

**Developing a framework for assessing the influence of public service motivation on core work evaluation and counterproductive work behaviour**

**PM Masukela**



**[orcid.org/0000-0003-2278-5163](https://orcid.org/0000-0003-2278-5163)**

Thesis submitted for the degree *Doctor of Philosophy* in Business Management at the North-West University

Promoter: Prof PA Botha

Examination: October 2022

Student number: 16486285

## **DECLARATION**

I, Phakane Moses Masukela, hereby declare that the study entitled “Develop a framework for assessing the influence of public service motivation on core work evaluation (job satisfaction, organisational commitment, work engagement) and counterproductive work behaviour in North West Provincial Government Departments” has not been conducted before nor submitted before at this university or any other university by myself or anyone. This study is original work and all authors that are used in the study have been duly acknowledged in the in-text citations and a fully completed reference list.

Phakane Moses Masukela      Date:

## **ACKNOWLEDGEMENTS**

- Firstly, I want to thank my Heavenly Father and Creator for His Gracious Grace, Love and Mercy for granting me the ability, insight and wisdom to have started and completed this academic journey.
- To my study promoter, Professor Petrus Albertus Botha, thank you for your guidance, support and mentorship throughout this journey of my study.
- To my lovely life partner Ofentse Refilwe Mathibela, and my son Omogolo Lereko Masukela, my Mom Annah, my dad Nelson, my twin sisters Vivian and Victoria, and the entire Masukela's family: thank you very much for your moral support, prayers and words of encouragement all the time.
- A special thanks to my study support mentors, Professor Johannes Tshepiso Tsoku and Professor Lebotse Daniel Metsileng, for their support, sacrifices, encouragement and patience throughout my journey, and your families for allowing me to take up their quality time daily.
- To my former supervisor Ms Ingrid Setshedi for her support and valuable friends, Professor Teboho Mosikari, Dr Lawrence Diteboho Xaba and others for their sterling friendship during my studies.
- Lastly, thanks to all respondents: without your contribution, this study would not have been possible.

## **DEDICATION**

This work is dedicated to the following people who have inspired me in many ways:

- My friends Professor Johannes Tshepiso Tsoku and Professor Lebotse Daniel Metsileng for mentoring, encouragement, support, sacrifices, and patience throughout my journey in this study.
- My life partner, Ofentse Refilwe Mathibela, my son Omogolo Lereko Masukela for words of encouragement throughout my study period, and the Masukela family for their prayers.
- My mom Annah, my dad Nelson and twin sisters, Thembeke and Thenjiwe, for their understanding when I could not go home regularly.
- My friends, Professor Teboho Jeremiah Mosikari and Dr Lawrence Diteboho Xaba, for instilling in me the quest to always strive for quality and condemn mediocrity.
- Ms Mmathapelo Modibedi and Gofentseone Modibedi for allowing me to use their family time and supporting me with everything they had.
- Mr and Mrs Mathibela for their general support and words of encouragement on my journey in this study.
- My late grandmother, Mamosa Masukela: may her soul rest in peace.

## **ABSTRACT**

This study's primary aim was to develop a framework for assessing the influence of public service motivation on core work evaluation (job satisfaction, organisational commitment, work engagement) and counterproductive work behaviour among employees at 11 North-West Provincial Government departments.

No previous research has investigated the influence of public service motivation (independent variable) on core work evaluations such as job satisfaction, organisational commitment, work engagement and counterproductive work behaviour (dependent variables) in the South African public service context. Therefore, this study filled the gap by developing a framework for assessing the influence of public service motivation on the core work evaluation of employees in the North-West Provincial Government departments.

The study was conducted within the quantitative research paradigm using a cross-sectional correlational survey design. The population included 61 954 public-service employees. The study used a stratified random sampling method consisting of four subgroups: senior management, middle management, junior middle management and elementary employees.

Descriptive statistics were used to determine the levels of perceived public service motivation, job satisfaction, work engagement, organisational commitment, and counterproductive work behaviour.

The results revealed positive or above-average public service motivation and neutral job satisfaction levels. However, slightly low organisational commitment and moderate work engagement levels were reported. In addition, very low levels of counterproductive work behaviour were reported. The measuring instruments were reliable and valid in the North-West Provincial Government departments. Work engagement and job satisfaction significantly predict public service motivation. Also, work engagement and organisational commitment significantly predict counterproductive work behaviour.

This study provides a theoretical and conceptual framework that public-sector managers can use to assess the impact of public service motivation on core work evaluation and counterproductive work behaviour. Ultimately this research contributes

to the theory, conceptualisation and establishment of relationships between organisational behavioural dimensions such as public service motivation, job satisfaction, organisational commitment, work engagement and counterproductive work behaviour.

DECLARATION.....	i
ACKNOWLEDGEMENTS .....	ii
DEDICATION .....	iii
ABSTRACT .....	iv
LIST OF FIGURES.....	viii
LIST OF TABLES.....	ix
LIST OF ACRONYMS.....	xi
CHAPTER 1: INTRODUCTION AND BACKGROUND OF THE STUDY .....	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND.....	3
1.3 PROBLEM STATEMENT .....	5
1.4 RESEARCH OBJECTIVES, QUESTIONS AND HYPOTHESES .....	7
1.5 SIGNIFICANCE OF THE STUDY.....	9
1.7 PRELIMINARY LITERATURE REVIEW.....	10
1.7.1 Public service motivation .....	10
1.7.2 Core work evaluation .....	11
1.7.3 Counterproductive work behaviour .....	13
1.8 CONTRIBUTION OF THE STUDY.....	16
1.9 RESEARCH PHILOSOPHY .....	17
1.10 RESEARCH METHOD AND DESIGN.....	18
1.11 POPULATION AND SAMPLE .....	18
1.12 MEASURING INSTRUMENTS.....	19
1.13 STATISTICAL TECHNIQUES FOR DATA ANALYSIS.....	19
1.13.1 Descriptive statistics .....	20
1.13.2 Cronbach's alpha coefficients.....	20
1.13.3 Exploratory and confirmatory factorial analysis .....	20
1.13.4 Independent-samples test and multivariate analysis of variance.....	20
1.13.5 Pearson product-moment correlation coefficient and multiple regression analysis.....	21
1.14 RESEARCH ETHICS .....	21
1.15 STRUCTURE OF THE THESIS .....	21
1.16 SUMMARY .....	22
CHAPTER 2: LITERATURE REVIEW OF PUBLIC SERVICE MOTIVATION, CORE WORK EVALUATION AND COUNTERPRODUCTIVE WORK BEHAVIOUR.....	23
2.1 INTRODUCTION.....	23
2.2 THEORETICAL-CONCEPTUAL FRAMEWORK OF PUBLIC SERVICE MOTIVATION.....	23
2.2.1 Public service motivation theories .....	25
2.2.2 Public service motivation dimensions .....	27
2.3 THEORETICAL-CONCEPTUAL FRAMEWORK OF CORE WORK EVALUATION .....	31

2.3.1 Job satisfaction .....	32
2.3.2 Job satisfaction theories .....	33
2.3.3 Job satisfaction facets or dimensions .....	38
2.4 ORGANISATIONAL COMMITMENT .....	39
2.4.1 Organisational commitment theories .....	39
2.4.2 Organisational commitment dimensions .....	42
2.5 WORK ENGAGEMENT .....	44
2.5.1 Work engagement theories.....	45
2.5.2 Work engagement dimensions .....	45
2.6 THEORETICAL-CONCEPTUAL FRAMEWORK OF COUNTERPRODUCTIVE WORK BEHAVIOUR .....	46
2.6.1 Theories of counterproductive work behaviour .....	47
2.6.2 Dimensions of counterproductive work behaviour .....	49
2.7 DIFFERENCES IN MEAN JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT, PUBLIC SERVICE MOTIVATION AND COUNTERPRODUCTIVE SCORES .....	55
2.8 RELATIONSHIPS BETWEEN PUBLIC SERVICE MOTIVATION, CORE WORK EVALUATION AND COUNTERPRODUCTIVE WORK BEHAVIOUR .....	56
2.9 SUMMARY .....	69
CHAPTER 3: RESEARCH METHODOLOGY AND DESIGN .....	71
3.1 INTRODUCTION .....	71
3.2 RESEARCH PHILOSOPHY .....	71
3.3 RESEARCH METHODOLOGY .....	73
3.4 RESEARCH DESIGN .....	75
3.5 TARGET POPULATION .....	77
3.6 SAMPLING METHOD .....	78
3.7 MEASURING INSTRUMENTS .....	80
3.8 RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENTS .....	81
3.9 PROCEDURES FOR DATA COLLECTION .....	87
3.9.1 Administration of the returned questionnaires .....	87
3.9.2 Handling of the returned questionnaires .....	88
3.10 DATA ANALYSIS .....	88
3.10.1 Descriptive statistics .....	89
3.10.2 Reliability and validity of the measuring instruments .....	90
3.10.3 Independent-samples t-test and analysis of variance with multiple variables (MANOVAs) .....	92
3.10.4 Pearson's product-moment correlation .....	93
3.10.5 Analyses of multiple regression .....	94
3.11 ETHICAL CONSIDERATIONS .....	94
3.12 SUMMARY .....	95
CHAPTER 4: DATA ANALYSIS AND INTERPRETATION OF RESULTS .....	96
4.1 INTRODUCTION .....	96
4.2 DESCRIPTIVE STATISTICS .....	96
4.2.1 Demographic characteristics of the sample .....	97
4.2.2 Measures of central tendency .....	99
4.2.3 Descriptive statistics of the PSM, JS, OC, WE and CWB levels .....	100
4.3 RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENTS .....	102
4.4 COMPARISON OF EMPLOYEES' PERCEIVED JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT, PUBLIC SERVICE MOTIVATION AND COUNTERPRODUCTIVE BEHAVIOUR MEANS SCORES	

BETWEEN GENDER, AGE GROUPS, YEARS OF SERVICE AND DEPARTMENTS .....	117
4.5 THE CORRELATION COEFFICIENT BETWEEN THE VARIABLES.....	125
4.6 MULTIPLE REGRESSION ANALYSIS RESULTS .....	126
4.7 SUMMARY.....	127
CHAPTER 5: DISCUSSIONS OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS .....	128
5.1 INTRODUCTION.....	128
5.2. PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT AND COUNTERPRODUCTIVE WORK BEHAVIOUR LEVELS.....	128
5.3 RELIABILITY AND VALIDITY OF THE PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT, AND COUNTERPRODUCTIVE WORK BEHAVIOUR SCALES .....	129
5.4 DIFFERENCES IN THE PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT AND COUNTERPRODUCTIVE WORK BEHAVIOUR BETWEEN GENDER, AGE GROUPS, DEPARTMENTS, SALARY LEVELS, SERVICE YEARS AND QUALIFICATIONS .....	142
5.5 RELATIONSHIPS BETWEEN PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT AND COUNTERPRODUCTIVE WORK BEHAVIOUR.....	144
5.6 BEST PREDICTORS OF PUBLIC SERVICE MOTIVATION AND COUNTERPRODUCTIVE WORK BEHAVIOUR: JOB SATISFACTION, ORGANISATIONAL COMMITMENT OR WORK ENGAGEMENT .....	148
5.7 MANAGERIAL IMPLICATIONS.....	148
5.8 SIGNIFICANCE AND CONTRIBUTION OF THE STUDY.....	149
5.9 LIMITATIONS OF THE STUDY.....	150
5.10 CONCLUSIONS .....	150
<b>REFERENCES</b> .....	153
ANNEXURE A: QUESTIONNAIRE .....	177
ANNEXURE B: ETHICAL APPROVAL.....	193
ANNEXURE C: APPROVAL LETTER OF EMPLOYER .....	194
ANNEXURE D: TURNITIN SUMMARY REPORT .....	196
ANNEXURE E: CONFIRMATION OF PROFESSIONAL EDITING .....	197

## LIST OF FIGURES

Figure 1.1: Conceptual framework .....	15
Figure 2.1: Core work evaluation and three dimensions.....	32
Figure 4.1: Scree plot of eigenvalues from CFA.....	108
Figure 4.2: Scree plot of eigenvalues from CFA.....	113
Figure 4.3: Scree plot of eigenvalues from CFA.....	115

## LIST OF TABLES

Table 3.1: Sample size per strata and department .....	79
Table 3.2: Reliability analysis .....	83
Table 3.3: Returned questionnaires per strata and department .....	87
Table 4.1: Demographic characteristics of the sample .....	97
Table 4.2: Measures of central tendency of constructs.....	100
Table 4.3: Descriptive results of the PSM, JS, OC, WE and CWB levels.....	101
Table 4.4: Results of the reliability test.....	103
Table 4.5: The KMO measure and Bartlett's test.....	104
Table 4.6: Total variance explained by factors for PSM.....	104
Table 4.7: Total variance explained by factors for JS .....	105
Table 4.8: Total variance explained by factors for WE.....	105
Table 4.9: Total variance explained by factors for OC .....	106
Table 4.10: Total variance explained by factors for CWB .....	106
Table 4.11: Factor loadings based on a principal component extraction with Oblimin with Kaiser Normalisation rotation for PSM .....	107
Table 4.12: Forced five-factor loading based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for JS .....	109
Table 4.13: Factor loadings based on a principal component extraction with Oblimin with Kaiser Normalisation rotation for WE .....	111
Table 4.14: Forced three-factor principal component extraction with Oblimin and Kaiser Normalisation rotation for OC.....	114
Table 4.15: Forced two-factor loading principal component matrix with Oblimin and Kaiser Normalisation rotation for counterproductive .....	116
Table 4.16: An independent-samples t-test to compare the mean scores of the dependent variables with gender .....	118
Table 4.17: An independent-samples t-test to compare the mean scores of OC facets with gender .....	118
Table 4.18: MANOVA results for age and dependent variables.....	119
Table 4.19: MANOVA results for age and facets of dependent variables .....	119
Table 4.20: MANOVA results for department as an independent variable .....	120
Table 4.21: MANOVA results with department as independent variable and facets of PSM, JS, OC, WE and CWB.....	121
Table 4.22: MANOVA results for salary level as an independent variable .....	121
Table 4.23: MANOVA results with salary level as an independent variable and facets of PSM, JS, OC, WE and CWB.....	122
Table 4.24: MANOVA results for service years as an independent variable .....	123

Table 4.25: MANOVA results with service years as an independent variable and facets of JS and WE as the dependent variable .....	123
Table 4.26: MANOVA results for qualification as an independent variable .....	123
Table 4.27: MANOVA results with qualification as independent variable and facets of PSM, JS, OC, WE and CWB.....	124
Table 4.28: Results of the correlation test .....	125
Table 4.29: Multiple regression analysis results with PSM as the dependent variable .....	126
Table 4.30: Multiple regression analysis results with CWB as a dependent variable	126
Table 5.1: Describe statistics of PSM, JS, OC, WE and CWB levels of employees..	128
Table 5.2: Comparison of Cronbach's alpha coefficients with previous studies .....	130
Table 5.3: Comparison of PSM factors and item loadings .....	132
Table 5.4: Comparison of JS factors and item loadings.....	133
Table 5.5: Comparison of WE factors and item loadings .....	135
Table 5.6: Comparison of OC factors and item loadings .....	137
Table 5.7: Comparison of CWB factors and item loadings .....	139

## LIST OF ACRONYMS

AC	Affective Commitment
ACS	Affective Commitment Scale
AD	Assistant Director
ANOVA	Analysis of Variance
APM	Attraction to policy making
APS	Attraction to Public Service
BCEA	Basic Condition Employment Act
BO	Behavioural Outcomes
CC	Continuance Commitment
CCS	Continuance Commitment Scale
CD	Chief Director
CFA	Confirmatory Factor Analysis
COM	Compassion
CPI	Commitment to Public Interest
CPV	Commitment to Public Values
CWB	Counterproductive Workplace Behaviour
CWB-I	Counterproductive Work Behaviour-Interpersonal
CWB-O	Counterproductive Work Behaviour-Organisation
CWB-P	Counterproductive Work Behaviour-Person
CWB-S	Counterproductive Work Behaviour Scale
CWE	Core Work Evaluation
DCATA	Department of Culture, Arts and Traditional Affairs
DCSTM	Department of Community Safety and Transport Management
DD	Deputy Director
DEED	Department of Economy and Enterprise Development
DESD	Department of Education and Sport Development
DF	Degrees of Freedom
DLGHS	Department of Local Government and Human Settlement
DoH	Department of Health
DoT	Department of Tourism
DPWR	Department of Public Works and Roads
DREAD	Department of Rural, Environment and Agriculture Development

DSD	Department of Social Development
EEA	Employment Equity Act
EMS	Emergency Medical Services
EMSP	Emergency Medical Services Professionals
EWE	Employee work engagement
ERG	Existence, Relatedness and Growth
FFM	Five-Factor Model
GDP	Growth Domestic Product
GEAR	Growth, Employment and Redistribution
HRM	Human Resources Management
JDI	Job Description Index
JD-R	Job Demands-Resources
JS	Job Satisfaction
JSS	Job Satisfaction Survey
KMO	Kaiser-Meyer-Olkin
LMX	Leader-Member Exchange
MANOVA	Multivariate analysis of variance
MPA	Master of Public Administration
MSP	Malaysian Public Service
NC	Normative Commitment
NCS	Normative Commitment Scale
NWPA	North West Provincial Administration
NWPDG	North West Provincial Director-General
NWPGD	North West Provincial Government Department
OC	Organisational Commitment
OCQ	Organisational Commitment Questionnaire
PhD	Doctor of Philosophy
PMS	Performance Management System
PO	Premiers Office
PS	Public Service
PSM	Public Service Motivation
RSA	Republic of South Africa
SA	South Africa

SAPS	South African Public Sector
SDA	Skills Development Act
SFL	Standardized Factor Loadings
SOC	Sense of Community
SOC-R	Sense of Community Responsibility
SPSS	Statistical Packaging for Social Science
SS	Self-Sacrifice
TCM	Three-Component Model
TWE	Team Work Engagement
UWES	Utrecht Work Engagement Scale
WE	Work Engagement

## CHAPTER 1: INTRODUCTION AND BACKGROUND OF THE STUDY

### 1.1 INTRODUCTION

Several decades ago, some of the most frequently used measures of employees' attitudes about their jobs, the organisation, organisational commitment(OC), and work activities were parsed (Webster *et al.*, 2014). According to Webster *et al.* (2014), employees “make broad evaluative judgements of their work environment and detailed assessments of particular areas of their employment, and these subjective assessments have been the topic of substantial empirical and theoretical study in work-related attitudes research.” Attitudes have been described in various ways throughout history. However, the simplest explanation is “made of emotions, cognitions, and behaviours oriented toward an object or collection of things” (Webster *et al.*, 2014).

Shrestha and Mishra (2015) say that as a component of public administration, “public service motivation” (PSM) has increased in prominence and “on a global scale, providing efficient and high-quality public services is a pressing issue for any welfare state.” High-quality public service is vital in contemporary society, and the discipline of public administration has continually attempted to enhance public-service performance (Shrestha and Mishra, 2015).

Billions of dollars are lost yearly due to counterproductive workplace behaviours (CWBs). Furthermore, individual differences in terms of workplace misbehaviour are influenced by personality factors (DeShong *et al.*, 2015). Thus, gaining a better knowledge of the link between personality characteristics and CWBs may assist organisations in building more efficient recruiting screening processes, thereby averting future disputes and decreasing productivity losses. CWBs have some adverse effects, including “money losses (e.g., paying or accepting bribes, fraud) and reputation harm (e.g., discriminating against co-workers)” (DeShong *et al.*, 2015).

The “Republic of South Africa’s public service” aims to enhance the essential principles of the Constitution (1996) to guarantee that every public worker has equality within the workplace and a fair labour process. With the establishment of the democratic government, the public-service system required considerable modification. Attempts have been made to rehabilitate the South African public sector via numerous

policy evaluations in line with the labour process. However, due to dire working circumstances, the public service has continued to offer low-quality services to the country's inhabitants, leading to demotivated core job evaluation personnel and a high resignation rate.

By aligning policies and regulations with the Constitution's preamble (1994), the South African public sector (government) acknowledged the crucial significance of investing in its workers. The preamble states, in light of South Africa's history of injustices:

“Honour those who have fought for justice and freedom in our land; Respect those who have worked to build and develop our country. Lay the groundwork for a democratic and open society in which government is based on popular will, and every citizen is equally protected by law. Raise the standard of living for all citizens and unleash the potential of each individual. (Act108, 1996)”

In recent years, the public service has been broadened to encompass people who work directly “for the government and the private sector to” provide several types of community service. Poor job performance and service delivery problems “in the public sector date back to 1998, when the government of President Thabo Mbeki adopted the macroeconomic strategy Growth, Employment and Redistribution (GEAR).” “Given the service and community-oriented nature of public-sector tasks”, public management is interested in “an individual's orientation toward providing services to people to do good for others and society” (Kim *et al.* (2015). As a result, the personnel of every organisation are a crucial resource.

To fulfil its purpose of delivering services to the Republic of South Africa's residents, the whole public sector needs highly motivated staff. Regrettably, given the country's current economic circumstances, which often lead to budget cuts, there is no upward mobility for the workforce and no further improvement in the living conditions of public-sector employees. Thus, retaining public-sector personnel is exceedingly challenging, resulting in many early retirements and a high proportion of dissatisfied employees owing to a lack of public-service incentives. Additionally, most public servants in the North-West Provincial Government exhibit poor performance on core work, as evaluated “on three work-related attitudes: job satisfaction (JS), OC, and work engagement (WE)” (Hamilton and Streets, 2007).

The phrase “public service motivation (PSM) refers to an individual’s desire to serve the public.” Simultaneously, PSM and egoistic motivation are widely compared, and a trade-off may occur between public service and other types of prosocial motivation (Jensen and Andersen, 2015). One is user orientation, which refers to an individual’s desire to aid persons via public services. According to Jensen and Andersen (2015), some people are inspired to help others because they “respond to the emotions aroused by specific conditions of indigence”. They think one’s drive to do good for others fluctuates depending on the situation. While public and non-profit administrators are constantly under pressure to “provide more and better public services, the current political and economic climate makes funding these efforts difficult, leaving public administrators with few tools to improve organisational performance and programmatic outcomes” (Ward, 2014). Consequently, the public sector has started to embrace techniques associated with employee retention in the “private sector, such as performance management”, capacity building and work satisfaction (Ward, 2014).

Chapter 1 focuses on the introduction; background; problem statement; research objectives, questions and hypotheses; the significance of the study; preliminary literature review; contributions of the study; research philosophy; research method and design; population and sample; measuring instruments; statistical techniques for data analyses; research ethics; structure of the thesis and summary

## **1.2 BACKGROUND**

In contemporary” societies, high-quality public service is vital”, and public administration has made a concerted effort to continually enhance public-service performance (Shrestha and Mishra, 2015). Despite these efforts, the popular view of public workers is that they seldom work and are ineffective and “less productive than their private-sector counterparts.” According to Shrestha and Mishra (2015), no unified “theory of work motivation can explain the vast range of workplace behaviours.” The phrase “public service motivation (PSM) indicates that bureaucrats are driven by an ethic of public service and act in the public interest rather than their own” (Shrestha and Mishra, 2015).

A large section of the South African population comprises dissatisfied public-sector personnel, impeding service delivery to people. The concept that individuals enter

public service out of altruism, “a desire to serve, or make a difference in society, has a long history, and it is intrinsically tied to a public-service ethos, predicated on the realisation that the public sector is unique from the private sector in terms of its work and employees’ behaviour: (Shrestha and Mishra, 2015). PSM is “a value or attitude that motivates people to act pro-socially” (Gould-Williams *et al.*, 2014). Since the 1980s, measures to reform the public service have taken place in varying degrees throughout developed countries to create a well-managed workforce capable of delivering public services efficiently and effectively.

“Public Service Motivation is” commonly promoted in the public service to improve performance and overcome incentive concerns. However, any welfare state confronts chronic difficulties in providing efficient and high-quality public services. Public Service Motivation is described as “a subset of altruism or prosocial drive that is powered by certain dispositions and ideals generated from public institutions and missions” (Homberg *et al.*, 2015). Additionally, PSM received significant study attention within public administration and management starting in the early 1990s (Pedersen, 2015). On the other hand, the process through which PSM influences employee attitudes has received less consideration (Gould-Williams *et al.*, 2014).

The expression “a desire to serve the public is referred to as a public service motive” (Jensen and Andersen, 2015). While PSM is often compared with egoistic motivation (Jensen and Andersen, 2015), a comparable trade-off between public service and prosocial motivation might occur. In comparison, those motivated by public service have a larger area of concern, reflecting their commitment to providing public services that benefit categories of people and society. This difference is helpful “because the two forms of motivation might have different antecedents and results” (Jensen and Andersen, 2015). Individual incentives to do good for others and promote society’s wellbeing have often been explored as a reasonably consistent personality feature founded in an employee’s early experiences (Taylor and Taylor, 2015).

Public Service Motivation may also appear as a more temporary psychological state, with environmental conditions driving workers to adopt a PSM attitude for a given context or period (Taylor and Taylor, 2015). The motivation of public workers is multifaceted and covers a range of elements, some of which are “inherent qualities” of their employment and others that are “extraneous”, such as rules that apply to public

employees (Riba and Ballart, 2016). For example, job security is one of public-sector labour's most enticing and extrinsic components. However, certain public officials have shown a high degree of PSM concerning the fundamental qualities of their profession, which may be described as the purpose "to do good and impact society's wellbeing" (Riba and Ballart, 2016).

The phrase "core work evaluation" originates in the idea of attitudes and their development. It is described as "a succinct psychological evaluation of one's work environment with a particular emphasis on the job, organisation, and work activities" (Webster *et al.*, 2014). Although attitudes have developed through time, "the most conventional definition indicates that they are comprised of emotion, cognition, and behaviour oriented toward an object or collection of things" (Webster *et al.*, 2014). They describe core work evaluation (CWE) as a multidimensional concept comprised of three dimensions: "job satisfaction, organisational commitment, and work engagement". According to Webster *et al.* (2014): "these three attitudes were selected based on theoretical considerations derived from classic and modern attitude theory, the fact that each is well-established in the literature, and that they together represent the hierarchical character of the work context".

In recent years, significant advancements have been achieved in our knowledge of counterproductive conduct in corporate contexts. Counterproductive work behaviour is defined "by a shared interest in better understanding the individual and contextual factors that motivate employees to engage in harmful work behaviours – both toward co-workers and the organisation – as well as the effects of such behaviour on individual, group, and organisational outcomes" (Raver *et al.*, 2013).

### **1.3 PROBLEM STATEMENT**

Public service motivation an important factor in CWE such as JS, OC, work engagement (WE), and CWB, either positively or negatively. Research done by Homberg *et al.* (2015) "revealed a positive relationship between public service motivation (PSM) and job satisfaction (JS) and considered PSM as a predictor of job satisfaction." Crucke *et al.* (2021) also found that PSM is a predictor of JS. Furthermore, studies done by Bright (2021), Palma (2016) and Kim *et al.* (2013) revealed that "PSM was significantly positively related to JS." This positive relationship

was confirmed in a study by Prysmakova and Vandenabeele (2020) among “police officers in Poland and Belgium”, which showed “that officers with higher levels of public service motivation also have higher levels of job satisfaction”. Furthermore, Breugh *et al.* (2018) found that “APS and CPV were significantly related to JS, while SS and COM were not”. However, a “study done by Boyd *et al.* (2018) showed that PSM was not significantly correlated to JS. “

According to Strizović (2019), JS has a “negative relationship with counterproductive work behaviour meaning that high levels of job satisfaction lead to low levels of counterproductive work behaviour”. Wu *et al.* (2019) also found a negative relationship between JS and unethical behaviour. These negative relationships were confirmed by Wang *et al.* (2020), which found that JS and OC are negatively related to workplace deviance. However, Czarnota-Bojarska (2015) found a weak correlation between counterproductive work behaviour and work satisfaction.

