to which the job requires the employee to complete the entire piece of work from the beginning to end with a visible outcome (Hackman & Oldham (1976:257). In the process of starting productivity from beginning until the end of the production process, the employee is free to experiment with new ideas that will make him/her achieve the task effectively and efficiently.

2.7.3 Task significance

Task significance is the degree to which the job given to the employee has a considerable influence on the lives of other people irrespective of whether in the immediate organisation or in the external environment (Hackman & Oldham (1976:257). The work that other employees do not only affects them but the environment of other people.

2.7.4 Autonomy

Autonomy is the degree to which the job provides the employee with significant freedom, independence and discretion in scheduling the work and in determining the procedures to be used in the achievement of the task (Hackman & Oldham 1976:258). The employee is free to take

decisions that s/he knows are best to perform the task at hand. The employee has right to take a decision that s/he believes is best to perform the task at hand. The employee can change the processes and use what s/he thinks is more suitable.

2.7.5 Feedback

Feedback is the degree to which the job results in the employee gaining direct and lucid information about the effectiveness of his or her performance when carrying out the work activities required by the job (Hackman & Oldham 1976:258). The employees receive feedback on their performance on all the tasks carried. The feedback can be both positive and negative; when it is positive, it increases the level of JS and when it is negative, it decreases the level of JS.

2.8 JOB SATISFACTION

Job satisfaction is an important issue for all organisations, including public, private and non- profit organisations. Locke (1976:1300) refers to JS as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. Vroom (1964:99) defines JS as affective orientations on the part of individuals toward work roles in which they are currently engaging. This emotional side is also reflected when Davis (1991:27), defines JS as “an individual’s positive affective reaction of the target environment as a result of the individual’s appraisal of the extent to which his or her needs are fulfilled by the environment”. Overall, the above definitions emphasise that JS is a complex variable that includes various behavioural, affective and environmental factors related to one's job or job experiences.

According to Aziri (2011:78) JS is the collection of feelings and beliefs that people have about their current job. As Spector (1996:216) notes, it is simply the extent to which people like or dislike their jobs. People’s level of JS can range from extreme satisfaction to extreme dissatisfaction. Job satisfaction is a collection of employee’s feelings about intrinsic and extrinsic JS factors (Chipunza & Malo 2017:150). Intrinsic JS is related to an individual’s expectations from her/his job and reflects her/his attitude towards her/his job. Extrinsic JS consists of the factors external to and affecting the individual externally (Bektaş 2017:636). The benefits of JS survey are discussed in the next segment.

2.8.1 Benefits of job satisfaction survey

A high level of employee JS can improve service quality and increase employee satisfaction. However, the saying, “A happy worker is a productive worker” is not always right. So, it may also

be said that “A happy organisation is a productive organisation”. In this circumstance, policy makers and managers have turned their attention to provide different kinds of facilities for their employees in order to satisfy them (Parvin & Kabir 2011:119). Job satisfaction steers productivity because performance attracts rewards. Work atmosphere is an element that influences JS. Having a positive and healthy work environment is vital because it influences employees' productivity, creates a stress-free atmosphere, provides motivation, reduces workplace accidents and absenteeism (Thakur, Ansari & Bidkar 2020:1). Figure 2.10 displays the benefits of a JS survey.

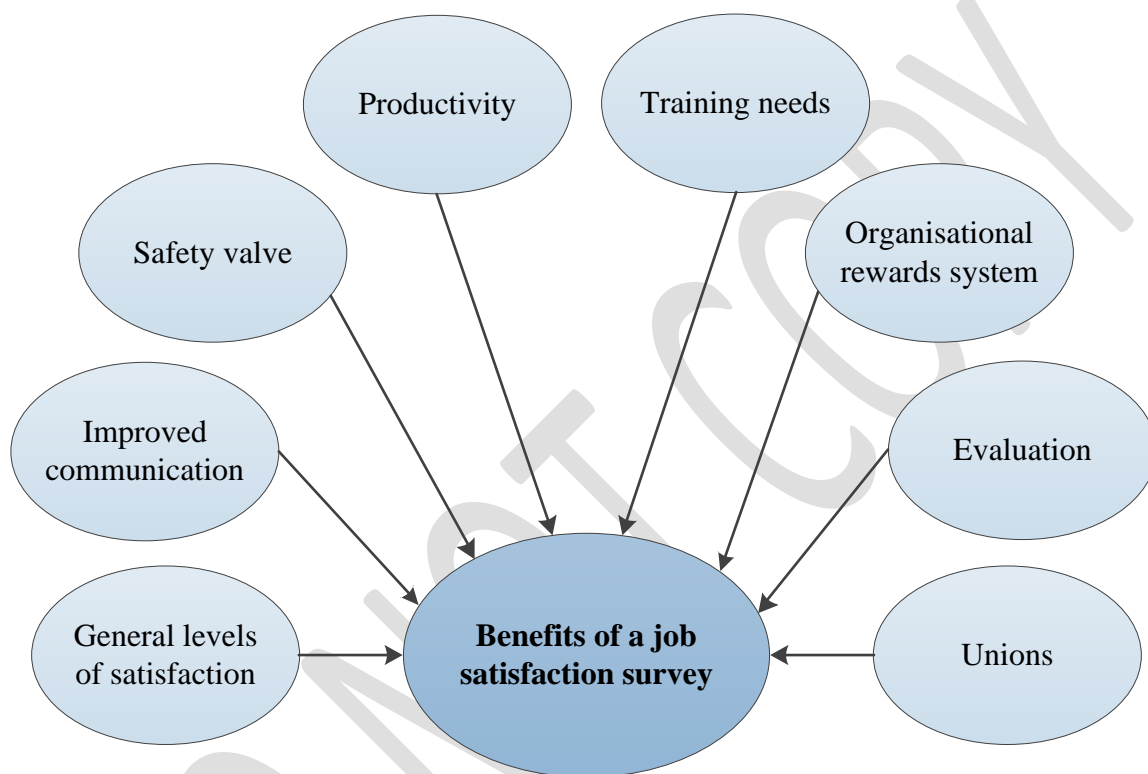


Figure 2.10: Benefits of a job satisfaction survey

Source: Newstorm and Davis (1999:265)

According to Newstorm and Davis (1999:265) the following are the benefits of a JS survey.

2.8.1.1 Levels of satisfaction

One benefit of JS surveys is that they give management an indication of the general level of satisfaction in an organisation. Surveys also indicate specific areas of satisfaction or dissatisfaction (as with employee service) and particular groups of employees (as in the tool department or among those over the age of 40).

2.8.1.2 Improved communication

Communication flows in all directions as people plan the survey, talk and discuss its results. Particularly beneficial to the company is the upward communication when the employees are encouraged to comment about what they really have on their minds.

2.8.1.3 Safety valve

An unexpected benefit from a JS survey is improved attitudes. For some employees, the survey is a safety valve, an emotional release, a chance to get things off their chest. For others, the survey is a tangible expression of management's interest in employees' welfare.

2.8.1.4 Productivity

The JS survey can help discover the cause of indirect productivity problems, such as absenteeism, turnover and poor quality of work.

2.8.1.5 Training needs

Usually employees are given an opportunity to report on how their supervisor performs in certain areas or parts of his job such as delegating tasks and giving adequate instructions.

2.8.1.6 Organisational rewards system

A JS survey is an indicator of the effectiveness of an organisational reward systems. There is a positive relationship between performance and satisfaction. This relationship will be strong when rewards (intrinsic and extrinsic) are distributed equitably, contingent upon performance. Job satisfaction surveys can provide some clues as to the effectiveness of the organisational rewards system. They help managers judge whether the best performers are receiving the most rewards and the most satisfaction from their jobs. The best performers are likely to quit if they are not suitably rewarded.

2.8.1.7 Evaluation

One of the best uses of JS surveys is in the evaluation of the impact of organisational changes on employee attitudes. For example, management wants to know whether the job redesign programme recently implemented in the organisation has resulted in increased satisfaction to the employees. By comparing pre-change data and post-change data, it is easy to determine what impact the redesigned work has on employee attitudes.

2.8.1.8 Union

Both management and unions debate on employees' needs and sometimes they do not reach an agreement. The JS survey is one way to find out what are employees' expectations in the organisation. Five factors affecting JS are discussed below.

2.8.2 Five factors that affect job satisfaction

Job satisfaction is a multi-variable concept. Five factors affect JS, as shown in Figure 2.11.



Figure 2.11: Five factors affecting job satisfaction

Source: Robbins and Judge (2009:106)

2.8.2.1 Satisfaction with the job itself

This satisfaction is achieved when an employee's work is consistent with his or her interests and abilities (Robbins & Judge 2009:106). The job itself should be challenging as well as interesting to the employees, lack of confidence and recognition leaves the employees dissatisfied and demoralised. Job satisfaction is regarded as an essential component of employee motivation among academic staff and is believed to be their basic inner feeling regarding their job as it reflects the degree to which employees feel personally fulfilled and content in their job roles (Hesampour, Akbari, Khanjani, Naghibzadeh-Tahami, Dehghan, Nabipour, Maghsoudi & Alipour 2016).

2.8.2.2 Satisfaction with the rewards of the job

This is where the employee feels that the salary or wage s/he receives is in accordance with his/her workload and balanced with other employees working in the organisation (Robbins & Judge 2009:106). Rewards increase the level of efficiency and performance of the employees in their jobs and as a result increase the success of the organisation (Priya & Eshwar 2014:72). Employees become closer to their organisations and perform better when they receive healthier rewards and recognition in their organisations.

2.8.2.3 Satisfaction with supervision from superiors

This is achieved when employees feel they have a supervisor who can provide technical assistance and motivation (Robbins & Judge 2009:106). The superiors play an important role in the relationship between them and employees. Employees need to feel like they matter and their input and suggestions are taken into consideration. Supervisors should give clear guidelines to the employees of what should be done as lack of this leads to frustration and low levels of JS.

2.8.2.4 Satisfaction with co-workers

Satisfaction is achieved when employees are satisfied with their colleagues who can provide technical assistance and social encouragement (Robbins & Judge 2009:106). It is based on the feeling of security and self-confidence of the individuals associated with the work and motivation to encourage friendships in the workplace (Ariani 2015:37).

According to Rafiq, Javed, Khan and Ahmed (2012:338) there are four important rewards. The first reward is pay and promotion, which is considered most related to JS because when employees feel that they are rewarded fairly, their experience towards satisfaction is increased. The second one is supportive work environment, the third determinant is mentally challenging work and the last determinant is supportive colleagues. Employees who feel a friendship with co-workers will experience good mental and physical health.

2.8.2.5 Promotional opportunities

Promotional opportunities are vital for the motivation of employees in the organisation. This happens when the opportunity to improve the position on the organisational structure takes place (Robbins & Judge 2009:106). When there are promotional opportunities, the relationship with co-workers improve. They get paid for what they do, they feel their jobs are secured and they have

the chance to grow with the organisation (Danish & Usman 2010:164). Figure 2.12 below illustrates the factors determining JS.

2.8.3 Factors determining job satisfaction

Job satisfaction is a multi-variable concept. There are a number of factors determining JS as indicated below:

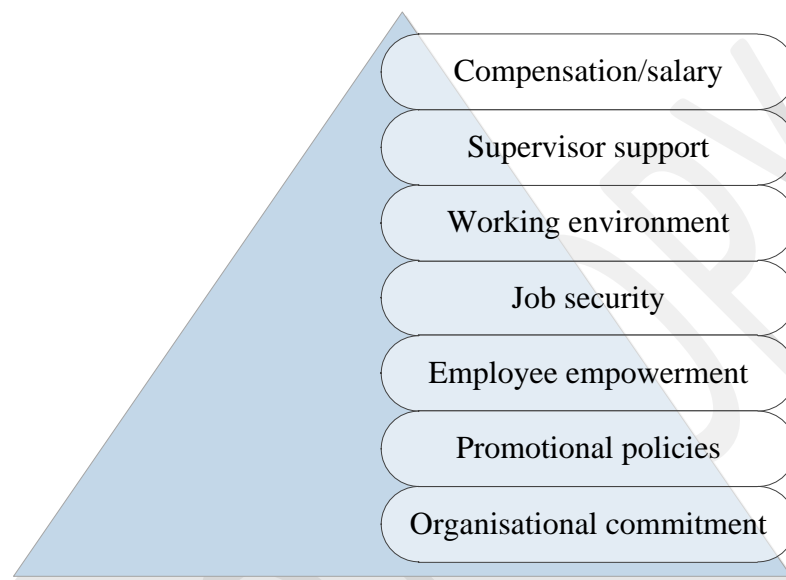


Figure 2.12: Factors determining job satisfaction

Source: Sumitha and Padmaja (2017:14)

2.8.3.1 Compensation

Compensation can be defined as the monetary benefit rewarded to the employees by the company for their services to the company (Sumitha & Padmaja 2017:14). Compensation is among the basic needs that every individual should have to fulfil their life requirement (Bryant & Allen 2013). Compensation and rewards are those factors that bring about satisfaction if they are fairly administered; the opposite is true if they are unfairly administered.

2.8.3.2 Supervisor support

Supervisor support is one of the important factors for employee retention. A leader with high supervisor support is one that makes employees feel appreciated, heard and cared about (Sumitha & Padmaja 2017:14). Supervisor support is the extent to which leaders care about their employees' welfare and value their contributions. Supervisor support denotes the extent to which an individual

views his/her supervisor being supportive, handy and recognising in major work prospects (Ahmeda, AbdulMajidb, Al-Aalia & Mozammela 2018:230).

2.8.3.3 Working environment

The term working environment is wide and its concept includes both qualitative and quantitative aspects of the job that influence the level of satisfaction of employees at some point, for example, the relationship of employees with top management and their co- employees, as well as with all monetary and non-monetary rewards. When the working environment is good for an employee, then his/her productivity levels automatically increase. The working conditions include office space, equipment, comfortable chairs, air conditioning and tools (Sumitha & Padmaja 2017:14). In addition, the job space environment incorporates security measures and operational hours that directly or indirectly influence the employee's level satisfaction in the workplace.

2.8.3.4 Job security

It is important for an individual to feel safe and secure within the employment setting. Job security is the chance that a person or an employee will keep his or her job; a person with the job would remain in their job if his/her job has an elevated level of JS (Sumitha & Padmaja 2017:14). Effective communication, good working conditions, excellent relationships with superiors and the subordinates, availability of incentives, benefits and good salary in accordance with the performance of job duties contribute to the employee's level of job security.

2.8.3.5 Employee empowerment

Empowerment involves giving employees autonomous motivation to go through their goals and groom them for their performance in the work place (Sumitha & Padmaja 2017:14). Employee empowerment is giving employees a certain degree of autonomy and responsibility for decision-making regarding their specific organisational tasks. It allows decisions to be made at the lower levels of an organisation where employees have a unique view of the issues and problems facing the organisation at a certain level (Rathore 2015:17).

2.8.3.6 Promotional policies

Fair promotional policies in any organisation become their foundation for growth. When an employee receives fair promotion, which is generally based on his/her true assessment; s/he gets a type of recognition and, hence, increases his/her JS (Sumitha & Padmaja 2017:14). Promotions

increase employees' perceptions of the quality of their job and thereby enhance both their satisfaction and commitment.

2.8.3.7 Organisational commitment

Organisational commitment is an important organisational subject as committed employees benefit their organisations and displays various favourable organisation outcomes (Sumitha & Padmaja 2017:14). A variety of factors have been identified that shape organisation commitment for example job-related factors, employment opportunities, personal characteristics and positive relationships. Maintenance of organisational commitment is a viable organisational goal and the next section will be discussing the relationship between OJ and JS.

This research project attempts to examine perceptions of administrative staff at a university of technology via items about JS as contained in Section E of the questionnaire.

2.9 RELATIONSHIP BETWEEN ORGANISATIONAL JUSTICE AND JOB SATISFACTION

The findings of a study conducted by Ajala (2017:37) on the relationship study between OJ and JS among industrial employees suggest that there is a significant correlation between OJ and JS. The findings are as follows:

- It is of note that the finding states that there is a significant correlation between DJ and JS,
- As for the second hypothesis, the finding showed that PJ has a relationship with employee satisfaction,
- Interactional justice being a fair behaviour with an employed individual in form of approved official methods encourages JS. The study revealed that there is significant correlation between IJ and JS.

In another study conducted by Mahboob and Khan (2017:6) on OJ and its impact on JS in public sector universities of Peshawar shows a positive correlation between OJ and JS. Meanwhile in a study conducted by Beuren, Santos, Marques & Resendes (2017:80) they found that the low scores of OJ for selected respondents, denotes little perception of justice in the workplace in all the observed dimensions (reward distributive, task distributive, procedural, interpersonal and informational). This fact may also explain the low JS scores observed among the individuals in the sample, which suggests that the increase in the perceived OJ can bring about an increase in the level of satisfaction.

2.9.1 The influence of perceptions of distributive justice on job satisfaction

Distributive justice refers to the individual's perception of the fairness of the outputs s/he makes and returns he receives when comparing her/himself to what others do and receive (Mansour & Ismail 2019:46). Distributive justice is the belief of employees regarding the fairness of their share among the resources distributed and that increases the level of JS (Yean & Yusof 2016:799).

2.9.2 The influence of perceptions of procedural justice on job satisfaction

Procedural justice is based on views of individuals in terms of accuracy of proceedings or methods used during decision-making processes of the management for the individual or other employees (Akbolat, Isik, Yilmaz & Akca 2015:361). Procedural justice perceptions of employees will have an influence on their motivation. The employees will have certain beliefs and attitudes about the way that the organisation will make and implement decisions. In situations where the beliefs of how decisions should be made and how they are made are different, the employees may experience cognitive dissonance and as a result the employees will feel uncomfortable that may lead to job dissatisfaction (Al-Douri 2020:345). From this, it seems to this researcher that perceptions of PJ can influence JS either positively or negatively.

2.9.3 The influence of perceptions of interactional justice on job satisfaction

Interactional justice is viewed as an expanded version of PJ and is related to the human factor of organisational implementations (Akbolat, Isik, Yilmaz & Akca 2015:362). The important issue in terms of IJ is the perceptions related with the quality of inter-personal behaviours encountered during application of processes. Thus, these perceptions seem to be able to influence JS either positively or negatively.

2.10 CONCLUSION

This chapter enclosed the definition of OJ and its dimensions including DJ, PJ and IJ. This was followed by a discussion on JS and the best leading theories of JS. There are numerous studies conducted on OJ that provided an explanation on the concept of OJ. The individual's perceptions of OJ affect their interpretation of JS and their views may differ. The treatment employees receive both fair and unfair in the organisation is referred to as OJ. The treatment will involve DJ, PJ and IJ. Organisational justice, specifically PJ, DJ and IJ, were positively correlated with JS. Thus, JS is directly dependent on levels of perceived OJ.

However, this leaves this researcher with some uncertainty as to exactly what the relationship is between OJ and JS especially when one sees OJ as consisting of three components namely PJ, DJ and IJ. In addition, IJ can in turn be split into two components namely informational justice and interpersonal justice. This researcher postulates that PJ, which has to do policies and the extent to which, they are perceived as being fair and how things should be, could act as an indicator variable. The outcome variable seems clearly to be JS. The role of DJ (broadly, about how equal things are perceived to be distributed) and IJ (with its two components) could possibly be that of acting as mediators between the independent or predictor variable and the outcome variable. This relationship becomes clearer via a diagram, which is given in Figure 2.13

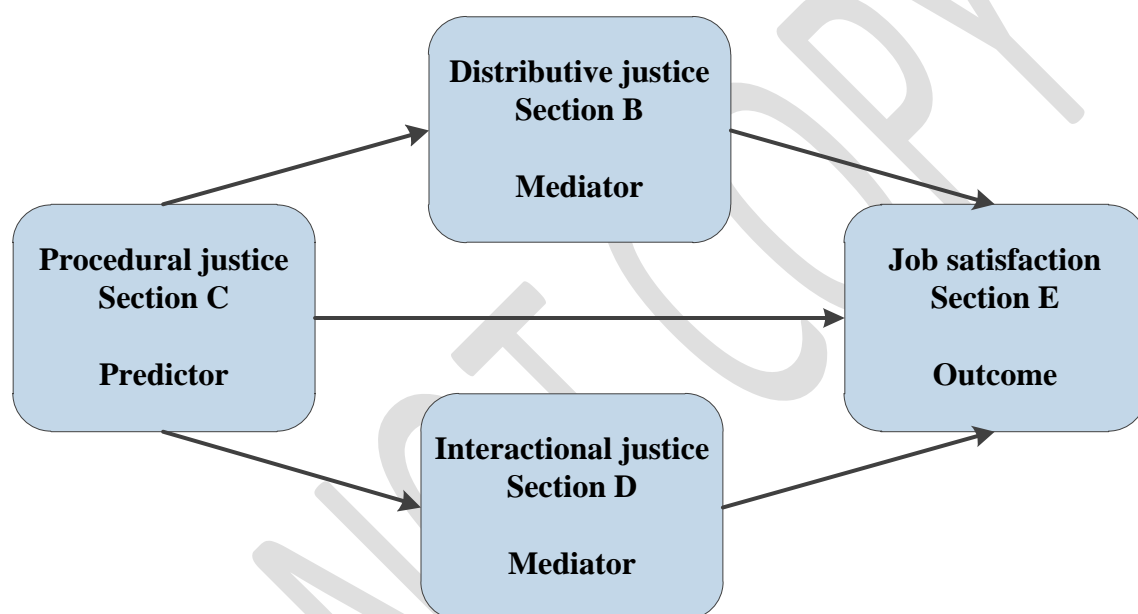


Figure 2.13: The postulated relationships between PJ, DJ, IJ and JS

The diagram is an attempt to display visually the postulated relationships that could be present between the four constructs which, are captured via questions in Sections B, C, D and E in a structured questionnaire (See Appendix A)

In Chapter 3, the research methodology of the study is discussed. The research design, research approach and sampling design are described. An explanation of the data collection method and measuring instrument are outlined, as well as the pilot testing implemented, with a discussion on the data preparation and statistical analysis methods utilised in the research. The chapter concludes with an explanation of reliability, validity and ethics.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter 2 of this study focused on the literature review of the two main constructs of the study, namely OJ and JS at a university of technology. The chapter analysed the relationship of OJ and its influence on JS.

In Chapter 3, the research design and methodology applied in the study are delineated. The study design, research approach, population and sampling design, as well as data collection method and instruments are described. The steps implemented to guarantee reliability and validity of the study is explained, as well as discussing the procedures used to collect, capture, process and analyse data. The chapter ends with ethical issues being discussed.

3.2 RESEARCH DESIGN

Research design is best described as the overall plan, according to which the respondents of a proposed study are selected, as well as the means of data collection or generation (Welman, Kruger & Mitchell 2009:46). Explanatory research will be conducted, which involves quantitative studies and hypothesis testing. The core purpose of explanatory research is to categorise any connecting links between the factors or variables that relate to the research problem. Such research is also structured in nature. A cross-sectional survey design will be used where selected units will be measured on all the dependent variables. The types of research design are illustrated in Table 3.1.

Table 3.1: Types of research design

Exploratory research	Exploratory research explores problems that have not been studied previously and try to identify new knowledge, new perceptions, new understanding and new meanings and to discover any factors linked to the subject.
Descriptive research	Descriptive research provides a correct account of characteristics of a certain individual, event or group in real-life situations.
Explanatory research	Explanatory research design is suitable to explain relationships between the variables under study.

Source: Maferethane (2012:13); Leedy and Ormrod (2013:190); Harrison and Reilly (2011:17)

Analysis of research approaches and the approach utilised in this study follows.

3.3 RESEARCH APPROACH

There are three known research approaches, namely qualitative, quantitative and mixed method. These research approaches are different from each other and are addressed in the following section.

3.3.1 Qualitative research approach

The qualitative approach is rooted in the philosophy of observation, follows an open, flexible and unstructured approach to analysis. It underlines the description and narration of feelings (Kumar 2014:14). It is a non-numeric explanation and interpretation of observation using in-depth interviews with the goal of identifying meanings and patterns of relationship (Lichtman 2010:5; Dantzker, Hunter & Quinn 2016:61). Qualitative research takes the form of words (spoken or written) and visual images (observed or creatively produced). It is utilised to increase an understanding of underlying reasons, opinions and motivations. It provides understanding into the problem or supports to develop ideas or hypotheses for potential quantitative research. Methods commonly used include focus group discussions, in-depth interviews, key informant interviews and participation observation. The sample size is small and respondents are selected to fulfil a given quota. The advantages and disadvantages of qualitative research approach are illustrated in Table 3.2.

Table 3.2: Advantages and disadvantages of qualitative research

Advantages	Disadvantages
<ul style="list-style-type: none">• Useful during the early stages of a study when the researcher may be unsure of what will be studied or what to focus on.• Does not need a strict design plan before it begins, which gives the freedom to let the study unfold more naturally.• Gains more detailed and rich data in the form of comprehensive written descriptions or visual evidence such as photographs.• Looks at context and social meaning and how it affects individuals, which is advantageous particularly in the social sciences.	<ul style="list-style-type: none">• Researcher is heavily involved in the process, which gives the researcher a subjective view of the study and its participants.• Researcher interprets the research according to his or her own biased view, which skews the data gathered.• Very time-consuming and can last for months or even years.

Source: Adapted from Ehow.com (2016)

3.3.2 Quantitative research approach

Bryman (2012:35) defines quantitative research as a research strategy that highlights quantification in the collection and analysis of data. Quantitative research takes the form of numbers. Quantitative research is used to quantify the problem by way of generating numerical data or data that can be transformed into useable statistics, for example, to distribute closed-ended questions, such as questionnaires. It is used to quantify attitudes, opinions, behaviours and other defined variables and generalise results from a larger sample to a population. Quantitative research uses measurable data to formulate facts and uncover patterns in research. Quantitative data collection methods are structured compared to qualitative data collection methods. Quantitative data collection methods include various forms of surveys such as online surveys, paper surveys, mobile surveys and kiosk surveys, face-to-face interviews and telephone interview. The advantages and disadvantages of quantitative research approach are outlined in Table 3.3.

Table 3.3: Advantages and disadvantages of quantitative research

Advantages	Disadvantages
<ul style="list-style-type: none">• Allows the researcher to measure and analyse data.• Relationship between an independent and dependent variable is studied in detail, which is advantageous because the researcher is more objective about the findings of the research.• Used to test hypotheses in experiments because of its ability to measure data using statistics.	<ul style="list-style-type: none">• The context of the study or experiment is ignored.• Does not study things in a natural setting or discuss the meaning things have for different people as qualitative research does.• In some cases, a large sample of the population must be studied; the larger the sample of people researched, the more statistically accurate the results will be. As such, the timeline, complexity and cost of the research will be increased.

Source: Adapted from Ehow.com (2016)

3.3.3 A comparison between the quantitative and qualitative research approach

The researcher remains autonomous of what is to be researched in the quantitative research study, whilst in qualitative the researcher engage with participates of the study. A comparison to emphasise these differences is illustrated in Table 3.4.

Table 3.4: A comparison between the quantitative and qualitative research approach

Quantitative research approach	Qualitative research approach
Epistemological roots in positivism	Epistemological roots in phenomenology
Purpose is testing predictive and cause-effect hypotheses about social reality	Purpose is constructing detailed descriptions of social reality
Methods use deductive logic	Methods use inductive knowledge
Suitable for a study of phenomena which is conceptually and theoretically well developed and seeks to control phenomena	Suitable for a study of relatively unknown terrain and seeks to understand phenomena

Quantitative research approach	Qualitative research approach
Concepts are converted into operational definitions and results appear in numeric form and are eventually reported in statistical language	Participants' natural language is used in order to come to a genuine understanding of their world
The research design is standardised according to a fixed procedure and can be replicated	The research design is flexible and unique and evolves throughout the research process. There are no fixed steps that should be followed and the design cannot be exactly replicated
Data sources are obtained systematically and in a standardised manner	Data sources are determined by information richness settings and types of observation are modified to enrich understanding
The unit of analysis is variables which are atomistic (elements that form part of the whole)	The unit of analysis is holistic, concentrating on the relationships between elements, contexts, etc. The whole is more than the sum of the parts

Source: De Vos, Strydom and Delpont 2011:66

After the analyses of the current research study, both research approaches were considered and the researcher decided on quantitative research approach. A quantitative approach was used to address the research objective and hypotheses postulated in Chapter 1 of this study.

3.4 SAMPLING DESIGN PROCEDURE

3.4.1 Target population

A target population is defined as the subset of people from the population who will participate in the study (Vanderstoep & Johnston 2009:25). The target population will be all administrative staff at a university of technology. The population will include both female and male staff. The total number of administrative staff is 200. All the administrative staff will be included in the study, such as senior, middle and lower administrative staff. The classification of administrative staff at a university of technology that formed part of the target population is illustrated in Figure 3.1.

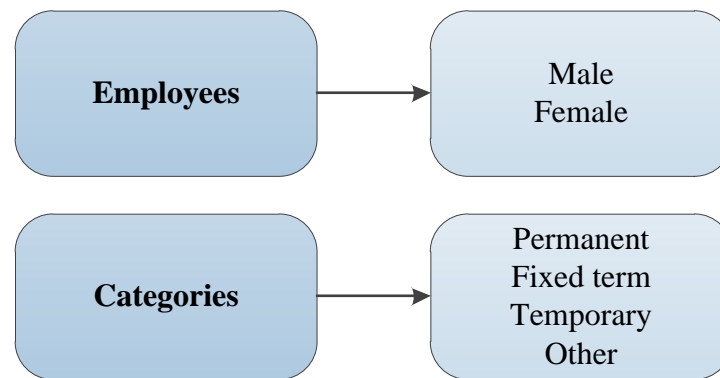


Figure 3.1: Cataloguing of administrative staff at a university of technology

Source: Own research

3.4.2 Sampling frame

A sampling frame is a list of the study of items of analysis, from which you take a sample and to which you generalise to the population (Bernard 2013:130). A list of all administrative staff was obtained from human resource department and 200 administrative staff at a university of technology will form part of the study.

3.4.3 Sampling technique

Probability sampling stipulates to the researcher that each section of a known population will be represented in the sample. Non-probability sampling is any method in which samples are selected in some way not recommended by probability theory (Babbie 2010:192). The different methods of probability sampling and non-probability sampling are illustrated in Table 3.5.

Table 3.5: Methods of sampling

Probability	Description
Simple random sampling	Each element of the population has the same and known opportunity of being selected as apportion of the sample
Stratified random sampling	The population is divided into subgroups of mutual characteristics and a simple random sample is chosen from each sub-group
Probability	Description
Cluster sampling	The population is divided into subgroups of mutual characteristics and a simple random sample is chosen from subgroups. Often associated with area sampling
Systematic sampling	Random selection of a digit (n) and then selection of sample element at every n the interval depending on population size and the required sample size
Non-Probability	Description
Convenience sampling	Any process when a researcher selects a sample of elements. It is quick and easy.
Judgement sampling	The sample depends on the experience, skill, knowledge and insight from one choosing the sample to provide accurate information.
Quota sampling	The population is divided and assigned appropriate quotas based on prior knowledge and understanding of characteristics. Quota categories involve age, gender and occupation.

Source: Weideman (2014:84)

The sampling method that is used in the study is the probability method. Probability sampling is also known as random sampling or representative sampling. In probability sampling every member of the population has a known (non-zero) probability of being included in the sample (Alvi 2016:12). It could be said that all administrative staff at all the universities of technology in SA form the population for possible research. However, the researcher has selected all administrative staff at a university of technology as the research population. As each member of the

administrative staff of the selected university of technology has an equal chance of being selected the sample can be viewed as being random. The study population is the aggregation of elements from which the sample is selected and this involves all administrative staff at a university of technology.

3.4.4 Sample size

Sample size is one component of research design that researchers need to contemplate as they plan their study. Sample size is a number of, for example, students, families or electors from whom information is required (Kumar 2014:231). Due to the small size of the population, all administrative staff will form part of the sample. The questionnaires will be distributed to all administrative staff that will be available at that time.

3.5 DATA COLLECTION METHOD AND MEASURING INSTRUMENT

3.5.1 Data collection

The data will be collected through a self-designed questionnaire using items from previous valid and reliable questionnaires on OJ and JS. As this questionnaire will be tested in a new context, its validity and reliability will be determined before statistical analyses are done. The value of a structured questionnaire is that it tends to be more reliable because it can be completed anonymously. The questionnaire will be distributed and collected by hand. In exceptional cases the questionnaires will be e-mailed to the respondents.

3.5.2 Questionnaire design

The questionnaire comprised five sections:

Section A: This section solicits demographic information of respondents such as:

- Gender
- Marital status
- Age category
- Educational level
- Income category per month
- Length of time in the administration at a university of technology.

Section B: This section comprises questions on PJ.

Section C: This section contains questions on DJ.

Section D: This section entails questions on IJ.

Section E: This section includes questions on JS.

3.5.3 Questioning format

The structured questionnaire will be used to examine and gain an understanding of the perceptions of OJ on JS of administrative staff at a university of technology SA. The questionnaire will have Section A, which will contain biographical questions. Furthermore, sections B will focus on DJ, C will be focusing on PJ, D will focus on IJ and E focus on JS. Questions for sections B, C and D are implemented from Niehoff and Moorman (1993:538). Questions from Section E will be adopted from Wanous, Reichers and Hudy (1997:247). A questionnaire composed of Section A, B, C, D and E utilising the Likert five-point scale ranging from 1=strongly disagree to 5=strongly agree.

3.6 PILOT TESTING

This researcher will attempt to achieve face, content, construct and convergent validity. A pilot study was conducted using 20 participants from the university of technology who will not form part of the final research. The pilot questionnaires were used to investigate the face and construct validity as well as to eliminate ambiguity in the way the questions were framed.

The researcher conformed the above process in this study. After the questionnaire was framed, a pilot study was undertaken to determine the reliability of the questionnaire for the study. The researcher used the practice and knowledge gained during the pilot study to evaluate the strengths and weaknesses of the data collection process.

3.7 DATA PREPARATION

The data preparation process contains the decreasing of data from uncontrollable facts to controllable summaries (Babbie & Mouton 2012:460). A brief explanation of these steps in the data preparation process follows.

3.7.1 Editing

Aaker, Kumar, Leaone and Day (2013:346) are of the view that the role of editing process is to identify errors, doubts and mistakes in the responses. Editing is the process of inspecting and adjusting data for omissions, reliability and legibility. For this study, the language of the questionnaire was carefully patterned and checked by the research supervisor and co-supervisor. The corrections were made for readability and understanding by administrative staff at a university of technology in SA.

Collected data were carefully studied to confirm correctness. In the process of completion of the questionnaire by administrative staff at a university of technology in SA, editing of the questionnaire data was done and checked by the researcher by going through the pages of the completed questionnaire. This was done in order to determine any overlooked or unanswered questions within the sections of the questionnaire so that the necessary corrections could be made and fully completed questionnaires collected from administrative staff at a university of technology in SA. This assisted in the assessment of the accuracy, completeness and usability of the questionnaire.

3.7.2 Coding

Coding is the progression of breaking down, examining, comparing, hypothesising and classifying research data, which will be grouped into categories (Jonker & Pennink 2010:139). The questionnaire consists of five sections. Section A relates to biographical information ranging from A1 to A8. Each response was then coded according to the number of possible responses for each question. A sample of the coded questionnaire is replicated in Table 3.10. Sections B, C, D and E of the questionnaire followed the comparable pre-coding procedure. An established set of response choices were provided to each of the respondents. Further, each question and response were given a code number. The Likert scale ranging from 1=strongly disagree to 5=strongly agree to express the extent of agreement was also used.

Table 3.6: Coded questionnaire example

Item	Detail	Option	Code
A1	Gender	Male	1
		Female	2
A2	Race	African	1
		White	2
		Coloured	3
		Indian	4
		Other	5
A3	Age	18-30 years	1
		31-40 years	2
		41-50 years	3
		51-60 years	4
		61+ years	5

3.7.3 Entering data

The statistical codes that were distributed through coding were entered in a Microsoft Office Excel spreadsheet. An example of the captured coding using the Microsoft Office Excel spreadsheet is reflected in Table 3.7 The formatting process ensured compatibility with a statistical computer package. A row of each respondent was allocated and each column represented the responses to the different questions or statements that were suggested by the respondents when completing the questionnaire. The following section addresses the statistical approach and analysis employed in converting the data collected from respondents into meaningful research output.

Table 3.7: Captured coded responses

Question	A1	A2	A3	A4	A5	A6	A7	A8
1	2	1	1	1	6	5	1	1

3.8 DATA ANALYSIS

Data analysis will be conducted after capturing the collected data. The data will be investigated to determine trends in the distribution and whether parametric or non-parametric statistical procedures should be used for further statistical analysis. The latest version of IBM Statistical

Package for Social Sciences (IBM SPSS), version 26.0 for Windows, will be utilised to process the data collected from questionnaires.

3.9 RELIABILITY

Reliability is the instrument's ability to measure the qualities of a variable or a construct consistently (LoBiondo-Wood & Haber 2014:290). Many methods exist to measure reliability, namely test-retest reliability, parallel-forms reliability, inter-rater reliability and split-half reliability. However, this research will use the Cronbach alpha coefficient, which varies in value from zero to one and may be used to describe the internal reliability of the items in a factor. The reliability of the various scales will be determined using the Cronbach alpha reliability coefficient.

3.9.1 VALIDITY

Validity is the degree to which an instrument measures the features of a concept precisely (LoBiondo-Wood & Haber 2014:290). The researcher will attempt to achieve face, content, construct and convergent validity. A pilot study will be conducted using 20 people from a university of technology who will not form part of the final research. The pilot questionnaires will be used to investigate the face and construct validity as well as to eliminate ambiguity in the way the questions are framed. Validity determines whether the research truly measures what it intends to measure or how truthful the research results are (Blanche, Durrheim & Painter 2013:489).