Castaing (2006) study’s findings revealed “a positive association between PSM, affective, normative and continuance commitment”, while Potipiroon and Ford (2017) also “found that PSM had a significant positive effect on OC. “The study results of Nikkah-Farkhani *et al.* (2017) showed that OC “had a negative and significant effect on counterproductive work behaviour”. Baysal *et al.* (2020) “found a negative relationship between abuse, withdrawal, affective, and NC.” In addition, “there was a negative correlation between abuse, theft, withdrawal and continuance commitment.”

Ugaddan and Park (2017) study revealed “a positive relationship between PSM and WE.” On the other hand, Ariani (2013) found “a negative relationship between work engagement and counterproductive work behaviour”, while Filipkowski and Derbis (2020) confirmed “a negative correlation between work engagement and counterproductive work behaviour”.

The results of a study done by Vogel *et al.* (2016) showed a negative association between PSM and deviant behaviour (CWB), while Koumenta (2015) also found a negative and significant relationship between PSM and CWB. Vandenabeele (2009) found “that two of the four dimensions of PSM, namely politics and self-sacrifice, are entirely mediated by job satisfaction and normative and affective commitment, respectively”. Based on the literature, the results revealed that high levels of PSM positively affect JS, OC and WE and negatively affect CWB. Therefore, public-service

employees' low degree of PSM, JS, OC and WE and a high degree of CWB have been significant concerns (Perry and Vandenabeele, 2015). ***The problem statement is that the low levels of PSM led to decreased CWE (JS, OC, WE) and increased CWB.***

No previous research has investigated the influence of PSM (independent variable) on CWE such as JS, OC, WE and CWB (dependent variables) in the South African public-service context. These dependent variables can also be regarded as outcomes of PSM. Therefore, this study filled the gap by developing a framework for assessing the influence of PSM on core work evaluation (JS, OC, WE) and CWB of employees in the North-West Provincial Government departments.

#### **1.4 RESEARCH OBJECTIVES, QUESTIONS AND HYPOTHESES**

This study aims to develop a framework for assessing the influence of PSM on CWE (JS, OC, WE) and CWB.

The study's objectives are to:

- Measure the public service motivation, job satisfaction, organisational commitment, work engagement and counterproductive work behaviour levels of employees.
- Establish if public service motivation, job satisfaction, organisational commitment, work engagement, and counterproductive work behaviour scales are reliable and valid in the South African public-sector context.
- Establish differences in the public service motivation, job satisfaction, organisational commitment, work engagement and counterproductive work behaviour between gender, age groups, departments, salary levels, service years and qualifications.
- Investigate the relationships between public service motivation, job satisfaction, organisational commitment, work engagement and counterproductive work behaviour.
- Establish the best predictor of public service motivation and counterproductive work behaviour: job satisfaction, organisational commitment or work engagement.

Based on the research objectives, the following research questions have been formulated:

- What are the employees' public service motivation, job satisfaction, organisational commitment, work engagement and counterproductive work behaviour levels?
- Is the public service motivation, job satisfaction, organisational commitment, work engagement, and counterproductive work behaviour scales reliable and valid in the South African public-sector context?
- Are there differences in the perceived public service motivation, core work evaluation (job satisfaction, organisational commitment and work engagement) and counterproductive work behaviour between gender, age groups, departments, salary levels, service years and qualifications?
- Are there relationships between public service motivation, job satisfaction, organisational commitment and work engagement and counterproductive work behaviour?
- What is the best predictor of public service motivation and counterproductive work behaviour: job satisfaction, organisational commitment, and work engagement?

The following hypotheses were developed in line with the research objectives and questions:

- H1<sub>0</sub>: Employees will have low levels of PSM, JS, OC, WE and high levels of CWB.
- H1<sub>A</sub>: Employees will have high levels of PSM, JS, OC, WE and low levels of CWB.
- H2<sub>0</sub>: The PSM, JS, OC, WE and CWB scales will not be reliable and valid in the South African public-sector context.
- H2<sub>A</sub>: The PSM, JS, OC, WE and CWB scales will be reliable and valid in the South African public-sector context.
- H3<sub>0</sub>: There are no differences in the perceived PSM, core work evaluation (JS, OC and WE) and CWB between gender, age groups, departments, salary levels, service years and qualifications.

- H3<sub>A</sub>: There are differences in the perceived PSM, core work evaluation (JS, OC and WE) and CWB between gender, age groups, departments, salary levels, service years and qualifications.
- H4<sub>0</sub>: There is no positive relationship between PSM, JS, OC and WE and no negative relationship between PSM and CWB.
- H4<sub>A</sub>: There is a positive relationship between PSM, JS, OC and WE and a negative relationship between PSM and CWB.
- H5<sub>0</sub>: JS, OC and WE will not predict PSM and CWB.
- H5<sub>A</sub>: JS, OC and WE will predict PSM and CWB.

### **1.5 SIGNIFICANCE OF THE STUDY**

This research aimed to construct a framework for evaluating the impact of PSM on core work evaluation (JS, OC, WE) and CWB. Additionally, the link between PSM, JS, OC, WE and CWB of employees was examined in 11 departments of the North-West Provincial Government. Government employees have a low standard of work, which includes aggression (physical and verbal), sabotage, theft, and withdrawal, poor service delivery to the community, high absenteeism from duty, employee corruption, stealing government property, laziness, and misusing state assets, a high rate of employee grievances, and a high rate of resignations. It is widely believed that the South African public service fulfils its responsibilities. However, Moerdyk *et al.* (2015) suggest that even if people are motivated and capable of performing, there may be constraints on their ability to perform. South African public-sector professionals can perform but lack the drive to do so.

This research adds to the theory and application of behavioural dimensions such as PSM, JS, OC, WE, CWB and relationships. Additionally, validating the measuring instruments in the South African public-service context is crucial. Finally, the research examines the correlation between the independent and dependent variables.

The study's results will aid in the development of public-service employees' capability, performance, JS and OC to enhance their performance and service delivery to residents. Successful, efficient and motivated public-service employees will have high JS, OC and WE. Additionally, these positive work behaviours will help prevent CWB

(including corruption), which is necessary for effective corporate governance, service delivery, policy formulation and implementation.

## **1.7 PRELIMINARY LITERATURE REVIEW**

This research examines five constructs: PSM (an independent variable), JS, OC and CWB (dependent variables). The following section summarises the core theories that underpin this study and serve as the study's theoretical framework, as detailed in Chapter 2.

### **1.7.1 Public service motivation**

Public Service Motivation is a broad term that refers to “an individual’s commitment to providing services to others to do good for individuals and society” (Caillier, 2014a). Public Service Motivation is considered an innate proclivity toward doing such activities. Additionally, PSM is a theory of human motivation that encompasses three dimensions: emotional, norm-based, and logical motivations. Affective motivations are motivated by an emotional reaction to community and social settings. The norm-based incentives are motivated by a desire to assist society. Additionally, reasonable motivations relate to acts that maximise individual benefit (Caillier, 2014a). While PSM is prevalent across many industries, it is especially critical in government institutions. This is because governmental institutions have social goals, which require employees to act on humanitarian impulses as part of their employment. For example, PSM has been associated with retention, whistleblowing, and performance, albeit the latter results are inconsistent. The concept of PSM originated in the United States, and academics have found that it helps describe the motivation of public-sector employees across cultures and nations (Caillier, 2014b).

Employee motivation is controversial in public-service administration and public management literature. Research on PSM is multidisciplinary, having strong connections to the broader literature on altruism, other-regarding orientations, prosocial motivation and behaviour in psychology, organisational behaviour, sociology and economics (Koehler, 2015 ).

The conceptualisation of PSM and motivation in Chapter 2 is based on a range of theories that explain motivation. A literature review reveals a balanced approach to

developing and implementing PSM and incentive policies. To begin with, employees must understand their organisation's culture to effect change in their work environment. Second, if organisations wish to increase the quality of service delivery to citizens via PSM policies, they must understand their workers' intrinsic and extrinsic motivational inclinations. Thirdly, PSM is one facet of the present public service reforms. Finally, PSM is seen in a larger context, involving capacity building, performance management and employee happiness in the workplace (Koehler, 2015).

Apart from these primary pillars of motivation theory, this research considers the following subsidiary theories: PSM, motivation for organisational work satisfaction, and performance management system. These theories must be examined to generate study questions which will be used for data-gathering. However, the crux of the matter is that a consideration of both the primary and subsidiary theories is critical to achieving the study's primary objective, which is to test generalisations found in motivation theories and examine the processes of capacitating the workforce to respond to core work evaluation and the compatibility of performance management incentive processes in a public-service environment.

### **1.7.2 Core work evaluation**

The distinction between work and other attitudes is that life experiences, particularly significant life events, profoundly influence an individual's future values and attitudes (Gurbuz and Aytakin, 2020). Numerous studies examining work attitudes have established links between them and critical employee behaviours. However, most of this study has divided attitudes into more precise judgements of particular aspects of the work environment (Webster *et al.*, 2014). The findings indicate that "CWE (1) explains meaningfully shared variance across more specific indicators (JS, OC, and WE) that is not due to common method variance, (2) is distinguishable from no evaluative features of the work environment, and stable individual differences, and (3) predicts critical work-related outcomes in addition to its constituent indicators" (Webster *et al.*, 2014). While the Webster study provides valuable insights for practical, theoretical, and practical reasons, one may argue that a more comprehensive examination of the work environment is necessary. The current research aims to establish, conceptualise and empirically support a global work attitude construct dubbed CWE.

The conceptual framework for CWE is derived from classical and contemporary attitudes and attitude development theories. The term “core work evaluation” refers to a brief psychological assessment of one’s work environment that focuses on the job, organisation and work activities (Webster *et al.*, 2014). Attitude definitions classify attitudes as either created from available data, or stable entities maintained in memory (Krüger *et al.* (2016). Attitudes are a fundamental notion in (social) psychology that has a long history and continues to be significant. Attitudes remain a central concept in social psychology, and attitude research is one of the most active subfields. An attitude is a judgement on a subject of thinking. Attitude objects may be anything a person has in mind, from the commonplace to the abstract, including things, people, organisations and ideas (Krüger *et al.*, 2016). Three sub-constructs comprise the CWE: JS, WE and OC.

“Job satisfaction is a happy or positive emotional state that results from an evaluation of one’s job or experiences, or, more simply, the degree to which individuals like (satisfaction) or loathe (dissatisfaction) their employment” (Top *et al.*, 2015). As one of HRM’s organisational outputs, work satisfaction is critical to its strategic success since it affects job performance, employee turnover, employee commitment and employee trust. Therefore, Spector’s JS model was used in their study, which includes the following primary JS facets: “appreciation, communication, co-workers, fringe benefits, job conditions, nature of the work, the organisation itself, organisational policies and procedures, pay, personal growth, promotion opportunities, recognition, security, and supervision” (Top *et al.*, 2015).

Organisational commitment is “the degree to which an individual identifies with and participates in a particular organisation” (Albdour and Altarawneh, 2014). The model of OC is predicated on the premise that committed employees are more likely to stay with the organisation than uncommitted employees (Top *et al.*, 2015). The model divides OC into three components: AC, CC, and NC. Affective commitment is an attitude-forming process in which individuals consider their values and goals concerning organisations. It entails “employees’ emotional commitment to, identification with, and participation in the organisation” (Top *et al.*, 2015). Organisations with high emotional commitment retain people because they desire to work there. A company with a high degree of continuing commitment retains workers since they must remain with the company until they find a more appropriate

position. On the other hand, NC refers to an employee's sense of obligation to remain in a job position in light of his or her values and beliefs. Organisations with normatively committed workers retain them because they think they should remain with the organisation. The NC is positively connected to the organisational culture in that the organisational purpose is aligned with the individual's values (Top *et al.*, 2015).

One of these positive states is WE, which is often referred to as the antithesis of burnout. In contrast to individuals who are burnt out, engaged workers have an active and effective connection to their work activities, and they see themselves as capable of meeting job objectives. Work engagement is a positive, fulfilling state of mind associated with vigour, dedication, and absorption in one's work. Rather than a temporary state, engagement refers to a more long-lasting affective-cognitive state that is independent of any particular item, event, person, or behaviour (Schaufeli *et al.*, 2009). Vigour is defined by a high level of "energy and mental resilience while working, a willingness to invest effort in one's work, and perseverance in the face of adversity" (Schaufeli *et al.*, 2009). Dedication entails a deep commitment to one's job and a feeling of importance, passion, inspiration, pride, and challenge. Finally, absorption is defined as being immersed in one's job, during which time goes quickly, and people find it difficult to distance themselves from work (Schaufeli *et al.*, 2006).

### **1.7.3 Counterproductive work behaviour**

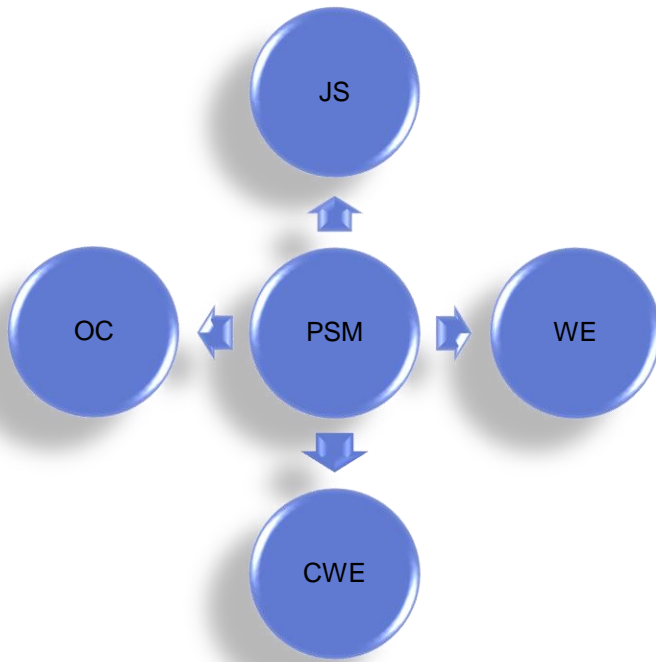
Workers' counterproductive behaviour is more widespread in the public sector than employees' negative work behaviours in the private sector. This behaviour is detrimental to businesses and stakeholders, including supervisors, co-workers, clients, and customers. Counterproductive work behaviours are characterised by workplace hostility involving detrimental conduct aimed at people rather than organisations. In extreme cases, CWB reduces an individual's performance and increases absenteeism and turnover (Spector and Fox, 2010). Workplace incivility encompasses a range of actions, including unproductive work behaviour, workplace misbehaviour, workplace deviance and workplace bullying (Fatima, 2016). Counterproductive workplace behaviour (CWBs) results in significant financial losses. Personality traits are one source of individual differences concerning workplace misconduct. Understanding the relationship between personality characteristics and CWBs may help businesses to develop more effective screening methods when

recruiting new staff, thereby avoiding future conflicts and reducing productivity losses. The current study compared two personality models often used in research on CWBs: “the Five-Factor Model (FFM) and the Dark Triad. The FFM is a general personality model consisting of openness, conscientiousness, extraversion, agreeableness and neuroticism (Top *et al.*, 2015), while the Dark Triad includes three constructs: Machiavellianism, Psychopathy and Narcissism (Lyons, 2019).” The current study was novel in that it examined the FFM and the Dark Triad in predicting interpersonal and organisational CWBs using a path analysis that facilitated a comparison of several models to find the most appropriate model. The agreeableness and conscientiousness FFM domains are negatively related to interpersonal and organisational CWBs, while neuroticism is positively related to organisational CWBs (DeShong *et al.*, 2015). The study evaluated the two models’ predictive abilities for CWB levels.

The present research examines a subtype of CWB known as undermining social behaviour. This is characterised as “behaviour meant to impair an individual’s capacity to develop and sustain strong interpersonal connections, professional achievement, and a favourable reputation over time” (DeShong *et al.*, 2015).

According to DeShong *et al.* (2015), CWBs result in undesirable consequences, including financial losses caused by bribery or fraud and damage to the company’s reputation (e.g., discriminating against co-workers). These behaviours have been further classified according to their intended recipient. For example, interpersonal CWBs cause bodily or emotional harm to another person (e.g., mocking or harassing a co-worker), while organisational CWBs directly affect the company’s productivity (e.g., consuming alcohol while working, working slowly) (DeShong *et al.*, 2015).

This study’s conceptual framework is depicted in Figure 1.1. The independent variable in this framework is PSM, while the dependent variables are JS, OC, WE and CWB.



**Figure 1.1: Conceptual framework**

## **1.8 CONTRIBUTION OF THE STUDY**

The research adds to the expanding body of evidence concerning the effect of PSM on JS, OC, WE, and CWB. This study's contribution to knowledge can be viewed from three perspectives. First, the study validated the measuring instruments in the South African public-service context. Second, the study examined the generalisability of motivation theories in a public-sector setting to develop a single proposition about the importance of the environmental contingency motivational approach to managing CWBs and the significant influence of PSM on JS, OC and WE. Thirdly, the results are expected to corroborate the critical nature of PSM and its beneficial effect on JS, OC, WE, and its mitigating effect on CWB. These beneficial workplace behaviours will also alleviate negative workplace behaviours such as corruption, fraud, and sabotage. As a result, the public service should increase employee motivation, JS, OC and WE to mitigate CWB.

## 1.9 RESEARCH PHILOSOPHY

The research philosophy represents the researcher's fundamental ideas and serves as the basis of the research plan. The study's perspective is on human resource management and organisational behaviour. In this study, the researcher used a positivist philosophical approach since the technique selected for the research design was appropriate for the topic matter and sample size.

The term "positive implies a limitation to observed facts without reference to underlying causes or forces; the latter do not qualify as positive since they cannot be noticed directly (Pearce, 2015)." "Positivist" is a misleading term. When a scientific approach is referred to as positivist nowadays, it often refers to an endeavour to comprehend minds, persons, or communities via natural science techniques to maintain strict value neutrality. In contrast, referring to someone as a positivist in philosophy creates a hazy feeling that the individual is pro-science and anti-metaphysics; but this alone tells one nothing (Pearce, 2015).

What Giddens (1974:23) stated remains true: "'positivist' like 'bourgeois' has devolved into a disparaging term rather than a helpful descriptive phrase". One reason for the term's ambiguity is the vast range of historical people who have self-identified as or been labelled as positivists. Unfortunately, philosophers' historians have mostly ignored this variety, concentrating instead on Auguste Comte, Ernst Mach, and others associated with the Vienna Circle (Pearce, 2015).

Much post-positivist policy theory indicates that positivism exists as a self-protective paradigm. Inspired by a skewed reading of Kuhn, this interpretation implies that policy positivism must be defeated (Liu *et al.*, 2015). This is a bad strategy. There are fundamental conflicts between aspects of the positivist paradigm and difficulties that make it challenging to think the paradigm can be accepted as a whole. An alternate perspective regards positivism as a cultural phenomenon. Since components of any culture may grow independently, a cultural approach would concentrate its critique of specific aspects of positivism (Liu *et al.*, 2015).

## **1.10 RESEARCH METHOD AND DESIGN**

The study examined the relationships between PSM, JS, OC, WE and CWB. The study is quantitative and employs a correlational research approach. Terre Blanche *et al.*(2006) describe methodology as the methods, techniques, and processes used to conduct the research. It is a study plan that includes the underlying concepts and assumptions that guide their application. A study can be either qualitative, quantitative or mixed methods.

Qualitative research is defined by its objectives which are concerned with comprehending some element of social life, and by its techniques, which (in general) create data for analysis in the form of words rather than numbers. This approach focuses on the ‘what’, ‘how’, or ‘why’ of a phenomenon rather than the ‘how many’ or ‘how much’ that quantitative methods address. Qualitative approaches are often applicable when the objective is to ascertain how a community or person perceives a particular problem (Tashakkori and Teddlie, 2009).

In a quantitative setting, Creswell (2013b) defines research design “as the process of gathering, analysing, interpreting, and writing the study’s findings”. In addition, examining “the relationships between and among variables is central to answering questions and hypotheses through surveys and experiments”.

Correlational research aims to establish relationships between two or more variables within a population. Correlational studies are used to determine whether two variables are related. This means determining whether “an increase or decrease in one variable is associated with an increase or decrease in another” (Curtis *et al.*, 2015b:4). For example, “consider a model in which an independent variable (X) is correlated with a dependent variable (Y) not because it affects the dependent variable directly but because it affects an intervening or mediating variable (M), which then affects the dependent variable” (Wuensch, 2009).

## **1.11 POPULATION AND SAMPLE**

Sampling refers to the procedure the researcher adopts in selecting participants to take part in the study (Kothari, 2004). The population in this study comprised 61 954 public officials from 11 North West provincial departments, which are the “Department

of Education and Sports Development, Department of Public Works and Roads, Department of Community Safety and Transport Management, Department of Social Development, Department of Rural, Environment and Agricultural Development, Premiers Office, Department of Health, Department of Local Government and Human Settlement, Department of Tourism, Department of Economy and Enterprise Development and Department of Culture, Arts and Traditional Affairs.” A total of 2 250 public employees were sampled for this study. This represents all categories of professionals within the population sampled in the 11 provincial government departments. The sample is composed of clearly recognisable subpopulations. The study used a stratified random sampling method consisting of four subgroups, namely senior management (SMS salary levels 13–16); middle management (MMS salary levels 11–12), junior middle management (JMM salary levels 8–10) and elementary employees (professional’s salary levels 1–7) (Republic of South Africa, 2007). Therefore, the sample was composed of the following:

- 190 (SMS salary levels 13–16).
- 450 (MMS salary levels 11–12).
- 840 (JMM salary levels 8–10).
- 770 (Professional’s salary level 1–7).

## **1.12 MEASURING INSTRUMENTS**

Parahoo (2014:282) states that a research instrument is “a tool used to collect data. An instrument is designed to measure knowledge attitude and skills”. This study used a questionnaire that was divided into six sections. Section A comprises the respondents’ demographic characteristics. Section B comprises the questions relating to PSM; Section C measured JS; Section D OC; Section E WE; and Section F CWB. These measuring instruments are described in Chapter 3.

## **1.13 STATISTICAL TECHNIQUES FOR DATA ANALYSIS**

The following statistical techniques were used to attain the study’s objectives:

### **1.13.1 Descriptive statistics**

Tables, graphs, means, and standard deviations were used to present descriptive statistics. The demographic features of the respondents were presented using frequencies. The mean scores and standard deviations were used to determine the levels of perceived PSM, JS, WE, OC and CWB among public-service professionals. Additionally, descriptive statistical analyses were conducted to ascertain central tendency metrics, such as the mean, median, standard deviation, lowest and maximum scores, and the range of scores.

### **1.13.2 Cronbach's alpha coefficients**

Cronbach's alpha reliability coefficients were calculated to measure the measuring instrument's reliability. Although other approaches have been offered for measuring the reliability of test results, this research focuses on Cronbach's coefficient alpha ("alpha" or  $\alpha$ ), which calculates dependability using data from the administration of a single test (Cho and Kim, 2015). Alpha, also known as the "internal consistency" coefficient, is the most often used reliability coefficient in organisational research and is regarded an estimate of reliability, depending on the context (Cho and Kim, 2015). Cronbach's  $\alpha$  is frequently used in the social and organisational sciences (Bonett and Wright, 2015). Cronbach's  $\alpha$  indicates the reliability of a total (or average) of  $q$  measures where the  $q$  measurements may reflect "q raters, occasions, alternative forms, or questionnaire/test items" (Bonett and Wright, 2015). Cronbach's alpha is a measure of "internal consistency" reliability "when the measurements represent multiple questionnaire/test items, which is the most common application" (Bonett and Wright, 2015).

### **1.13.3 Exploratory and confirmatory factorial analysis**

Both exploratory and confirmatory factor analyses were used to investigate the structural factors and items of the measuring instruments used in this study.

### **1.13.4 Independent-samples test and multivariate analysis of variance**

An independent-samples t-test was conducted to establish the differences in JS, WE, OC, PSM and CWB in terms of gender. MANOVAs were done to determine significant

differences in JS, WE, OC, PSM and CWB between age groups, salary, service years, departments and qualifications.

### **1.13.5 Pearson product-moment correlation coefficient and multiple regression analysis**

Pearson product-moment correlation was used to measure the relationship between PSM, JS, OC, WE and CWB. A multiple regression analysis was performed to establish the best predictor of PSM and CWB, namely JS, OC or WE.

## **1.14 RESEARCH ETHICS**

An application for ethical clearance was made to the North West University, where a form was signed binding the researcher to abide by the rules stipulated (Appendix B). Permission was obtained from the Director-General in the Office of the Premier to enable the researcher to conduct the study in 11 North-West Provincial Government departments (Appendix C). Each questionnaire had a cover letter that clearly explained the purpose of the study, and the confidentiality clause was attached (Appendix A). The findings of the study will be readily available to participants upon request. Ethical considerations of confidentiality and privacy were guaranteed.

## **1.15 STRUCTURE OF THE THESIS**

The thesis is structured as follows:

*Chapter 1* contains the introduction of the study, consisting of the problem statement, research questions, objectives, and the scope and limitations of the study.

*Chapter 2* examines, among other things, relevant literature from work that has already been done on the topic. The literature review is structured in the following way: introduction, concepts and nature of PSM, the early theorists of PSM, motivation, contemporary theories of motivation, the importance of PSM, the CWE with its components (i.e., JS; OC and WE), and CWBs.

*Chapter 3* focuses on the research method and design.

*Chapter 4* presents the analysis of research data, an interpretation of the study's results and a summary of the research findings.

*Chapter 5* presents the research findings; outlines the study's recommendations, and the conclusion.

## **1.16 SUMMARY**

Governmental sectors worldwide use a range of programmes to encourage their workforce (workers) to increase service quality and maintain a motivated workforce. Managers in the public sector are urged to benchmark or adopt private-sector strategies for addressing CWBs through enhancing employees' JS, OC and WE. This pursuit of high-quality PSM has resulted in an extensive study on the revised role of PSM and motivation theories in addressing CWBs. Previous studies have shown a positive correlation between PSM and JS, OC and WE, and a negative correlation between PSM and CWB. They have also revealed a negative correlation between JS, OC, WE and CWB.

The next chapter presents the literature review of the study.

## **CHAPTER 2: LITERATURE REVIEW OF PUBLIC SERVICE MOTIVATION, CORE WORK EVALUATION AND COUNTERPRODUCTIVE WORK BEHAVIOUR**

### **2.1 INTRODUCTION**

This chapter provides a literature review of the study's constructs. A conceptual-theoretical framework of PSM is presented first. The concept of CWE is then described. The following section provides a conceptual-theoretical framework of OC, followed by the dimensions of OC. After discussing the measuring tools of OC, the relationship between OC, JS, WE, PSM, and CWB is examined. Thirdly, a conceptual-theoretical framework of JS is discussed, followed by the dimensions of JS, the relationship between JS, WE, PSM, CWB and the relationship between JS engagement and PSM. A conceptual-theoretical framework of employee engagement is presented in the fourth section, followed by the dimensions of WE, the measurement of employee engagement, and the relationship between employee engagement, PSM, and CWB. Then, the dimensions and measuring instruments of PSM and the relationship between PSM and CWB are discussed. Sixth, the construct counterproductive work conduct's conceptual-theoretical framework, dimensions, and measurement tools are discussed.

### **2.2 THEORETICAL-CONCEPTUAL FRAMEWORK OF PUBLIC SERVICE MOTIVATION**

Public service motivation (PSM) is an individual's pressure to contribute to society in the broadest sense. It is the incentive for people who value frugality to spend their energy or assets to make society a better place – for any given price of higher energy or assets (Vandenabeele and Schott, 2020). Moreover, Andersen *et al.* (2020) assert that PSM is an individual's attitude toward providing services to others to benefit society. This motivation is particularly pertinent for public servants since it influences behaviour and overall performance in the public, non-profit and private provision of public services. Researchers have expanded the definition of PSM to include a disposition or mindset to assist others and improve the health of society and have linked PSM to activities like volunteering and donating. PSM is a specific concept in public administration. PSM theory enables public management students to assign rational-preference perspectives on bureaucratic behaviour, which assume a rational

and self-interested individual who seeks private profits, including status, power, and money. However, desires are typically less clearly defined in public organisations and are harder to measure and link to external incentives; thus, the diversity in behaviour reflects individual differences rather than incentive structures (Wang, van Witteloostuijn *et al.*, 2020).