Table: 3.8: The types of validity

Type	What is measured	Methods
Content	Degree to which the content of the items adequately represents the universe of the relevant items under study.	Judgmental or panel evaluation.
Predictive	Degree to which the predictor is adequate in capturing the relevant aspects of criterion.	Correlation.
Construct	Identifies the underlying construct being measured and determine how well the test represents them.	Judgemental: correction of proposed test with an established one. Confirmatory factor analysis: multivariate-multi-method analysis and convergent-discriminant techniques.

Source: Cooper (2011:48)

3.10 ETHICAL ISSUES

Ethical issues are a way of life and social standards for behaviour that is acceptable and unacceptable (Shah 2011:205; Akaranga & Ongong'a 2013:8). Ethical issues that are related to the study are as follows:

- Permission will be obtained from a university of technology management prior to the data collection.
- Permission will be obtained from the participants (administrative staff) before the data collection
- Anonymity and confidentiality of the participants will be guaranteed.
- The questionnaire will not include the names of the respondents.
- Suitable and adequate information will be given concerning the nature of the study to enable the potential participant to make an informed choice and to give or withhold informed, voluntary consent.

The questionnaire will be given to the ethical committee of the appropriate department to obtain ethical clearance from them with respect to the proposal.

3.11 CONCLUSION

An empirical investigation using a structured questionnaire was used in order to determine and obtain an understanding of the perceptions of OJ on the JS among administrative staff at a university of technology in SA. In this study a quantitative approach was used. The target population, sampling methods, sampling frame, sample size, data collection and ethical issues were clearly described.

To collect the data a questionnaire was used. Pilot testing was embarked on to guarantee the reliability and validity of the questionnaire. Statistical analysis and its components were also discussed.

In Chapter 4 the analysis, interpretation and evaluation of the research findings are covered.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The previous chapter provided the details of the research design and methodology implemented in the study. The study design, the research approach, the procedure of the sampling design as well as the data collection method and instrument were described. The relevance thereof was also explained. Furthermore, the steps completed to ensure reliability and validity of the study were explained as well as the procedures used to collect, capture, process and analyse the data. The chapter ended with a discussion on the ethical issues.

This chapter discusses the data analysis conducted as well as the findings of the study. The results of the pilot study, descriptive statistics of the sample, factor analysis, correlation analysis and regression analysis are explained and presented. Prior to the main study, a pilot study was conducted and the following section represents the results of the pilot study. The results of the pilot study and the main study are presented in the form of tables and statistical summaries.

4.2 PILOT STUDY RESULTS

A pilot study was conducted in order to test the reliability of the measuring instrument used in this study. A pilot survey was completed by 20 respondents who did not form part of the main study. The designed questionnaire was tested via this pilot study. As a result of feedback received from respondents who participated in this pilot study, a few changes were made to the initial questionnaire, namely a separate section for IJ was added under Section D by using the items under Sections B and C in the pilot study. The results of the pilot study are summarised in Table 4.1.

Table 4.1: Reliability statistics of the questionnaire: Sections B, C, D and E

Sections of questionnaire	Sample size	No of items in the scale	No of items deleted	Cronbach's alpha
Section B: Distributive justice	20	6	1	0.652
Section C: Procedural justice	20	6	-	0.782
Section D: Interactional justice	20	9	-	0.952
Section E: Job satisfaction	20	6	1	0.952

Cronbach's alpha coefficient is the standard value reported for scale reliability, this value tends to underestimate the internal consistency of scales consisting of fewer than 10 items (Herman, 2015:8) and offered mean inter-item correlation values as an alternative measure of internal consistency. The resultant coefficients indicated that the scale items performed adequately in capturing the elements of the perceptions of employees towards PJ, DJ, IJ and JS. Cronbach alpha values for the individual scales ranged from 0.652 to 0.952.

4.3 DATA ANALYSIS OF THE STRUCTURED QUESTIONNAIRE

The researcher distributed 238 questionnaires to the various campuses of a university of technology in SA. Of the distributed questionnaires, the researcher managed to collect 200; hence, a return rate of 84.03 percent was obtained. The next section presents the results of the descriptive statistics obtained from Section A.

4.4 DESCRIPTIVE STATISTICS FOR SECTION A OF THE QUESTIONNAIRE

Descriptive statistics quantitatively summarise a data set. This study makes use of graphical representations (frequencies, tabulation and graphs) and statistical commentary (a discussion of the results) of the eight questions in the biographical section (Section A) of the questionnaire. An analysis of the employees' profile is discussed in the following sections.

4.4.1 Gender

4.4.2 Race

The representation of the various race groups is provided in Table 4.3

Table 4.3: Race group of the respondents

	Frequency	Percent	Valid percent	Cumulative percent
African	185	92.5	92.5	92.5
White	14	7.0	7.0	99.5
Coloured	1	.5	.5	100.0
Total	200	100.0	100.0	

The data in Table 4.3 indicate that 92.5% (n=185) of the respondents were African, 7.0% (n=14) were White and 0.50% (n=1) Coloured. The sample is not representative of the racial demographics of the study population.

4.4.3 Age

Table 4.3 represents the percentages of the various age groups in the sample.

Table 4.4: Age group of the respondents

	Frequency	Percent	Valid percent	Cumulative percent
18-30yrs	43	21.5	21.5	21.5
31-40yrs	81	40.5	40.5	62.0
41-50yrs	44	22.0	22.0	84.0
51-60yrs	25	12.5	12.5	96.5
61+yrs	7	3.5	3.5	100.0
Total	200	100.0	100.0	

The data in Table 4.4 indicates that the majority of the respondents in the sample are in the 31-40 years' age group (40.5%; n=81). This is followed by the 41-50 year age group (22%; n=44), then the 18-30 year age group (21.5%; n=43), 51-60 year age group (12.5%; n=25) and only 3.5% (n=7) falling in the 61 or older year age group. The majority of respondents are thus younger than 40 years of age and only 16.0% are older than 50 years.

4.4.4 Campus

Information on the campus where the respondents work is presented in Table 4.5.

Table 4.5: Respondents' campuses

	Frequency	Percent	Valid percent	Cumulative percent
Vanderbijlpark	144	72.0	72.0	72.0
Secunda	2	1.0	1.0	73.0
Upington	1	.5	.5	73.5
Ekurhuleni	13	6.5	6.5	80.0
Science Park	40	20.0	20.0	100.0
Total	200	100.0	100.0	

The data in Table 4.5 indicate that the majority of respondents (72.0%) were from the Vanderbijlpark campus situated in the Vaal Triangle. The frequencies are not representative of administrative staff at the campus.

4.4.5 Home language

Information on respondents' home language is presented in Table 4.6. The home languages were regrouped into Nguni, SeSotho and Other.

Table 4.6: Home language of the respondents

	Frequency	Percent	Valid percent	Cumulative percent
English	5	2.5	2.5	2.5
IsiZulu	30	15.0	15.0	17.5
Sepedi	18	9.0	9.0	26.5
Ndebele	3	1.5	1.5	28.0
Xitsonga	25	12.5	12.5	40.5
IsiXhosa	4	2.0	2.0	42.5
Afrikaans	13	6.5	6.5	49.0
SeSotho	72	36.0	36.0	85.0
Setswana	16	8.0	8.0	93.0
SiSwati	4	2.0	2.0	95.0
TshiVenda	8	4.0	4.0	99.0
Other	2	1.0	1.0	100.0
Total	200	100.0	100.0	

The data in Table 4.6 indicate that the majority of the respondents claimed to have SeSotho (65.5%) as home language (Sepedi, Xitsonga, Sotho, Setswana) followed by Nguni (24.5%) and Other (English, Afrikaans, Other) at only 10.0%. This is not representative of the groups in South Africa as the Nguni group contains the largest groups, namely Zulu and Xhosa (39.0%) while SeSotho groups form 25% of the groups, Afrikaans about 13.5% and English about 10.0%. The Sotho home language group is over-represented in the sample. However, Sotho seems to be the main home language among African respondents in the Vaal Triangle. Afrikaans as home language seems to be vastly under-represented in the sample of administrative staff at a university of technology.

4.4.6 Educational qualifications

Information of respondents' level of education is given in Table 4.7 as percentages of the responses received.

Table 4.7: Level of education of the respondents

	Frequency	Percent	Valid percent	Cumulative percent
Less than National Senior Certificate	2	1.0	1.0	1.0
NSC	12	6.0	6.0	7.0
National diploma	75	37.5	37.5	44.5
Bachelor's degree	23	11.5	11.5	56.0
BTech/ Hons degree	77	38.5	38.5	94.5
Master's degree	7	3.5	3.5	98.0
Doctorate	4	2.0	2.0	100.0
Total	200	100.0	100.0	

The data in Table 4.7 show that the majority of the respondents indicated that they have a B. Tech. /Hons degree (38.5%; n=77), followed by those who were in possession of a National Diploma (37.5%; n=75). Twenty-three (11.5%) of respondents were in possession of a Bachelor's degree were as (6.0%; n=12) were in possession of a National Senior Certificate. Respondents with other qualifications were those with a Master's degree (3.5%; n=7), Doctorate (2%; n=4) and less than NSC (1%; n=2).

4.4.7 Years of experience

Respondents were requested to indicate their years of experience at a university of technology and Table 4.8 presents the percentages of the responses.

Table 4.8: Experience of the respondents

	Frequency	Percent	Valid percent	Cumulative percent
0-5 years	65	32.5	32.5	32.5
6-10 years	66	33.0	33.0	65.5
11-15 years	41	20.5	20.5	86.0
16-20 years	17	8.5	8.5	94.5
21 years	9	4.5	4.5	99.0
	2	1.0	1.0	100.0
Total	200	100.0	100.0	

The data in Table 4.8 indicate that the majority of respondents have working experience of between 6-10 years (33%; n=66), followed by those with 0-5 years (32.5%; n=65), those with 11-15 years (20.5%; n=41), those with 16-20 years (8.5%; n=17) and, finally, 21+ years (4.5%; n=9). Two (2) respondents did not provide any details about experience.

4.4.8 Employment categories

Information on respondent's employment category is presented in Table 4.9.

Table 4.9: Employment categories of the respondents

	Frequency	Percent	Valid percent	Cumulative percent
Permanent	91	45.5	45.5	45.5
Fixed Term	36	18.0	18.0	63.5
Temporary	63	31.5	31.5	95.0
Other	10	5.0	5.0	100.0
Total	200	100.0	100.0	

The data in Table 4.9 indicate that 45.5% (n=91) of respondents are permanently employed. Of the 200 respondents, 49.5% (n=99) are on fixed term or temporary contract, while 5.0% (n=10) are other.

Having provided the biographical statistics in Section A for the sample, the following section provides the analyses for the remaining sections, namely Sections B to E.

4.5 ANALYSIS OF SECTION B OF THE QUESTIONNAIRE (PERCEPTIONS TOWARDS DISTRIBUTIVE JUSTICE)

Section B of the questionnaire contained five items, which probed perceptions about DJ. In Chapter 2 (see 2.3) DJ was defined as “how people perceive the distribution of rewards among employees in the organisation”. The items were placed on an interval scale, one being strongly disagree and five being strongly agree. The five items were first subjected to a factor analytic process to determine if they would cluster together and provide a more parsimonious solution. A principal axis factoring (PAF) procedure with Varimax rotation was utilised. The Kaiser-Meyer-Olkin (KMO) of 0.78 and significant Bartlett’s sphericity ($p=0.000$) indicated that a more frugal solution of variables was possible. One factor resulted which explained 49.68% of the variance present and had a Cronbach reliability (CR) of 0.741. It was labelled perceptions of DJ. The only item which had a loading of <0.50 was item B5 and it did not meet the criterion of converging validity. The factor loadings of the items with their mean scores are provided in Table 4.10.

Table 4.10: Factor loadings and mean scores of the items in the perceptions of distributive justice factor (FB1.0)

FB1.0 - Perceptions of distributive justice (Cronbach's alpha = 0.74)			
Item	Description	Loading	Mean
B3	I consider my work load as fair	0.730	3.59
B2	I think that my pay is fair	0.709	3.52
B1	I feel my work schedule is fair	0.657	3.96
B4	Overall the rewards I receive are fair	0.501	3.36
B5	I feel that my job responsibilities, compared to others at the same post level, are fair	0.433	3.14
Average		0.606	3.514

The data in Table 4.10 show a factor mean of 3.51, which suggests that the participants partially agreed with the items (a score of 3.00 indicates a neutral value but in this study 3.00 to 3.49 was accepted to indicate partial disagreement and 3.50 to 3.99 to represent partial agreement). The item with the highest mean score was item B1 (I feel that my work schedule is fair) with a mean score of 3.96, indicating the strongest partial agreement of all items. The lowest mean was item B5 (I feel that my job responsibilities, compared to others at the same post level, are fair) with a mean of 3.14, indicating partial disagreement with the item.

When considering factor loading only, the item with the highest factor loading was item B3 (I consider my workload as fair), with a loading of 0.730. As such, it is the item, which is most representative of the factor “perceptions of DJ (FB1.0)”. As most universities of technology have a procedure in place, which allocates certain values to job responsibilities to obtain a total workload, it is likely that each respondent will have a relatively good perception of how his/her particular workload correlates with others. The item B3 thus has a R^2 of 0.5329 and explains 53.29% of the variance present. The effect size is thus regarded as large (Field, 2018:117) as it explains more than 25.0% of the variance. The data distribution of the items in this factor is shown in Figure 4.1

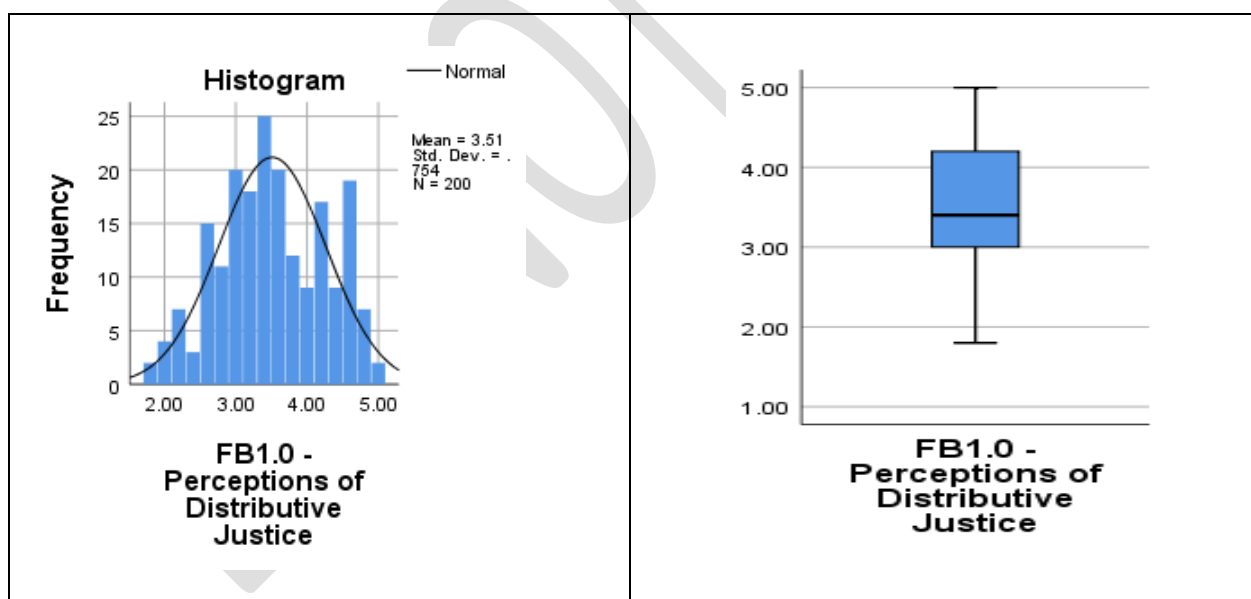


Figure 4.1: Histogram and boxplot showing the data distribution of the items in the perceptions of distributive justice factor (FB1.0)

The mean of 3.51[95% CI – LI=3.41, UI=3.62] indicates partial agreement. The median value was 3.40 and hence at least 50% of the scores are above 3.40. The distribution is close to normal but probably slightly negatively skew.

4.5.1 Converging validity and composite reliability of the distributive justice factor (FB1.0)

The data in Table 4.11 show the data needed to calculate the average variance extracted (AVE) and the composite reliability.

Table 4.11: Data used to calculate the AVE and CR

Item	λ	λ^2	$\varepsilon(1 - \lambda^2)$
B3	0.730	0.533	0.4671
B2	0.709	0.503	0.4973
B1	0.6571	0.432	0.5684
B4	0.501	0.251	0.7490
B5	0.433	0.187	0.8125
SUM	3.030	1.906	3.09428

The formula for AVE:

$$AVE = \frac{\sum \lambda^2}{N} = \frac{(1.9057)}{5} = 0.381$$

As the AVE is < 0.50, the items in the factor do not demonstrate converging validity. Items B5, B4 and B1 seem to be problematic with respect to converging validity.

$$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum \varepsilon} = \frac{(3.030)^2}{(3.030)^2 + 3.094} = \frac{(9,181)}{(12.275)} = 0.748$$

The composite reliability of 0.748 is virtually identical to the Cronbach alpha reliability of 0.74 (see Table 4.10)

4.6 ANALYSIS OF SECTION C OF THE QUESTIONNAIRE (EMPLOYEES' PERCEPTIONS TOWARD PROCEDURAL JUSTICE)

Section C of the questionnaire contained six items, which investigated the perceptions of respondents regarding PJ. In Chapter 2 (see 2.1), PJ was described as “how organisational

practices affect the perception of justice through the *processes* used by the organisation”. The processes are mostly related to policies and procedures and how decisions are made. As such, the items are mostly about perceptions of the fairness of decisions on resource distribution in the organisation. The items were placed on a five-point interval scale where one represented strongly disagree and five strongly agree. Factor analysis (PAF with Varimax rotation) was used to determine if the six variables would cluster together to form a more parsimonious solution. The KMO value of 0.860 and significant Bartlett’s sphericity ($p=0.000$) suggested that this clustering was plausible. One factor formed, which explained 64.09% of the variance present. It had a Cronbach alpha of 0.866. The factor loadings of the items with their mean scores are provided in Table 4.12.

Table 4.12: Factor loadings and mean scores of the items in the perceptions of procedural justice factor

FC1.0- Perceptions of procedural justice (Cronbach's alpha = 0.866)			
Item	Description	Loading	Mean
C2	Before making any job decisions my manager ensures that the concerns of all employees have been heard	0.831	3.72
C3	Job decisions made by my manager are based on the collection of accurate and up-to-date information	0.814	3.79
C4	When employees oppose a decision, my manager readily provides any additional information requested	0.782	3.67
C5	All job-related decisions made are equitably applied throughout the organisation	0.739	3.63
C6	Employees are allowed to test or appeal job decisions made by their managers	0.685	3.44
C1	Job decisions are made in a fair manner	0.669	3.81
Average		0.753	3.68

The data in Table 4.12 show a factor mean of 3.68, which suggests that the participants partially agreed with the items (a score of 3.00 indicates a neutral value, while 3.00 to 3.49 indicate partial disagreement and 3.50 to 3.99 represent partial agreement). The item with the highest mean score was item C1 (Job decisions are made in a fair manner) with a mean score of 3.81, indicating the

strongest partial agreement of all items in the factor. The lowest mean was item C6 (Employees are allowed to test or appeal job decisions made by their managers) with a mean of 3.44, indicating partial disagreement with the item. This possibly suggests an uncertainty about appeals regarding job decisions made by managers due to a fear of victimisation or confrontation with managers as this could jeopardise future promotion.

Considering factor loading only, the item with the highest factor loading was item C2 (Before making any job decisions my manager ensures that the concerns of all employees have been heard) with a loading of 0.831. As such, it is the item, which is most representative of the factor “perceptions of PJ (FC1.0)”. The data distribution of the items in this factor is shown in Figure 4.2.

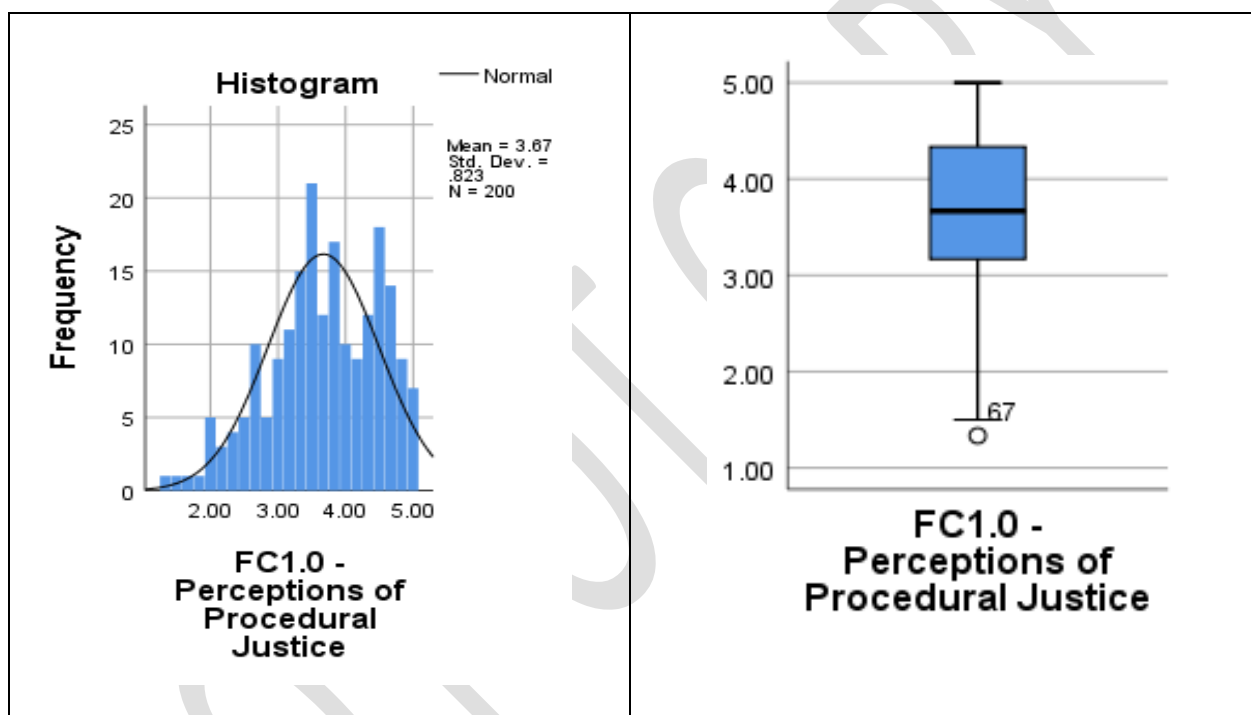


Figure 4.2: Histogram and boxplot showing data distribution in the factor perceptions of procedural justice

The histogram indicates a mean of 3.67 [95% CI – LI = 3.56, UI=3.79] and a slightly negatively skew distribution.

4.6.1 Converging validity and composite reliability of the procedural justice factor (FC1.0)

The data in Table 4.13 show the data needed to calculate the AVE and the composite reliability.

Table 4.13: Data used to calculate the AVE and CR

Item	λ	λ^2	$\varepsilon(1 - \lambda^2)$
C2	0.831	0.691	0.309
C3	0.814	0.663	0.337
C4	0.782	0.612	0.388
C5	0.739	0.546	0.454
C6	0.685	0.469	0.531
C1	0.669	0.448	0.552
SUM	4.52	3.429	2.521

$$AVE = \frac{\sum \lambda^2}{N} = \frac{(3.429)}{6} = 0.57$$

As the AVE is >0.50, the items in the factor demonstrate converging validity.

$$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum \varepsilon} = \frac{(4.52)^2}{(4.52)^2 + 2.521} = \frac{(20.43)}{(12.275)} = 0.89$$

The composite reliability of 0.89 is virtually identical to the Cronbach reliability of 0.87 (see Table 4.12).

4.7 ANALYSIS OF SECTION D OF THE QUESTIONNAIRE (EMPLOYEES' PERCEPTIONS TOWARD INTERACTIONAL JUSTICE)

There were 11 items in Section D of the questionnaire, which probed perceptions of respondents about IJ. Interactional justice refers to how organisational practices affect the perception of justice through behaviour exhibited and statements made by the authorities within an organisation (Chapter 2, Section 2.5). The items were placed on a five-point interval scale and anchored by one, which represented strongly disagree and five, which represented strongly agree. In an attempt to cluster the 11 items to a smaller number, factor analysis was utilised (PAF with Varimax rotation). The KMO value of 0.920 with a significant Bartlett's sphericity of $p=0.000$ indicated

that such a reduction was plausible. Two first-order factors were formed, explaining 73.57% of the variance present. The first of the two first-order factors with a Cronbach alpha reliability of 0.866 was named “perceptions of informational justice (FD1.1)”. The items with their factor loadings and mean scores are provided in Table 4.14.

Table 4.14: Items in the perceptions of informational justice (FD1.1) with their loadings and mean scores

FD1.1 - Perceptions of informational justice (Cronbach's alpha = 0.917)			
Item	Description	Loading	Mean
D9	The manager offers a suitable explanation for decisions made about my job	.840	3.69
D10	When making decisions about my job, the manager offers explanations that make sense to me	.827	3.79
D8	When decisions are made about my job, the manger first discusses the possible implications of the decision with me	.800	3.68
D11	My manager very clearly explains any decisions that influence my job	.723	3.83
D7	When decisions are made about my job, the manager shows concern for my rights as an employee	.690	3.78
Average		0.776	3.75

The factor mean of 3.75 indicates that the respondents partially agreed with the items in the factor. The strongest level of partial agreement was item D11 (My manager very clearly explains any decisions that influence my job) with a mean of 3.83. The lowest level of partial agreement was item D8 (3.68).

With respect to loadings of items, item D9 (The manager offers a suitable explanation for decisions made about my job) had the highest factor loading (0.84) which translates to an R^2 of 0.7056 and hence 70.56% of variance is explained. Item D9 is thus the item most representative of this factor of informational justice (FD1.1), which is related to perceptions of fairness regarding explanations of decisions made about a job by a manager. The data distribution in this factor is provided in Figure 4.3

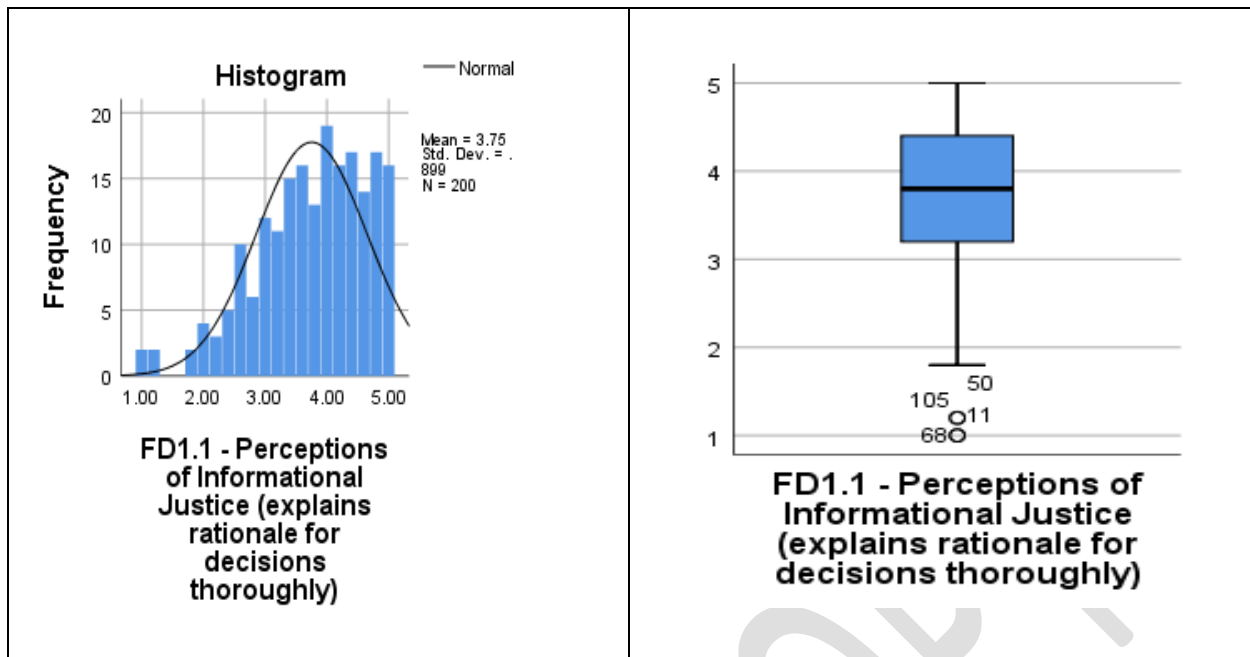


Figure 4.3: Histogram and boxplot showing the data distribution in FD1.1 (Perceptions of informational justice)

The data distribution of items in this factor was negatively skew.

4.7.1 Converging validity and composite reliability of the informational justice factor (FD1.1)

Table 4.15 indicates the data needed to calculate the AVE and the composite reliability.

Table 4.15: Data needed to calculate the AVE and CR values

Item	λ	λ^2	$\epsilon(1 - \lambda^2)$
D9	0.840	0.706	0.294
D10	0.827	0.684	0.316
D8	0.800	0.640	0.360
D11	0.723	0.523	0.477
D7	0.690	0.476	0.524
SUM	3.880	3.028	1.971

$$AVE = \frac{\sum \lambda^2}{N} = \frac{(3.028)}{5} = 0.61$$

As the AVE is > 0.50 the items in the factor demonstrate converging validity.

$$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum \varepsilon} = \frac{(3.880)^2}{(3.880)^2 + 1.971} = \frac{(15.054)}{(17.025)} = 0.88.$$

The composite reliability of 0.88 is similar but less than the Cronbach reliability of 0.92 (see Table 4.14)

The second first-order factor formed by the factor analysis of the 11 items in IJ had six items with a Cronbach alpha of 0.912. It was named “perceptions of interpersonal justice” (FD1.2). The loadings of the factor and mean scores are provided in Table 4.16.

Table 4.16: Items in the perceptions of interpersonal justice (FD1.2) with their loadings and mean scores

FD1.1 - Perceptions of informational justice (Cronbach's alpha = 0.917)			
Item	Description	Loading	Mean
D2	When decisions are made about my job, the manager treats me with attention	0.872	3.91
D3	When decisions are made about my job, the manager treats me with esteem	0.846	3.86
D4	When decisions are made about my job, the manager treats me with dignity	0.835	3.96
D1	When decisions are made about my job, the manager treats me with sympathy	0.666	3.81
D5	When decisions are made about my job, the manager is sensitive to my personal needs	0.597	3.79
D6	When decisions are made about my job, the manager deals with me in a honest manner	0.525	3.85
Average		0.724	3.86

The data in Table 4.16 show a mean of 3.86 and respondents partially agreed with the items in the factor interpersonal justice (FD1.2), which relates to perceived fairness when it comes to treating one with dignity and respect. Item D6 (When decisions are made about my job, the manager treats me with dignity) with a mean of 3.96 was the item with the highest mean score. The item with the largest factor loading was Item D2 (When decisions are made about my job, the manager treats me with attention), which had a loading of 0.872 and R^2 of 0.7604 and explains 76.04% of the variance present. The effect size is thus large.

The data distribution in this factor is illustrated in Figure 4.4.

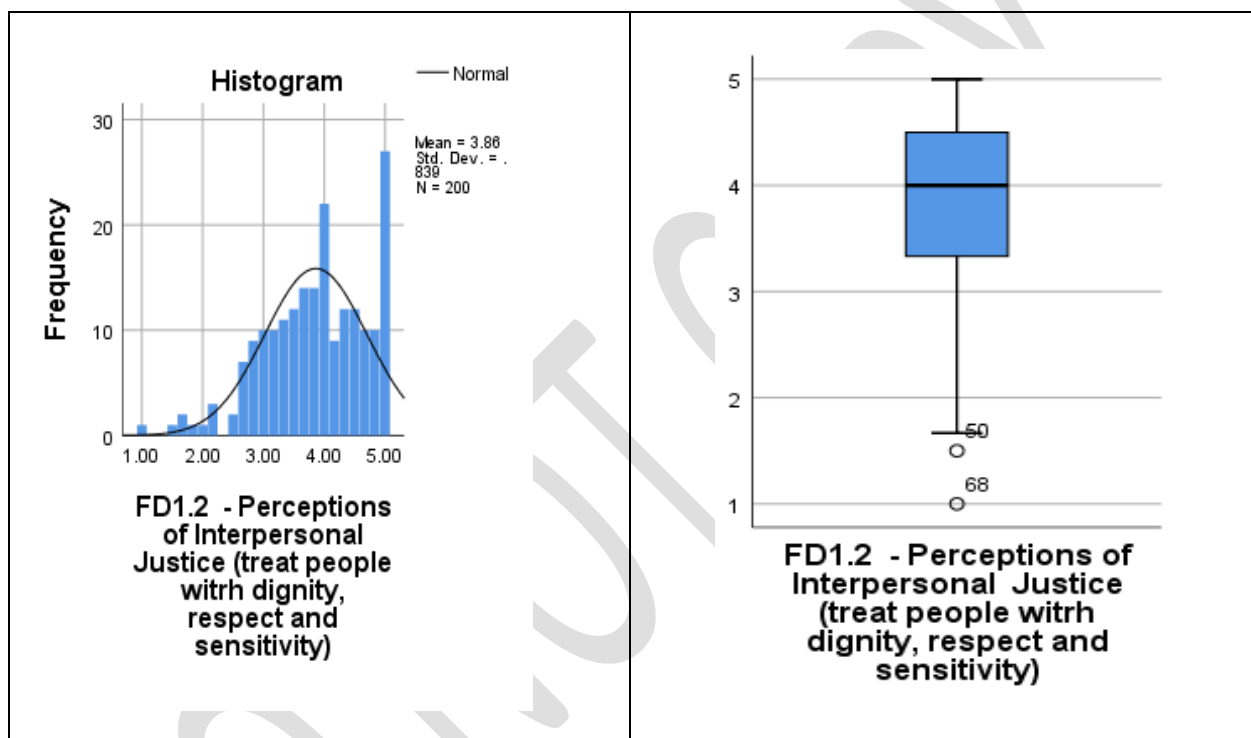


Figure 4.4: Histogram and boxplot showing the data distribution of the perceptions of interpersonal justice factor (FD1.2)

The mean score was 3.86 [95% CI –M LI = 3.74; UI = 3.98] and the median was 4.00. At least 50.0% of the respondents thus agreed with the items. The data distribution was negatively skew.

4.7.2 Converging validity and composite reliability of the interpersonal justice factor (FD1.2)

Table 4.17 indicates the data needed to calculate the AVE and the composite reliability.

Table 4.17: Data needed to calculate the AVE and CR values

Item	λ	λ^2	$\varepsilon(1 - \lambda^2)$
D2	0.872	0.760	0.240
D3	0.946	0.716	0.284
D4	0.835	0.697	0.303
D1	0.666	0.444	0.556
D5	0.597	0.356	0.644
D6	0.525	0.276	0.724
SUM	4.314	3.249	2.751

$$AVE = \frac{\sum \lambda^2}{N} = \frac{(3.249)}{6} = 0.54$$

As the AVE is >0.50, the items in the factor demonstrate converging validity.

$$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum \varepsilon} = \frac{(4.314)^2}{(4.314)^2 + 2.751} = \frac{18.835}{21.587} = 0.87.$$

The composite reliability of 0.87 is similar but less than the Cronbach alpha reliability of 0.91 (see Table 4.16)

When a second-order procedure was performed on the two first-order factors (FD1.1 and FD1.2), one second-order factor resulted in a Cronbach alpha of 0.93 containing 11 items. The factor explained 83.28% of the variance present and was named IJ (FD2.0). Hence, what was described as IJ in Chapter 2 is actually composed of two first-order factors namely FD1.1 (perceptions of informational justice) and FD1.2 (perceptions of interpersonal justice) and is probably related more to perceptions of the fairness of aspects of performance appraisals. This finding is in agreement with the literature in Chapter 2.

4.8 ANALYSIS OF SECTION E OF THE QUESTIONNAIRE (PERCEPTIONS OF JOB SATISFACTION)

Section E of the questionnaire contained five scaled items. The items were placed on a five-point interval scale and anchored by one, which represented strongly disagree and five, which represented strongly agree. A factor analytic procedure using PAF with Varimax rotation contained a KMO value of 0.890 with a significant Bartlett's sphericity. One factor resulted, which explained 62.23% of the variance present. The factor was named perceptions of JS (FE1.0) with a Cronbach alpha reliability coefficient of 0.851. The factor loadings and mean scores obtained are provided in Table 4.18

Table 4.18: Loadings and mean scores of items contained in the factor job satisfaction (FE1.0)

FE1.0- Job satisfaction (Cronbach's alpha = 0.851)			
Item	Description	Loading	Mean
E2	I find that my opinions are respected at work	.845	3.65
E3	I am satisfied with the recognition I get for the work I do	.827	3.60
E1	In general, I am satisfied with my job	.779	3.86
E5	I am satisfied with the personal relationship between me and my manager	.658	4.02
E6	I am satisfied that my pay compares well with that for similar jobs in other organisations	.557	3.20
Average		0.733	3.67

The data in Table 4.18 indicate a factor mean of 3.67, which shows partial agreement with the items in the factor. The item with the highest mean score and the only item in the questionnaire that obtained a mean of 4.02 was E5 (I am satisfied with the personal relationship between me and my manager), indicating agreement. The item with the largest factor loading was E2 (I find that my opinions are respected at work). The data distribution of the items in this factor is illustrated in Figure 4.5.