Adlerian psychologists argue that individuals are more likely to cooperate with others when they have advanced social goals (Shim and Faerman, 2017). According to this school of thought, people are not typically motivated by self-interest. Instead, they will forego self-interest to seek social goals, create empathy, and contribute to their network and society by developing social interests. According to the assertions of Adlerian psychologists, people with high empathy are significantly more likely to comprehend and become aware of the issues of others, as well as to interact with others as proper team members. Consequently, from this perspective, this gender orientation may promote people's supportive behaviour (Shim and Faerman, 2017). Public service motivation has been defined as a response to motivation rooted most commonly or distinctively in public institutions and organisations (Shim and Faerman, 2017). Thus, PSM provides a comprehensive framework for explaining public-sector employees' orientation to their work. Although public personnel's organisational experiences generate PSM, it is more commonly defined as an individual orientation underpinned by parental socialisation, religious orientation, professional identification and political ideology (Shim and Faerman, 2017). In addition, since altruism is one of the core components of PSM, it is anticipated that PSM will be closely associated with prosocial orientation, leading PSM scholars to posit that employees in the public sector with a high level of PSM will have more empathy and initiative when engaging in prosocial behaviours (Shim and Faerman, 2017). In the early 1980s, authors like Buchanan, Mosher, Perry, Porter, and Rainey established the concept of PSM; however, Perry and Wise (1990) are regarded as having coined the phrase. Since then, PSM has attained global significance among students and researchers.

Since its inception more than 25 years ago, PSM theory research has become increasingly multinational, multidisciplinary and multisectoral. As a result, the public-service incentive has been eliminated from public enterprises' human resource management procedures (Ritz *et al.*, 2016). Since the 1990s, the topic has had little impact on public management studies; however, considerable research has been

conducted. The practical implications of PSM most frequently mentioned in the literature are: (1) public corporations should investigate the level of PSM of job applicants and consider this when making hiring decisions; (2) public corporations should implement control practices that increase PSM; and (3) conventional or opportunity-based reward structures should be used instead of pay-for-performance, which tends to be counterproductive (Ritz *et al.*, 2016).

Jacobson (2011) emphasises that Perry expanded this body of research by employing an expanding measurement scale for PSM. Perry identified four classes for a PSM scale based on theoretical literature, recognising organisations, and testing his results with confirmatory aspect analysis: public policymaking, public interest, compassion and self-sacrifice. As a result, most PSM investigations have elucidated and analysed the Perry and Wise database and investigated hypothesised differences in the motivation of workers in the public, private and non-profit sectors. In addition, Jacobson (2011) describes how Moynihan and Pandey built upon Perry's works regarding the role of sociohistorical contexts. Moreover, Perry, Moynihan and Pandey's studies support that a higher level of PSM competence might lead to significant managerial improvements (Jacobson, 2011).

Theoretically, Van Loon *et al.* (2018) suggested that employees with high PSM go over and above their tasks to aid colleagues through "extra-role" behaviours. According to Van Loon *et al.* (2018), PSM can be viewed as an individual's drive to present public offerings that stem from rational, normative and affective motives. Van Loon *et al.* (2018:141) defined PSM as "the beliefs, values, and attitudes that transcend self-interest and organisational interest, challenge the interest of a larger political body, and motivate people to act accordingly whenever possible". PSM is not necessarily a fundamental personality trait but is formed and shaped by interactions at some point in a person's life (Van Loon *et al.*, 2018).

### **2.2.1 Public service motivation theories**

Barsoum (2016) emphasises that the difficulty of disentangling the relationship between PSM and public-sector motivation relates explicitly to the set of intrinsic and extrinsic motivators that drive people to work in the public sector. In addition, some academics assert that the earlier recognition of Herzberg's dichotomous model of

motivation (Theory X and Theory Y) has given way to more sophisticated assessments of these motivational factors. Therefore, the development by Barsoum (2016) of four types of extrinsic motivation, including the self-dedication cognitive theory, is of particular importance. On a continuum of factors, extrinsic motivation factors, namely, “outside regulation, over introjection, identification and integration” (Barsoum, 2016:207), are situated between managed motivation and self-sustaining motivation. In addition, Barsoum’s (2016) argument for internalising extrinsic aspects weakens the dichotomised motivational elements essential to distinguishing between PSM and public-sector motivation.

A basic assumption of PSM is that persons with innate prosocial inclinations are more inclined than others to choose professions within the public sector (Shim *et al.*, 2017). If their professions afford them opportunities to satisfy their inherent motivating needs as public servants, they will survive longer than others in government organisations (Shim *et al.*, 2017). However, this assumption does not appear to be supported by actual findings from previous studies. For example, Shim *et al.* (2017) found no significant correlation between PSM and turnover targets within the workforce of a non-profit human service agency. Similarly, using a sample of individuals in local government agencies, Shim *et al.* (2017) found that the local government agency partially mediated the relationship between PSM and turnover objectives. However, Shim *et al.* (2017:567) found a strong relationship between interest exhaustion and PSM. They hypothesised that PSM might have a “darkish aspect”: personnel with a high PSM may suffer from burnout or exhaustion in pushing themselves to their limits to meet the demands of their jobs in providing public services.

Van Witteloostuijn *et al.* (2017) developed an effective theoretical method for determining the antecedents of PSM. According to van Witteloostuijn *et al.* (2017), PSM is influenced by three primary sources. The first is the sociohistorical context, which is determined by an individual’s education, socialisation and lifestyle experiences. The second source is the individual’s motivational context, which consists of the business environment in which the individual works, which is impacted by organisational incentives, process attributes, and the enterprise’s beliefs and value system. The third source comprises personal characteristics, such as talents and competencies. Consistent with evidence of a strong association between PSM and a person’s inclination toward public service, the individual’s self-concept is composed of

his or her values and identity (van Witteloostuijn *et al.*, 2017). Initially, PSM was defined primarily as an intention to serve the public interest. However, as the PSM notion has expanded, authors have characterised PSM as a pro-public-good mindset (van Witteloostuijn *et al.*, 2017).

### **2.2.2 Public service motivation dimensions**

“The dimensions of PSM include attraction to public policymaking, dedication to the public good, civic responsibility, social justice, self-sacrifice, and compassion” (Liu and Perry, 2016:12). Ritz (2011:1129) categorised “attraction to public policymaking (APM) as a rational dimension; commitment to the public interest (CPI) as a normative dimension; compassion as an affective dimension; and self-sacrifice (SS) as an independent dimension”. Ritz (2011) identified APM as an integral component of PSM, given that public agencies are concerned with the political environment. However, APM also addresses the acceptance, or at least the preference for, the conventional “politics vs administration” split. The term ‘politics’ covers the Aristotelian and Machiavellian understandings of politics, which are diametrically opposed. However, by defining APM as a dimension that optimises private gain, Ritz (2011) highlights the power that comes from understanding.

According to Amegavi and Mensah (2020:69), based on Perry’s (1996) measurement scale, “dedication to the public interest measures normative motives, appeal to public policy measures rational motives, and self-sacrifice and compassion assess affective motives”. The calculation of the public interest is based solely on the need to serve society, organisational commitment and dedication. This signifies that public personnel are expected to perform beneficial tasks for society. This involves a commitment to public principles such as “fairness, honesty, accountability and social justice”. In addition, Amegavi and Mensah (2020) assert that CPI as a PSM measurement is increasingly difficult for public employees. Public employees are expected to act within the interests of society and promote the public interest. Advocating the public interest requires a visible commitment to the general public interest. Even though several factors can impact a person’s decision to pursue a career in public service, it was observed that CPI appears to be a common motivation. However, CPI is not necessarily the only determining factor for wanting to be employed in the public service (Amegavi and Mensah, 2020).

According to Clerkin and Fotheringham (2017), an added PSM dimension is CPI and civic duty. This normative approach asserts that a decision to serve the public good is both selfless and patriotic. Even though “public interest” may vary from person to person, demonstrating a commitment to civic responsibility is a distinctly rational approach motivated by self-interest. In addition, Clerkin and Fotheringham (2017) believe that working in the public sector out of a sense of civic duty appeals to the normative notion prevalent in American culture that the public sector can be a “noble” profession. In addition, Clerkin and Fotheringham (2017) contend that the third component, compassion, is an affective motivator for employment that may represent a particular ethical viewpoint. Self-sacrifice is the fourth component of PSM. Self-sacrifice is defined by Clerkin and Fotheringham (2017:26) as “the willingness to substitute service to others for tangible self-rewards”. Although this definition may also appear closely related to the compassion measurement discussed previously, this factor integrates rational and emotive reasons when examining career choices. The mental benefits of public service that come with the sacrifice of potentially lucrative employment are equally important to the individual. The more compelling argument for this metric is that the employee overtly realises the reduced private incentives to provide some form of public service (Clerkin and Fotheringham, 2017).

Perry (2014 in Liu and Perry, 2016:12) generated positive and negative statements regarding the six dimensions he established after researching terms used by other PSM authors referring to motives. These statements were put into a Likert-style questionnaire beneath the relevant PSM dimension, where respondents rated their responses to each statement (Liu and Perry, 2016). This PSM scale was piloted and modified using focus groups comprised of MPA and MBA students from the United States (Liu and Perry, 2016). Perry’s 24-item measurement scale has been the foundation for most subsequent PSM-related measurement measures. The normative assertions (items) have infiltrated contemporary PSM measurement scales and have been adopted in a variety of PSM-related research in which “the structure of the original measurement instrument remains intact” (Ritz *et al.*, 2016:414). For instance, Ritz *et al.* (2016) used all the items in Liu and Perry’s (2016) scale to analyse the individual perspectives on PSM-related motives. Caillier (2016) measured the impact of PSM on OC and employee performance using Perry’s 24-item scale. Similarly,

Chordiya *et al.* (2017) employed particular elements from Perry's assessment scale to assess how organisations support PSM.

By asking a broad sample of private and public managers to rank their willingness "to engage in meaningful public service", the idea of PSM was established. Consistent with Schott and Ritz's (2018:30) caution that "in some cases, public service motivation, by inspiring high levels of commitment, may result in bad outcomes", we question whether PSM is as clear-cut as commonly believed. Schott and Ritz (2018:31) were the first to properly define PSM as "a person's tendency to respond to reasons rooted mostly or exclusively in public institutions and organisations". PSM is a multidimensional term comprised of (1) "self-sacrifice" (SS); (2) "compassion" (COM); (3) "attraction to public service" (APS); and (4) "commitment to public values" (CPV). According to Kim (2018), the APS dimension of PSM represents extrinsic motives that determine the methods used to provide critical public services. Extrinsic motives include working within the public sector, collaborating within the policy strategy arena, participating in social development activities like sport, and advocating for unique public policies and programmes to provide effective public service that benefits society.

Moreover, Kim (2018) emphasises that the measurement of CPV relates to the private inclination to embrace public pursuits and values. This metric primarily determines value-based causes or public values individuals want to achieve through their conduct and actions. In comparison, the COM scale is mainly focused on the extent to which a person identifies with others' needs and stresses an individual's affective commitment to meeting their needs. Emotional connectedness with others is the emotional basis for serving others (Kim, 2018).

The SS measurement is the basis for determining PSM. Self-sacrifice is the willingness to forsake personal gain in exchange for service to others (Kim, 2018). Based on SS, individuals are likely to carry out acts that are meant to benefit others and shape the wellbeing of society, even if there is a loss in real individual benefits. Moreover, Gupta *et al.* (2020) noted that the APS and CPV components of PSM are more aligned with bureaucratic interests, whereas the COM and SS dimensions and resigned work satisfaction (i.e., acceptance of a situation despite having reservations about it) have a strong correlation. This study suggests that individuals with high levels

of COM and SS may not necessarily let them satisfy their own needs and expectations (Kim, 2018). Schott and Ritz (2018) argue that the intention to quit, stress and burnout can be connected to emotional and intellectual motivations.

Therefore, since considering the effects of each PSM dimension independently would decrease the complexity of this study, we opted not to provide a systematic examination of the function of each PSM dimension. Instead, we only examine dimensional features if we expect a certain PSM dimension to be particularly relevant within a specific setting or if we expect the impact of two PSM dimensions to be contradictory. PSM is thus regarded in this study as a unidimensional concept.

COM and SS are positively associated with resigned work satisfaction (i.e., when employees reduce their level of aspiration to cope with the negative aspects of their job (Büssing and Bissels, 1998)), whereas CPI and APM are negatively associated. When CPI is included as a moderator variable, the effect of bureaucratic requirements on resigned work satisfaction turns positive. However, as stated previously, we must also examine the potential that various PSM dimensions may be especially pertinent to this proposition. On this premise, one can believe that COM, which “captures the emotional state of empathy and identification with certain underprivileged or vulnerable groups” is likely to play a more prominent role in Proposition 1 than the other three PSM dimensions (Schott and Ritz, 2018:32). When examining the four aspects of PSM independently, one may claim that “CPV” plays a more significant role in this statement than the other three dimensions. According to Schott and Ritz (2018), this feature demonstrates a motivation to advance the interests of society as a whole. We argue that individuals with high levels of CPV are more likely to experience problems with the psychological contract and, as a result, engage in passive coping strategies such as disengagement, which are associated with negative attitudes. This is because achieving the goal of advancing the interests of society as a whole appears to be much more complex than benefiting vulnerable or underprivileged groups (the motivation for COM) and participation in public services (APS motivation). Excessive dedication to the PSM feature of “compassion” may collide with a public servant’s neutrality and regard for equity and lawfulness, provoking unethical conduct (Schott and Ritz, 2018).

Typically, PSM refers to contributing to society. Few topics in recent public administration and management studies have generated as much controversy as

PSM. PSM is neither the same as public servants' general motivation nor exclusive to the public sector (Vandenabeele *et al.*, 2018).

Public administration and public management are branches of the scientific family tree that emphasise application. This raises the question of what can be done with this type of knowledge and the potential uses (Vandenabeele *et al.*, 2018). A job demands-resources (JDR) perspective is one method to conceptualise the role of PSM. This theoretical perspective attempts to explain individual behaviour inside businesses by identifying aspects of the job that either drive performance and supply energy (i.e., job resources) or drain energy without producing beneficial outcomes (job demands). This theoretical perspective is intriguing because of its adaptability, as nearly everything can be a resource or a demand. This enables the incorporation of several context-specific variables into the theory. Therefore, even though the JDR model was not explicitly designed for the public service, it has been successfully applied in many public contexts, although not necessarily addressing the particular context of the public sector (Vandenabeele *et al.*, 2018). Kim *et al.* (2013:82) created the International Public Service Motivation Scale to quantify PSM.

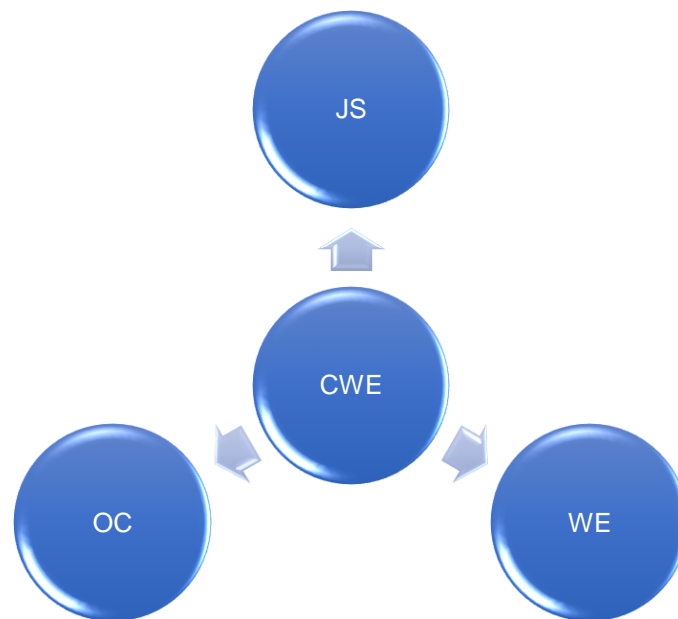
The questionnaire included four factors, namely:

- “Attraction to public service – 4 items.”
- “Commitment to public values – 4 items.”
- “Compassion – 4 items.”
- “Self-sacrifice – 4 items.”

## **2.3 THEORETICAL-CONCEPTUAL FRAMEWORK OF CORE WORK EVALUATION**

Core work evaluation (CWE) involves an assessment of an individual's work environment that focuses on the job, organisation and work activities (Webster *et al.*, 2014). Numerous studies on work attitudes have demonstrated that they are associated with essential employee behaviours. Even though this research has provided valuable insights into practice and theory, we suggest that a broader global evaluation of the work environment is necessary. Webster *et al.* (2014) conceptualise and offer empirical support for the CWE global work attitude construct. The conceptual basis for CWE is derived from traditional and contemporary theories of attitudes and

attitude formation. One follows recent guidelines for generating higher-order constructs to evaluate the theoretical statements in three empirical experiments. The findings indicate that CWE: (1) explains the variances across the specific indicators of JS, OC, and WE; (2) distinguishes the non-evaluative features of the work environment; and (3) predicts important work-related outcomes beyond its constituent indicators (Webster *et al.*, 2014). The three sub-constructs comprising the CWE are JS, WE, and OC (see Figure 2.1). These sub-constructs will be discussed with their respective reference definitions and supporting hypotheses.



**Figure 2.1: The three dimensions of core work evaluation**

Source: Researcher's own

### 2.3.1 Job satisfaction

Job satisfaction is one of the critical variables that have attracted the attention of organisations and scholars. Given the increased competitiveness caused by globalisation, managers have placed a premium on job fulfilment (Thiagaraj and Thangaswamy, 2017). According to Thiagaraj and Thangasamy (2017), the term 'job' refers to the immediate work task and work role within a specific work organisation, while job satisfaction refers to a person's attitude towards his occupation. Locke (1969:311) describes JS as "a pleasant or positive emotional state resulting from evaluating one's or work experiences". Satisfaction can be described from a

behavioural standpoint. It is considered that individual and organisational behaviour is goal-directed. Each human activity has a fundamental motivation, and most activities attempt to maximise satisfaction by meeting various needs, some of which Maslow has recognised (McLeod, 2007). Following this definition, satisfaction occurs when a person receives what he needs, wants, anticipates, deserves, or considers to be his due. It can, therefore, be argued that JS is a complicated set of characteristics determined mainly by employees' perceptions and expectations. The present study defines JS as "a favourable attitude or a joyful emotional state resulting from certain work-related events".

Numerous attempts have been made to explain JS. Considering these theories shows that it is difficult to distinguish between motivation and work satisfaction, despite the theoretical and practical differences between the two notions. Nonetheless, the two are closely related, and the methods used in examining work motivation are strikingly similar to those employed in the studies of JS (Thiagaraj and Thangaswamy, 2017).

### **2.3.2 Job satisfaction theories**

The numerous JS theories can be categorised into content theories and process theories. Content theories focus on the specific elements that drive someone to seek employment, whereas process theories explain the dynamics of this motivational process. Even though these hypotheses were criticised, they served as the framework for creating succeeding theories. Therefore, assessing JS that does not consider critical theoretical contributions is insufficient (Thiagaraj and Thangaswamy, 2017). Consequently, an attempt is made to examine the significant theories in the following section briefly. First, the numerous content and process theories are reviewed briefly. The content theories focus on recognising the needs/drives of individuals and how these needs/drives are met.

According to Maslow (1943:7), "work satisfaction is any combination of psychological, physiological, and environmental factors that lead a person to state, 'I am content with my job'". This description illustrates the several factors that affect JS. Blum, Naylor and Naylor (1968:31) defined JS as "an attitude resulting from the weighing and summing several individual likes and dislikes experienced concerning the job".

According to Thiagaraj and Thangaswamy (2017:465), JS is “the favourable orientation of an individual toward all aspects of the work situation”.

More than 70 years ago, in 1943, Abraham Maslow posited his hierarchical theory of five fundamental needs. The idea gained traction over time, and because of its inherent logic, it became widely accepted and required reading for all management students and human resource professionals. Later philosophers have questioned, analysed, and deemed it inadequate in specific ways, but its fundamental value in understanding human and employee behaviour in the workplace cannot be denied. According to Maslow’s (1943) hypothesis, humans have five ascending groups of requirements. The sequential order of the five need sets is as follows: physiological, safety and security, love and belonging, status and prestige, and actualisation. Only once each level of needs is met will the next level of needs be considered for fulfilment (Maslow, 1943). These needs can also be differentiated within a level. For example, the safety needs can be subdivided into physical safety, family security, financial security, and employment security and love; the belonging needs can be subdivided into parental love, partner love, sibling love, and children’s love. Humans seek to satisfy these wants, which alter as individuals and society progress through life. It is easy to comprehend why these needs were categorised hierarchically, with physiological demands at the bottom and actualisation needs at the top. Using this classification, Maslow concluded that as a person advances in life, his needs vary, and if he is unable to access appropriate needs, he will be unsatisfied, even if he does not realise it (Thiagaraj and Thangaswamy, 2017). This is true of all individuals, situations, groups, and nations.

Alderfer (1969) reconstructed Maslow’s need hierarchy into three fundamental human needs to make it more congruent with empirical research findings. He retained Maslow’s hierarchical structure but reduced the levels to three because of some overlap between the middle layers. He dubbed these levels Existence, Relatedness, and Growth, or ERG. Existence is the most fundamental need concerned with physical existence and encompasses the need for food, drink, and shelter, which can be supplied by a salary, fringe benefits, a safe working environment, and some level of job stability. Relatedness needs entail interactions with others and the gratification they might provide in emotional support, respect, acknowledgement, and a sense of belonging. These requirements can be met at work by co-workers and outside of work

by friends and family (Thiagaraj and Thangaswamy, 2017). Finally, growth centres on the individual and involves the need for personal growth and development, which can only be addressed by maximising one's talents. The ERG theory views needs as existing on a continuum, where a lower-level need may remain despite the achievement of a higher-level need (Thiagaraj and Thangaswamy, 2017).

Herzberg (2005) attempted to revise Maslow's idea of the need hierarchy. His theory is sometimes referred to as the two-factor hypothesis and the hygiene theory. He claimed that there are some workplace satisfactions and dissatisfactions. Extrinsic elements are associated with job dissatisfaction, whereas intrinsic factors are linked to JS. His theory was based on the inquiry, "What do people desire from their jobs?" He requested that individuals recount in detail instances in which they felt exceptionally good or dreadful. According to his responses, the inverse of satisfaction is not unhappiness. Removing unsatisfactory aspects of a job does not necessarily render it more satisfying. He asserted that specific components in the organisation are natural and that their presence does not lead to satisfaction. However, their lack of responsiveness causes discontent. Similarly, the absence of certain things does not result in unhappiness, but their presence has a motivating effect (Thiagaraj and Thangaswamy, 2017).

McGregor (1960) proposed Theory X and Y to explain employee behaviour. According to Theory X, fundamentally indolent people despise labour and must be forced to perform it. Later, McGregor saw similar patterns of conduct resulting from the managerial activity. A typical worker can only be motivated for a limited time by low-level incentives such as money and security. However, when a worker works to attain higher-level requirements and is denied this by management, he develops mistrust and adopts a disengaged attitude, which may be misconstrued as laziness. So, according to McGregor's Y theory, man is creative and has the self-discipline to work. Therefore, the essential purpose of management should be to maximise employees' creative potential by ensuring they have the means to satisfy their higher-order wants. McGregor's theory of JS implies that workers will be pleased if their wants can be met on various levels inside the workplace.

McClelland and McLelland (1961) identified three fundamental human needs that encouraged people to strive and accomplish. These were the needs for achievement

(N-Ach), power (N.Pow), and affiliation (N.Aff). These requirements vary from person to person and from society to society. It is unlikely that any individual would have similar levels for all three demands, varying according to their history, society, culture and education (Thiagaraj and Thangaswamy, 2017).

McClelland's idea became known as the three-need theory. It is also known as the learnt needs theory since it posits that most requirements are moulded over time and depend on the individual's experiences. For example, if a person with high accomplishment needs is placed in a position best suited for a person with high affiliation needs, this will result in a mismatch and, potentially, poor performance. On the other hand, people with strong connection requirements, for instance, will thrive in cooperative and people-oriented settings and perform well in a customer service role or public relations (Thiagaraj and Thangaswamy, 2017).

Observing that an employee's motivation influences their perceptions and experience of pleasure and discontent, process theories aim to understand the underlying emergence of various motives. They describe employee motivation from the first energisation of behaviour by selecting alternative behaviours to the actual effort. In the following parts, we will discuss the most significant theories related to JS.

Vroom, Porter and Lawler (2005) proposed the most widely recognised explanation of motivation. Their hypothesis is known as the expectation theory. The theory posits that an individual's propensity to act in a particular manner depends on the strength of his or her expectation that the act will lead to a particular outcome and the attractiveness of that consequence. According to the expectation theory, an employee can be motivated to perform better if they believe that better performance will result in a favourable performance evaluation and that this would lead to the achievement of personal goals in the form of a reward. This is expressed as follows:  $Motivation = Value \times Expectation$ . The hypothesis is centred on three factors: the relationship between efforts and output, the link between output and payment, the relationship between benefits and aims, and obtaining pleasure through rewards.

According to the equity hypothesis, Adams and Freedman (1976) contend that people are motivated by unfairness and constantly compare their efforts to those of their co-workers and the rewards they receive. Equity is compared to the feeling of justice between co-workers' labour and their rewards. A fair situation in which all employees

are treated equally predicts identical outputs for identical inputs, and if some employees believe that others are receiving greater compensation for the same labour, they will undoubtedly reduce their efforts. If a hard-working person observes an ineffective and counterproductive co-worker receiving the same wage, he or she may lose motivation to continue to perform at the same level. Motivation is impossible without fairness in the evaluation and reward system (Thiagaraj and Thangaswamy, 2017).

Edwin Locke's Goal-Setting Theory posits that instead of assigning ambiguous tasks to individuals, providing them with defined and well-articulated goals expedites their completion. A goal orientation also prevents misconceptions in the employees' work. According to the goal-setting hypothesis, employees are driven to perform better and exert maximum effort when goals are set at a high standard. It centres on self-efficacy, an individual's belief that they can complete a difficult task (Locke and Latham, 1994).

Vroom *et al.* (2005) established a comprehensive model of motivation based on the notion of anticipation. It has to do with perception, effort, reward and contentment. An employee's effort is contingent upon the value of the anticipated reward and the perception of the effort required to execute and get a reward. Therefore, performance is the consequence of a combination of effort, a person's ability and accurate perception. The performance or achievement will yield further intrinsic and external rewards. The employees compare the anticipated compensation to the real compensation received. This will determine if employees are satisfied or dissatisfied. The smaller the gap between the perceived equitable and actual reward, the greater the contentment. Failure to receive the anticipated reward will result in discontentment (Schuster *et al.*, 1971).

Job satisfaction is a key issue that must be addressed for any organisation to achieve greater success. This study summarises the various factors that need to be clarified for a survey on JS. The related words of JS – job attitude and morale – are defined in depth (Thiagaraj and Thangaswamy, 2017). JS influences productivity, employee turnover, absenteeism, safety, stress, and unionisation, amongst other factors. There are numerous explanations for JS.

### 2.3.3 Job satisfaction facets or dimensions

The relationship between JS, intention to leave, and OC has been studied by Rutherford *et al.* (2009). Even though JS is studied as both a cause and an effect, most academic research investigates JS as a global, unidimensional entity. According to Rutherford *et al.* (2009), using a global measure of JS fails to give an accurate and comprehensive assessment of satisfaction, providing management with little information regarding the specific parts of the work environment that employees find satisfactory. In addition, research that has assessed JS using multidimensional scales has found that employees' job-related attitudes and behaviours are affected differently. Due to the inherent limits of global measures of JS, several multidimensional JS scales were developed to provide a more accurate and comprehensive evaluation of the construct by researchers (Rutherford *et al.*, 2009).