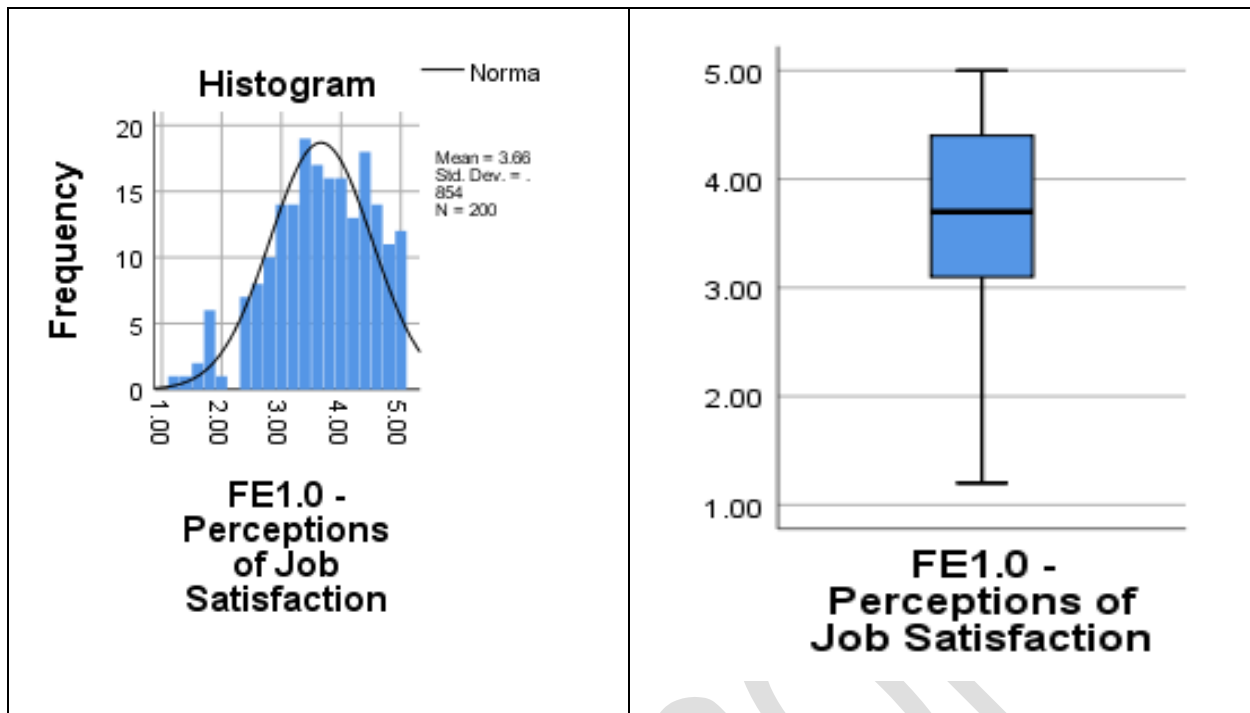


Figure 4.5: Histogram and boxplot showing the data distribution in the factor perceptions of job satisfaction (FE1.0)

The mean was 3.66 [95% CI – LI = 3.54; UI = 3.78] and the median was 3.70. The data distribution was negatively skew.

4.8.1 Converging validity and composite reliability of the perceptions of job satisfaction factor (FD1.2)

The data in Table 4.19 show the data needed to calculate the AVE and the composite reliability.

Table 4.19: Data needed to calculate the AVE and CR values

Item	λ	λ^2	$\epsilon(1 - \lambda^2)$
E2	0.845	0.714	0.286
E3	0.827	0.684	0.316
E1	0.779	0.607	0.393
E5	0.658	0.433	0.567
E6	0.557	0.310	0.690
SUM	3.666	2.748	2.252

$$AVE = \frac{\sum \lambda^2}{N} = \frac{(2.748)}{5} = 0.55$$

As the AVE is > 0.50, the items in the factor demonstrate converging validity.

$$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + \sum \varepsilon} = \frac{(3.67)^2}{(3.67)^2 + 2.252} = \frac{13.469}{16.721} = 0.81.$$

The composite reliability of 0.81 is similar to the Cronbach alpha of 0.85

Table 4.20 indicates both the converging and discriminatory validity of five constructs utilised in the questionnaire.

Table 4.20: The construct validity of the constructs utilised in the questionnaire

Factor	CR	AVE	MSV	Max R(H)	FB1.0	FE1.0	FD1.2	FD1.1	FC1.0
FB1.0	0.752	0.383	0.416	0.769	0.619	-	-	-	-
FE1.0	0.856	0.549	0.524	0.883	0.645	0.741	-	-	-
FD1.2	0.917	0.651	0.450	0.935	0.460	0.671	0.807	-	-
FD1.1	0.918	0.692	0.513	0.926	0.523	0.702	0.660	0.832	-
FC1.0	0.888	0.571	0.524	0.898	0.585	0.724	0.564	0.716	0.756
FB1.0 - Distributive justice FD1.2 -Interpersonal justice FBC1.0 - Procedural justice					FE1.0 -Job satisfaction FD1.1 - Informational justice				

4.9 VALIDITY

Validity concerns the accuracy of the questions asked, the data collected and the explanations afforded. Generally, it relates to the data and the analysis done in the study. It refers to the quality of data and explanations and the confidence they accord with what is true or what is real (Denscombe 2010:143). The measures of validity discussed in the next sub-sections are face, content, construct and convergent validity. Validity measures the extent to which the research is

accurate and the extent to which the truth-claims can be made, based on the research; for example, that it measures what is intended (Curtis & Curtis 2011:13).

The following validity concerns were identified:

Distributive justice (FB1.0)

- **Discriminant validity:** the square root of the AVE for FB1.0 (0.619) is less than the absolute value of the correlations with another factor. The AVE for FB1.0 (0.383) is less than the MSV (0.416).
- **Converging validity:** the AVE for FB1.0 (0.383) is less than 0.50.

The exploratory factor analysis used above as PAF with Varimax rotation indicated that the construct of DJ had five items related to it but that the items did not all have factor loadings high enough (>0.50) to be able to show converging validity. The other factors demonstrated both converging and diverging validity.

The researcher also submitted all the items related to DJ (B1-B6), the items related to PJ (C1-C6) and the items, which were used for interactional justice (D1-D11) to a factor analytic procedure, namely PAF with Varimax rotation. The KMO value of 0.921 with a significant Bartlett's sphericity value ($p=0.000$) suggested that the 22 items could be grouped into a smaller number of factors. Four first-order factors resulted, which explained 66.76% of the variance present. These four factors were identical to those discussed above except that item B5 grouped with the C items. When checking the reliability of these first-order factors, the analysis suggested that item B5 be omitted. This corroborates the data in Table 4.10. A second-order factor analysis was then performed on the four first-order factors in order to find a more parsimonious solution than four clusters. The KMO of 0.764 and Bartlett's sphericity of $p=0.000$ indicated that a more frugal solution was possible. One second-order factor resulted, which explained 63.75% of the variance present. It was named OJ and contained 21 items with a Cronbach's alpha reliability of 0.935.

AMOS 26 was used to draw a model of the factors in OJ using confirmatory factor analysis (CFA) as shown in Figure 4.6.

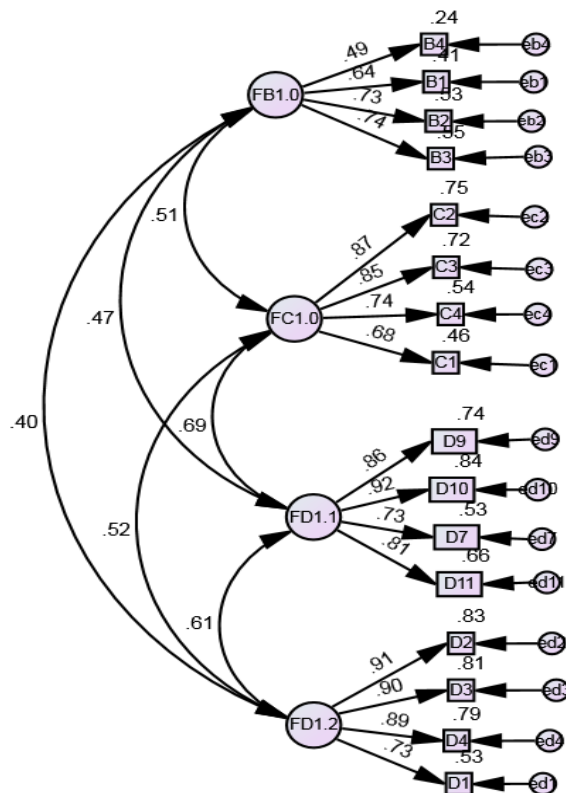
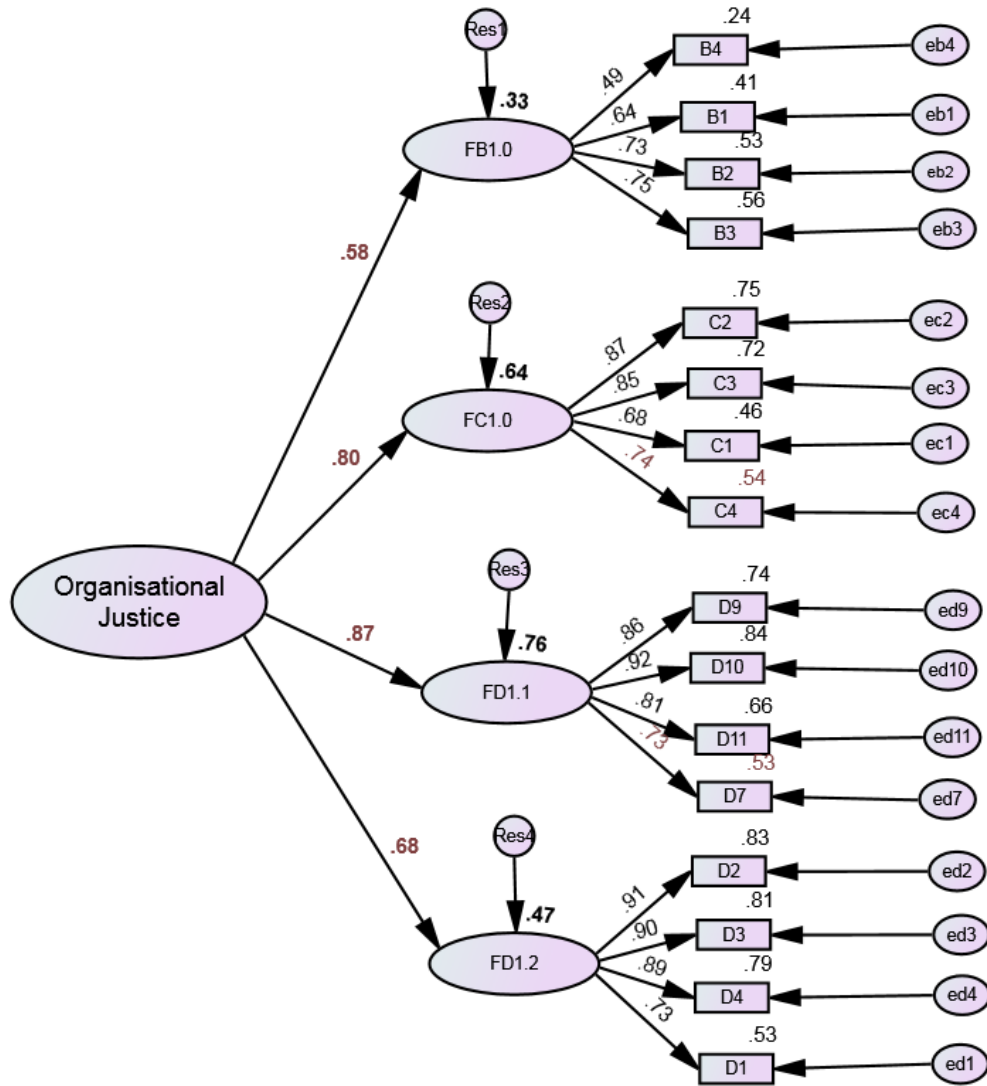


Figure 4.6: A CFA model showing the underlying structure of the four first-order factors involved in organisational justice

Using the modification indexes (MI's) from AMOS 26, items B5, C5, C6 and D8 were removed one at a time as they had excessively large values. In addition, as suggested by Schumacker and Lomax (2004:212), a latent variable should have at least four indicators with loadings of 0.70 or higher. Removing the items, rather than allowing them to correlate with one another, resulted in a simpler model. The various model fit indexes showed a moderate-to-good fit of the data to the postulated model. Having shown the measurement model to be in order with respect to the extent to which the observed (manifest) variables are generated by the underlying latent constructs, the strengths of the regression paths from the factors to the observed variables to be in order, the structural part of the model was now examined. The structural part of the model includes the possible pathways between the latent variables themselves. As this study is attempting to show a causal link between OJ and JS, AMOS 26 was used to draw the model as depicted in Figure 4.7. The JS construct was added to the model (see Figure 4.8)



[CMIN/DF=1.53;p=0.001;CFI=0.973;RMSEA=0.05;(Lo90=0.034;Hi90=0.067)
;PCLOSE=0.426;ECVI=1.129 <Sat.<Ind]

Figure 4.7: A SEM showing the structure of organisational justice with its four first-order constructs underlying it

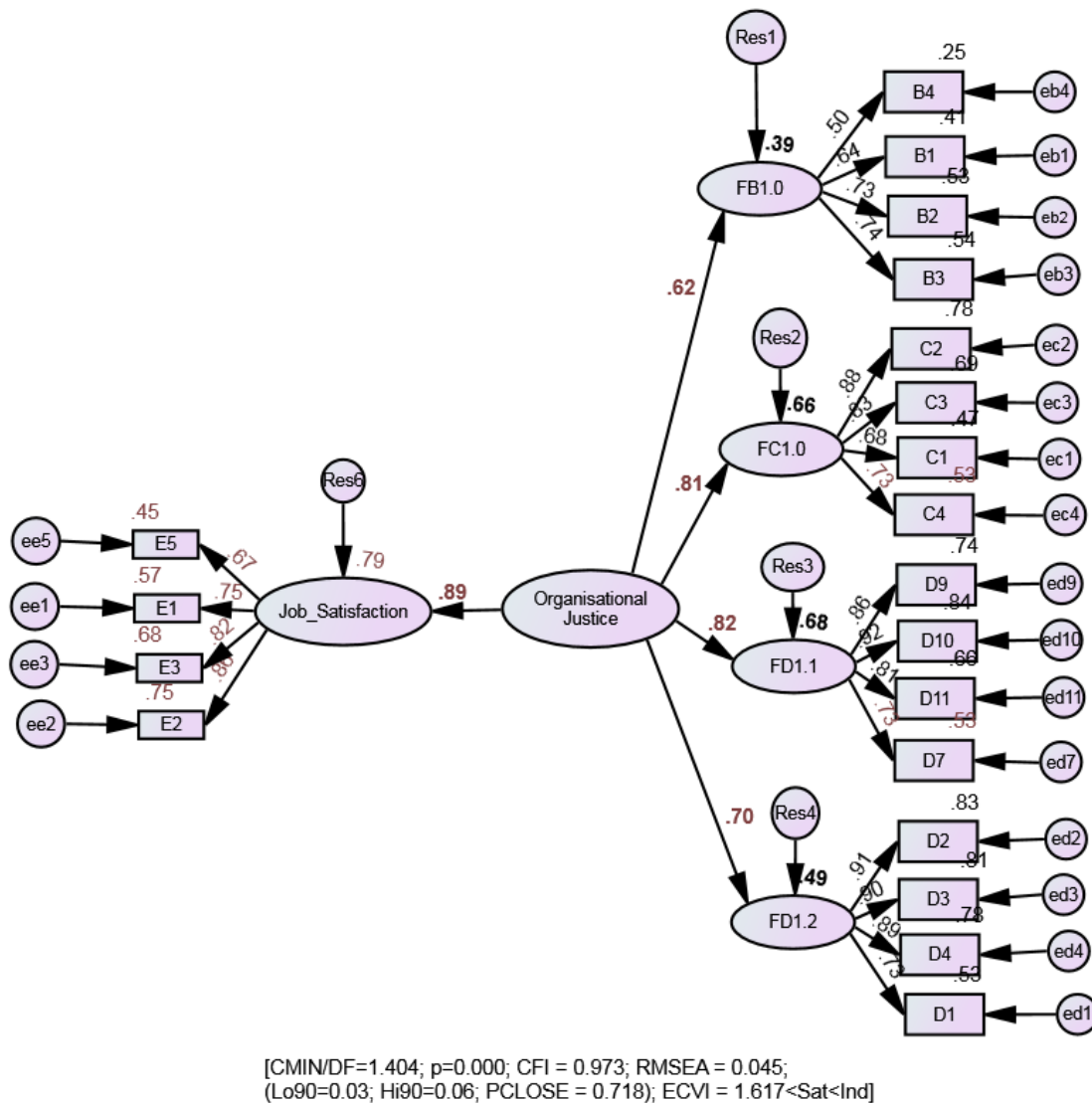


Figure 4.8: The SEM showing the causal links between job satisfaction and organisational justice

The fit indexes in both Figures 4.7 and 4.8 can be described as good (Schumacker & Lomax 2004:82; Arbuckle 2007:585; Blunch 2008:110).

The standardised direct effects of OJ are now briefly discussed using the data in Table 4.21 obtained from Figure 4.8 and AMOS 26 data.

Table 4.21: The standardised values of the constructs involved in the organisational justice and job satisfaction model

Factors	Organisational justice (F2.0)
Job satisfaction (FE1.0)- E items	0.89
Interpersonal justice (FD1.2) (D1-D6)	0.70
Informational justice (FD1.1) (D7-D11)	0.82
Procedural justice (FC1.0) - C items	0.81
Distributive justice (FB1.0)- B Items	0.62

4.9.1 Standardised direct effects

4.9.1.1 Organisational justice (F2.0) on job satisfaction (FE1.0)

The standardised direct (unmediated) effect of F2.0 (OJ) on FE1.0 (JS) was 0.89; that is, due to the direct (unmediated) effect of F2.0 on FE1.0. When F2.0 increases by one standard deviation, FE1.0 increases to 0.89 standard deviations. Organisational justice thus has a direct causal effect on JS.

4.9.1.2 Organisational justice (F2.0) on interpersonal justice (FD1.2)

The standardised direct (unmediated) effect of F2.0 (OJ) on FD1.2 (interpersonal justice) was 0.70; that is, due to the direct (unmediated) effect of F2.0 (OJ) on FD1.2 (Interpersonal Justice). When F2.0 (OJ) increases by one standard deviation, F1.1 (Interpersonal Justice) increases to 0.70 standard deviations.

4.9.1.3 Organisational justice (F2.0) on informational justice (FD1.1)

The standardised direct (unmediated) effect of F2.0 (OJ) on FD1.1 (informational justice) is 0.82; that is, due to the direct (unmediated) effect of F2.0 (OJ) on F1.1 (informational justice). When FD2.0 (OJ) increases by one standard deviation, F1.1 (informational justice) increases by 0.82 standard deviations.

4.9.1.4 Organisational justice (F2.0) on procedural justice (F1.2) (C Items)

The standardised direct (unmediated) effect of F2.0 (OJ) on FC1.0 (PJ) is 0.81; that is, due to the direct (unmediated) effect of F2.0 (OJ) on FC1.0 (PJ). When F2.0 (OJ) increases by one standard deviation, FC1.0 (PJ) increases by 0.81 standard deviations.

4.9.1.5 Organisational justice (F2.0) on distributive justice (FB1.0)

The standardised direct (unmediated) effect of F2.0 (OJ) on FB1.0 (DJ) is 0.62; that is, due to the direct (unmediated) effect of F2.0 (OJ) on FB1.0 (DJ). When F2.0 (OJ) increases by one standard deviation, FB1.0 (DJ) increases by 0.62 standard deviations. Organisational justice thus has a direct effect on each one of its four underlying first order factors as well as on JS.

4.10 DISCUSSION OF POSSIBLE MEDIATING EFFECTS

In Chapter 2, the possibility of a situation when the relationship between a predictor variable (such as PJ – FC1.0) and an outcome (such as JS – FE1.0) can be explained by their relationship to a third variable (the mediator) was discussed. The process model by Hayes (<http://www.afhayes.com>), which is also available in SPSS 26, was utilised to investigate the direct and indirect effects of a predictor variable (PJ) on an outcome (JS) in the presence of two mediating variables (DJ and IJ). Procedural justice was chosen as predictor as procedures are something, which all persons working in educational institutions are familiar with, and PJ would possibly be a common factor. The direct and indirect effects between the various variables are shown in Figure 4.9 and Figure 4.10

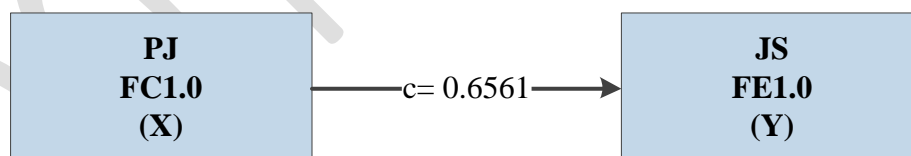


Figure 4.9: Total effect of X (PJ) on Y (JS) where c = Total effect

The total effect of X on Y, $c = 0.6561$ is positive and statistically significant ($c = 0.656$, 95% CI [0.544, 0.769], $t = 11.49$, $p = 0.000$).

The direct and indirect effects of PJ on JS is shown in Figure 4.10

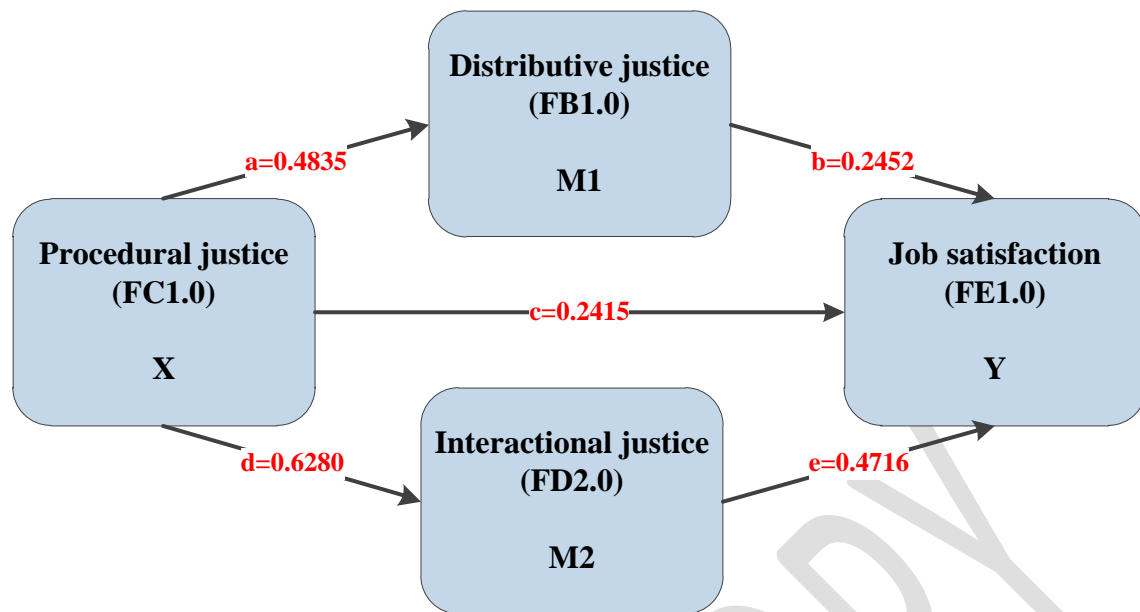


Figure 4.10: Distributive justice and interactional justice as mediating variables between procedural justice and job satisfaction

The process model of Hayes, in SPSS 26 was used to investigate the effect of PJ (FC1.0 - policies, procedures and processes) on JS (FE1.0) with DJ (FB1.0 – Equity, needs and decisions on how resources are distributed) and IJ (FD2.0) as Mediators (M1 and M2). It is a parallel mediator model with two mediators and is model 4 (Hayes, 2018).

4.10.1 Discussion of direct and indirect effects in Figure 4.10

- From the figure $c' = 0.2415$ is the direct effect of PJ (X) on JS. (Y). ($c'=0.2415, 95\%CI [LI=0.109, UI=0.374], t = 3.582, p=0.0004$)
- From the figure, $a \times b$ is the indirect effect of PJ(FC1.0) to IJ (FD2.0) and it is positive and significant $a \times b = 0.1185$; Boot LLCI=0.056, ULCI=0.189)
- From the figure, $d \times e$ is the indirect effect of PJ (FC1.0) on JS (FE1.0) and it is positive and significant ($dxe = 0.2961$; Boot LLCI = 0.185, ULCI = 0.418)

$$\begin{aligned}
 \text{Total effect} &= \text{Direct effect (c)} + \text{Indirect effect M1 (a x b)} + \text{Indirect effect M2 (d x e)} \\
 &= 0.2415 + (0.4835 \times 0.2452) + (0.6280 \times 0.4716) \\
 &= 0.2415 + 0.1185 + 0.2961 \\
 &= 0.6561.
 \end{aligned}$$

The total effect of PJ (FC1.0) on JS (FE1.0) consists of a direct effect of 0.2415 and two indirect effects, via mediators M1 (DJ –FB1.0 of 0.1185) and M2 (IJ –FD2.0 of 0.2961).

However, (IJ) is composed of two factors, namely informational justice (FD1.1) and interpersonal justice (FD1.2). Hence, the model can also be viewed as consisting of three mediators, namely (FB1.0 – DJ; FD1.1 – informational justice; FD1.2 – interpersonal justice). The resulting diagram is complicated, but the results are similar to those shown in Figure 4.17, as the total effect of 0.6561 is the same. The DE (0.2498) and IE (0.4063) give the total effect of 0.6561.

One could conclude that the total effect of PJ on JS consists of a direct effect as well as two specific indirect effects of X on Y through M1 (DJ) and M2 (IJ).

4.11 USING MULTIPLE REGRESSION TO ANALYSE JOB SATISFACTION AS OUTCOME VARIABLE

The four independent variables (predictors), namely FB1.0, FC1.0, FD1.1 and FD1.2, were first tested for linearity by conducting a scatterplot matrix, which indicated linearity between all pairs of independent variables. Secondly, tests were conducted for multicollinearity using the variance inflation factor (VIF) and the tolerance statistic in SPSS 26. None of the four independent variables had VIF values larger than one and all tolerance statistics were less than 0.2 (Field, 2018:402). The Durban-Watson value was also $< 2 .0$ indicating that the residuals were uncorrelated. No heteroscedacity was present between the predictor variables. Hence, all assumptions for a multiple regression were met.

To determine which of the four first-order OJ factors was the best predictor of JS, multiple regressions could also be utilised in the form:

$$\hat{Y} = (b_o + b_1X_1 + b_2X_2....b_nX_n) + \varepsilon$$

$$JS = constant + b_1FB1.0 + b_2FC1.0 + b_3FD1.1 + b_4FD1.2 + \varepsilon$$

First, the model summary in the SPSS output gives an R^2 value of 0.578. This means that 57.8% of the variability in the JS variable can be accounted for by the four justice constructs. Secondly, there is a need to test whether the various regression constants are different from zero. In terms of hypotheses, it could be stated as:

$$H_o: \alpha = 0 \text{ and } \beta_1 = 0 \text{ and } \beta_2 = 0; H_a: \text{At least one coefficient is different from zero}$$

Table 4.22: ANOVA table in the multiple regressions with constant included

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	92.352	4	23.088	66.901	.000 ^b
	Residual	67.295	195	.345		
	Total	159.647	199			
a. Dependent variable: E-Job satisfaction b. Predictors: (Constant), FD1.2- Interpersonal justice, FB1.0 Distributive justice, FC1.0 - Procedural justice, FD1.1 - Informational justice						

From the ANOVA value in Table 4.22, it can be seen that the null-hypothesis of all regression coefficients being zero cannot be accepted (it is rejected) as the p-value of $0.000 < 0.0005$. Hence the assumption that at least one of the regression coefficients (α or β) is significantly different from zero. The values of the various coefficients are given in Table 4.23.

Table 4.23: Coefficients involved in the multiple regression of JS as outcome

Model		Unstandardised coefficients		Standardised coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.028	.239		.116	.908
	FB1.0-Distributive justice	.209	.060	.188	3.499	.001
	FC1.0 -Procedural justice	.267	.066	.254	4.036	.000
	FD1.1 - Informational justice	.263	.066	.265	3.990	.000
	FD1.2- Interpersonal justice	.258	.060	.253	4.302	.000
a. Dependent variable: E-Job satisfaction						

The data in Table 4.23 show that the p-values for FB1.0, FC1.0, FD1.1 and FD1.2 are all small ($p < 0.05$); hence the null hypothesis can be rejected in each case. However, the p-value of the constant value of 0.028 is 0.908, which is > 0.05 . Hence, the null hypothesis that the *constant* in the model is zero cannot be rejected, which implies it should be excluded from the model. The

procedure needs to be rerun by not including the constant in the model. The appropriate values are given in Table 4.24.

Table 4.24: Coefficients involved in the multiple regression of JS as outcome without the constant

Model	Unstandardised coefficients			Standardised coefficients	t	Sig.
		B	SE	Beta		
1	FB1.0	0.255	0.059	0.244	4.312	0.000
	FC1.0	0.256	0.067	0.256	3.796	0.000
	FD1.1	0.176	0.067	0.181	2.616	0.010
	FD1.2	0.301	0.063	0.317	4.807	0.000
a. Dependent variable: FE1.0 - Perceptions of job satisfaction						
b. Linear regression through the origin						

All four of the unstandardised (b) coefficients have significant p-values and, hence, all four are significantly different from zero. The regression equation can now be written as:

$$FE1.0 = 0.255(FB1.0) + 0.256(FC1.0) + 0.176(FD1.1) + 0.301(FD1.2) + Error$$

The standardised beta values (β) are useful in that they can be directly compared with one another. As such, FD1.2 (perceptions of interpersonal justice – treating people with dignity, respect and sensitivity) is the best predictor of perceptions of JS ($\beta=0.317$). Hence, as the perceptions of informational justice (FD1.2) increase by one standard deviation, JS (FE1.0) increases by 0.317 standard deviations. The second-best predictor of perceptions of JS (FE1.0) is PJ (FC1.0 with $\beta = +0.256$) followed by DJ (FB1.0) and then informational justice (FD1.1). All four of the OJ factors are significant predictors of JS and as perceptions of these OJ factors increase, so JS increases. In this sense, they are directly proportional to one another. The bivariate correlations gave a similar order, with FD1.2 having the highest correlation ($r= 0.637$) and FB1.0 having the lowest correlation ($r=0.556$).

Using Bayesian statistics, the best combination of predictors found was when all four predictors were included. The Bayes factor was 7.623×10^{31} indicating that the alternative hypothesis (all

four variables included) was that many times more likely than the null hypothesis using the intercept alone (Field 2018:522).

4.12 TESTING THE FACTORS INVOLVED FOR SIGNIFICANT DIFFERENCES ON THE INDEPENDENT VARIABLES

As most data distributions were slightly negatively skew, it was decided to make use of nonparametric statistical procedures to test the various independent groups in the sample against the dependent variables. The four first-order factors for OJ and JS were the dependent variables. When two independent groups are tested, the Mann-Whitney U-test can be utilised.

4.12.1 Testing two independent groups for significant differences against the dependent variables.

4.12.1.1 Gender (A1)

No statistically significant differences could be found between the two gender groups on any of the five dependent variables.

4.12.1.2 Race (A2)

As there were so few of the race groups, other than African, they were combined into ‘other’. The only dependent variable where significant differences were present was in the informational justice factor (FD1.1). A summary of results obtained was:

FD1.I (Informational Justice)

$\bar{R}_A = 103.29; \bar{R}_O = 66.10; z = -2.403; p = 0.016; r = 0.17$
--

The respondents belonging to the African race group agreed statistically significantly more strongly with the informational justice factor than the other respondents. The respondents differed significantly from one another with respect to items D11 (My manager very clearly explains any decisions that influence my job; $r=0.21$), D10 (When making decisions about my job, the manager offers explanations that make sense to me; $r=0.17$) and D9 (The manager offers a suitable explanation for decisions made about my job; ($r=0.16$)). Respondents who indicated they belonged to the African race group agreed significantly more strongly with explanations their managers gave them for decisions made about their jobs. In a bureaucratic hierarchical structure, as is present in a university structure, decisions are often made at levels higher than that of one’s manager and the manager often just has to communicate the decision made with unpleasant decisions often

avoided. However, this difference can also be due to what Hofstede (1991) refers to as cultural differences and are likely to lie in the power distance dimension, which Hofstede (1991:28) defines as “the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally”. In a hierarchical structure, superiors and subordinates consider each other existentially unequal and subordinates expect to be told what to do. Hofstede (1991:35) indicates that there are many supervisory personnel, structured into tall hierarchies and people reporting to one another. It is thus possible to argue that the African respondents are more accepting (they agree more strongly) with decisions made by their superiors in the hierarchical structure.

4.12.1.3 Campus where you work (A4Rec)

The campuses were recoded to two groups because of small numbers at campuses other than the Vanderbijlpark campus. There were three dependent variables where significant differences were recorded, namely FB1.0 (DJ); FC1.0 (PJ) and FD1.1 (informational justice). A summary of the differences found were as follows:

FB1.0 (Distributive Justice)

$$\bar{R}_{VDB} = 105.75; \bar{R}_O = 86.99; z = -3.264; p = 0.001; r = 0.15$$

FC1.0 (Procedural Justice)

$$\bar{R}_{VDB} = 108.79; \bar{R}_O = 79.18; z = -3.264; p = 0.001; r = 0.23$$

FD1.1 (Informational Justice)

$$\bar{R}_{VDB} = 106.33; \bar{R}_O = 85.32; z = -2.292; p = 0.022; r = 0.16$$

The results indicate that respondents on the Vanderbijlpark campus agreed significantly more strongly with these three factors than did respondents from other campuses. Using only effect sizes, as they are standardised, it can be seen that FC1.0 shows the largest effect and as such is the most important. The items involved in FC1.0 were items C1 to C6. Only items C1, C2 and C3 showed significant differences between the two campuses and these are summarised in Table 4.25.

Table 4.25: Summary of items in FC1.0 (procedural justice) showing significant differences between the mean ranks

Factor	Item	Campus	Mean rank	Z	p-value	Effect size (r)
FC1.0	C1	Vanderbijlpark	106.58	-2.501	0.012	0.18
		Other	84.87			
	C2	Vanderbijlpark	108.61	-3.322	0.001	0.24
		Other	79.63			
	C3	Vanderbijlpark	108.93	-3.458	0.001	0.25
		Other	78.82			

C1 Job decisions are made in a fair manner ($r=0.18$)

C2 Before making any job decisions my manager ensures that the concerns of all employees have been heard ($r=0.24$)

C3 Job decisions made by my manager are based on the collection of accurate and up-to-date information ($r=0.25$).

Item C3 had the largest effect size, hence it is the most important item. Respondents from the Vanderbijlpark campus agreed significantly more strongly, than respondents from other campuses with “job decisions made by my manager are based on the collection of accurate and up-to-date information”. Item C2 had virtually the same effect size and again respondents on the Vanderbijlpark campus agreed significantly more strongly. The Vanderbijlpark campus is the largest of those mentioned, as the other campuses are satellite campuses, therefore, the Vanderbijlpark campus is likely to be more hierarchically arranged with greater acceptance of the decisions made by superiors.

4.12.1.4 Highest educational qualification (A6Rec)

The various qualification groups were collapsed to two because of large numbers in the B.Tech/ Hons degree group. The only dependent variable, where significant differences could be found, was in the JS category. The results of this multivariate non-parametric test are as follows:

Job satisfaction (JS)

$$\bar{R}_{ND<L} = 111.58; \bar{R}_{Hons+} = 91.92; z = -2.434; p = 0.015; r = 0.17$$

The results show that the respondents with the higher qualification levels (honours or higher) disagreed largely with the JS factor than the lower qualifications group. Of the five items, present in the JS factor only item E1 and E5 indicated significant differences. A summary of the results is given in Table 4.26.

Table 4.26: Summary of items in FE1.0 (job satisfaction) showing significant differences between the mean ranks

Factor	Item	Campus	Mean rank	Z	p-value	Effect size (r)
FE1.0	E1	NHD or less	113.26	-2.949	0.003	0.21
		Honours+	90.27			
	E5	NHD or less	110.33	-2.275	0.023	0.16
		Honours+	92.62			

E1 In general, I am satisfied with my job

E5 I am satisfied with the personal relationship between my manager and me

The data in Table 4.26 show that item E1 had the largest effect ($r = 0.21$). Respondents with the higher qualifications disagreed largely with the satisfaction of the relationship between them and their managers. Respondents who are well qualified are generally more critical of a manager's actions and they possibly feel that they are also just as well qualified to be able to meet the requirements for being a manager. They also could feel more confident of being critical of persons who occupy higher positions in the hierarchy than they do. The respondents with higher levels of qualifications also disagreed largely than those at lower levels about general JS.