Organisations must comprehend the elements that influence and are influenced by the many levels of work satisfaction. Several scales are available to assist them in such evaluations. Churchill *et al.* (1974:257) created the INDSALES seven-dimensional, 95-item Likert-type scale ("satisfaction with the overall job, co-workers, supervision, company policy and support, pay, promotion and advancement and customers"). The INDSALES scale is employed because it captured more aspects than the other multidimensional scales and was developed expressly for use in a sales context (Rutherford *et al.*, 2009). Smith *et al.* (1969:231) established a five-dimensional, 72-item yes/no scale known as the JDI ("satisfaction with the type of work, the pay, opportunities for promotion, supervision, and co-workers").

It is essential to use a multidimensional JS measure to determine these factors. The Facet Satisfaction Scale developed by Bowling *et al.* (2017) measured JS. There are five variables and 25 items on the JS facet scale.

- "Work itself – 5 items."
- "Supervision – 5 items."
- "Co-workers – 5 items. "
- "Pay – 5 items."
- "Promotion – 5 items."

## **2.4 ORGANISATIONAL COMMITMENT**

Organisational commitment has been a widely studied organisational behaviour phenomenon since 1990. Typically, OC refers to an employee's psychological relationship with their employer (Potipiroon and Ford, 2017). Scholars in public administration have identified various reasons why individuals may develop an intense emotional commitment to their public-sector companies. One of these motivations is PSM, a prosocial drive that indicates "an individual's orientation toward providing services to people to do good for others and society" (Potipiroon and Ford, 2017). Individuals with a strong internalised desire to do good and promote "the welfare of others are more likely to join, feel emotionally attached to, and remain in public-service organisations that enable them to do good and be valuable to society" (Potipiroon and Ford, 2017:212). Researchers state that individuals with high PSM may develop an unfavourable view of the organisation if their work environment does not meet other underlying needs. Previous research has shown that PSM significantly influences OC and reduces turnover intentions (Potipiroon and Ford, 2017).

Potipiroon and Ford (2017) found that PSM could not predict OC when individuals thought their jobs did not satisfy their prosocial needs. In line with this perspective, Potipiroon and Ford (2017) said that researchers need to adopt an interactionist perspective and study potential variables that may amplify or mitigate the beneficial impacts of PSM. Although PSM has been characterised as a different kind of intrinsic motivation, questions have been raised as to whether the two are significantly distinct. Intrinsic motivation is the level to which one obtains delight from the "task" itself, whereas PSM is a persistent "want" to do good for others (Potipiroon and Ford, 2017).

### **2.4.1 Organisational commitment theories**

According to Srivastava and Pathak (2016), commitment is a stabilising factor that directs behaviour and binds an individual to a course of action. Srivastava and Pathak (2016) define OC as the extent to which individuals identify with and participate in the activities of a particular organisation. Specifically, commitment is an individual's psychological connection to the organisation. Srivastava and Pathak (2016:200) made a significant contribution to the OC literature, and many researchers refer to their three-component model of OC, which includes "affective commitment (AC), normative

commitment (NC), and continuance commitment (CC)”. A person’s attachment to and identity with the organisation are described as AC. In contrast, CC refers to an individual’s desire to remain in the business due to a perceived lack of alternative employment opportunities and concern over potential loss associated with quitting the position. Additionally, NC refers to an individual’s view that they must remain in an organisation because of specific tasks or obligations (Takamatsu and Yamaguchi, 2018). According to Takamatsu and Yamaguchi (2018), this model offers the most reliable measurement scale for assessing OC.

AC refers to the emotional connection between an employee and the organisation and a strong identification with the organisation’s goals and values; CC refers to the willingness to exert effort and remain in an organisation due to the perceived cost of leaving, such as the employee’s time invested or unfavourable economic conditions. There is a sense of duty to retain membership in any organisation designated NC (Srivastava and Pathak, 2016). Srivastava and Pathak (2016:198) describe employee commitment as “an attitude expressing employees’ loyalty to their organisation and a continuous chain by which organisation’s members express their care for the organisation’s development”. A high level of OC promotes employee JS, motivates them to work harder, and encourages them to remain with the organisation. For over three decades, commitment has been the key to business success, leading to considerable research on the phenomenon (Srivastava and Pathak, 2016).

Today, it is commonly acknowledged that employee engagement can take various forms (Battistelli *et al.*, 2016). In their three-component commitment model, Battistelli *et al.* (2016) conceptualised commitment as a psychological drive that binds the individual to the organisation and enhances the possibility that the employee will remain. They used the terms AC, CC and NC to differentiate between different mindsets of commitment and argued that employees could experience various combinations of all three mindsets concurrently.

AC has been most strongly associated with turnover and work performance among the three components (Battistelli *et al.*, 2016). Work experiences that contribute to employees’ sense of comfort in the organisation (e.g., strong interpersonal interactions; role clarity) and their sense of competence and self-worth promote AC (e.g., participation, feedback, challenge). Continuance commitment arises from

actions or decisions that make retaining valued assets (such as company benefits or community standing) more important. Normative commitment is impacted by socialisation experiences that stress the validity of continuous service or the receipt of organisational advantages (such as investment in training) that give rise to a need to reciprocate (Battistelli *et al.*, 2016).

Affective, normative, and enduring commitment comprise the OC. Creating OC among employees ensures they are motivated and focused on achieving the organisation's objectives (Faizan and Zehra, 2016). However, OC cannot be developed only through an organisation's support structure: competent leadership is also required. Before emphasising the role of leadership in generating OC, it is essential to comprehend the concept of leadership. Effective leaders can influence and inspire people in specific ways to achieve desired goals, while diverse leadership styles influence employees' organisational performance and OC. According to Faizan and Zehra (2016), transformative leadership highly predicts overall employee and job-related satisfaction. Furthermore, Faizan and Zehra (2016) stated that an innovative and competitive culture substantially impacts organisational success. In other words, organisational culture influences organisational performance, whereas leadership style influences organisational culture; hence, leadership style in organisational settings influences organisational performance (Faizan and Zehra, 2016). Mathieu *et al.* (2016) supported the three-factor AC, CC and NC model. According to Mathieu *et al.* (2016), JS can be viewed as an overall feeling about the job or as a linked collection of attitudes regarding various aspects of employment.

Informally, OC can be regarded as a measure of an employee's devotion and loyalty to an employer. Mogotsi *et al.* (2011:44) defined it as "the relative strength of an individual's affiliation with and participation in a specific organisation". Additionally, OC has been defined as "the entirety of internalised normative pressure to act in a manner that serves the organisation's interests". In addition, Mogotsi *et al.* (2011) established a three-component model of OC, which has been quoted extensively in the literature. This approach differentiates between AC, CC, and NC: "affective commitment [AC] refers to the employee's emotional relationship to, identification with, and participation in the organisation. Continuance commitment [CC] refers to recognising the expenses associated with quitting the organisation. Finally, normative commitment [NC] denotes a sense of obligation to maintain employment" (Meyer and Allen, 1991:63).

Affective OC is associated with various organisationally significant characteristics, including turnover and turnover intentions, tardiness and absenteeism, and job performance. Importantly – at least for our study – it has been found that OC is a powerful predictor of organisational citizenship behaviours (Mogotsi *et al.*, 2011).

#### **2.4.2 Organisational commitment dimensions**

A worker's emotions are intimately tied to AC. It entails forming an emotional bond with the organisation, identifying with it, and wanting to remain loyal to it. Continuance commitment refers to an employee's awareness of the costs associated with leaving or remaining with the organisation (Buda and Ling, 2017; Thabane *et al.*, 2017). If people believe that remaining with the organisation is greater than the cost of leaving, they will prefer to remain. Unlike AC, CC refers to a psychological attachment that encompasses the effort, time and growth invested in staying with the same organisation for many years. Finally, NC displays a worker's feeling of organisational duty. It has to do with the employee's strong level of obligation to continue working (Buda and Ling, 2017; Koc, 2018). Thus, OC can be described as the extent to which employees identify with and participate in an organisation (Buda and Ling, 2017).

OC measures whether an organisation's human resource management procedures can foster psychological ties between its aims and those of its employees. The topic of OC is crucial for the organisation's managers. To boost their competitive advantage, managers continually look for ways to increase their employees' dedication. This is an intangible result of a human resource management system essential for retaining employees and maximising their potential over time (Masouleh and Allahyari, 2017). The orientation of OC is toward the organisation. It implies the attachment and identification of individuals with the organisation. Commitment to the organisation has been demonstrated to predict greater effort, motivation, work satisfaction, decreased absenteeism, lower turnover, and increased retention.

Masouleh and Allahyari (2017) believe genuinely empowered employees who operate within a framework that allows them to participate and solve problems are more loyal to their company and union. Furthermore, OC is correlated with employees' attitudes and behaviours towards their organisation. Employees with a very high level of OC have a strong belief in the organisation's values and beliefs, quickly embrace its aims

and objectives, and are willing to exert extra effort for the organisation (Masouleh and Allahyari, 2017). As OC is a crucial antecedent to critical workplace behaviours, the connection between employee volunteering and OC has garnered much attention (Breitsohl and Ehrig, 2017). According to Breitsohl and Ehrig (2017), conceptual approaches to making employee volunteers more devoted to their organisation can be categorised into two major categories: social identity and social exchange. Social identity implies that people define themselves in terms of the social groups to which they belong (Breitsohl and Ehrig, 2017:267), while social exchange means that individuals are committed to the organisation since volunteering enhances their identification as employees. Social exchange is often conceptualised through perceived organisational support (POS) in the organisational context (including employee volunteering), i.e. “global beliefs concerning the extent to which the organization values (employees) contributions and cares about their well-being” (Breitsohl and Ehrig, 2017:268).

Allen and Meyer’s (1996) instrument, as discussed by Bar-Haim (2019), is the most widely used method for measuring OC. This questionnaire consists of 24 items, with eight items for each of the three dimensions: emotional commitment scale (ACS), continuation commitment scale (CCS), and normative commitment scale (NCS). Since the intense focus on the methodology of OC research in the 1990s, Allen and Meyer’s (1996) three-dimensional questionnaire has become the gold standard. Today, this questionnaire is seldom validated except to detect cultural biases (Bar-Haim, 2019). Nevertheless, researchers have created and validated devices for evaluating employee commitment (EC). For example, Wilson *et al.* (2016) used the instrument and validated a measure of EC called the Organisational Commitment Questionnaire (OCQ). They defined EC as the relative strength of an individual’s identification and involvement with a specific organisation, which is influenced by three interrelated criteria. The three variables were identification with the organisation’s goals and ideals, a readiness to exert significant effort on behalf of the organisation, and a desire to maintain membership.

The AC component (eight items) measured emotional attachment and involvement with an organisation; the CC component (eight items) measured the perceived costs of leaving an organisation, and the NC component (eight items) measured the

perceived obligation to support and remain a member of the organisation. Allen and Meyer (1996, as cited in Wilson *et al.*, 2016:3) tested the developed scales with non-unionised full-time employees from two manufacturing companies and a university. According to their findings, EC's AC and CC components were empirically distinct phenomena. However, the AC and NC components were connected. In this study, the researcher employed a three-component model (TCM) of emotional (AC), continuation (CC), and normative (NC) OC. The organisational commitment was measured using Allen and Meyer's OC scale (1996), validated by Maqsood *et al.* (2012).

The questionnaire consists of three factors and 22 items:

- "AC – 8 items."
- "CC – 6 items."
- "NC – 8 items."

## **2.5 WORK ENGAGEMENT**

Work engagement (WE) is a positive, satisfying, and work-related state of mind with three components: physical, emotional, and cognitive (Wang *et al.*, 2017). The three components of WE are vigour, commitment, and immersion (Wang *et al.*, 2017). In addition, work engagement is commonly defined as an attitude or behaviour that is drawn to, involved in, and retained in the work or organisation (Pandita and Singhal, 2017). According to Junça-Silva, Caetano and Lopes (2017), there is a need for more research on job engagement as a process due to its potential to improve workplace outcomes.

Work engagement may encourage individuals to be more enthusiastic, committed, and interested in their work, leading to favourable organisational performance-related results (Pandita and Singhal, 2017). For instance, WE influence employee performance, turnover intentions and job commitment (Pandita and Singhal, 2017). The sensible response to the empirical findings of Junça-Silva *et al.* (2017) showing a link between work engagement and wellbeing and performance would be an in-depth examination of the variables that drive WE as a leverage point for wellbeing and performance.

### **2.5.1 Work engagement theories**

Work engagement is a highly accurate predictor of crucial employee, team and organisational outcomes, one of the most significant reasons for its popularity. The JDR hypothesis is one of the most frequently used explanations for WE (Bakker and Albrecht, 2018). This theory states that a mix of job qualities and personal resources will predict job performance through WE. According to Bakker and Albrecht (2018), WE is most likely to occur when workers face significant problems but have a sufficient job and personal resources to overcome them. The JD-R theory focuses specifically on job characteristics, employee behaviours (such as job crafting, use of strengths, and playful work design), and personal resources (such as self-efficacy, optimism, and self-esteem) (Bakker and Albrecht, 2018).

The burnout hypothesis views WE as the antithesis of burnout, placing burnout at the opposing end of a bipolar dimension and WE at the positive end (Kuok and Taormina, 2017). Engaged workers experienced a positive affective-motivational state of fulfilment, but burnt-out workers reported a negative emotional state/experience at work. This idea posited a bipolar dimension with mutually exclusive poles, implying that an employee may be either burnt out or engaged at work, but not both (Kuok and Taormina, 2017).

### **2.5.2 Work engagement dimensions**

Work engagement is a psychologically motivated state with three dimensions: involvement, commitment and vigour (Costa *et al.*, 2016; Yalabik *et al.*, 2017). Dedication is shown by inspiration, identification, enthusiasm, and involvement in one's work. Vitality relates to energy, mental fortitude, resolve, and persistent effort in one's work. The final component, absorption, relates to detachment from one's surroundings, a high focus and immersion in one's work with little awareness of the time spent on the job. Thus, an engaged employee is enthusiastic, eager and engrossed in his or her work (Yalabik *et al.*, 2017).

The structure may be multidimensional; consequently, it differentiates between its levels. The key theoretical elements of job engagement differ across the individual and team levels. Teamwork engagement (TWE) emerges from the interaction of team members. However, individual job engagement (IJE) is described as a condition of

work-related happiness and does not require any external impetus to grow. In addition, some studies suggest that there are two primary characteristics shared by TWE and IJE: an energy continuum (from weariness to vigour) and an involvement continuum (from cynicism to dedication) (Costa *et al.*, 2016).

Costa *et al.* (2016) presented a three-dimensional structure of WE, characterised by vigour (high levels of energy when working), devotion (strong involvement in one's job, experiencing a sense of enthusiasm), and absorption (complete concentration on one's work). The concept of engagement counteracts the qualities of burnout: energy, involvement, and effectiveness. In addition, the three dimensions typically exhibit statistically significant correlations of 0.80 or 0.90 between the latent components (Costa *et al.*, 2016), indicating that the three dimensions are closely related. The Work Engagement Scale (WES), developed by Schaufeli and Bakker (2004), was used to measure WE. The questionnaire has 17 questions and three criteria:

- "Vigour – 6 items."
- "Dedication – 5 items."
- "Absorption – 6 items."

## **2.6 THEORETICAL-CONCEPTUAL FRAMEWORK OF COUNTER-PRODUCTIVE WORK BEHAVIOUR**

Counterproductive work behaviour is defined as any purposeful act by a member of an organisation that is deemed to go against the organisation's legitimate interests (Whelpley and McDaniel, 2016). Counterproductive work behaviour can impact the performance and wellbeing of the individual engaged in CWB, the individuals interacting with the one engaging in CWB, and the organisations where CWB occurs. Whelpley and McDaniel (2016:850) describe CWBs as a "persistent and costly" issue. Estimates for the cost of CWBs to organisations in many sectors are in the billions of dollars, resulting in decreased organisational effectiveness (Dunlop and Lee, 2004). In addition to organisational expenditures, CWBs at work can cause harm to their victims. Extreme cases of CWB may involve acts of physical aggressiveness and workplace violence against co-workers (Whelpley and McDaniel, 2016).

According to nearly all definitions of CWBs (Martinko *et al.*, 2002), CWBs are defined by disrespect for social and corporate rules and values. Furthermore, they observe

that the severity of CWBs might range from low (e.g., petty theft) to high (e.g., violence). Similarly, Martinko *et al.* (2002) consider CWBs to encompass all deviant behaviours, from absenteeism to assault. Finally, according to some definitions, CWBs are actions that endanger an organisation's and its staff's wellbeing and violate implicit and explicit rules for courteous, respectful, and proper conduct. We concur with these points of view and define counterproductive behaviour as conduct by an employee that harms the organisation or other staff (Martinko *et al.*, 2002).

### **2.6.1 Theories of counterproductive work behaviour**

Numerous theories of counterproductive behaviour share comparable aspects and represent the same fundamental processes. The proposed paradigm demonstrates that the causal thinking process is the most immediate cause of CWB. Making sense exemplified by simple reasoning helps explain why unique environmental and individual difference elements are crucial to comprehending antisocial behaviours. Nearly every theoretical perspective that seeks to explain CWB includes the aspect of information processing. Two characteristics shared by these perspectives are the following: "(1) how individuals evaluate the quality of their outcomes (e.g., perceived fairness, perceived justice, perceived success or failure); and (2) how beliefs about the causes of their outcomes (e.g., attributions) influence behaviour and affect" (Martinko *et al.*, 2002:42). Evaluations of the quality of outcomes typically involve a comparative procedure that generates judgements of disequilibrium, unfairness, or inequity (Martinko *et al.*, 2002).

Although the researcher acknowledges the two-stage process in which individuals perceive some disequilibrium and then make an attribution for the disequilibrium, he has chosen to focus primarily on the attributional aspect of this process. This is for two reasons. First, there is a high degree of agreement on the procedure for evaluating outcomes. In contrast to absolute equity, the evaluation process is characterised by distributive, procedural, and interactional fairness (Martinko *et al.*, 2002).

Although it is essential to understand how the quality of outcomes is assessed, the attributions for the causes of the outcomes appear to be the most predictive of the nature and form of CWB. Specifically, although two people may perceive that their outcomes are undesirable and unequal, their causal reasoning processes are most

predictive of their inadequate responses to the outcomes (Martinko *et al.*, 2002). For example, if a person relates a disappointing outcome to a lack of effort, they are likely to accept responsibility and will not participate in CWB. However if they link the disappointing outcome to an external cause, such as a jealous or malicious co-worker, they are significantly more likely to engage in retaliatory behaviour, which could be classified as counterproductive (Martinko *et al.*, 2002).

Although various theories describe how and why different causal reasoning processes are associated with CWB, the attribution theory provides the most appropriate explanation for why some individuals choose to engage in CWB while others do not. In addition, the attribution theory helps explain why, when confronted with adverse outcomes, some people choose to engage in retaliatory forms of CWB. In contrast, others choose to direct their efforts internally through self-destructive forms of CWB, such as substance abuse. Evidence suggests that specific attribution patterns for perceived inequitable workplace outcomes significantly predict people's tendencies to engage in retaliatory vs self-destructive CWBs (Martinko *et al.*, 2002).

Thus, a person's attributions regarding the causes of outcomes (be they equitable or inequitable) are the driving force behind CWB. Specifically, the locus of causation dimension influences emotional responses. Internal attributions for unfavourable situations frequently result in self-deprecating and helpless feelings (Martinko *et al.*, 2002). On the other hand, external attributions elicit negative affective reactions directed towards others, such as vengeance, mainly when people believe that there are no reasonable excuses for the offenders' actions which are viewed as intentional. The dimension of stability influences expectations. When bad results are attributed to unstable sources, they do not alter anticipations (Martinko *et al.*, 2002).

Consequently, CWB is not anticipated and is regarded as improbable whether the attribution is internal or external. If, however, the undesirable outcome is expected to persist, CWB is more likely to occur (Martinko *et al.*, 2002). Specifically, attributing poor results to internal and stable factors, such as a lack of aptitude, increases the risk of inwardly directed CWB, such as learned helplessness and substance abuse. On the other hand, negative outcomes that are ascribed to external, persistent and intentional causes for which there are no mitigating circumstances, such as punishment by a manager, are more likely to result in externally directed CWB such

as aggression, revenge and sabotage (Martinko *et al.*, 2002). As the attribution theory provides the most appropriate explanation for why some individuals, when presented with the same stimuli, choose to engage in CWB as opposed to others, the researcher has decided to base the theoretical foundation of the study on this theory.

### **2.6.2 Dimensions of counterproductive work behaviour**

Akkaya (2019:2) analysed CWBs in the context of three primary dimensions, including “‘physical-verbal,’ ‘active-passive’ and ‘direct-indirect’ and eight sub-dimensions” constructed by crossing these main dimensions. The classification of Akkaya was augmented by adding “the effect/danger ratio and overt/covert dimensions”. Eleven categories of counterproductive work conduct were determined: “(1) theft and related conduct; (2) destruction of property; (3) misuse of information; (4) misuse of time and resources; (5) unsafe conduct; (6) poor attendance; (7) poor quality work; (8) alcohol use; (9) drug use; (10) inappropriate verbal actions; and (11) inappropriate physical actions”. Akkaya (2019:3) categorised CWBs into two basic categories: “individually targeted” and “organisationally targeted”. In this context, the researchers suggested that CWBs might be studied under five sub-dimensions: “(i) abuse toward others, (ii) production deviance, (iii) sabotage, (iv) theft, and (v) withdrawal”.

Individually targeted CWBs are exhibited by conduct aimed at directly exploiting an employee or employees. This primary dimension is “abuse against others”. According to Akkaya (2019), threatening words and acts, insults, disregard, and physical violence are included in this dimension. On the other hand, CWBs that directly target the organisation are called “organisationally targeted”. The organisation is the direct target of such conduct, but employees’ CWBs directed at individuals also directly and negatively affect the organisation (Akkaya, 2019).

The concept of sabotage entails the intentional destruction of an organisation’s physical property. This dimension consists of the employee’s intentional actions to harm the organisation’s property, equipment, image and reputation. For example, employees may participate in theft to hurt the organisation out of financial necessity, dissatisfaction with their jobs, or a low view of organisational fairness (Akkaya, 2019). The origins of much of the research on CWB lie in studying human violence. In the social, psychological and workplace literature, most of these ideas are associated with

negative emotions, such as anger or frustration, in response to the environment at work (Spector *et al.*, 2006). Over time, precipitating events include various occupational stressors that elicit a wide range of negative emotions: aggression-based models generally focus on injustice and inequity. This connection was made clear by Spector *et al.* (2006), who examined perceived unfairness as a workplace stressor. The literature on aggressiveness distinguishes between hostile and instrumental aggression based on the underlying motivation. Associating with negative emotions, generally rage, hostile violence is frequently impulsive and primarily motivated by harm. Intentional aggression is not necessarily accompanied by emotion and is directed at achieving a specific purpose, not physical harm to an individual (Spector *et al.*, 2006). Anderson and Bushman (2002) highlight that the proximal motive of hostile aggression is injury, whereas instrumental aggression, such as robbery, has a more distant motive. In fact, according to some experts, some forms of aggressiveness, such as retaliatory behaviour and vengeance, may have functional or prosocial instrumental motivations and outcomes (Folger and Skarlicki, 2005). Abuse comprises destructive behaviours directed at co-workers and others that cause bodily or psychological injury, such as making threats, negative criticism, disregard, or undermining their capacity to work effectively. Such behaviours are direct manifestations of aggressiveness; however, physical violence in the workplace is typically uncommon; hence, most studies have focused on nonphysical forms.

Spector *et al.* (2006) address the relationship between stressors and other unpleasant conditions and aggressive violence resulting from negative emotions. Both items that cause bodily pain and pressures that may only produce mental anguish are included. Linkages between workplace pressures and CWB directed against others have been demonstrated (Spector *et al.*, 2006). Geen (1998) explains that aggression is a consequence of both personality and environmental factors. The work of Keashly and Harvey (2005) on emotional abuse in the workplace draws on the aggressiveness literature but identifies additional contributory elements. They discuss how social norms and organisational culture can contribute to such conduct. Thus, stressful working conditions may lead to abuse in environments where such conduct is deemed acceptable or, at least, not objectionable. The researcher expects abuse to be primarily motivated by hostility, thus hypothesising that it is related to stressors and negative feelings. The degree to which an individual directly faces negativity from other

employees elicits a response in kind or spiralling into more severe types of abuse (Pearson *et al.*, 2005).

Production deviation is the deliberate failure to complete required job duties, often categorised by withdrawal. Sabotage, on the other hand, defaces or damages employer-owned property (Spector *et al.*, 2006). Although these two forms of behaviour are distinct, with the former often being more passive (failing to perform a task or performing it incorrectly) and the latter being more active (deliberately damaging something), they are conceptually linked and may have the same root causes (Spector *et al.*, 2006). Some studies on workplace aggression have viewed production deviation and sabotage as misplaced hostility aimed at safer inanimate organisational targets instead of individuals (Spector *et al.*, 2006). Production deviance would be safer than sabotage, as the destruction of property is more likely to be punished by the organisation and, depending on the severity of the conduct, could result in arrest. Being more passive, production deviance is less evident and difficult to verify. Although anger directed against inanimate objects may be perceived as safer than direct physical aggression, it is less likely to be preferred to verbal aggression for two reasons. First, verbal aggressiveness is unlikely to be penalised, and second, it allows the aggressor to retaliate against the source of the provocation.

Some researchers have observed that sabotage can be committed both for instrumental reasons and in response to negative emotions (Spector *et al.*, 2006). Such activities may be performed, for instance, to bring attention to an issue, effect organisational change, win peer acceptance, or gain a competitive advantage over colleagues (e.g., sabotaging their chances for a promotion). However, little research has been conducted on such production deviance or sabotage motives. Given their connection to hostile aggression and their potential instrumentality, production deviance and sabotage are expected to have weaker relationships with the same variables as abuse. Moreover, production deviance is expected to have better correlations with other factors than sabotage because it is viewed as safer (Spector *et al.*, 2006).

Employee theft is acknowledged as a significant issue for businesses. As with sabotage, some academics contend that stealing can be a type of aggression against an organisation committed with the intent to cause harm (Spector *et al.*, 2006). This

shows that many of the same characteristics that contribute to abuse also contribute to theft. However, the majority of employee theft treatments incorporate additional criteria. For instance, Spector *et al.* (2006) highlighted a variety of probable explanations, such as the idea that theft is acceptable, a lack of self-control, perceptions of injustice, personality, the work environment, demographic traits and stress. Spector *et al.* (2006) identified three primary causes of theft: economic need, job unhappiness and injustice. Among the three, views of inequality have been thoroughly researched, with multiple studies establishing a clear correlation between these attitudes and stealing. Injustice may be regarded as a stressor that influences stealing through anger and other negative feelings, but it is also feasible that injustice functions through more instrumental means. That is to say; a person steals not to cause harm to the organisation but to attain a state of equity or simply for economic benefit. Theft is presumed to have more instrumental than hostile motivations. Based on prior research, we hypothesise that it relates to justice and JS, but we do not anticipate that it relates to our other factors (Spector *et al.*, 2006).

Withdrawal consists of behaviours that limit the amount of time spent working to a minimum. It includes absence, tardiness and taking longer than permissible breaks (Spector *et al.*, 2006). We removed employee turnover since it is a once-off act of permanent departure instead of a potentially ongoing series of actions by present employees. Absence and tardiness have been examined separately and have their bodies of literature, even though several studies have linked various types of withdrawal (Spector *et al.*, 2006). Although withdrawal may be driven by a desire to harm the organisation, most solutions for this type of CWB have taken a different route.