4.12.1.5 Years of experience (A7Rec)

The years of experience groups were collapsed into two groups, namely 0-10 years of experience and 11+ years of experience. When all five factors were tested together, significant differences were found to be present in only two of them. The results are summarised as follows:

Interpersonal Justice (FD1.2)

$$\bar{R}_{0-10yrs} = 92.55; \bar{R}_{11+yrs} = 115.59; z = 2.699; p = 0.007; r = 0.19$$

Job Satisfaction (JS)

$$\bar{R}_{0-10yrs} = 94.23; \bar{R}_{11+yrs} = 112.40; z = 2.119; p = 0.034; r = 0.15$$

From the data, it can be concluded that the respondents with less experience (0-10years) also disagreed more strongly with both the interpersonal and JS factors than the respondents with more experience (11+ years). As the interpersonal justice factor had the larger effect size, the six items contained in it will be analysed further. The results of items showing statistically significant differences are displayed in Table 4.27.

Table 4.27: Summary of items in FD1.2 (interpersonal justice) showing significant differences between the mean ranks

Factor	Item	Campus	Mean Rank	Z	p-value	Effect size (r)
FD1.2	D3	0-10years	92.78	2.731	0.006	0.195
		11years	115.15			
	D4	0-10years	93.63	2.434	0.015	0.170
		11years	113.54			
	D1	0-10years	92.81	2.707	0.007	0.190
		11years	115.11			
	D5	0-10years	92.63	2.764	0.006	0.197
		11years	115.45			
	D6	0-10years	93.67	2.425	0.015	0.170
		11years	113.46			

D3 When decisions are made about my job, the manager treats me with esteem

D4 When decisions are made about my job, the manager treats me with dignity

- D1 When decisions are made about my job, the manager treats me with sympathy
- D5 When decisions are made about my job, the manager is sensitive to my personal needs
- D6 When decisions are made about my job, the manager deals with me in an honest manner

The data from the table indicate that items D5 (the manager is sensitive to my personal needs) had the highest effect size and hence this difference in mean ranks between the two experience groups is the most important. It seems plausible that persons with less experience will possibly have needs that are more personal and hence it would be more difficult for a manager to accommodate all such personal needs. As one gains more experience the personal needs possibly become less. It does, however, seem as if managers should pay more attention to the personal needs of employees with experience less than 10 years. From the correspondence analysis biplot (see Figure 4.11) one can also see that age and experience are related to one another (see especially the 0 to 5 years of experience close to the 18-30 years of age and the 21+ years of experience associated with the 51 to 60 years of age group. It also seems intuitively true that as one gets older so one's personal needs become less. Managers need to be aware of this and hence aspects such as treating people with less experience with dignity and ensuring that their self-esteem needs are met is important.

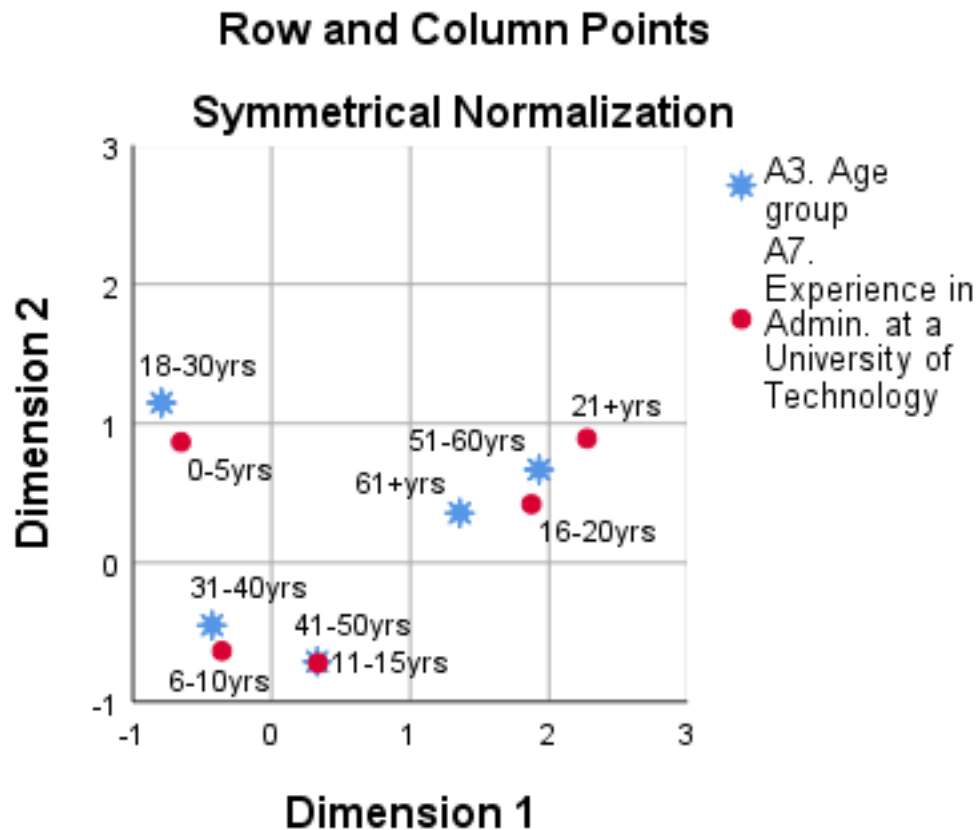


Figure 4.11: A correspondence analysis biplot showing the association between years of experience and age

4.12.2 Testing three or more independent groups for significant differences against the dependent variables.

When three or more independent groups are involved, the non-parametric Kruskal-Wallis test can be used to distinguish between the three groups when tested together. Any significant difference at this level can be further tested for pairwise differences.

4.12.2.1 Age groups (A3Rec)

There was no statistically significant difference between the four age groups. The tendency was, that the older age groups tended to agree more strongly with the five factors than the younger age groups, but they did not differ statistically significantly from one another.

4.12.2.2 Home language (A5Rec)

The home language groups were recoded into three groups, namely SeSotho, Nguni and Other. When testing the three language groups against the five dependent factors, significant differences

were found in three of the factors, namely FD1.1 (informational justice), FD1.2 (interpersonal justice) and JS (FE1.0). A summary of the Kruskal-Wallis tests was:

FD1.1:	$H(2) = 8.82; p = 0.016;$
FD1.2:	$H(2) = 8.255; p = 0.016;$
FE1.0:	$H(2) = 11.434; p = 0.000$

In all three of the above factors, the pairwise differences were present between the Nguni and SeSotho home language groups. A summary of the effect sizes for these differences is given in Table 4.28.

Table 4.28: Comparison of the effect sizes of differences between the SeSotho and Nguni home language groups with respect to informational justice, interpersonal justice and job satisfaction

Factor	Comparison	Z	\sqrt{N}	Effect size (r)
FD1.1	SeSotho vs. Nguni	-2.511	13.42	0.19
FD1.2	SeSotho vs. Nguni	-2.873	13.42	0.21
FE1.0	SeSotho vs. Nguni	-3.072	13.42	0.23

The data in Table 4.28 show that the effect size of the JS factor was perceived to be most important, followed by the interpersonal justice factor and then the informational justice factor. In each case, the SeSotho home language group agreed more strongly than did the Nguni home language group. A correspondence analysis biplot (see Figure 4.12) indicates that Ekurhuleni is closely associated with Nguni whilst Vanderbijlpark is closely associated with Sesotho. The predominant language in Ekurhuleni is isiZulu, which falls under the Nguni group (<https://www.ekurhuleni.gov.za> Accessed 28 April 2020). Hence, this difference in home language groups is also associated with the campus of the respondents. Sesotho home language respondents on the Vanderbijlpark campus agreed statistically significantly more strongly with job satisfaction than did the Nguni home language, where respondents were mostly from the Ekurhuleni campus. Differences in JS could be due to many aspects, but in this research, it is probably cultural- and campus-related.

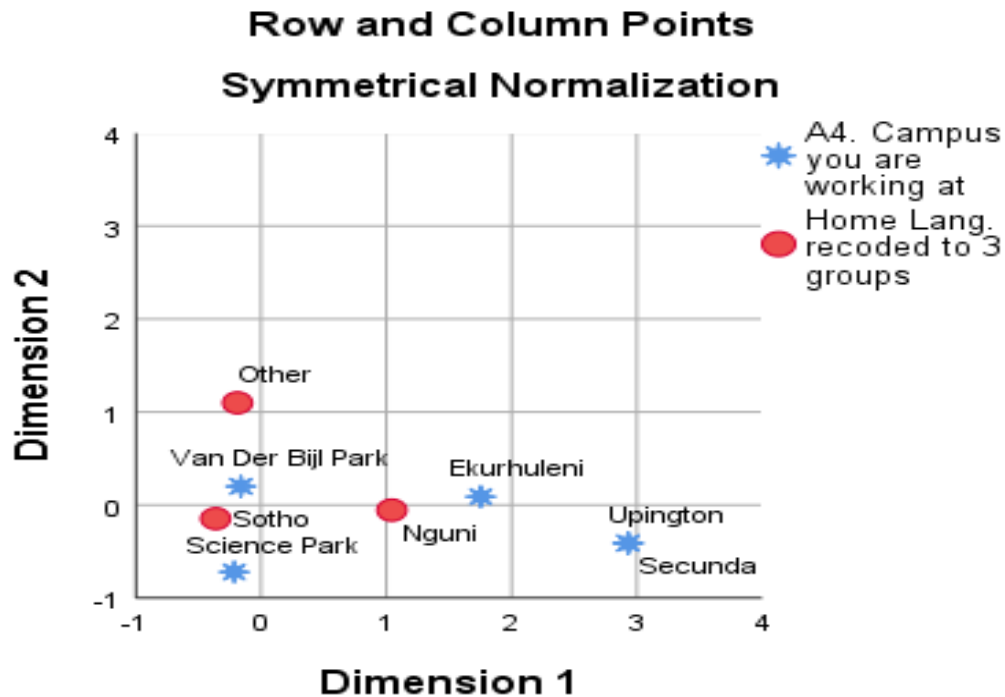


Figure 4.12: A correspondence analysis biplot showing the association between campus and home language

4.12.2.3 Category of employment (A8)

There were four categories of employment. Using the Kruskal-Wallis test, three of the five factors indicated significant differences when tested together, namely FB1.0 (DJ), FD1.2 (interpersonal justice) and FE1.0 (JS). The Kruskal-Wallis test will be given first and any pairwise differences arising will then be given.

FB1.0 (Distributive Justice)

$H(3) = 11.69; p = 0.009.$

The Kruskal-Wallis test thus indicates that the four employment groups, when tested together, differed statistically significantly at the multivariate level. However, an adjustment for type-1 error needs to be made. This was done using the Bonferroni adjustment, which makes the p-value much more rigorous. For example, the 0.05 is divided by the number of tests conducted. Hence, the 0.05 p-value is divided by six and p now becomes 0.008, which is much more rigorous for accepting or rejecting the null hypothesis. When testing the DJ factor there were six pairwise comparisons and no significant differences were present between any of the groups. The pairwise comparison of other versus temporary and other versus permanent were close but were larger than 0.008. The effect sizes of these differences indicated that other versus temporary ($r=0.28$) and other versus

permanent ($r=0.26$) were the most important, with other having the lowest mean rank in each case; hence, disagreeing most strongly with DJ.

FD1.2 (Interpersonal justice)

$$H(3) = 11.27; p=0.01$$

For interpersonal justice (FD1.2), the test at multivariate level was significant. However, at the univariate level, it was only the fixed-term appointments that differed significantly from permanent employees. The adjusted p-value was significant with an effect size $r=0.28$. Permanent employees agreed significantly more strongly with the interpersonal factor than did the fixed-term employees.

The items that were involved in this significant pairwise difference between the fixed-term appointments and permanent employees were then investigated. The appropriate statistics are given in Table 4.29.

Table 4.29: Summary of items in FD1.2 (interpersonal justice) showing significant differences between the mean ranks

Factor	Item	Appointment	Mean rank	Z	p-value (Adjusted)	Effect size (r)
FD1.2	D2	Fixed-term	80.64	2.887	0.023	0.26
		Permanent	11.84			
	D3	Fixed-term	77.92	3.084	0.012	0.27
		Permanent	111.35			
	D1	Fixed-term	74.24	3.20	0.008	0.28
		Permanent	109.12			

D1 When decisions are made about my job, the manager treats me with sympathy

D2 When decisions are made about my job, the manager treats me with attention

D3 When decisions are made about my job, the manager treats me with esteem.

If effect sizes are utilised, then the most important item was D1, followed by D3 and then D1. In each of the three items, the fixed-term employees disagreed more strongly than did the employees who were permanently appointed. It appears as if the respondents who have fixed term contracts feel that their need for self-esteem is not being met, compared to permanent employees.

4.13 SYNTHESIS OF FINDINGS

A structured questionnaire was used to investigate the relationships between OJ and JS among administrative staff of a university of technology in SA. Organisational justice was postulated as a multi-dimensional construct composed of DJ (Section B), PJ (Section C) and IJ (Section D). These three latent variables (DJ, PJ and IJ) each had a number of manifest variables associated with them and an EFA (in the form of a PAF with Varimax rotation) revealed that OJ was composed of the three postulated underlying constructs of DJ, PJ and IJ. However, IJ was itself composed of two first-order factors, namely informational justice (FD1.1) and interpersonal justice (FD1.2). All four of the constructs involved in OJ had diverging validity and on removal of certain items had converging validity. With the measurement-part of the OJ construct found to be in order, a CFA model was drawn in AMOS 26 in order to test this hypothetical structure of

OJ, which consisted of four constructs, in a statistical way. AMOS 25 was utilised and the various fit indices indicated that the model was in order (see Figure 4.6). The structural part of the model was now investigated by first adding OJ to the model with regression pathways towards DJ, PJ, informational justice (FD1.1) and interpersonal justice (FD1.2) (see Figure 4.7). Secondly, JS and its five manifest variables were added to the model. A pathway from OJ to JS was added to the model (see Figure 4.8). All of the regression pathways were direct and were statistically significant. Hence, one could conclude that OJ had direct influences on DJ, PJ, IJ and JS. Structural Equation Modelling was not used to investigate any indirect influences of the constructs on JS the researcher found the process tool, as encapsulated in SPSS 26, preferable.

As more than two constructs were involved in association with one another, the possibility of mediation cannot be excluded. Hence, the researcher decided to investigate the effect of PJ (FC1.0) as predictor variable on JS (FE1.0) as outcome variable with DJ (FB1.0) and IJ (FD2.0) as mediating variables (see Figure 4.9). This analysis indicated that PJ had a statistically significant direct influence on JS as well as two significant indirect effects on JS via the two mediators DJ (FB1.0/M1) and IJ (FD2.0/M2). A similar result was found when the IJ construct was separated into its two components. One could possibly conclude that OJ has a direct effect on JS as well as an indirect effect via the components of OJ when they act as mediators in the association. The researcher did not investigate the possibility of moderation effects and it is likely that both mediation and moderation are involved. It is recommended, that further research be done regarding this possible relationship.

Multiple regression was also used to investigate the influence of OJ on JS. The four constructs involved in OJ (DJ, PJ, informational justice and interpersonal justice) acted as predictors and JS as outcome. The analysis indicated that all four constructs involved in OJ had a significant influence on JS. However, when using standardised beta values, perceptions of interpersonal justice (FD1.2) was found to be the best predictor of JS, followed by PJ (FC1.0), DJ (FB1.0) and informational justice (FD1.1). A bivariate correlation confirmed that perceptions of interpersonal justice, related to feelings of being treated with dignity and respect and self-esteem, had the strongest correlation with JS. The strongest relationship with JS was when all four predictors of OJ were included in the model.

Non-parametric procedures were used to investigate possible associations between the four constructs in OJ and the one in JS, as dependent variables, versus the various biographic groups as independent variables. Respondents from the African race groups agreed statistically significantly more strongly with the informational justice factor (FD1.2) than did the other race

groups. With respect to the various campuses of a university of technology, the respondents from the Vanderbijlpark campus agreed significantly more strongly with DJ, PJ and IJ than did respondents from other campuses. Participants with higher educational qualifications agreed significantly more strongly with the JS factor than did respondents with lower qualifications. With respect to years of experience, respondents with the fewer years of experience (0-10years) disagreed significantly more strongly with both interpersonal justice (FD1.2) and JS (FE1.0) than did the group with more experience (11+years). The significant difference on the interpersonal factor could be important as it refers to ensuring that people are treated with the necessary dignity and respect as well as attending to their self-esteem needs. The least experienced group seems to perceive an unfairness when it comes to interpersonal justice and JS. Statistically significant differences were also found between the home language groups regarding informational justice (FD1.1), interpersonal justice (FD1.2) and JS. The differences between these dependent variables and the home language groups were largest on JS, followed by interpersonal justice (FD1.2) and informational justice (FD1.1). The SeSotho home language group, predominant on the Vanderbijlpark and Science Park campuses, agreed significantly more strongly with these factors than did the Nguni home language group who were foremost on the Ekurhuleni campus. This difference could be due to ethnic differences between these two SeSotho and Nguni home language groups. In the categories of employment groups, the respondents with fixed-term appointments disagreed significantly more strongly with DJ than did the permanent employees. It seems logical that fixed-term employees, who have fewer benefits than permanent employees, should agree less strongly with how justice is distributed. With respect to interpersonal justice factor FD1.2, the fixed-term employees also disagreed significantly more strongly than did permanent employees. Again, it appears logical that fixed-term employees will agree less strongly with interpersonal justice being fair, as perceptions will be that permanent employees are treated with a greater degree of fairness than they are.

4.14 CONCLUSION

Chapter 4 reported on the data collection, analysis, interpretation and results of the empirical findings. Both pilot and main survey results were analysed. A descriptive analysis of Section A of the research instrument was undertaken. Tables depicting frequencies and percentages were used to describe the demographic information of respondents. Overall analyses of the study, such as factor analysis, regression analysis and correlations, were undertaken on items in Sections B, C, D and E of the research instrument. Reliability and validity assessment procedures were conducted and the results were found reliable, as indicated by the Cronbach's alpha achieved in Sections B,

C, D and E. Exploratory factor analytic techniques were used to determine the construct validity of the constructs of OJ and JS. Structural equation modelling and process mediation analyses were used to show the direct and indirect effects of the OJ constructs on JS. Furthermore, SEM and process modelling were utilised to indicate the direct effect of the predictor (PJ) acting on JS as outcome. Indirect effects of PJ on JS were also present through the mediators of DJ and IJ. Hence, one could conclude that the aim of the research namely to determine the perceptions of OJ on JS among the administrative staff at a university of technology was achieved in that OJ has a significant positive direct influence on JS as well as significant indirect effects via the sub-dimensions of OJ. Multiple regression was used to indicate which of the sub-dimensions of OJ had the largest effect on JS. Furthermore, non-parametric statistical procedures were employed to investigate significant differences between independent groups and the dependent constructs present in the sample. The reliability and various validity measures of the measuring instrument were also highlighted.

In the next and final chapter, a general overview of the study is provided. The achievement of the theoretical and empirical objectives is discussed. Recommendations, limitations and implications for future research arising from the study are provided. Finally, the concluding remarks are presented.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS OF THE STUDY

5.1 INTRODUCTION

The data analysis and the interpretation of the results were discussed in Chapter 4. This chapter summarises the conclusions that were drawn from the research findings. It includes conclusions on the literature review and empirical study and indicates the extent to which the objectives were met. The recommendations and limitations of the empirical study are outlined as well as recommendations for future research.

5.2 OVERVIEW OF THE RESEARCH

The main purpose of this study was to determine the perceptions of OJ and its influence on JS among administrative staff at a university of technology.

Chapter 1 provided the introduction and background of the study. The theoretical and empirical objectives of the study were also formulated. The conceptual framework and hypotheses were discussed, as well as the problem statement.

Chapter 2 provided an overview of the literature on the Equity Theory, OJ, its dimensions as well as JS. The chapter only reviewed literature on OJ and JS in general. The analyses of the elements of JS were also provided.

The research design and methodology utilised in this study was outlined in Chapter 3. The sampling and data collection methods used were discussed. The methods of data analysis and statistical techniques were outlined with the reliability, validity and ethical issues also presented. In addition, the research design, methodology, statistical analysis, reliability and validity concerns of the study were formulated

Chapter 4 dealt with the presentation, analysis and interpretation of the data. A rationalisation of the pilot study results and descriptive statistics was provided. The results of the factor, mediation process, SEM, correlation and regression analysis were discussed with statistical analysis of the data. The reliability and the validity of the measuring instrument were also included.

Chapter 5 is a summary of the important findings of the study. Recommendations originating from the study are also discussed, while the limitations of the study and implications for further research are outlined.

5.3 EVALUATION OF OBJECTIVES

The theoretical and empirical objectives of the study were formulated in Section 5.2 of Chapter 1. The extent to which the objectives were achieved is indicated in the following sections:

5.3.1 Theoretical objectives

5.3.1.1 To conduct a literature review on the dimension of organisational justice

This theoretical objective was achieved through a literature review of various sources such as books, journals and other review sources in Chapter 2, Sections 2.2, 2.3, 2.4 and 2.5. Section 2.2 indicates the several definitions of the various constructs of OJ that exist. There are three main dimensions of OJ, namely DJ, PJ and IJ. In Section 2.3, DJ definitions as well as the input-output relationship was discussed. Procedural justice was discussed in Section 2.4, together with four pillars of PJ. Section 2.5 evaluated the literature on IJ.

5.3.1.2 To provide an overview of job satisfaction

The literature review of JS revealed that its theories strongly overlap with theories explaining human motivation. In general, the motivational theories can be classified into three broad categories, namely Maslow's Hierarchy of Needs Theory, the Equity Theory and the Two-factor Theory. Motivational theories are discussed in Chapter 2, Section 2.6.

5.3.1.3 To analyse the literature on the relationship between organisational justice and job satisfaction and the methodology used to measure it

The literature review, as discussed in Section 2.9 of Chapter 2, outlined the relationship between OJ and JS. It was found that OJ had direct influences on DJ, PJ, IJ and JS. The analysis showed that PJ had a statistically significant direct influence on JS as well as two significant indirect effects on JS through the two mediators DJ (FB1.0/M1) and IJ (FD2.0/M2). Comparable results were found when the IJ construct was separated into its two components informational justice (FD1.1) and interpersonal justice (FD1.2). The conclusion was that OJ has a direct effect on JS as well as an indirect effect through the components of OJ when they act as mediators in the association. There were three dimensions of OJ, namely DJ, PJ and IJ. The methodology review, as discussed in Section 6.2 of Chapter 3, indicates the measuring instrument used to conduct the study.

The following empirical objectives were addressed in this study:

5.3.2 Empirical objectives

The following empirical objectives were formulated in Section 5.3 of Chapter 1:

5.3.2.1 To determine the perceptions of the various components of organisational justice

Using exploratory factor analysis in the form of PAF with varimax rotation, this study corroborated that OJ was composed of three underlying components, namely PJ, DJ and IJ. Both PJ and IJ had construct, converging and diverging validity and Cronbach and composite reliability coefficients larger than 0.80. Distributive justice showed construct validity but did not exhibit converging or diverging validity. It had sufficiently high Cronbach and composite reliability coefficients to use for further analysis. Factor analysis further revealed that IJ was composed of two underlying sub-dimensions, which were named perceptions of informational justice (FD1.1) and perceptions of interpersonal justice (FD1.2). Both factors showed construct, converging and diverging validity (see Table 4.20) and high Cronbach alpha and composite reliability. Thus, OJ seems to have four sub-dimensions involved in its structure, namely PJ, DJ, interpersonal justice and informational justice. The researcher then made use of CFA to support the measurement part of the model via AMOS 26. Slight modification of the model resulted in good fit indices for the model drawn (see Figure 4.6). A SEM was then drawn using AMOS 26 to show the structural part of the model by adding causal links between OJ and its four sub-dimensions. Good model fit indices suggested that this model was a good representation of the structure of OJ (see Figure 4.7)

With respect to the JS-construct, a factor analytic procedure also showed that the items used in JS formed one factor with construct, converging and diverging validity with high reliability coefficients (see Table 4.18).

Having shown that OJ has four first-order factors in its structure, JS was added to the model drawn in Figure 4.8. Model fit indices were good and the result showed a strong direct effect from OJ to JS. The standardised direct (unmediated) effect of OJ on JS was 0.89; that is, due to the direct (unmediated) effect of OJ on JS. When OJ increased by one standard deviation, JS increased by 0.89 standard deviations. Organisational justice thus has a direct causal effect on JS. To determine possible indirect effects of the components of OJ (PJ, DJ and IJ) on JS, the researcher utilised the process model of Hayes (2018).

Using PJ as predictor and JS as outcome variable, the researcher showed the possible effects of IJ and DJ as mediators in the interaction between the predictor (PJ) and the outcome (JS) (see Figures 4.9 and 4.10). The parallel mediator model indicated that the total effect of PJ on JS consisted of a direct effect as well as two specific indirect effects of X on Y through M1 (DJ) and M2 (IJ).

Multiple regression analysis suggested that perceptions of interpersonal justice (FD1.2) was the best predictor of JS ($\beta=0.317$), followed by perceptions of PJ (FC1.0) with $\beta=0.256$ and then DJ and IJ. Hence, all four of the OJ factors are significant predictors of JS and, as these factors increase in value, so does JS.

The researcher thus concludes that OJ has both direct and indirect mediating effects on the perceptions of JS of administrative staff at a university of technology in SA.

Next, the researcher investigated the possible associations between the various independent groups in the sample and the dependent variables of OJ and JS using non-parametric tests. Some of the more important findings were:

- The respondents in the African race group agreed significantly more strongly with the items in the IJ factor than respondents in the other race groups. Interactional justice is associated with race and, hence, probably with cultural differences.
- Respondents from the different campuses differed statistically significantly with respect to their perceptions of DJ, PJ and IJ. Respondents from the main campus at Vanderbijlpark agreed more strongly with the items in these factors than did respondents from the satellite campuses. Geographical location, thus, seems to be associated with perceptions about these factors.
- Level of educational qualification was associated with JS where respondents with higher qualifications agreed significantly less strongly with the JS factor. The level of educational qualification is associated with perceptions of JS.
- Years of experience was associated with IJ and the less the experience, the lower the agreement with the items present in IJ.
- Home language was associated with JS, IJ and informational justice. Respondents from the SeSotho home language group agreed significantly more strongly with each of these factors than respondents from the Nguni home language group. This finding is probably related to the campus of respondents, as the Vanderbijlpark campus consists mainly of SeSotho home language administrative staff, while staff at the Ekurhuleni campus mostly use Nguni as home language.

- Administrative staff with permanent appointments differed statistically significantly from staff who had temporary appointments regarding perceptions about distributive justice.
- Administrative staff employees also agreed significantly more strongly than those with fixed term contracts with respect to perceptions of interactional justice.

5.4 RECOMMENDATIONS

Based on the empirical findings acquired in this study, the following recommendations are suggested to address the challenges with regard to the implementation of OJ and its effect on JS within a university of technology in SA:

Perceptions of OJ effects JS both directly and indirectly. When OJ is acts as predictor variable and OJ as outcome variable, then the components of OJ have both a direct and indirect influence via mediators of OJ. It is thus recommended that attention be given to all the components of OJ as improving perceptions about IJ, PJ and DJ will positively influence perceptions of the JS of the administrative staff. In the training and development of administrative staff, attention should be given to issues of OJ so that employees at all appointment levels become familiar with the constructs utilised in OJ. An open discussion, where employees are allowed to make use of opportunities to participate freely in discussions as well as to reflect on their own thinking should be promoted and facilitated in all training and development opportunities.

The contextual factors that influence both OJ and JS should also be considered when policies related to administrative staff are developed. Among the most important are cultural differences, geographical locations and levels of educational qualifications. Managers often feel threatened by well-qualified employees who voice their opinions and often tend to ignore such opinions. Any decisions made should always be in the best interest of the institution and not on bureaucratic policies formulated at higher management levels. The role of OJ and its impact on JS is important and should not be used to ensure only compliance of employees to formulated policies at higher levels of the institutional hierarchy. An open dialogue about OJ and its components and their effect on JS, when training and developing administrative staff, is recommended, as it could prevent a polarisation of views and foster commitment to challenge predominant ways of thinking about things. Clear policies, where employees feel free to voice their concerns regarding perceptions of unfair treatment by managers should not only be present but should also be implemented without fear of possible victimisation of any sort.

The study limitations and future research opportunities follow.

5.5 STUDY LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES

This study contributes significantly to academia and practice; however, it is limited in some areas. The study was limited to one university of technology in SA and the results cannot be generalised to all HEIs in SA and elsewhere in the world. Consideration must be given to the limited sample size of 200 respondents in this study and a larger sample might have resulted in different findings. In this study only one research approach (quantitative) was utilised. In combination with a qualitative approach, deeper understanding of the perceptions of respondents might have been obtained.

The findings of this study can be further advanced by investigating the relationship between OJ and other elements of JS not covered in this study. Further research can be conducted using both mediation and moderation to investigate the associations between OJ and JS. The scope of this study could be extended to other universities of technology in SA in order to obtain a more comprehensive understanding of perceptions of OJ and their effect on JS. It may also be of importance to conduct a qualitative study relating to the perceptions of OJ and JS, which may allow the findings to be openly discussed with perceptions exposed to multiple views.

5.6 CONCLUSION

The purpose of this study was to determine the perceptions of the effect of DJ (FB1.0), PJ (FC1.0), informational justice (FD1.1) and interpersonal justice (FD1.2) on JS (FE1.0) among administrative staff members at a university of technology in SA. A direct effect was present between OJ and JS. Indirect as well as mediating effects were also found to exist between the components of OJ and JS.

This study serves to provide the management of a university of technology with possible answers to issues related to perceptions of the effect of OJ on JS. Management could gain a better in-depth understanding of the perception of OJ and JS among administrative staff. The awareness achieved in the study intends to contribute to supplementary recommended processes to improve OJ and JS concerns. This should support a university of technology to meet the continuously increasing service delivery demand. Improved perceptions of OJ and JS could enhance the motivation levels of administrative staff. Ultimately, a win-win situation could be created whereby the administrative staff are motivated with satisfactory levels of JS and the management of a university of technology will note improved administrative performance.

In this chapter, the summary of the study was presented. Theoretical and empirical objectives were elucidated and discussed. Recommendations were made based on empirical findings from the study. The limitations of the study were outlined and future research opportunities were highlighted.

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ANNEXURE A: QUESTIONNAIRE

QUESTIONNAIRE COVER LETTER



Vaal University of Technology
Private Bag X021
Vanderbijlpark
1900
South Africa

Dear participant,

I am a postgraduate student at the Vaal University of Technology studying towards a Magister Technologiae degree in Business Administration. The title of my research project is: “The influence of perceptions of organisational justice on job satisfaction among administrative staff at a university of technology in South Africa”.

You are invited to participate in this research study by completing the attached survey questionnaire. This questionnaire consists of three sections. Before you complete the enclosed questionnaire, I wish to confirm that:

- Your employer has given me permission for this research to be carried out.
- Your participation in this study is voluntary and you are free to withdraw at any time.
- Your anonymity will be maintained and no comments will be ascribed to you by name in any written document or verbal presentation, nor will any data be used from the questionnaire that might identify you to a third party. Please do not write your name anywhere on the questionnaire.
- On completion of the research, a copy of the completed research report will be made available to you upon request.
- Completion of the questionnaire will take approximately 10 minutes.

Your response and time is greatly appreciated. Thank you.

Yours sincerely,

Ms Nolubabalo Cana

+27(0) 71 754 3170

THE INFLUENCE OF PERCEPTIONS OF ORGANISATIONAL JUSTICE ON JOB SATISFACTION AMONG ADMINISTRATIVE STAFF AT A UNIVERSITY OF TECHNOLOGY IN SOUTH AFRICA

SECTION A: DEMOGRAPHIC INFORMATION

Please select and CIRCLE one of the numbers to identify your choice and the relevance to you.

A1	Gender	Male	1	Female	2
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A2	Race	African	1	White	2	Coloured	3	Indian	4	Other	5
A3	Age	18-30 Years	1	31-40 Years	2	41-50 Years	3	51-60 Years	4	61+ Years	5

A4	Please select the campus you are working at										
	Vanderbijlpark	1	Secunda	2	Upington	3	Ekurhuleni	4	Science Park	5	

A5	Home language											
	English	1	IsiZulu	2	Sepedi	3	Ndebele	4	Xitsonga	5	IsiXhosa	6
	Afrikaans	7	Sesotho	8	Setswana	9	SiSwati	10	TshiVenda	11	Other	12

A6	Highest level of education						
	Less than National Senior Certificate	National Senior Certificate	National Diploma	Bachelor's degree	BTech/ Honours degree	Master's degree	Doctorate
	1	2	3	4	5	6	7

A7	Experience in administration at a University of Technology					
	0-5 Years	6-10 Years	11-15 Years	16-20 Years	16-20 Years	21 + Years
	1	2	3	4	5	6

A8	Employment categories at a University of Technology							
	Permanent	1	Fixed term	2	Temporary	3	Other	4

	Specify Other:
--	----------------

CIRCLE ONLY ONE NUMBER FOR EACH STATEMENT

SECTION B: EMPLOYEES' PERCEPTIONS TOWARD DISTRIBUTIVE JUSTICE								
Please indicate the extent to which you agree with the following statements								
Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1)								
B1	I feel my work schedule is fair	Strongly Disagree	1	2	3	4	5	Strongly Agree
B2	I think that my pay is fair	Strongly Disagree	1	2	3	4	5	Strongly Agree
B3	I consider my work load as fair	Strongly Disagree	1	2	3	4	5	Strongly Agree
B4	Overall the rewards I receive are fair	Strongly Disagree	1	2	3	4	5	Strongly Agree
B5	I feel that my job responsibilities, compared to others at the same post level, are fair	Strongly Disagree	1	2	3	4	5	Strongly Agree

CIRCLE ONLY ONE NUMBER FOR EACH STATEMENT

SECTION C: EMPLOYEES' PERCEPTIONS TOWARD PROCEDURAL JUSTICE								
Please indicate the extent to which you agree with the following statements.								
Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1)								
C1	Job decisions are made in a fair manner	Strongly Disagree	1	2	3	4	5	Strongly Agree
C2	Before making any job decisions my manager ensures that the concerns of all employees have been heard	Strongly Disagree	1	2	3	4	5	Strongly Agree
C3	Job decisions made by my manager are based on the collection of accurate and up-to-date information	Strongly Disagree	1	2	3	4	5	Strongly Agree
C4	When employees oppose a decision, my manager readily provides any additional information requested	Strongly Disagree	1	2	3	4	5	Strongly Agree
C5	All job-related decisions made are equitably applied throughout the organisation	Strongly Disagree	1	2	3	4	5	Strongly Agree
C6	Employees are allowed to test or appeal job decisions made by their managers	Strongly Disagree	1	2	3	4	5	Strongly Agree

CIRCLE ONLY ONE NUMBER FOR EACH STATEMENT

SECTION D: EMPLOYEES' PERCEPTIONS TOWARD INTERACTIONAL JUSTICE Please indicate the extent to which you agree with the following statements. Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1)								
D1	When decisions are made about my job, the manager treats me with sympathy	Strongly Disagree	1	2	3	4	5	Strongly Agree
D2	When decisions are made about my job, the manager treats me with attention	Strongly Disagree	1	2	3	4	5	Strongly Agree
D3	When decisions are made about my job, the manager treats me with esteem	Strongly Disagree	1	2	3	4	5	Strongly Agree
D4	When decisions are made about my job, the manager treats me with dignity	Strongly Disagree	1	2	3	4	5	Strongly Agree
D5	When decisions are made about my job, the manager is sensitive to my personal needs	Strongly Disagree	1	2	3	4	5	Strongly Agree
D6	When decisions are made about my job, the manager deals with me in a honest manner	Strongly Disagree	1	2	3	4	5	Strongly Agree
D7	When decisions are made about my job, the manager shows concern for my rights as an employee	Strongly Disagree	1	2	3	4	5	Strongly Agree
D8	When decisions are made about my job, the manger first discusses the possible implications of the decision with me	Strongly Disagree	1	2	3	4	5	Strongly Agree
D9	The manager offers a suitable explanation for decisions made about my job	Strongly Disagree	1	2	3	4	5	Strongly Agree
D10	When making decisions about my job, the manager offers explanations that make sense to me	Strongly Disagree	1	2	3	4	5	Strongly Agree
D11	My manager very clearly explains any decisions that influence my job	Strongly Disagree	1	2	3	4	5	Strongly Agree

CIRCLE ONLY ONE NUMBER FOR EACH STATEMENT

SECTION E: JOB SATISFACTION

Please indicate the extent to which you agree with the following statements.

Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1)

E1	In general, I am satisfied with my job	Strongly Disagree	1	2	3	4	5	Strongly Agree
E2	I find that my opinions are respected at work	Strongly Disagree	1	2	3	4	5	Strongly Agree
E3	I am satisfied with the recognition I get for the work I do	Strongly Disagree	1	2	3	4	5	Strongly Agree
E4	I am satisfied that my pay compares well with that for similar jobs in other organisations	Strongly Disagree	1	2	3	4	5	Strongly Agree
E5	I am satisfied with the personal relationship between me and my manager	Strongly Disagree	1	2	3	4	5	Strongly Agree

Thank you for your participation. Your views are much appreciated.

ANNEXURE B: LETTER FROM THE LANGUAGE EDITOR



Masters (Linguistics: Intercultural Communication); BA (Hons) Lang Prac; ACE; NPDE
Reg. Member of SATI and SACE

English language editing

SATI membership number: 1002595

Tel: 083 654 4156

E-mail: lindascott1984@gmail.com

5 November 2020

To whom it may concern

This is to confirm that I, the undersigned, have language edited the **dissertation** of

Nolubabalo Cana

for the degree

Magister Technologiae

entitled:

The influence of perceptions of organisational justice on job satisfaction among administrative staff at a university of technology in South Africa

The responsibility of implementing the recommended language changes rests with the author of the dissertation.

Yours truly,

A handwritten signature in cursive script, appearing to read 'Linda Scott'.

Linda Scott