Absence has attracted the most attention among the many forms of withdrawal behaviour. Early models believed it was a reaction to job discontent, but such linkages have proven to be tenuous at best. Recent research indicates that a multitude of factors can cause absence. Spector *et al.* (2006) identify illness, mental health, stress, social norms, culture, conflict with management and individual differences. In addition, the research on work-family conflict states that disengagement may be instrumental and selected as a coping mechanism for conflicting work and nonworking duties.

In contrast to these other forms of behaviour, withdrawal is an attempt to avoid a situation instead of causing direct harm. For example, a person may seek to flee from

pressures, injustice, discontent, or situations that create destructive emotions. We hypothesise that withdrawal is associated with all of our research variables (Spector *et al.*, 2006).

This study focuses on two aspects of CWB: counterproductive workplace behaviour – organisation and counterproductive workplace behaviour – person. Researchers, employers and the general public are increasingly concerned about CWB. These behaviours are a collection of unique activities that are intentional (as opposed to accidental or mandatory) and harmful to companies and/or their stakeholders, including clients, colleagues and supervisors (Spector *et al.*, 2006). CWB and OCB; are both extra-task behaviours that are typically viewed as opposites (Fox *et al.*, 2012). Indeed, studies have demonstrated a substantial inverse correlation between the two, and they frequently correlate in opposite directions with putative antecedents such as justice, JS, and interpersonal conflict. This indicates that factors causing high amounts of one result in low levels of the other. However, a few studies failed to find these expected results when they selectively retained only those items they judged to be non-overlapping between CWB and OCB. However, a meta-analysis poses distinct challenges when the relationships between CWB and OCB are distorted (Fox *et al.*, 2012).

Counterproductive work behaviours (CWBs) are intentional actions that harm organisations or their employees (Bolton, Becker, and Barber, 2010). These behaviours might range from mild (such as taking a long lunch break) to severe (e.g., being verbally abusive). Although small behaviours are considered generally harmless, they can still negatively affect an organisation's functioning. Thus, businesses must understand how to prohibit these behaviours and recognise those more inclined to engage in them (Bolton *et al.*, 2010).

Personality qualities are one source of individual differences connected to workplace malfeasance (DeShong *et al.*, 2015). Therefore, understanding the association between personality traits and CWBs may enable firms to build better hiring screening techniques, reducing future conflicts and productivity losses. However, CWBs result in many undesirable outcomes, including financial losses (e.g., bribes, fraud) and damage to the company's reputation (e.g., discrimination). This is defined as "behaviour meant to impede the ability to create and maintain strong interpersonal

relationships, work-related achievement, and a favourable reputation over time” (DeShong *et al.*, 2015:55). These behaviours have been differentiated further in terms of their intended recipients. For example, interpersonal CWBs cause bodily or mental harm to another individual (e.g., denigrating or harassing a co-worker), whereas organisational CWBs directly impact the company’s productivity (e.g., being under the influence while working or working slowly). A meta-analysis revealed that personality might be a key factor in determining who is susceptible to engaging in CWBs (DeShong *et al.*, 2015).

Contemporary CWB research often distinguishes between interpersonally-directed acts (behaviours aimed towards persons) and organisationally-directed acts (behaviours directed towards organisations) (Bolton *et al.*, 2010). This distinction has been widely used in CWB research; however, it is not the only taxonomy presented. Because of its broad categorisation of deviant behaviours, acts such as abusing toilet privileges and undermining one’s career are sometimes grouped together and mistakenly viewed as a single index. Accordingly, Bolton *et al.* (2010) categorised deviant behaviours into five dimensions: abuse – harmful and nasty behaviours that affect other people; production deviance – intentionally doing one’s job incorrectly or making mistakes; sabotage – damaging organisational property; theft – taking the property of another, and withdrawal – avoiding work by tardiness or absenteeism.

Almost all businesses, both large and small, are susceptible to the potential repercussions of CWBs. CWB refers to various deliberate behaviours that threaten an organisation and/or its members (Fine, 2012). Some CWBs impact the organisation (such as theft and unexcused absences), while others target its workers (e.g., harassment, fighting). On a global scale, it is estimated that the vast majority of employees have engaged in CWB at some point in their careers, and the annual damages to organisations produced by such conduct have been assessed in the hundreds of billions of dollars (Fine, 2012). Therefore, the CWB Checklist created by Fox and Spector (2002) was utilised to assess CWB. The questionnaire includes 45 items and two factors.

- “CWB-Organisation – 21 items.”
- “CWB-Person – 22 items.”

- “CWB Scale – 43 items.” (Fox and Spector excluded items 12 and 45 in their analysis. Therefore, these two items were also excluded in this study).

## **2.7 DIFFERENCES IN MEAN JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT, PUBLIC SERVICE MOTIVATION AND COUNTERPRODUCTIVE SCORES**

Lumley (2009) utilised analysis of variance (ANOVA) to see if the four age groups (less than 30 years, 30-34 years, 35-39 years, and longer than 40 years) exhibited statistically significant differences in the mean scores on the Career Orientations Inventory (COI), Job Satisfaction Survey (JSS), and Organizational Commitment Questionnaire (OCQ). The study found that age groups differed significantly in COI, JSS, and OCQ. In addition, it was revealed that the age of the participants affected how they answered questions on COI, JSS, and OCQ. Moreover, according to Lumley (2009), the significant differences between age groups suggest that participants aged 34 to 39 (establishment stage) want more autonomy, independence and control over their work-life balance and do not wish to be dictated to by company bureaucracy. Lumley (2009) found that participants aged 34 to 39 are more emotionally attached to, identify with, and engage with their employer. Most participants aged 34 to 39 were employed at a managerial level and had significantly higher AC scores than workers. In addition, the survey indicated that participants aged 34 to 39 are more satisfied with communication. According to the study’s findings, participants younger than 30 (exploratory stage) also scored highly on AC, indicating that individuals younger than 39 had a strong purpose of remaining with their current employer.

Westlund and Hannon (2008) found a strong correlation between an employee’s intentions to leave and their level of satisfaction with communication inside their organisation. This would imply that remuneration and labour are related to absolute OC, and that clear and transparent communication must accompany these JS variables. According to Dockel *et al.* (2006:21), older employees tend to be more devoted to an organisation for various reasons, including increased JS, the possibility of promotion, and having “cognitively justified” their continued employment. Strong AC among those aged 35–39 and those younger than 30 may be attributable to both age groups entering establishing professional periods (Lumley, 2009). Moreover, Coetzee and Roythorne-Jacobs (2007) attempted to establish a personally meaningful and

solid work identity and found that diagnostic activities and assessment of the career of the employees in line with guidance and counselling of younger staff create commitment and involvement and thus the desire to be emotionally tied to an organisation.

According to Lumley (2009), there appears to be a positive, linear link between age and JS, such that employees become more contented with their occupations as they age. In addition, according to Martin and Roodt (2008), data about the association between age and commitment is inconsistent. When an individual's career and life structure stabilise during middle and late adulthood, there seems to be a positive correlation between age and career anchor choices (Coetzee and Schreuder, 2009). Regarding gender, Lumley (2009) indicated that gender differences exist in career anchor selection. The relationship between gender and OC tends to produce contradictory outcomes, as it is unclear whether males or females are more devoted (Martin and Roodt, 2008). The correlation between gender and JS has been conflicting (Lumley, 2009). Lumley (2009) stated that there is a dearth of research on the association between years of work experience and the variables of career anchoring, JS, and OC. However, data show a correlation between tenure, JS and OC. Nonetheless, according to Martin and Roodt (2008), the association between work satisfaction and tenure has revealed inconsistency. In addition, Dockel *et al.* (2006) underlined that tenure had been consistently favourably connected with OC, specifically between tenure and emotional commitment.

## **2.8 RELATIONSHIPS BETWEEN PUBLIC SERVICE MOTIVATION, CORE WORK EVALUATION AND COUNTERPRODUCTIVE WORK BEHAVIOUR**

According to Wu *et al.* (2019), the mediating influence of JS on organisational behaviour and supervisor raises the employee's JS, decreasing anti-production targeting behaviour. Furthermore, the researchers investigated the role of JS as a mediator of the relationship between workplace guanxi (relationships) and employee's Unethical Work Behaviour (UWB); the study employed social exchange theory and hypothesised that JS might play a role as a mediator in the influence of guanxi on UWB (Wu *et al.*, 2019). In addition, the study revealed a significant negative association between guanxi prevalence and guanxi practices and JS. In addition, the researchers found a significant negative association between JS and all three types

of UWB. However, JS only marginally mediated the association between guanxi prevalence and ordinary UWB. Similarly, the impact of JS as a mediator between workplace guanxi and the violation of rules and regulations UWB and property-related UWB was not statistically significant (Wu *et al.*, 2019).

However, Wu *et al.* (2019) indicate both positive and bad outcomes, notably when employees who are not in the inner circle are excluded and find it challenging to get resources and privileges; thus, they become unhappy, frustrated and dissatisfied. The more unsatisfied workers are with their jobs, the more likely they will participate in UWB. Consequently, managers must lower UWB by increasing employee JS. Job satisfaction is a crucial aspect of organisational behaviour. Numerous researchers have shown that JS positively affects job performance; however, few studies have focused on the relationship between JS and negative behaviour in organisations. However, the researcher found that JS partially moderated the association between guanxi prevalence and conventional UWB (Wu *et al.*, 2019).

Bright (2021) investigated how perceptions of organisational prestige (POP) affect the link between PSM and public employee JS and intention to leave. He found beneficial associations between PSM and various work attitudes. Therefore, the researcher attempted to understand how PSM may influence employee outcomes via POP and the degree to which POP mediates this relationship. Although PSM was a significant factor in POP perspectives and JS, POP somewhat moderated its effects and was the most significant predictor of JS. In addition, persons with high levels of PSM were more likely to hold positive POP perspectives, which increased their JS and decreased their intention to leave the organisation (Bright, 2021). It was hypothesised that PSM would only indirectly retain a favourable link with work satisfaction and turnover intentions through its positive association with POP.

Furthermore, Bright (2021) found a direct and indirect association between PSM and JS. Thus, respondents with high levels of PSM were much more content with their occupations than those with lower levels of PSM, regardless of their perceptions of how employees and supervisors evaluated their employer. Moreover, this finding implies that although POP explains a substantial proportion of the variance between PSM and JS, it does not fully explain the connection (Bright, 2021). According to Boyd and Nowell (2020), OC and identification and PSM predict employee engagement and

wellbeing indicators. In the current study, the researcher investigates whether PSM is a direct or indirect predictor of employee metrics.

Regarding organisational citizenship behaviours in the Korean setting, the researcher observed PSM, work satisfaction and OC to explain organisational citizenship. The researcher discovered a significant direct relationship between PSM and OC and organisational citizenship. Similarly, a study of people in the UK prison system revealed a significant positive association between PSM and OCB after controlling for perceived organisational support and perceived fairness (Boyd and Nowell, 2020). Much work has also been devoted to understanding the relationship between PSM and employee well-being in the PSM literature, such as JS, stress, and turnover. Boyd and Nowell (2020) argued that PSM should moderate the relationship between job demands and employee exhaustion. However, an individual's PSM may decline in chronically high organisational stress situations with low job resources (such as social support and autonomy). Mixed evidence exists about whether PSM is a direct or indirect predictor of these outcomes. Regarding JS, a recent meta-analysis by Boyd and Nowell (2020) revealed a moderately significant relationship between PSM and JS and evidence that job factors may modify the relationship.

Most studies have shown that the relationship between PSM and JS depends on social impact potential (SIP) via job and organisational type. According to various studies, in private work environments, PSM is mediated by a desire to assist particular beneficiaries of public services (called user orientation). Boyd and Nowell (2020) emphasise that other researchers discovered a substantial positive correlation between PSM and JS in a sample of Chinese MPA students with full-time public-sector employment. In addition, researchers found some evidence of moderation concerning work and environment fit. Boyd and Nowell (2020) found evidence that an increase in person-environment fit partially mediated the function of PSM in predicting JS.

In public higher education, Jin *et al.* (2018) propose the application of the three-path mediation model in which the relationship is serially mediated by person-organisation fit (P-O fit) and organisational commitment (OC). The non-significant correlations between PSM and task-oriented criteria variables can be clarified in several ways. The researchers found that the linkages between PSM and OCB and PSM and service were dependent on OC but that teaching and research output were not mediated (Jin

*et al.*, 2018). In addition, Jin *et al.* (2018) found that the multiple mediation model reveals that PSM indirectly affects OCB and service via its influence on P-O fit and OC in the causal chain. Recognising that P-O fit alone does not mediate the relationship between PSM and service is crucial. According to Jin *et al.* (2018), PSM-performance associations might vary based on the many characteristics of measured and analysed performance dimensions; furthermore, a performance measure needs to be evaluated in the task context. According to Boyd *et al.* (2018), public employees with varying degrees of PSM respond differently to job demands and job tiredness, and PSM moderates the positive association between job demands and job exhaustion. However, value congruence mediates a strong indirect influence of PSM on JS.

Boyd *et al.* (2018) also found that PSM had no direct effect on self-reported job performance, and they demonstrated that the link between PSM and JS or desire to leave was dramatically diminished when personal judgements of person-environment fit were present. The relationship between PSM and JS depends on the social impact potential (SIP) through the job and organisational type, with an emphasis on the finding that PSM is mediated in private work settings by a motivation to assist specific individual recipients of public services (called user orientation) (Boyd *et al.*, 2018). The association between PSM and JS demonstrates that the relationship becomes more prominent and robust when jobs expressly provide chances for public service. Boyd *et al.* (2018) also found a statistically significant relationship between PSM and transformational leadership and favourable associations of both variables to JS, self-perceived performance and work quality, and decreased intention to leave the organisation. Boyd *et al.* (2018) indicate that Sense of Community Responsibility (SOC-R) fully mediates the association between PSM and collaborative leadership measures. This shows that SOC and JS have a direct, positive link. However, the structure of the SOC-R suggests a more nuanced relationship between work satisfaction and its components.

Similarly, the association between PSM and JS is anticipated to be reduced and mediated by SOC using the same reasoning (Boyd *et al.*, 2018). Boyd *et al.* (2018:438) hypothesise that PSM is an indirect predictor of organisational behaviour, as opposed to a direct predictor, and provide additional support for the notion that measures that “tap global aspects of disposition, such as PSM, while good predictors of job choice

may have weaker associations to on-the-job attitudes and behaviour". Since PSM is assumed to be a worldwide propensity toward public service, it would theoretically precede a member's affiliation with a particular organisation. The relationship between the distinct sets of related constructs that attempt to reflect the inherent motives of an employee who goes above and beyond in service to a public institution (Boyd *et al.*, 2018).

Public service motivation refers to motivating elements particular to public-service professions. Stefurak *et al.* (2020:592) contend that PSM should influence worker behaviours in three crucial ways: "(a) As PSM increases, individuals are more compelled to seek membership in public organisations; (b) within public organisations, PSM is positively correlated with job performance; and (c) public organisations with high proportions of workers high in PSM do not need to rely on extrinsic, utilitarian incentives to manage workers". In addition, Stefurak *et al.* (2020) indicate that PSM has a positive link with JS and performance and that this association is increased in the context of transformative leadership tactics.

Controlling for other study variables, the public-service component was ultimately the most powerful predictor of JS and performance. This suggests that an Emergency Medical Services Professional's (EMSP) conviction in selfless service for an abstract cause greater than themselves is the strongest motivator for JS. The precise association between JS and these dimensions of PSM is not unique to EMSPs, and likely reflects that EMSPs have a normative motivation to serve the public good and that their employer provides a place for them to act on this satisfyingly (Stefurak *et al.*, 2020). The self-sacrifice and public interest components, particularly the public-service factor, may help MSPs since their labour is frequently underpaid, demanding and sometimes unappreciated. They rationalise working in a position that may hinder their upward mobility and financial gain, resulting in a positive correlation between self-sacrifice motivation and greater levels of pleasure. As predicted, a positive correlation between education level and work performance was established. EMS is a field that does not require a college degree for entrance, although individuals with college degrees are likely to bring a broader perspective and skill set to the position (Stefurak *et al.*, 2020). Potipiroon and Ford (2017) emphasise that research in public management demonstrates that PSM often results in greater OC. In addition, they contend that this link is more complicated than is commonly believed. In addition, it

was found that intrinsic motivation attenuated the effect of PSM so that the effect was favourable only for individuals with strong intrinsic motivation and negative for those with low intrinsic motivation. According to Potipiroon and Ford (2017), the importance of intrinsic motivation determines the degree to which individuals find interest and enjoyment in their work. Without rewards, they would be compelled to make more effort. In addition, they highlight the importance of the immediate work environment around high-PSM employees and propose that the relationship between PSM and OC would depend on the characteristics of their leaders. Moreover, given the interest in the immediate work surroundings surrounding high-PSM individuals, the researchers propose that the relationship between PSM and OC would depend on the characteristics of their leaders (Potipiroon and Ford, 2017).

The premise is that PSM generally results in increased levels of organisational dedication. The heterogeneity in the relationship between PSM and OC may be explicable by hypothetical boundary circumstances. The relationship between PSM and OC is more nuanced than commonly believed. The strength of this relationship depends on how much one enjoys and finds interest in their profession. Potipiroon and Ford (2017) found that the link between PSM and OC was significantly favourable when intrinsic motivation was strong. However, when intrinsic motivation was low, this association became significantly negative. The somewhat high connection between PSM and intrinsic motivation indicates that PSM is related to intrinsic motivation. The typical relationships between PSM and intrinsic motivation include task performance and citizenship behaviour. The positive effects of PSM on OC were greatest when intrinsic motivation and ethical leadership were high. Without intrinsic motivation and/or ethical leadership, the PSM–OC connection tended to be negative but non-significant (Potipiroon and Ford, 2017). Work involvement is associated with several favourable human and organisational outcomes.

Mussagulova (2021) emphasises that the conceptualisation of PSM based on the JDR theory is an attempt to provide theoretical insights into the relationship between PSM and WE. According to Mussagulova (2021), PSM increases the positive relationship between job resources and WE and has garnered the most attention. Moreover, the study on the relationship between WE and PSM in the context of JDR uses both job demands and resources and focuses initially on the moderating effect of PSM (Mussagulova, 2021). Mussagulova (2021) investigated the effect of PSM on the

relationship between job resources and WE, focusing on how it might be used when job resources are scarce or damaged.

The researcher emphasises that the theorisation of PSM's role in mitigating the link between job resources and WE gives public employees an incentive to organise their job resources to remain engaged, leading to improved performance. Although the estimation of PSM's moderating effect does not support the moderating effect of high PSM on the relationship between procedural limits and work engagement, public servants with a low level of PSM indicate a negative association between red tape and WE more strongly, possibly because their level of PSM is not high enough to absorb the shocks of procedural constraints (Mussagulova, 2021). Although PSM may not moderate the relationship between autonomy, competence, relatedness, and WE, these job resources directly affect WE. Mussagulova (2021) describes the relationship between PSM and WE and the role of PSM in increasing the positive effect of job resources and ameliorating the negative effect of job demands on the individual and the desired organisational work outcomes. The significance of PSM is that it acts as a buffer between employee engagement and job expectations and resources. However, the association between PSM and WE is poorly supported (Mussagulova, 2021).

Counterproductive workplace conduct or behaviour harms the organisation or co-workers (Czarnota-Bojarska, 2015). Numerous researchers have attempted to link counterproductive behaviour with negative emotions, namely rage and violence, caused by stress and unpleasant work settings. It involves breaching both rules and laws and social conventions. The link between JS and CWB should therefore be negative. Research has shown a negative correlation between CWB and work satisfaction, speculating that the absence of work satisfaction – and the subsequent urge to “get even” with the employer – are the seeds of workplace deviance (Czarnota-Bojarska, 2015).

According to Czarnota-Bojarska (2015), the association between JS and CWB was negative (the less satisfaction, the more counterproductive behaviour) but modestly beneficial for individuals with high conscientiousness (the more JS, the more counterproductive behaviour). The researcher was concerned about work satisfaction and CWB, organisational justice, stress at work, and the inclination for aggressive behaviour. Despite relatively high levels of JS, the research indicates a propensity for

CWB. The research revealed relatively low levels of JS and elevated levels of CWB. These people predictably “get even” with their employer and co-workers because they regard their work as substandard (Czarnota-Bojarska, 2015). In addition, Czarnota-Bojarska (2015) hypothesised that persons with high JS tend to engage in counterproductive behaviour. However, a diminished propensity for CWB is associated with a decline in JS. Therefore, there is no reason to believe these individuals threaten their organisation or co-workers. In addition, Czarnota-Bojarska (2015) emphasises that a propensity does not associate the lowest level of JS with counterproductive behaviour; this group exhibited the least amount of such behaviour.

According to Baysal *et al.* (2020), the relationship between CWB and OC is one of the most common challenges businesses encounter. The relationship between AC, NC, and CC, as characteristics of OC, and abuse, production deviation, sabotage, theft and disengagement as characteristics of CWB was investigated. In addition, Baysal *et al.* (2020) found that AC and NC had a negative direction and a significant link to the dimensions of withdrawal and abuse. In addition, negative direction and strong correlations exist between the dimensions of commitment to long-term treatment and withdrawal, abuse and theft. The researchers noted that counterproductive job behaviours predict OC significantly. The study found an inverted association between OC and CWB. In addition, the researchers demonstrate the relationship between perceived organisational support and CWB (Baysal *et al.*, 2020).

When analysing the relationship between OC and CWB, the processors responsible for OC exhibit CWB, either directly or indirectly. Baysal *et al.* (2020) found strong associations between OC and the sub-dimensions of counterproductive job behaviours. In establishing the link between CWB and OC in educational organisations, Baysal *et al.* (2020) stressed that CWB serves as an important predictor of OC. In addition, Baysal *et al.* (2020) found indirect and direct connections between counterproductive behaviours and leadership styles. Their findings demonstrated that organisational culture regulates the relationships between factors. Within this paradigm, the primary objective of the research was to determine the association between academics’ OC levels and the frequency of CWB (Baysal *et al.*, 2020). Chen *et al.* (2020) identify conscientiousness as a personality attribute that could mask a negative association between job engagements and emotional weariness.

Conscientiousness relates to a person's desire for results such as accomplishment, self-motivation, efficiency, orderliness, dependability and prudence.

Work engagement has generally been viewed as a good trait with distinct advantages for both the individual and the business and those who are fully engaged. The researchers hypothesised that highly conscientious, hard-working individuals would experience less emotional tiredness than less conscientious individuals. In addition, Chen *et al.* (2020) hypothesised that high-engagement, low-conscientiousness persons are more likely to experience emotional weariness because of their disorganisation and lack of persistence in highly conscientious individuals. However, Chen *et al.* (2020) question what happens when there is a strong positive correlation between professional involvement and emotional exhaustion. Poor conscientiousness and emotional instability (i.e., neuroticism) enhance the risk that a person engaged in their task would experience emotional exhaustion (Chen *et al.*, 2020). In the form of organisational deviance, CWB can undermine the overall effectiveness of a company. According to studies, organisational deviance is defined as the voluntary behaviour of workers at work that infringes organisational norms and, as a result, undermines the organisation's health (Chen *et al.*, 2020). Chen *et al.* (2020) state that CWB is more relevant to our context than interpersonal deviance because the former should have a more direct relationship with emotional exhaustion and the nature of the work.

In contrast, interpersonal deviance could be triggered by problematic supervision and other interpersonal relationships. In addition, these relationships were strengthened when emotional stability was considered. Because of their ability to manage stressful situations, conscientious, engaged employees experience less emotional burn-out and are less likely to deviate from expected performance. While Chen *et al.* (2020) further emphasised the unknown aspects of individual-level work engagements and CWB, they provide a different perspective on the consequences of WE by focusing on the potential drawbacks for individuals and organisations, which have implications for WE interventions. The moderating effects of individual characteristics on the connection between job engagement and weariness revealed that conscientiousness and emotional stability are essential boundary conditions to consider in the WE theory (Chen *et al.*, 2020).

JS is a pleasant or good emotional state coming from the evaluation or appraisal of one's employment or job experiences and is one of the most well-researched phenomena in HR literature (Liu and Tang, 2011). Motivated by utilitarian and ethical concerns, researchers have sought to comprehend and explain JS. Satisfied employees tend to engage in corporate citizenship behaviours that go beyond the formal criteria. Dissatisfied employees often engage in CWB (Liu and Tang, 2011). The connection between one's ideals and many workplace characteristics leads to JS. Exceptions notwithstanding, managers in the public sector are strongly driven to serve the public and are less concerned with extrinsic rewards than their private-sector counterparts (Liu and Tang, 2011).

Job satisfaction has been found to characterise government employees. Liu *et al.* (2008) found that intrinsic motivation led to public-sector employees being more satisfied with their occupations than private-sector employees. The public sector should be able to attract and retain enough high-quality workers with high PSM. Public-service incentives would be intrinsic for public personnel. According to motivational theories, public servants with a higher PSM would devote themselves to public causes and have greater JS and daily delight (Liu *et al.*, 2008). The root of PSM is that public officials are motivated differently from their private-sector counterparts (Liu and Tang, 2011). Public service motivation is defined as an individual's propensity to respond to motives grounded almost exclusively in public institutions; a general altruistic motivation to serve the interests of others, be they a community of people, citizens of a state or a nation or humanity at large. It is a driving force that motivates individuals to perform meaningful public, community and social service. It is defined as "the belief, values, and attitudes that transcend self-interest and organisational interest, that are concerned with the interest of a broader political body, and that encourage individuals to behave accordingly whenever possible" (Liu and Tang, 2011:719). Research indicates that PSM is associated with work-related attitudes and behaviours, such as JS, retention intentions, OC, interpersonal citizenship behaviours, and organisational performance. Public servants with greater PSM are more content with their jobs, more devoted to their organisations, and more productive than those with lower public-service drive (Liu and Tang, 2011).

The PSM is associated with critical work-related attitudes and behaviours, such as JS, OC and organisational performance, as well as "extra-organisational attitudes and

behaviours, such as altruism, trust in government, serving the public or one's country, civic engagement and political participation" (Liu *et al.*, 2008:687). All of these variables are positively influenced by PSM. Public employees have a higher PSM level than their private-sector counterparts, and public employees with higher PSM scores are more contented with their jobs, devoted to their organisations and more productive. Scholars have emphasised that PSM is a multidimensional phenomenon, but few studies have explored the link between PSM and work results. When PSM components are analysed concurrently, some dimensions have been found to impact job outcomes more than others (Liu *et al.*, 2008).

Employment satisfaction is an abstract and subjective feeling that arises when an employee is cognisant of their work content, job qualities and work environment. It is usually regarded as a concept that influences the consciousness or actions of organisation members in numerous ways. Individuals' methods for achieving JS fall primarily into two groups (Takamatsu and Yamaguchi, 2018). First, satisfaction is derived from the overall fulfilment of all job requirements. Second, the degree of satisfaction with each aspect of a job is determined independently. The coach's overall feeling of JS reflects the individual's JS. Coaches' JS provides insight into the influence that relations with an organisation, such as organisational culture, support, and qualities like a cohesive workgroup, may have on JS. Employees' perceptions of their conduct and behaviour and their relationship with the organisation they represent determine JS (Takamatsu and Yamaguchi, 2018).

The MPA degree is designed to prepare public workers to "carry out their daily work in a manner influenced by wide conceptual perspectives" (Ponomariov and McCabe, 2017:80). As with other professions, MPA education encompasses specialist knowledge, theoretically-grounded information, technical skills, and guiding principles. In addition to knowledge, all professions assert a commitment to serving the public interest. In the field of public administration, where "public service" and "the public interest" are aspects of the identity and public image of the public administration profession, these values are emphasised in particular (Ponomariov and McCabe, 2017). Therefore, the educational and professional communities and the general public are interested in determining how professional MPA training enhances students' CPI, increases their motivation to serve the public, and cultivates the leadership skills required to do so (Ponomariov and McCabe, 2017).

Such evaluations have been subject to extensive empirical and theoretical investigation in the literature on work-related attitudes (Webster *et al.*, 2014). Their study develops, conceptualises, and provides empirical evidence for the global work attitude construct of CWE. This fills a large vacuum in the literature and contributes to the discussion on broad vs restricted work attitudes. Core Work Evaluation is a higher-order construct that includes JS, OC, and WE.

These three elements of CWE are based on theoretical concerns derived from classic and modern attitude theory, the fact that each is well-established in the literature, and because they reflect the hierarchical character of the work environment (Webster *et al.*, 2014). The conceptual basis for CWE is derived from attitudes and attitude formation theory. Affect, cognitions and behaviours centred on an item or set of objects constitute the basic definition of attitudes. Attitudes have been defined in a variety of ways throughout history. Webster *et al.* (2014) defined CWE as a overall psychological evaluation of an individual's work environment focusing on the job, organisation, and work activities. In recent decades, some of the most typical methods in which employees evaluate their jobs, organisations, OC and work activities have been dissected. As these concepts were created, an empirical study demonstrated their validity relative to previously recognised work attitudes (Webster *et al.*, 2014).

Core Work Evaluation is known as a threefold definition of attitudes. According to most current definitions, an attitude does not need to comprise all three components; instead, it is an evaluative mental state or evaluative summary of an object or set of things. Attitudes may be expressed through affect, cognition or behaviour, but the attitude itself can be distinguished from these components (Webster *et al.*, 2014). Recognising this, we conceptualise CWE as a psychological evaluation of the work environment's components. As a comprehensive psychological concept, CWE involves a general psychological evaluation in terms of two dimensions – valence and intensity – and has the work environment as its object (the job, organisation, and work activities). These basic qualities influenced the researcher's decision to include three well-known work-related attitudes in CWE that would cover the desired range of evaluative characteristics and constitute a comprehensive and meaningful attitude object. Collectively, these three attitudes reveal a spectrum of valence and intensity in relation to work environment factors: JS focuses on the job, OC focuses on the organisation, and WE focuses on the work activities (Webster *et al.*, 2014).

Several variables can be used to quantify detrimental work behaviour. According to Nikkah-Farkhani *et al.* (2017:71), there are 11 categories of CWB: “theft and related behaviour, destruction of property, misuse of information, misuse of time and resources, unsafe behaviour, poor attendance, poor quality work, alcohol use, drug use, inappropriate verbal actions, and inappropriate physical actions”. Essentially, they are all personal work behaviours contradictory to the organisation’s norms. However, a sense of worthiness on the job and comfort in the workplace enhances employee dedication and relationships with the firm. A measure of an employee’s affiliation with their organisation is OC. Organisational commitment is the willingness to stay with the company in the future. It frequently shows the employee’s conviction about the firm’s objective and goals, willingness to devote effort to achieving them, and intention to remain employed by the organisation. As a result, a high level of performance is generated by devoted employees. Furthermore, strong OC motivates individuals to exert greater effort to attain the organisation’s goals (Nikkah-Farkhani *et al.*, 2017). In light of the preceding discussion, it may be concluded that OC has a negative and considerable effect on counterproductive job behaviour.

Work involvement is considered a three-dimensional motivational–psychological condition. These characteristics are described as commitment, vigour, and absorption. High employee engagement also minimises turnover and quit intentions (Ullah and Khattak, 2018). In addition, Ullah and Khattak (2018) emphasise that the supervisor’s role is to motivate employees to increase worker engagement for job performance and OC. It was found that there was a considerable correlation between employee WE and behavioural outcomes. According to Ullah and Khattak (2018), there was a strong negative association between WE and the intention to leave the organisation. This association may have significant effects on employee engagement and job performance.

When perceived organisational support moderates work engagement and behavioural outcomes (Imran and Khattak, 2019), there is a significant and unfavourable correlation between WE and behavioural consequences. According to Imran and Khattak (2019), supervisor and co-worker support also create a buffer between WE and behavioural consequences. In addition, Imran and Khattak (2019) found a negative relationship between WE and behavioural outcomes. The low level of employee engagement may prompt workers to consider resigning. Furthermore,

employee engagement is significantly and negatively correlated with behavioural results. The link between WE and Behavioural Outcomes (BO) was moderated by supervisor support. Consequently, based on the study's findings, we concluded that firms could use various methods and resources to boost employee engagement at work (Imran and Khattak, 2019).

Deng *et al.* (2019) suggest that hindrance stress has a negative impact on presenteeism and a favourable one on PSM. Furthermore, they emphasise that PSM indirectly mediates the link between job stress and presenteeism, suggesting that its effect on coping mechanisms should be considered in policymaking and management.

The PSM mediates the relationship between workplace stress and presenteeism. Both challenge stress and hindrance stress have detrimental consequences for PSM. However, presenteeism is strongly correlated with hindrance stress, whereas challenge stress has no significant direct effect on presenteeism. Therefore, occupational stress should be minimised, and PSM should be raised to enhance employees' job performance and service quality (Deng *et al.*, 2019). The link between LMX and organisational CWB is mediated by emotional tiredness and WE, according to Lebrón *et al.* (2018). Employees who perceive positive relationships with their bosses are not necessarily less emotionally fatigued but participate in less harmful organisational work behaviour. In addition, Lebrón *et al.* (2018) emphasise that job engagement partially mediates the association between Leader-Member Exchange (LMX) and organisational CWB. Positive leader-employee interactions increase employee engagement and decrease organisational CWB. Although LMX indirectly affects organisational CWB through emotional weariness and WE, it still has some direct detrimental effects on organisational CWB. According to Lebrón *et al.* (2018), effective leader interactions can reduce organisational CWB regardless of emotional weariness or WE.

## **2.9 SUMMARY**

This chapter examined the pertinent literature on the constructs of this study. The chapter also explored the theoretical-conceptual framework of PSM, including theories and dimensions of PSM. In addition, this chapter examined the conceptual-theoretical foundation of CWE. The theoretical-conceptual framework for CWE consists of JS, OC

and WE. Also studied were the disparities between JS, OC, WE, PSM and CWB. In Chapter 3, the research methodology and design are discussed.

## **CHAPTER 3: RESEARCH METHODOLOGY AND DESIGN**

### **3.1 INTRODUCTION**

The study's primary objective was to develop a framework for evaluating the effect of public service motivation on job satisfaction, organisational commitment, work engagement and counterproductive work behaviour. This chapter discusses the research methodology, including sampling techniques, population estimation, ensuring rigour during and after data collection, ethical considerations, and techniques for analysing the results necessary to accomplish the study's objectives. These objectives are:

- to quantify PSM, JS, OC, WE and CWB levels.
- to establish the reliability and validity of scales measuring PSM, JS, OC, WE and CWB in the South African public sector.
- to determine differences in PSM, JS, OC, WE and CWB between gender, age group, department, salary level, service years, and qualifications.
- to examine the relationships between PSM, JS, OC, WE and CWB.
- to determine which of the following variables best predicts PSM and CWB, JS, OC or WE.

### **3.2 RESEARCH PHILOSOPHY**

Babbie (2004) defined paradigms as “philosophies and assumptions about the world and the nature of knowledge held by a community of scientists that influence the types of problems they investigate and the research method”. “Positivism, realism, interpretivism, phenomenology, and pragmatism are just a few research philosophies” (Saunders and Thornhill, 2009). The most “common research paradigms, however, are positivism and interpretivism, and they differ fundamentally in their perspectives on reality, what reality is, and how it should be investigated” (Lodico et al., 2006).

Lincoln et al. (2011) described “positivism as a family of philosophical schools characterised by an unfavourable assessment of science and the scientific method”. “Positivism asserts that only phenomena accessible to our senses (sights, smell, hearing, touch, and taste) may truly generate knowledge” (Greener, 2008). Positivism presupposes that if there is a problem, a solution exists. The connection between

cause and effect defines the positivist worldview. Merriam (2002) emphasised further that the quantitative research worldview is based on the belief in a single quantifiable, observable, and proven truth. Quantitative researchers attempt to elucidate this truth. The preceding explanations emphasise the importance of general laws and assumptions. Assumptions are also a necessary component of positivist inquiry. Greener (2008) stated that positivist research is concerned with objective rather than subjective (normative) assertions and that scientists should focus only on objective statements.

Researchers that use interpretivism try to see the world through the eyes of their subjects rather than using positivism's "one reality" (Greener (2008). Organisations' "actors" (workers, managers, and stakeholders) are studied in an interpretive paradigm using qualitative research methods, including discourse analysis and interviews (Greener, 2008). Due to disagreements over knowledge claims between positivism and interpretivism, much effort has been put into defining the qualitative-quantitative division in the purist argument (Ngulube, 2010).

According to pragmatists, it is feasible to work within both positivist and interpretivist views, who say the research issue is the most important predictor of the chosen research philosophy (Cresswell, 1998). Practical methods are used to acquire and analyse data, incorporating many views. Pragmatists are motivated by real-world issues and a desire to learn from experience what works. To avoid wasting time debating such abstract ideas as "truth" and "reality", this research took a pragmatic approach, which allowed it to address the research objectives provided in Chapter 1 without becoming bogged down in philosophical disputes (Tashakkori and Teddlie, 1998). As the term "positive" was intended to express, it was limited to "seen facts" only and did not include speculation about underlying causes or forces (Pearce, 2015). Defining what a positivist approach really means might be a challenge. A positivist approach to science today uses methodologies from the natural sciences to study brains, people, or cultures while claiming to be completely value-free.

On the other hand, positivism in philosophy conjures up images of pro-science and anti-metaphysics, but this does not reveal anything on its own (Pearce, 2015). Assumptions made by the author will be reflected in the study's philosophy, which serves as a foundation for the research plan. The researcher took a positivist stance

in this study because the selected research design method was appropriate for the topic matter and the sample.

### **3.3 RESEARCH METHODOLOGY**

The term “methodology” was used by Mackenzie and Knipe (2006) to refer to the “collection of procedures and rules by which a certain piece of research is performed, as well as the principles, theories, and values supporting a particular research approach”. Terre Blanche *et al.* (2006) describe research methodology as the methodologies, strategies, and processes used to carry out a research plan and the principles and assumptions that underpin its application and implementation. Methodology refers to the entire research approach that is tied to a paradigm or theoretical framework. In contrast, the term “method” refers to the systematic modes, methods, or tools used to gather and analyse data. The research process and the instruments and methods are the primary emphases of research methodology (Babbie and Mouton, 2001).

According to Arghode (2012), methodology is the philosophy of how an investigation should be conducted. This requires analysing assumptions, concepts, and methods in the context of a certain inquiry approach. Arghode (2012) contends that the scientific method is the methodology of the positivist paradigm, which he defines as follows: “In this situation, researchers describe the setting in detail and redesign questions for use in the field”. Other approaches may include surveys, experimental and control group experiments, and case study approaches (Creswell *et al.*, 2003). This research was carried out within the framework of a quantitative paradigm. There are various research methods to choose from. The survey approach is the most appropriate strategy for this study. The techniques for research are addressed in greater detail in the following paragraphs.

This study aimed to ascertain the effect of PSM on JS, OC, WE and CWB among public-sector employees. This study was conducted within the quantitative paradigm. “Quantitative research can be defined as an investigation that aims to explain phenomena through the use of numerical data that has been analysed using mathematically based methodologies, most notably statistics” (Yilmaz, 2013). More broadly, “it is a method of conducting empirical research into a social phenomenon or

human problem that entails testing a theory using numerical variables and statistical analysis to determine whether the theory adequately explains or predicts the observed phenomena” (Gay and Airasian, 2000).

The advantages of using a quantitative technique include that data from a large number of people leads to a broader breadth of insight than the depth of understanding achievable with a qualitative approach. The quantitative method makes strong inferences, mainly when strict experimental control is obtained. Quantitative methods are frequently more systematic than other methods, increasing the likelihood of replicated findings (Francisco *et al.*, 2001). In the quantitative approach, one can only prove what one already believes – that is, one can only confirm a hypothesis regarding present variables – which has the disadvantage of being time-consuming. If any new variables are associated with the intervention, the range or scope of knowledge may not be expanded. It is impossible to illustrate the significance of the findings regarding people’s lives (Francisco *et al.*, 2001).

Polit and Beck (2012) define non-experimental research as studies whose objective is to describe a phenomenon and in which it is immoral to influence the independent variable as follows: There are several reasons why non-experimental research is appropriate for examining persons who work in public service. First and foremost, altering the human element is inappropriate due to ethical issues, as there is the possibility of physical, emotional, or mental harm to the participants. Second, human traits such as personal ideas and opinions, intrinsically resistant to experimental modification, are not subject to experimentation. Third, due to research constraints such as time, workforce, and participants, non-experimental research is more practicable than traditional experimental research. Finally, qualitative research does not interfere with the participants’ natural behaviour: experimental research would be inappropriate for the research type (Polit and Beck, 2012). Aspects of quantitative research that distinguish it from other types of study are its goals, which are concerned with understanding some aspect of social life, and its techniques, which (in general) generate words rather than numbers as data for analysis. It is the goal of these methods to answer questions about a phenomenon such as “what”, “how” or “why” rather than inquiries such as “how many” or “how much” which are answered by quantitative methods. The use of quantitative methodologies is frequently beneficial

when the goal is to understand better how a community or person perceives a particular issue (Teddlie and Tashakkori, 2012).

### **3.4 RESEARCH DESIGN**

A cross-sectional correlational design was deemed the most appropriate design to answer the research questions of this study. According to Grove et al. (2014), the research design is “a blueprint for conducting a study with maximum control over variables that could affect the validity of the results.” A research design is a plan that describes how, when, and where data will be collected and analysed” (Parahoo, 2014:page). Polit and Beck (2004) define “a research design as the approach the researchers take to answer the research question or test the research hypothesis.” “A research design is a plan or framework outlining how a researcher intends to conduct the research to address a research problem” (Babbie, 2015). Creswell (2013a) “defines a quantitative research design as collecting, analysing, interpreting, and writing the study’s findings.”

Deduction and induction are two distinct approaches to the strategy of scientific inquiry regarding the development and testing of hypotheses. Deductive arguments demonstrate that a conclusion follows logically from premises or hypotheses (Johnson and Christensen, 2008). The inductive analysis provides evidence for the “emergence of categories, themes and patterns from empirical data; deductive research aims to test the validity of proposed theories in real-world situations” (Lancaster, 2005). On the other hand, “inductive research begins with the specific observation of the empirical world and develops theories based on the evidence gathered from these observations” (Neuman, 2014). This study used both deductive and inductive reasoning to develop a theory that will enhance the understanding of the influence of worker-perceived CWE on PSM and CWB in 11 government departments in the North-West Province.

Correlational research aims “to establish relationships between two or more variables”(Curtis et al., 2015). A correlational study examines the relationship between two variables. This involves determining whether a change in one variable corresponds to a change in the other variable. “For example, consider a model that proposes that an independent variable (X) correlates with a dependent variable (Y)

not because it exerts a direct effect on the dependent variable but because it reflects changes in an intervening or mediating variable (M), which then causes changes in the dependent variable” (Wuensch, 2009). Orientation to intra-personal correlational design, using two or more variables measured repeatedly for each person in the sample, develops a cube model that illustrates the relationships between people, variables, and occasions, technical problems and practical techniques of using within-person correlations, such as data concatenation, computer programming techniques, significance tests and variance partitioning.

“Correlational research is non-experimental research in which the researcher measures two variables and evaluates the statistical relationship (correlation) between them with minimal or no effort to control for external variables” (Price *et al.*, 2015). There are two primary reasons why researchers may wish to conduct a correlation study rather than an experiment. First, they dispute the causality of the statistical correlation. For instance, a researcher could assess the validity of a short extraversion test by administering it to a large sample of participants alongside a longer test that has been demonstrated to be valid. This researcher could then determine if there is a strong correlation between the participant’s scores on the shorter and longer tests. There is no independent variable to manipulate because neither test result is assumed to cause the other. In this type of research, the terms independent variable and dependent variable are not applicable (Price *et al.*, 2015).

According to Grove *et al.* (2012), descriptive research aims to paint a picture of a situation as it naturally occurs. It can be used to justify and evaluate current practice, as well as to develop theories. Terre Blanche *et al.* (2006) define research methodology as “the methods, techniques, and procedures” used to implement the research design or plan and “the underlying principles and assumptions” that govern their application. The research used a quantitative approach.

The majority of quantitative research is exploratory. It is used to comprehend the underlying causes, attitudes, and motivations. It provides insight into a problem or generates ideas or hypotheses for future quantitative research. Quantitative research aims to “answer questions on meaning, interpretation, and socially constructed realities” (Newman *et al.*, 2003). Sampling in quantitative research can be based on probability (random sampling) or non-probability (targeted sampling). In non-

probability sampling, the researcher must intentionally select a subset of the larger population to include or exclude because it exemplifies a trait or process of interest, to have the sample be self-representative and not aim for generalisability (Cohen, 2013).

With a well-selected sample, the odds that members of the larger population will be sampled are unknown, whereas, with probability sampling, these odds are known: every member of the larger population has an equal chance of being included in the sample. Miles (2013) describes three quantitative data analysis strategies: interpretive, social anthropology, and collaborative social research. This interpretive study will focus on the individual and attempt to understand subjective human experience (Cohen, 2013).

Quantitative data are a source of comprehensive, detailed explanations of processes within specific contexts, allowing the researcher to preserve chronological flow, determine which events led to outcomes, and provide useful explanations (Miles, 2013). Both social actors and the researcher interpret meanings, with the researcher contributing their own understandings, beliefs, and conceptual orientations as a member of the cultural group at that particular time (Miles, 2013).

### **3.5 TARGET POPULATION**

According to Nestor and Schutt (2018), a “population is the total number of animals, people, plants, or things from whom one can obtain information”. For Martínez-Mesa *et al.* (2016), “a sample is defined as a subset of the target population”. According to the Provincial Annual Reports (Growth, 1996), there are 61 954 staff within the North West Provincial Administration. The study’s target population comprises employees between post levels 1–16 at 11 North-West Provincial Government departments. These include the “Department of Education and Sports Development, Department of Public Works and Roads, Department of Community Safety and Transport Management, Department of Social Development, Department of Rural, Environment and Agricultural Development, Premiers Office, Department of Health, Department of Local Government and Human Settlement, Department of Tourism, Department of Economy and Enterprise Development and Department of Culture, Arts and Traditional Affairs.”

### 3.6 SAMPLING METHOD

The study used a stratified simple random sampling method consisting of four subgroups (strata), namely senior management (SMS salary levels 13–16); middle management (MMS salary levels 11–12), junior middle management (JMM salary levels 8–10) and elementary employees (professionals salary levels 1–7).

There are two sampling methods: probability and non-probability sampling (Etikan and Bala, 2017). Probability sampling is a technique that gives every item from a universe an equal chance of being selected to participate in the study. Non-probability sampling is defined as a sampling technique where there is an unknown chance of participants being selected. Probability sampling may consist of simple or systematic random, stratified, and cluster sampling (Etikan and Bala, 2017). The four probability sampling techniques are described as follows:

- Simple random sampling: every member/element within the target population has an equal chance of being selected.
- Systematic random sampling: In this method, a sample is drawn by selecting every  $k^{\text{th}}$  member from the population.
- Stratified sampling: a sample is drawn from various strata or sub-groups of a population. A sample is drawn by taking one or more members from each stratum. This was the approach used in this research.
- Cluster sampling: the entire population is divided into clusters, and a random sample of these clusters is selected. “All observations in the selected clusters are included in the sample” (Etikan and Bala, 2017).

“The ever-increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population” (Krejcie and Morgan, 1970). According to Krejcie and Morgan (1970), “N” is the population size, and “S” is the sample size. Krejcie and Morgan (1970) used the following equation to calculate the minimum sample size for a given population:

$s = X^2 NP(1 - P) \div d^2 (N - 1) + X^2 P(1 - P)$ . Where  $s$  = required sample size;  $X^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841);  $N$  = the population size;  $P$  = the population proportion

(assumed to be .50 since this would provide the maximum sample size); and  $d$  = the degree of accuracy expressed as a proportion (.05).“

Therefore, the researcher determined the sample according to Krejcie and Morgan (1970), if “N” population size is equal to 75 000 and “S” sample size of a minimum of 382 should be sampled. Therefore, a total sample size of 1 546 was selected from the study population in the 11 provincial government departments to represent the strata, namely senior management, middle management, junior management and elementary staff (Krejcie and Morgan, 1970). The sample of 1 546 representing the four subgroups (strata) per department is depicted in Table 3.1.

**Table 3.1: Sample size per strata and department**

Department	Senior management	Middle management	Junior management	Professionals\ Elementary
Department of Education and Sport Development	14	33	29	77
Department of Public Works and Roads	12	27	39	92
Department of Community Safety and Transport Management	19	41	36	190
Department of Social Development	16	21	32	62
Department of Rural, Environment and Agricultural Development	9	18	14	67
Premiers Office	18	36	45	138
Department of Health	5	12	9	68
Department of Local Government	8	15	12	55

Department	Senior management	Middle management	Junior management	Professionals\ Elementary
and Human Settlement				
Department of Tourism	8	19	13	61
Department of Economic and Enterprise Development	11	8	19	76
Department of Culture, Arts and Traditional Affairs	4	12	8	38
<b>Total</b>	<b>124</b>	<b>242</b>	<b>256</b>	<b>924</b>

### 3.7 MEASURING INSTRUMENTS

The questionnaire was divided into six sections. Section A comprised the respondents' demographic characteristics. Section B comprised the questions relating to PSM; Section C measured JS; Section D OC; Section E WE, and Section F CWB. The demographic questions include gender, age group, post-salary level, years of service, provincial government department and qualification.

The International PSM Scale, developed by (Kim *et al.*, 2013), was used to measure PSM. The questionnaire consists of 16 items and four factors:

- "Attraction to public service – 4 items."
- "Commitment to public values – 4 items."
- "Compassion – 4 items."
- "Self-sacrifice – 4 items."

"A five-point Likert scale was used to measure the responses."

The Facet Satisfaction Scale of Bowling *et al.* (2018) measured job satisfaction. The JS facet scale consists of five factors and 25 items.

- "Work itself – 5 items."

- “Supervision – 5 items.”
- “Co-workers – 5 items.”
- “Pay – 5 items.”
- “Promotion – 5 items.”

“A seven-point Likert scale was used to measure the responses.”

Allen and Meyer’s (1996) scale, as validated by Maqsood *et al.* (2012), was used to measure OC. The questionnaire consists of three factors and 22 items.

- “Affective commitment – 8 items.”
- “Continuance commitment – 6 items.”
- “NC – 8 items.”

A six-point Likert scale was used.

The shortened WES of Schaufeli and Bakker (2004) was used to measure WE. The questionnaire consists of 17 items and three factors.

- “Vigour – 6 items.”
- “Dedication – 5 items.”
- “Absorption – 6 items.”

“A seven-point Likert scale was used.”

The Counterproductive Work Behaviour Checklist, developed by (Spector *et al.*, 2006), was used to measure CWB. The questionnaire consists of 45 items and two factors.

- “CWB-Organisation - 21 items.”
- “CWB-Person – 22 items.”
- “CWB Scale – 43 items” (Fox and Spector excluded items 12 and 45 from their analysis. Therefore, these two items were also excluded in this study).

“A 5-point Likert scale was used.”

### **3.8 RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENTS**

Researchers use accurate and valid measurement devices to explore complicated concepts in most investigations. The consistency of a measurement is an important

aspect of reliability. For example, a person who takes a test designed to gauge their level of motivation should get roughly the same results every time they do it. Several measures can approximate reliability even when an exact calculation is unachievable (Heale and Twycross, 2015). Homogeneity measures include item-to-total correlation, split-half dependability, the Kuder-Richardson coefficient, and Cronbach's alpha (internal consistency). Split-half reliability divides the results of a test or instrument in half. Correlations are calculated by comparing two subsets of a dataset. Correlations denote correlations with a high degree of reliability but a low degree of dependability. Unlike the split-half test, the Kuder-Richardson test is more complex. If all potential split-half combinations are calculated, the average correlation between zero and one will be generated (Heale and Twycross, 2015).

Cronbach's alpha is most frequently used to determine the internal consistency of an instrument. The average of all correlations across all split-half combinations is computed using this test. This examination may be used in conjunction with instruments that contain multiple-choice questions. Cronbach's alpha value ranges from 0 to 1. A reliability score of 0.7 or greater is considered satisfactory (Bell *et al.*, 2018). "Stability is determined using test-retest and parallel or alternate-form reliability testing". To assess test-retest reliability, an instrument must be administered multiple times to the same individuals under the same conditions. Each time a participant takes the test, their scores are statistically compared. The results demonstrate the instrument's dependability. It is similar to test-retest reliability, except that each subsequent test uses a different variant of the original instrument.

Both instruments examine the same principles, but the items are phrased differently. For an instrument to demonstrate its stability, the test scores must be highly correlated each time a participant takes it. Correlation coefficients less than 0.3 are generally regarded as insignificant. The term "moderate" refers to values between 0.3 and 0.5, whereas "strong" refers to values greater than 0.5 (Heale and Twycross, 2015). Inter-rater reliability is used to determine the equivalence of two tests. It enables the determination of the degree of agreement between two or more observers. The judges' scores in skating competitions provide an excellent illustration of how inter-rater reliability is determined. All judges' consistency in the scores assigned to skating competitors is used to determine inter-rater dependability. Inter-rater reliability is directly related to the consistency of the instrument's scores (Eagan *et al.*, 2017).

Cronbach's alpha internal consistency coefficient was used to determine the reliability of each scale, and the cut-off point was chosen at 0.70. Sample adequacy for Cronbach's alpha is defined as a value between 0.5 and 0.7. Scales below 0.5 are regarded as unreliable. Except for WE, all Cronbach's alpha values were higher than 0.7. Consequently, this indicates that the scale was both accurate and reliable. A scale is considered to have medium sample adequacy with a Cronbach's alpha value of 0.5 to 0.7. Given the alpha value and the results, further investigation is warranted. As previously mentioned, the instruments used in this research investigation were found to be reliable and valid by the developers of the scales. Table 3.2 shows Cronbach's alphas for the factors and scales.

**Table 3.2: Reliability analysis**

Scale and sub-scales	Authors	Cronbach's alpha	Number of items
APS	(Kim <i>et al.</i> , 2013)	0.70	4
CPV		0.54	4
Compassion		0.69	4
SS		0.78	4
PSM Scale		0.74	16
Work itself	(Bowling <i>et al.</i> , 2018)	0.72	5
Supervision		0.83	5
Co-workers		0.77	5
Pay		0.83	5
Promotion		0.82	5
Facets JS scale			
AC	(Maqsood <i>et al.</i> , 2012)	0.83	8
CC		0.61	6
NC		0.64	8
OC Scale		0.84	22
Vigour	(Schaufeli and Bakker, 2003)	0.83	6
Dedication		0.92	5
Absorption		0.82	6
WE Scale			17
CWB-Organisation	(Spector <i>et al.</i> , 2006)	0.84	21
CWB-Person		0.85	22

Scale and sub-scales	Authors	Cronbach's alpha	Number of items
CWB Scale		0.81	43

The validity, “defined as an instrument’s ability to accurately measure the properties of the construct under study, is a critical factor to consider when selecting or implementing an instrument” (Zamanzadeh *et al.*, 2015). Its three most common variants define the validity of the content, construct, and criterion measures. Because content validity is necessary for all other types of validity, it should take precedence during instrument development. Validity is not an instrument’s property but rather the scores obtained when an instrument is used on a particular population of respondents (Zamanzadeh *et al.*, 2015). As a result, each study that uses an instrument should collect valid evidence. It is impossible to establish the trustworthiness of an instrument without first establishing its content validity.

While content validity research requires additional resources initially, it reduces the need for resources during the psychometric process for subsequent instrument evaluations. While content validity is a critical component of instrument development and connecting abstract concepts to visible and quantifiable indices, it is only briefly and superficially explored (Zamanzadeh *et al.*, 2015). Mohajan (2017) defines validity as an instrument’s capacity to accurately measure what it claims to measure. A research instrument’s validity indicates its ability to measure what it is intended to measure (Mohajan, 2017). As a result, an instrument of research (questionnaire) is required to accurately measure the concepts under investigation. It encompasses the entire experimental design and verifies that the results meet the requirements of the scientific research method. Validity refers to the manner in which a quantitative research instrument measures the variables it is designed to measure. While instrument validity necessitates instrument reliability, an instrument may be valid without being reliable (Mohajan, 2017). “Validity” refers to an idea’s ability to be quantified precisely in a quantitative investigation. The second criterion for quality in a quantitative study is instrument dependability or “the instrument’s accuracy”. In other words, “the consistency with which a research instrument produces the same results when used repeatedly in the same situation” (Heale and Twycross, 2015). The first classification is based on the validity of the content. This category determines whether the instrument adequately covers all relevant information about the variable. “In other

words, does the instrument cover the entire domain of the variable or construct for which it was created?" Face validity is a subset of content validity in which experts are consulted to determine whether an instrument accurately assesses the intended concept (Heale and Twycross, 2015). Construct validity is the capacity to infer test scores associated with an investigated concept. Three different types of evidence can be used to determine a research instrument's construct validity. Homogeneity is a term that refers to an instrument that assesses a single concept. Convergence occurs when one instrument measures concepts comparable to how other instruments measure them. This, however, would be impossible without the availability of comparable instruments. Finally, when behaviour conforms to the construct's theoretical assertions as measured by the instrument, this is referred to as theory support (Heale and Twycross, 2015).

Criterion validity is the ultimate test. Criteria are any other instruments that evaluate the same variable. Correlations can be used to determine the degree to which different instruments measure the same variable in the same way. Three criteria are used to determine criterion validity: convergent validity, which indicates an instrument's high correlation with other instruments assessing similar variables; discriminant validity, which indicates an instrument's low correlation with other instruments assessing similar variables; and divergent validity, which denotes a low correlation between an instrument and instruments measuring distinct variables. For example, motivational and self-efficacy instruments have a weak correlation. Predictive validity requires a high correlation between the instrument and future criteria. For example, a high self-efficacy score for task execution should predict a participant's likelihood of completing an assignment (Heale and Twycross, 2015).

As previously mentioned, the measuring instruments were validated by the developers of the scales. The International PSM instrument was validated by Kim *et al.* (2012), and the confirmatory factor analysis (CFA)" revealed sixteen items and four factors and found that the model fit is quite strong ( $SB\chi^2$  [df- 98] = 564.1,  $p < .05$ ; CFI = 0.989; root mean square error of approximation (RMSEA) = 0.041 [.038,.044]; SRMR = 0.042)". "Therefore, the results support convergent validity while the composite reliability of the set of reflective indicators for each dimension of PSM ranged from .716 to .824, indicating adequate internal consistency." "The factor structure showed a four-factor structure with all items loading significantly onto their a priori dimension

( $p < .05$ ), and the SFLs ranged from .556 to .812.” “The results support discriminant validity as the correlation estimates between the four factors ranged from .482 to .851.”

“The CFA of the facets JS scale measuring JS indicated that the FFM produced marginally good fit ( $\chi^2 = 537.78$ ,  $df = 265$ ;  $RMSEA = 0.08$ ;  $CFI = 0.91$ ;  $TLI = 0.90$ ;  $SRMR = 0.06$ ) (Bowling *et al.*, 2018).” Bowling *et al.* (2018:386) also found that each “subscale produced high levels of internal consistency reliability, test-retest reliability and construct validity”.

Maqsood *et al.* (2012) validated Allen and Meyer’s (1996) OC scale by conducting a “CFA to test how well data supported the factor structure of the measures on individual item scores”. “Goodness-of-fit statistics of the three-factor model of the OCQ were “ $X^2 = 636.76$ ;  $df = 206$ ;  $RMR = .10$ ;  $RMSEA = .07$ ;  $GFI = .87$ ;  $AGFI = .84$ ;  $IFI = .89$ ;  $NFI = .85$ ;  $CFI = .89$ ;  $AIC = 783.97$  and  $CAIC = 1021.53$ ”. “In addition, the correlation matrix of factors revealed that AC relates with NC ( $r = .50$ ,  $p = .01$ ) and with subscale of CC ( $r = .29$ ,  $p = .01$ ); and CC relates to NC ( $r = .33$ ,  $p = .01$ )”.

A CFA of the UWES 17 item questionnaire to determine the factor structure and inter-correlations revealed “ $N = 1,242$ ;  $X^2 = 1859.93$ ;  $df = 232$ ;  $GFI = .82$ ;  $AGFI = .77$ ;  $RMSEA = .08$ ;  $NFI = .86$ ;  $NNFI = .85$  and  $CFI = .87$ ” (Schaufeli and Bakker, 2004). The correlations between factors of UWES were very high (“Vigour - Dedication.89; Dedication - Absorption.90 and Vigour - Absorption.90”) (Schaufeli and Bakker, 2004).

Barbaranelli *et al.* (2013) conducted a CFA to validate the two-factor CWB scale. “The two factors indicated “a significant and high correlation of.80”. “Goodness-of-fit indices indicated an ambiguous solution:  $X^2(859, N = 856) = 1,897$ ,  $p < .001$ ,  $RMSEA = .038$  [90% Confidence interval:  $LL = .035$ ,  $UL = .040$ ,  $p(RMSEA.05) = 1$ ], comparative fit index (CFI) = .88,  $TLI = .87$ , and weighted root mean square residual (WRMR) = 1.55”. “The RMSEA indicated an excellent fit to the data while the other fit indices converged, evidencing an inadequate fit”.

---

<sup>1</sup> Note: Multiple-Group method; GFI = Goodness-of-Fit Index; AGFI = Adjusted Goodness-of-Fit Index; RMSEA = Root Mean Square Error of Approximation; NFI = Normed Fit Index; NNFI = Non-Normed Fit Index; CFI = Comparative Fit Index

### 3.9 PROCEDURES FOR DATA COLLECTION

The researcher was responsible for collecting data, storage, security and use of data. The data was collected using the online platform (Questionpro survey). The data was stored on the researcher's Google Dropbox cloud storage account, and a backup was created on various emails and the researcher's laptop.

#### 3.9.1 Administration of the returned questionnaires

The researcher requested the approval of the North-West Provincial Director-General, and permission was granted to access the firewall and mail post of the entire participants within sampled departments. The researcher distributed one thousand five hundred and forty-six (1546) questionnaires online to the North West Provincial Administration employees. Out of one thousand five hundred and forty-six (1546) questionnaires distributed, one thousand thirty-one (1031) were completed and returned. The response rate was 66, 68%. The returned questionnaires represent the four subgroups (strata) per department, depicted in Table 3.3.

**Table 3.3: Returned questionnaires per strata and department**

Department	SMS	MMS	JMM	Prof
Department of Education and Sport Development	16	16	49	31
Department of Public Works and Roads	19	19	39	47
Department of Community Safety and Transport Management	21	21	37	98
Department of Social Development	12	12	33	36
Department of Rural, Environment and Agricultural Development	7	7	17	21
Premiers Office	27	27	32	91
Department of Health	17	17	18	17
Department of Local Government and Human Settlement	22	22	11	16
Department of Tourism	8	8	11	37
Department of Economy and Enterprise Development	22	22	8	35
Department of Culture, Arts and Traditional Affairs	2	2	13	18
Total	143	173	268	447

### **3.9.2 Handling of the returned questionnaires**

The researcher requested the approval of the North West Provincial Director-General, and permission was granted to access the firewall and email addresses of the entire participants within sampled departments. Through the Provincial Information System component from Provincial Treasury, the North West Provincial Director-General afforded the researcher access to the entire provincial firewall, which contains email addresses of all departmental employees from the 11 North-West Provincial. The researcher distributed the questionnaires through the Questionpro survey link attached to the email sent to all sampled participants, accompanied by the university's approval letter (Appendix B) that granted the researcher to conduct the study, the approval letter of the North West Provincial Director-General (Appendix C) and a covering letter from the researcher (Appendix A). Each link of Questionpro open affords participants a chance to complete it and enables participants to press the submit button; therefore, the completed questionnaires were returned to the Questionpro account of the researcher. The questionnaire link circulated for a month before it expired.

The Questionpro survey the researcher to download the raw data of completed questionnaires from the server. The downloaded raw data was in excel format. The researcher sent the email link to the participants who deleted and/or opened the questionnaire without completing it. The researcher distributed 1 546 questionnaires online to the North West Provincial Administration employees. Out of questionnaires distributed, 1 031 were completed and returned. The response rate was 66.68%. The final raw data was then transferred into SPSS software for analysis purposes.

### **3.10 DATA ANALYSIS**

Data analysis is a term that refers to the process of organising, providing structure, and eliciting meaning from data. Quantitative data analysis is a dynamic and participatory process (Polit *et al.*, 2001). Data analysis occurs concurrently with collecting data (Holloway and Wheeler, 2002). Morse and Field (1996) define the intellectual processes involved in data analysis as follows:

- Perceiving: The researcher wishes to learn what is occurring. After achieving comprehension, the researcher can write a complete account of the phenomenon under investigation. Saturation occurs when additional data cannot be added.
- Synthesising: This process entails sifting through data and piecing it together. This enables the researcher to make sense of the phenomenon's characteristics. The researcher makes broad assertions about the phenomena and its participants.
- Theorising is the methodical organisation of data. The researcher develops alternative explanations for the phenomenon to examine their correlation with the data.

When organisational scholars conduct research, they frequently seek solutions to the following problems: "Which data types and sources will assist the researcher in achieving his or her research objectives?" "How can these be integrated and sequenced to maximise their eventual publication and impact?" "How can I minimise sources of error and other impediments to rigour?" "How can I ensure that the time, effort, and financial resources I devote to research and development result in scientific and practical advancements?" To address these questions, the researcher collected and analysed quantitative data in order to develop a thorough understanding of the current prevalence of quantitative methods in organisational research, including innovative approaches to conducting such research, the various types of quantitative value methods, and practical techniques for increasing this value (Gibson, 2016).

The data were analysed using the following statistical techniques to meet the study's research objectives and provide answers to the study's research questions.

### **3.10.1 Descriptive statistics**

The basic objective of descriptive statistics is to rationally simplify enormous amounts of data in any practical scientific inquiry (Franzese and Iuliano, 2019). Additionally, Ruddle and Hall (2019) define descriptive statistics as the fundamental characteristics of data that aid analysts in determining its quality. The primary goal of descriptive statistics is to provide a straightforward explanation and interpretation of the data obtained during an experiment and to comprehend facts (Franzese and Iuliano, 2019).

Tables, graphs, means and standard deviations were used to present descriptive data. A frequency table was created to summarise the respondents' demographic

information, including gender, age group, post-salary level, years of service, department, and qualification. The mean scores, standard deviations, and response categories were used to determine the levels of reported JS, WE, OC, PSM, and CWB among employees.

Descriptive statistics were used in this study because they can be presented graphically or textually in tables, with the latter becoming increasingly arduous to comprehend as the number of variables increases. It provides statistical methods and numerical and graphic approaches for plainly and reasonably summarising a data set without assuming any underlying structure for the data. The second phase involves using strategies for deriving inferences about a population from sampled observations. Thus, researchers can summarise findings and test hypotheses by combining descriptive and inferential methods (Ruddle and Hall, 2019). Additionally, descriptive statistical analyses were conducted to ascertain measures of central tendencies, such as mean, median, standard deviation, minimum and maximum scores, and therefore the range of scores

### **3.10.2 Reliability and validity of the measuring instruments**

Cronbach's alphas were calculated to determine the reliability of the factors and scales measuring PSM, JS, OC, WE, and CWB. Although other approaches for assessing test score reliability have been offered, this study focused on Cronbach's coefficient alpha (referred to as "alpha"), which predicts dependability using data from a single test administration (Cho and Kim, 2015). Alpha is an "internal consistency" coefficient, most frequently used in organisational research (Cho and Kim, 2015).

Cronbach's alpha dependability is a frequently used reliability metric in the social and organisational sciences (Bonett and Wright, 2015). Cronbach's alpha reliability coefficient indicates the reliability of a sum (or average) of  $q$  measures, where the  $q$  measurements may reflect "q raters, occasions, alternative forms, or questionnaire/test items" (Bonett and Wright, 2015).

According to Crutzen and Peters (2017), the reliability of each scale must be estimated using Cronbach's alpha internal consistency coefficient, with a cut-off point of 0.70. According to Cronbach (2017, as cited in Gil-Gómez *et al.* (2017), alpha values greater than or equal to 0.70 imply a high level of internal consistency. A scale above that is

deemed incoherent. It is critical to remember that the scale used for individual groupings may not affect the composite scale. The overall scale of CWE is outstanding and consistent with an acceptable Cronbach's alpha coefficient. Given the high alpha value and the outstanding and consistent outcome, the results encourage additional analysis.

The validity of the measuring tools was determined using exploratory and confirmatory factor analyses. Watkins (2018) states that "exploratory factor analysis (EFA) is a multivariate statistical technique" that has developed into a critical tool for developing, quantifying, and validating psychological theories. Additionally, Watkins (2018) states that:

"exploratory factor analysis (EFA) is a multivariate statistical technique that aims to parsimoniously explain the covariation observed between a set of measured variables (also known as observed variables, manifest variables, effect indicators, reflective indicators, or surface attributes) (also known as factors, dimensions, latent variables, synthetic variables, or internal attributes)"

Furthermore, Goretzko *et al.* (2021) state that EFA is used to model these relationships with a large number of latent variables and to uncover relationships between manifest variables. An assumption is made when a common factor model establishes a causal link between manifest indicators and latent variables.

Confirmatory factor analysis (CFA) is a multivariate statistical process that is used to determine the degree to which measured variables accurately represent several constructs (Li, 2016). "Researchers can determine the number of factors required in the data and which measurable variable is associated with which latent variable" (Statistics.com, 2022) using CFA. Confirmatory factor analysis is a technique for validating or invalidating measurement theories. A CFA model considers the variations between observed and actual scores by integrating relevant error variances as model parameters inside a structural equation modelling framework (Li, 2016). Confirmatory factor analysis has been frequently used to demonstrate construct validity in developing theory-based instruments.

As a result, CFAs were conducted to determine the validity of the JS, OC, WE, PSM, and CWB scales in the South African public sector. There are two approaches to

determining driving elements, namely: the principal component analysis method: This strategy generates the fewest possible components and accounts for the greatest volatility in the original variable; and common factor analysis: This technique is employed when the nature of the component is to be retrieved, and the common error variance is unknown.

The theory is the initial criterion for determining the number of extracted factors. We know from theory that the number of factors extracted makes sense. Most researchers employ the Eigenvalue criterion when determining the number of components to extract. For EFA, the value of the percentage and variance explained methods are also utilised. We can select factors based on the screen test criteria. The Eigenvalue is plotted on a graph, and factors are picked using this procedure (Reio and Shuck, 2015).

### **3.10.3 Independent-samples t-test and analysis of variance with multiple variables (MANOVAs)**

An independent-samples t-test was conducted to establish the differences in JS, WE, OC, PSM and CWB between gender. According to KSU Libraries (2017), the “independent-samples t-test examines the means of two independent groups” to ascertain whether statistical evidence exists that the related population means are statistically significantly different. Gerald (2018) states that the “independent-samples t-test is used to compare two groups whose means are unrelated”. Two samples are considered independent if the sample values from one population are not tied to or “paired or matched with the sample values from the other population”. The independent sample t-test informs the researcher “whether there is a statistically significant difference in the mean scores of the two groups” (Gerald, 2018).

MANOVAs were used to compare the mean levels of JS, OC, WE, PSM, and CWB across age groups, salary/post levels, years of service, and qualifications. MANOVA is defined by Huang (2020). However, MANOVA’s popularity may be misguided. First, most existing MANOVA research focuses on univariate investigation problems rather than the multivariate concerns that MANOVA is purported to solve (Huang, 2020). Furthermore, French *et al.* (2008) define MANOVA as an ANOVA with several dependent variables. For example, ANOVA examines the difference in means

between two or more groups, whereas MANOVA examines the difference in vectors of means between two or more groups.

Multivariate analysis of variance (MANOVA) is frequently used in education research, and a wide variety of social, cognitive, developmental, organisational, and clinical psychologists use it (Huang, 2020). However, French *et al.* (2008) emphasise using MANOVA in experimental circumstances, including manipulating at least some of the independent variables. It is superior to ANOVA in several ways. First, examining multiple “dependent variables in a single experiment increases the likelihood of determining which element is significant”. Second, if many ANOVAs are run independently, they can guard against Type I errors (i.e., a false-positive “where a researcher rejects a null hypothesis that is true in the population” (Banerjee *et al.*, 2009:128). Additionally, it can disclose differences that ANOVA tests do not detect (French *et al.*, 2008).

#### **3.10.4 Pearson’s product-moment correlation**

Schober *et al.* (2018) state that the term “correlation” is most frequently employed “in the context of a linear relationship between two continuous, random variables, referred to as a Pearson product-moment correlation”, abbreviated as “r”. Pearson’s product-moment correlation (r) was used to measure the relationship between PSM, JS, OC, WE, and CWB. Schober *et al.* (2018) define the r as a measure of a monotonic relationship between two variables. Additionally, “a monotonic relationship between two variables is one in which the value of one variable increases in lockstep with the value of the other variable; or (2) the value of one variable increases in lockstep with the value of the other variable” (Schober *et al.*, 2018). Pearson’s r is a statistic that indicates the direction and strength of the link between two variables measured on at least an interval scale (Statistics, 2018).

Additionally, Laerd Statistics (2018) notes that r tests the ability to “create a line of best fit across the data of two variables”, and reflects the distance between all these data points and this line of greatest fit. The r can take on values ranging from +1 to -1, according to Laerd Statistics (2018).

“A value of zero shows that there is no relationship between the two variables. A number greater than 0 implies a positive correlation; as one variable’s value

grows, the other variable's value increases. A number less than 0 implies a negative correlation; as one variable grows, the other variable's value falls."

### **3.10.5 Analyses of multiple regression**

A multiple regression analysis was performed to establish the best predictor of PSM and CWB, namely JS, OC or WE. Multiple regression is similar to basic regression, except it involves multiple variables. The fundamental assumptions, the interpretation of regression coefficients, and the coefficient of determination (R-square) remain unchanged (Konasani and Kadre, 2015).  $R^2$  or the coefficient of determination is "a statistical measure in a regression model that determines the proportion of variance in the dependent variable that the independent variable can explain. In other words, r-squared shows how well the data fit the regression model (the goodness-of-fit)" (Zhang, 2017)."  $Y = B_0 + B_1X_1$  is a basic regression line equation. The following is the multiple regression line equation:  $Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6$ ."

In multiple regression, the objective is to fit a regression line between the independent and dependent variables. Consider the sale of smartphones as an example. Assume one wishes to forecast smartphone sales using independent variables such as the phone's rating, price band, and market promotions. In basic regression, one attempts to fit a regression line between  $y$  and  $x$ . Since the method only involves two variables, the regression line is a simple straight line on a two-dimensional plot (Konasani and Kadre, 2015). According to Lemu *et al.* (2017), multiple regression analysis is generic and is a flexible data-analytic method that may be used whenever a dependent variable is being analysed as a function of, or in relation to, any independent variables.

## **3.11 ETHICAL CONSIDERATIONS**

This section is guided by North-West University's ethical standards for post-graduate study. Ethics is described as societal attitudes about what constitutes acceptable and unacceptable behaviour. It also refers to the behavioural norms demanded by a group (Jacobsen and Landau, 2003). Additionally, informed consent requires that participants be told about the research's overarching goal (Johnson and Christensen, 2008); for example, the study's primary characteristics, significance, and the risks and benefits associated with the participants' involvement.

To collect data from public servants working in the North West Provincial Government Departments listed in the study, self-administered online survey questionnaires were used. Respondents consented to participate in the study by returning the online survey questionnaire. Informed consent safeguards participants by requiring the researcher to obtain their consent before including them in the study. This safeguards the individual against harm and the researcher against being sued or having their research declared invalid or immoral. In addition, the researcher was candid, accountable, and transparent with public officials throughout this research process.

In this study, self-administered online survey questionnaires were accompanied by an introductory letter (see Appendix A) describing the study's objective and significance for the researcher's programme and the public service in general. Additionally, the opening letter stressed the critical nature of responders' participation in the study. Furthermore, the researcher ensured participant confidentiality by assuring them that their information would not be shared with anybody not directly involved in the study. According to Wiles *et al.* (2008), the researcher must ensure the participants'/respondents' confidentiality.

### **3.12 SUMMARY**

This chapter covered the research methodology and design, the various research methodologies, including qualitative and quantitative, and the rationale for using the quantitative method in this study. The deductive and inductive methods of scientific enquiry were emphasised. This chapter explored positivism, interpretivism, and pragmatism as research philosophies. The study's population, sample and sampling process were highlighted. Additionally, the sampling scope and sample size were discussed. The collection and analysis of data were emphasised. The chapter ended by examining the study's quality, rigour, and ethical implications. The following chapter discusses data analysis and interpretation.

## **CHAPTER 4: DATA ANALYSIS AND INTERPRETATION OF RESULTS**

### **4.1 INTRODUCTION**

This chapter presents the data analysis and interpretation of results obtained through the administration of an online questionnaire to employees of 11 North-West Provincial Government departments. The data are presented and analysed to address the research objectives stated in Chapter 1:

- to quantify JS, OC, WE, PSM, and CWB levels;
- to validate the various scales within the South African public-sector context;
- to ascertain differences in the evaluation of core work (JS, OC, and WE), PSM, and CWB across age groups, salary levels, service years, qualifications, and departments;
- to examine the relationship between fundamental job evaluations (JS, OC, and WE), PSM, and CWB; and
- to identify the most accurate predictors of PSM and CWB, namely JS, OC, and WE.

The sample's demographic characteristics are discussed, followed by a descriptive analysis of JS, OC, WE, PSM, and CWB as constructs using measures of central tendencies, such as mean, median, and standard deviation. The reliability and validity of scales measuring JS, OC, WE, PSM, and CWB are then discussed. The mean scores for perceived JS, OC, WE, PSM, and CWB are illustrated by gender, age, years of service, and department. The relationship between JS, OC, WE, PSM, and CWB is discussed, and the multiple regression analysis results are tabulated.

### **4.2 DESCRIPTIVE STATISTICS**

This section contains information about the sample's demographic characteristics and measures of central tendency for the primary constructs of JS, OC, WE, PSM, and CWB.

### 4.2.1 Demographic characteristics of the sample

This section summarises the findings regarding the participants' demographic characteristics. According to Table 4.1, the sample was almost evenly distributed by gender, with 50.2 % of respondents (n = 518) identifying as male and 49.8 % (n = 513) as female. The majority of respondents (n = 370; 35.9 %) fell into the 40 to 49 age bracket, followed by respondents in the 50 to 59 age bracket (n = 242). Additionally, 22.4 % (n = 231) of the sample fell into the 30 to 39 age bracket, while 10.1 % (n = 104) fell into the 20 to 29 age bracket. The smallest group of respondents were aged 60 and over (n = 84; 8.1 %). The 16 post-salary levels were divided into four subpopulations, namely senior management (SMS – salary levels 13–16), middle managers (MMS salary levels 11–12), junior middle managers (JM salary levels 8–10) and elementary staff (professionals salary levels 1–7). The majority of respondents (n = 431; 41.7 %) had worked for the North West Provincial Administration (Departments) for six to ten years, while the fewest respondents, 1.2 % (n = 12), had at least 21 years of work experience. The Department of Community Safety and Transportation Management employed 18.5 % (n = 191) of the respondents, followed by the Premier's Office (n = 158; 15.3 %), while the Department of Culture, Arts and Traditional Affairs (DCATA) employed only 4% (n = 41) of the sample. This was expected, as DCATA is one of the province's smallest departments. Finally, the majority of respondents (36.7 %) with a diploma as their highest qualification, followed by 22.8 % (n = 235) with a master's degree, and only 4.1 % (n = 42) with a doctoral degree (PhD).

**Table 4.1: Demographic characteristics of the sample**

Variable	Level of the variable	N	%	Cumulative %
"Gender"	"Male"	518	50.2	50.2
	"Female"	513	49.8	100.0
"Age"	"20 – 29"	104	10.1	10.1
	"30 – 39"	231	22.4	32.5
	"40 – 49"	370	35.9	68.4
	"50 – 59"	242	23.5	91.9
	"60 and older"	84	8.1	100.0
"Salary level"	"Salary level 1"	54	5.2	5.2

<b>Variable</b>	<b>Level of the variable</b>	<b>N</b>	<b>%</b>	<b>Cumulative %</b>
	“Salary level 2”	55	5.3	10.6
	“Salary level 3”	47	4.6	15.1
	“Salary level 4”	59	5.7	20.9
	“Salary level 5”	65	6.3	27.2
	“Salary level 6”	98	9.5	36.7
	“Salary level 7”	69	6.7	43.4
	“Salary level 8”	68	6.6	50.0
	“Salary level 9”	98	9.5	59.5
	“Salary level 10”	102	9.9	69.4
	“Salary level 11”	64	6.2	75.6
	“Salary level 12”	109	10.6	86.1
	Salary level 13”	83	8.1	94.2
	“Salary level 14”	38	3.7	97.9
	Salary level 15”	18	1.7	99.6
	“Salary level 16”	4	0.4	100.0
<b>Years’ service</b>	“0 – 5 years”	252	24.4	24.4
	“6 – 10 years”	431	41.8	66.2
	“11 – 15 years”	244	23.7	89.9
	“16 – 20 years”	92	8.9	98.8
	“21 – 25 years”	3	0.3	99.1
	“26 – 30 years”	2	0.2	99.3
	“31 – 35 years”	1	0.1	99.4
	“36 – 40 years”	3	0.3	99.7
	“41 and more years”	3	0.3	100.0
<b>Department</b>	Education and Sport Development	102	9.9	9.9
	Public Works and Roads	113	11.0	20.9
	Department of Community Safety and Transport Management	191	18.5	39.4

Variable	Level of the variable	N	%	Cumulative %
	Social Development	88	8.5	47.9
	Rural, Environment and Agricultural Development	72	7.0	54.9
	Premiers Office	158	15.3	70.2
	Health	63	6.1	76.3
	Local Government and Human Settlement	60	5.8	82.2
	Tourism	67	6.5	88.7
	Economy and Enterprise Development	76	7.4	96.0
	Culture, Arts and Traditional Affairs	41	4.0	100.0
<b>Qualification</b>	“National Certificate (Matric)”	42	4.1	4.1
	“Higher Certificate”	11	1.1	5.1
	“Advanced Certificate”	26	2.5	7.7
	“National Diploma”	150	14.5	22.2
	“Diploma”	72	7.0	29.2
	“Post-Graduate Diploma”	157	15.2	44.4
	“Degree”	158	15.3	59.7
	“Honours Degree”	138	13.4	73.1
	“Master’s Degree”	235	22.8	95.9
“Doctoral”	42	4.1	100.0	

#### 4.2.2 Measures of central tendency

Descriptive statistical analysis was used to determine the mean, median, standard deviation, minimum and maximum scores, and thus the scores range. On the other

hand, descriptive statistics describe the current state of each variable in a sample, whereas inferential statistics extrapolate results to the entire population. The term “core work evaluation” refers to three distinct constructs: JS, OC, and WE, the results of which are summarised in Table 4.2 below.

**Table 4.2: Measures of central tendency of constructs**

Variable	Min.	Max.	Mean	Median	Std.	Skewness
<b>PSM</b>	46	80	71.67	71.00	5.599	-0.289
<b>JS</b>	40	142	95.16	93.00	22.979	-0.194
<b>OC</b>	55	108	76.72	77.00	12.697	0.455
<b>WE</b>	30	119	86.75	91.00	21.048	-0.065
<b>CWB</b>	43	131	56.46	50.00	16.211	2.702

Two variables, OC and WE, were slightly negative, as shown in Table 4.2. The average level of OC was 76.72, while the median or mid-point level was 77.00. As a result, OC was slightly less than 50% negative. Respondents indicated a lack of OC. On average, WE was 86.75, while on a median basis, it was 91.00, indicating a slight lack of engagement. All other variables were greater than the mean by a significant amount.

#### **4.2.3 Descriptive statistics of the PSM, JS, OC, WE and CWB levels**

The first objective was to assess employees’ motivation, JS, OC, WE, and levels of CWB. The results revealed that APS (M = 4.7; SD=.370); CPV (M = 4.63; SD =.400); compassion (M = 4.63; SD =.437) (all leaning towards the strongly agree category); self-sacrifice (M = 3.95; SD =.757 - leaning towards the agree category) and PSM Scale (M= 4.48; SD =.350- leaning towards the strongly agree category) indicating high levels of PSM.

The facets of JS, namely work itself (M = 3.88; SD = 1.084); supervision (M = 3.65; SD = 1.609) and pay (M =3.96; SD =1.453) are all leaning towards the neither agree nor disagree category indicating that respondents experience neither satisfaction nor dissatisfaction (neutral) with these dimensions. Co-workers (M = 4.87; SD= 1.129) are

leaning towards the somewhat category indicating moderate satisfaction levels, while promotion (M = 2.67; SD = 1.378) is leaning towards the somewhat disagree category showing some dissatisfaction with promotion opportunities. Overall, the JS scale (M = 3.81; SD = .919) leans towards the neither agree nor disagree category indicating that respondents are neither satisfied nor dissatisfied with their jobs (neutral).

Two OC factors, namely AC (M = 3.49; SD = .895); NC (M = 3.38; SD = .754), lean towards the slightly disagree category, indicating slightly low levels on these dimensions. However, CC (M = 3.57; SD = 1.194) is leaning towards the slightly agree category, indicating a slightly high CC. The OC scale (M = 3.47; SD = .627) is also leaning towards the slightly disagree category, indicating slightly low levels of OC.

The mean scores for the work vigour (M = 5.11; SD = 1.184) and dedication (M = 5.04; SD = 1.527) lean towards the often category indicating moderate levels while absorption (M = 2.57; SD = .616) leans towards the rarely category indicating low levels. The mean score for the WE scale (M = 5.10; SD = 1.238) is towards the often category indicating moderate levels of WE.

CWB-person (M = 1.21; SD = .408; CWB-organisation M = 1.42; SD = .395) and counterproductive work behaviour scale (M = 1.31; SD = .377) are all leaning towards the never category indicating that CWB is prevalent at a low level.

**Table 4.3: Descriptive results of the PSM, JS, OC, WE and CWB levels**

Factors and scales	N	Minimum	Maximum	Mean	Std. Deviation
APS	1031	3	5	4.70	.370
CPV	1031	2	5	4.63	.400
Compassion	1031	4	5	4.63	.437
Self-sacrifice	1031	3	5	3.95	.757
<b>PSM Scale</b>	1031	3	5	4.48	.350
Work itself	1031	2	6	3.88	1.084
Supervision	1031	1	7	3.65	1.609
Co-workers	1031	2	7	4.87	1.129
Pay	1031	1	7	3.96	1.453
Promotion	1031	1	6	2.67	1.378
<b>JS Scale</b>	1031	2	6	3.81	.919
AC	1031	1	5	3.49	.895

<b>Factors and scales</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
CC	1031	1	6	3.57	1.194
NC	1031	2	5	3.38	.754
<b>OC Scale</b>	1031	2	5	3.47	.627
Vigour	1031	3	7	5.11	1.184
Dedication	1031	1	7	5.04	1.527
Absorption	1031	1	4	2.57	.616
<b>WE Scale</b>	1031	2	7	5.10	1.238
CWB-person	1031	1	3	1.21	.408
CWB-organisation	1031	1	3	1.42	.395
<b>CWB Scale</b>	1031	1	3	1.31	.377

### **4.3 RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENTS**

The study's second objective was to determine the reliability and validity of scales measuring PSM, JS, OC, WE and CWB in the South African public-sector context. Cronbach's alpha internal consistency coefficient was used to determine each scale's reliability. A Cronbach's alpha value of 0.7 or greater is widely considered acceptable (Taber, 2018), whereas a value between 0.5 and 0.7 indicates moderate sample adequacy. A scale with a value less than 0.5 is considered inconsistent (Walsh, 2003). The Cronbach's alpha coefficient for the JS scale was 0.888, considered acceptable and consistent. Thus, given the sample characteristics, the scale will revert to the same results after several iterations.

Similarly, JS sub-scales ranged from 0.715 to 0.845. Cronbach's alpha values for AC, CC, NC, and OC were between 0.5 and 0.7, indicating moderate sample reliability for the specified scales. The Cronbach's alpha coefficient for the WES was 0.947, considered excellent, with sub-scales ranging from 0.849 to 0.876. Similarly, the PSM scale was 0.833 reliable, with sub-scales ranging from 0.553 (i.e., commitment to the public service) to 0.806 (i.e., commitment to the public service) (i.e., self-sacrifice). Simultaneously, the reliability coefficient for CWB was 0.968, with the two sub-scales reverting to 0.893 for organisational CWB and 0.970 for individual CWB.

**Table 4.4: Results of the reliability test**

Factor and scales	Items	Cronbach's alphas	Mean	Std.Dev
Work itself	5	0.715	19.41	5.420
Supervision	5	0.834	18.26	8.046
Co-workers	5	0.793	24.34	5.647
Remuneration	5	0.845	19.80	7.265
Promotion	5	0.820	13.35	6.891
JS scale	25	0.888	95.16	22.979
AC	8	0.642	27.93	7.162
CC	6	0.600	21.78	5.801
NC	8	0.524	27.01	6.032
OC scale	22	0.664	76.72	12.697
Vigour	6	0.849	30.68	7.105
Dedication	5	0.876	25.19	7.636
Absorption	6	0.851	30.87	7.397
WE scale	17	0.947	86.75	21.048
APS	4	0.726	18.80	1.480
CPS	4	0.553	18.52	1.749
Compassion	4	0.743	18.539	1.601
SS	4	0.806	15.81	3.031
PSM Scale	16	0.833	71.688	5.599
CWB-Organisation	20	0.893	28.70	8.018
CWB-Individual	22	0.970	26.67	8.898
CWB scale	43	0.968	56.46	16.211

Exploratory and confirmatory factor analyses were used to determine the validity of the measuring instruments. On scales of PSM, CWE constructs (JS, WE, and OC), and CWB, the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure and Bartlett's test of Sphericity were computed first (see Table 4.5).

**Table 4.5: The KMO measure and Bartlett’s test**

Scale	KMO Measure of Sampling Adequacy	Bartlett’s Test of Sphericity	p-value
PSM	0.573	10 827.723	0.000**
JS	0.638	30 549.620	0.000**
WE	0.833	19 660.720	0.000**
OC	0.425	15 666.427	0.000**
CWB	0.598	22 853.990	0.000**

“Note: p ≤0.05\*; p ≤ 0.01\*\*”

According to Table 4.5, the KMO measure of sampling adequacy value is greater than 0.5 except for OC. The corresponding Bartlett’s test of Sphericity is statistically significant at a 0.1% level of significance at the 99<sup>th</sup> percentile. Therefore, the correlation matrix is assumed to be factorable, and the sample is adequate for factor analysis.

Pursuant to determining the factorability of the data, EFA was performed with results displayed in Table 4.6 to Table 4.9.

**Table 4.6: Total variance explained by factors for PSM**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.726	29.537	29.537	4.726	29.537	29.537
2	2.568	16.048	45.585	2.568	16.048	45.585
3	2.312	14.448	60.033	2.312	14.448	60.033
4	1.412	8.827	68.860	1.412	8.827	68.860

According to Table 4.6, four factors should be retained in the PSM scale, which explains 68.86% of the variance. The percentage variance in extraction sums of squared loadings is the same, explaining 68.86%.

**Table 4.7: Total variance explained by factors for JS**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.296	29.183	29.183	7.296	29.183	29.183
2	4.442	17.769	46.952	4.442	17.769	46.952
3	3.079	12.317	59.269	3.079	12.317	59.269
4	2.184	8.736	68.006	2.184	8.736	68.006
5	1.495	5.981	73.986	1.495	5.981	73.986
6	1.407	5.628	79.614	1.407	5.628	79.614

The results presented in Table 4.7 revealed that six factors had eigenvalues exceeding 1, which explained 79.61% of the variance in JS. The percentage variance in extraction sums of squared loadings is the same, explaining 79.61%.

**Table 4.8: Total variance explained by factors for WE**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.342	54.954	54.954	9.342	54.954	54.954
2	2.265	13.326	68.280	2.265	13.326	68.280
3	1.182	6.956	75.236	1.182	6.956	75.236

The results presented in Table 4.8 show that three factors should be retained in the WES, with eigenvalues exceeding 1. The three factors explain 75.2% of the variance in WE. The percentage variance in extraction sums of squared loadings is the same, explaining 75.2%.

**Table 4.9: Total variance explained by factors for OC**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.631	21.049	21.049	4.631	21.049	21.049
2	3.484	15.836	36.885	3.484	15.836	36.885
3	2.073	9.424	46.310	2.073	9.424	46.310
4	1.740	7.910	54.220	1.740	7.910	54.220
5	1.598	7.265	61.486	1.598	7.265	61.486
6	1.532	6.965	68.451	1.532	6.965	68.451
7	1.246	5.666	74.117	1.246	5.666	74.117
8	1.161	5.277	79.394	1.161	5.277	79.394

Results in Table 4.9 revealed that eight factors reverted eigenvalues exceeding 1, explaining 79.39% of the variance in OC. The percentage variance in extraction sums of squared loadings is also found to be explaining 79.39%.

Moreover, Table 4.10 revealed that six factors had eigenvalues exceeding 1, which explained 81.34% of the variance in CWB. The percentage variance in extraction sums of squared loadings is also found to be explaining 81.34%.

**Table 4.10: Total variance explained by factors for CWB**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.774	37.021	37.021	7.774	37.021	37.021
2	2.747	13.082	50.103	2.747	13.082	50.103
3	2.271	10.813	60.916	2.271	10.813	60.916
4	1.897	9.032	69.948	1.897	9.032	69.948
5	1.365	6.500	76.448	1.365	6.500	76.448
6	1.027	4.890	81.338	1.027	4.890	81.338

After the EFA, CFA was performed to retain the number of factors and determine the validity of each scale.

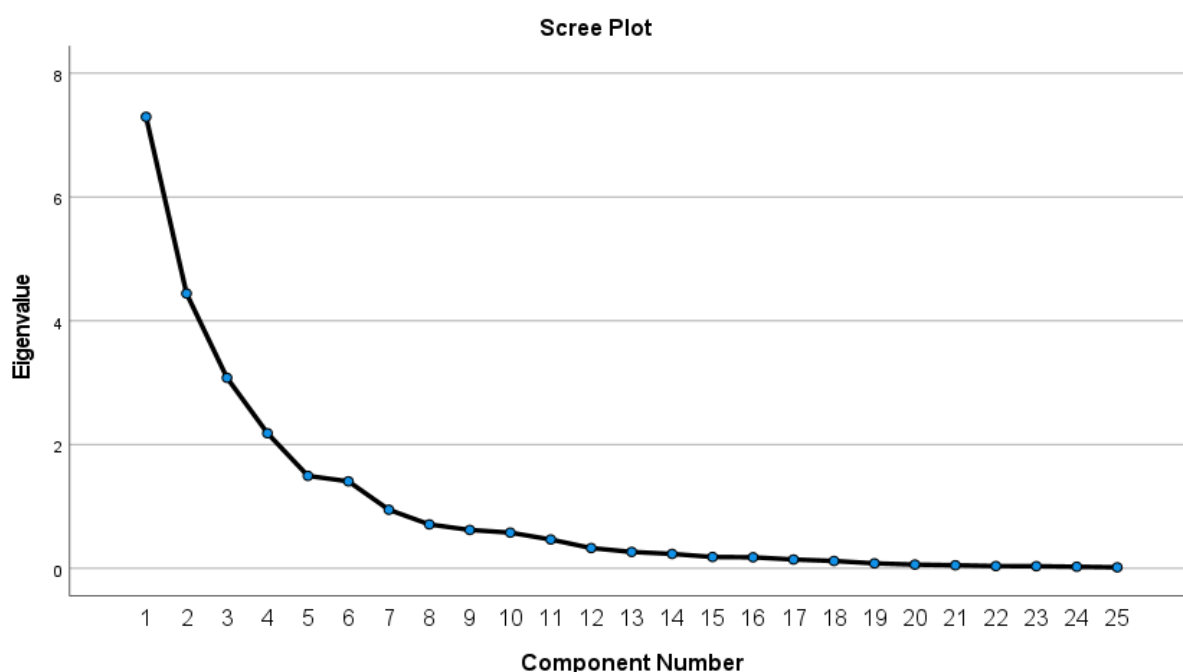
Results in Table 4.11 present the factor loadings based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for PSM. According to the results, six items loaded onto Factor 1 measuring APS. This factor was labelled “Attraction to Public Service”. All the six items loaded positively on the first factor. There are four items loaded onto Factor 2 measuring CPV. This factor was labelled “Commitment to Public Values”. All four items loaded positively onto the second factor. There are two items loaded onto Factor 3 measuring compassion. This factor was labelled “Compassion”. One item loaded positively and the other item loaded negatively on to the third factor. Finally, there are four items loaded onto Factor 4 measuring self-sacrifice. This factor was labelled “self-sacrifice”. All four items loaded negatively onto the fourth factor.

**Table 4.11: Factor loadings based on a principal component extraction with Oblimin with Kaiser Normalisation rotation for PSM**

Statements	Factors			
	1	2	3	4
“It is fundamental that the interests of future generations are taken into account when developing public policies”.	0.897			
“To act ethically is essential for public servants”.	0.800			
“I empathise with other people who face difficulties”.	0.789			
“I feel sympathetic to the plight of the underprivileged”.	0.619			
“It is important to contribute to activities that tackle social problems”.	0.513			
“It is important that citizens can rely on the continuous provision of public services”.	0.415			
“I would agree to a good plan to make a better life for the poor, even if it costs me”.		0.901		
“I am willing to risk personal loss to help society”.		0.814		
“I believe in putting civic duty before self”.		0.778		
“I am prepared to make sacrifices for the good of society”.		0.614		

Statements	Factors			
	1	2	3	4
“I think equal opportunities for citizens are very important”.			-0.860	
“I admire people who initiate or are involved in activities to aid my community”.			0.531	
“Meaningful public service is very important to me”.				-0.864
“It is important for me to contribute to the common good”.				-0.827
“I get very upset when I see other people being treated unfairly”.				-0.738
“Considering the welfare of others is very important”.				-0.598

A parallel analysis was conducted to confirm the existence of the JS scale’s factor count. As determined by the analysis, five factors had eigenvalues greater than the corresponding criterion value for a similarly sized randomly generated data matrix. Therefore, in light of the scree plot (see below) and subsequent analysis, confirmatory analysis was conducted using a forced five-factor rotation, as shown in Table 4.12.



**Figure 4.1: Scree plot of eigenvalues from CFA**

Table 4.12 presents the forced five-factor loading based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for JS. Four items were loaded onto Factor 1, measuring supervision according to the results. Hence, this factor was labelled “Supervision”. Of the four items, all four items loaded positively onto the component with factor loadings ranging between 0.918 and 0.793. For example, “All in all, I am very satisfied with this person as my manager” with a high factor loading of 0.918. There are seven items loaded onto Factor 2 measuring promotion. This factor was labelled “Promotion”. Five items loaded positively onto the second factor, and one item loaded negatively. For example, “I would be more content with my job if my promotion opportunities were not so poor.” with a factor loading of 0.551. Also, “All in all, I would rather have more opportunities for promotion.” with a factor loading of 0.545. There are three items loaded onto Factor 3 measuring pay. This factor was labelled “Pay”. All three factors loaded positively onto the third factor, with factor loadings ranging between 0.894 and 0.882. Five items loaded onto Factor 4 measuring co-workers. Hence, this factor was labelled “Co-Workers”. Of the five items, all the items loaded positively with factor loadings ranging between 0.941 and 0.415. Four items loaded onto Factor 5 measuring work itself. This factor was labelled “Work itself”. All four items loaded positively onto Factor 5. For example, “All in all, I would rather have some other kind of duties in my work.” with a factor loading of 0.837. Also, “I would be more content with my job if I were doing tasks that are different from the ones I do now”., with a factor loading of 0.818.

**Table 4.12: Forced five-factor loading based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for JS**

Items	Component				
	1	2	3	4	5
“All in all, I am very satisfied with this person as my manager”.	0.918				
“Overall, I am very pleased with the way my manager supervises me”.	0.872				
“I am more satisfied with my manager than with almost anyone I have ever worked for”.	0.866				

Items	Component				
	1	2	3	4	5
“All and all, I would rather work for some other manager”.	0.793				
“I am more satisfied with my opportunities for promotion now than with almost any other promotion opportunities I have ever had”.	0.480				
“All in all, I am very satisfied with my chances for promotion”.		-0.332			
“I would be more content with my job if my pay were not so low”.		0.844			
“I would be more content with my job if my manager did not work here”.		0.789			
“I would be more content with my job if my co-workers did not work here”.		0.648			
“All in all, I would rather have better pay”.		0.591			
“I would be more content with my job if my promotion opportunities were not so poor”.		0.551			
“All in all, I would rather have more opportunities for promotion”.		0.545			
“I am more satisfied with my pay now than I have almost ever been”.			0.894		
“Overall, I am very pleased with how much money I earn”.			0.887		
“All in all, I am very satisfied with my pay”.			0.882		
“All in all, I would rather work with some other kind of co-workers”.				0.496	
‘All in all, I am very satisfied with my co-workers”.				0.941	
“Overall, I am very pleased to work with my co-workers”.				0.732	

Items	Component				
	1	2	3	4	5
“I am more satisfied with my co-workers than with almost anyone I have ever worked with before”.				0.692	
“I am more satisfied with the types of work I currently do that with almost any other work I have ever done”.				0.342	
“All in all, I would rather have some other kind of duties in my work”.					0.837
“I would be more content with my job if I were doing tasks that are different from the ones I do now”..					0.818
“All in all, I am very satisfied with the things I do at work”.					0.628
“Overall, I am very pleased with the types of activities that I do on my job”.					0.318

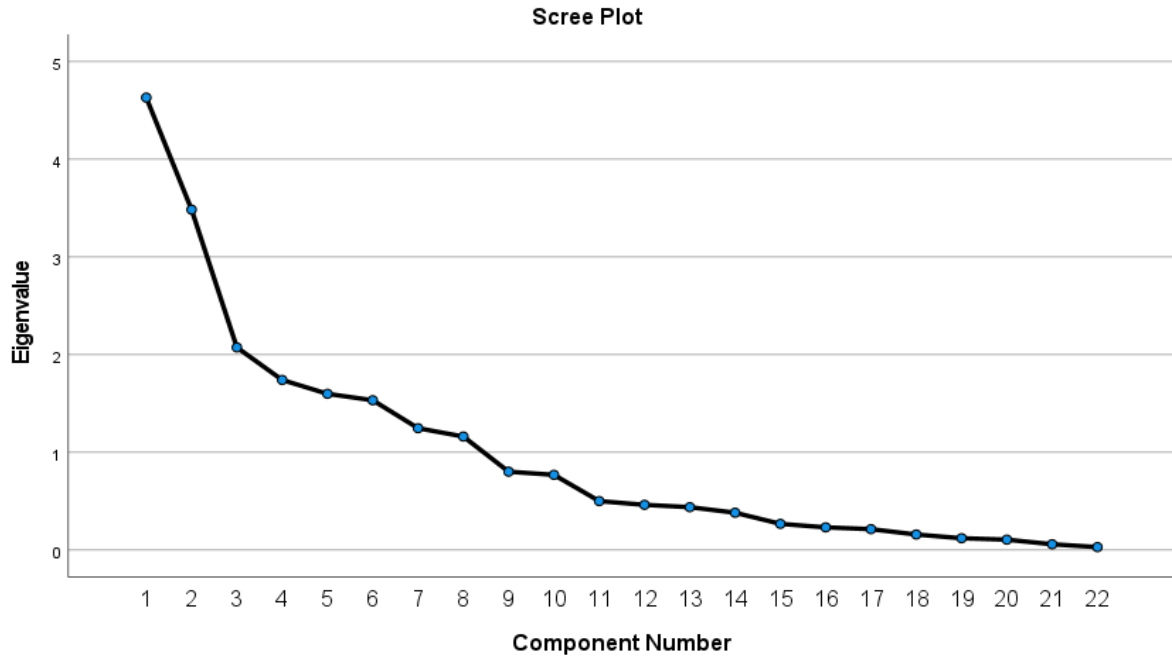
Table 4.13 presents the factor loadings based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for the WES. According to the results, eight items are loaded onto Factor 1, measuring employee dedication. This factor was labelled “Dedication”. All the eight items loaded positively onto the first factor. Next, there are six items loaded onto Factor 2 measuring employee absorption. This factor was labelled “Absorption”. All the six items loaded positively onto the second factor. Finally, there are three items loaded onto Factor 3 measuring employee vigour. This factor was labelled “Vigour”. All three items loaded positively onto the third factor.

**Table 4.13: Factor loadings based on a principal component extraction with Oblimin with Kaiser Normalisation rotation for WE**

Statements	Factors		
	1	2	3
“When I get up in the morning, I feel like going to work”.	0.917		
“At my job, I feel strong and vigorous”.	0.915		
“My job inspires me”.	0.910		

Statements	Factors		
	1	2	3
“I find the work that I do full of meaning and purpose”.	0.858		
“I am enthusiastic about my job”.	0.832		
“At my work, I feel bursting with energy”.	0.828		
“When I am working, I forget everything else around me”.	0.749		
“I feel happy when I am working intensely”.	0.562		
“To me, my job is challenging”.		0.892	
“I get carried away when I’m working”.		0.877	
“It is difficult to detach myself from my job”.		0.792	
“At my job, I am very resilient, mentally”.		0.603	
“I can continue working for very long periods at a time”.		0.588	
“I am immersed in my work”.		0.486	
“I am proud of the work that I do”.			0.732
“At my work, I always persevere, even when things do not go well”.			0.724
“Time flies when I’m working”.			0.697

A parallel analysis was conducted to confirm the scale’s factor count. As determined by the analysis, three factors had eigenvalues greater than the corresponding criterion value for a similarly sized randomly generated data matrix. As a result of the scree plot (see below) and subsequent analysis, confirmatory analysis was conducted using a forced three-factor rotation; the results are shown in Table 4.14.



**Figure 4.2: Scree plot of eigenvalues from CFA**

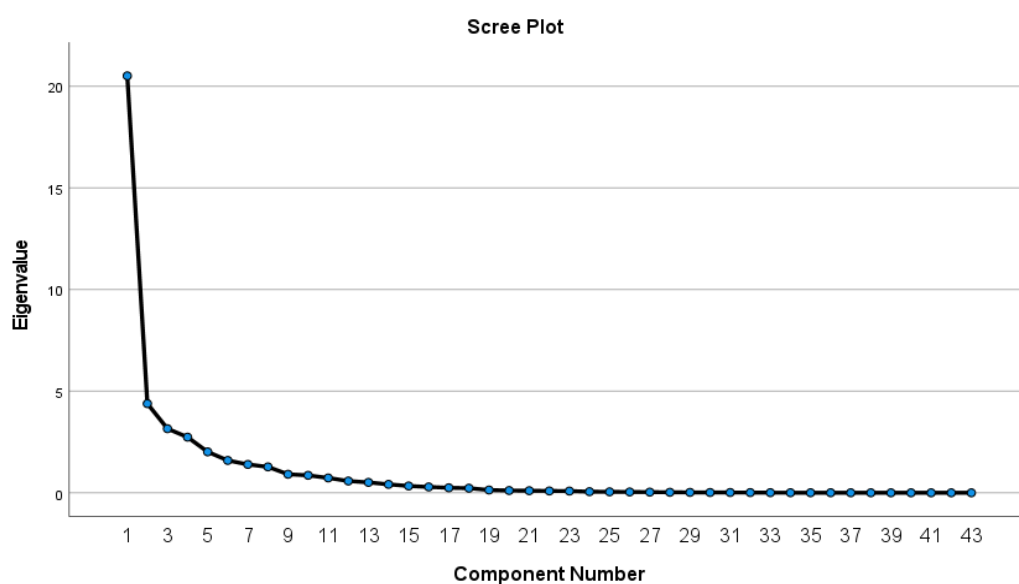
Table 4.14 presents the factor loadings based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for OC. According to the results, eight items loaded onto Factor 1 measuring CC. All the eight items loaded positively onto the mentioned factor with factor loadings ranging between 0.804 and 0.368. Six items loaded onto Factor 2 measuring AC. Hence, this factor was labelled “Affective Commitment”. Of the six items, five loaded negatively, with one item loading positively onto the second factor. Seven items loaded onto Factor 3 measuring NC. Consequently, this factor was labelled “Normative Commitment”. All three items loaded positively onto the third factor. Of the seven items, five loaded positively onto the third factor, and two loaded negatively. For example, ““I do not believe that a person must always be loyal to his or her organisation”” with a factor loading of 0.532. Similarly, “I do not think that wanting to be a “company man” or “company woman” is sensible anymore”, with a factor loading of 0.690.

**Table 4.14: Forced three-factor principal component extraction with Oblimin and Kaiser Normalisation rotation for OC**

Statement	Component		
	1	2	3
“Too much in my life would be disrupted if I decided I wanted to leave my organisation now.”	0.804		
“Things were better in the days when people stayed with one organisation for most of their careers.”	0.693		
“It would be very hard for me to leave my organisation right now, even if I wanted to.”	0.682		
“Right now, staying with my organisation is a matter of necessity as much as desire.”	0.647		
“If I got another offer for a better job elsewhere I would not feel it was right to leave my organisation.”	0.581		
“One of the major reasons I continue to work for this organisation is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.”	0.501		
“I am not afraid of what might happen if I quit my job without having another one lined up.”	0.486		
“I feel that I have too few options to consider leaving this organisation.”	0.368		
“I enjoy discussing my organisation with people outside it.”		-0.375	
“I would be very happy to spend the rest of my career with this organisation.”		-0.478	
“I do not feel a strong sense of belonging to my organisation.”		-0.851	
“I do not feel like ‘part of the family’ at my organisation.”		-0.840	
“This organisation has a great deal of personal meaning for me.”		-0.737	
“I think that I could easily become as attached to another organisation as I am to this one.”		0.517	

Statement	Component		
	1	2	3
“Jumping from organisation to organisation does not seem at all unethical to me.”			0.353
“I do not think that wanting to be a company man or company woman is sensible anymore.”			0.690
“I think that people these days move from company to company too often.”			-0.534
“I do not believe that a person must always be loyal to his or her organisation.”			0.532
“I really feel as if this organisation’s problems are my own”			0.491
“I was taught to believe in the value of remaining loyal to one organisation.”			-0.469
“It wouldn’t be too costly for me to leave my organisation now.”			0.342

Parallel analyses were conducted to confirm some components associated with CWB. The study discovered that two factors had eigenvalues greater than the relevant criteria value for a similarly sized randomly generated data matrix. In light of the scree plot (see below) and subsequent analysis, confirmatory analysis was conducted using a forced two-factor rotation; the results are shown in Table 4.15.



**Figure 4.3: Scree plot of eigenvalues from CFA**

The results in Table 4.15 present the factor loadings based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for CWB. Results revealed that 27 items loaded onto Factor 1 measured CWB aimed at an individual. Hence, this factor was labelled “CWB – individual”. All the aforementioned items loaded positively onto the factor with factor loadings ranging from 0.960 to 0.406. Moreover, 14 items loaded onto Factor 2 measure CWB towards the organisation. Therefore, this factor was labelled “CWB – organisation”. All the mentioned items loaded positively with factor loadings ranging from 0.795 to 0.363.

**Table 4.145: Forced two-factor loading principal component matrix with Oblimin and Kaiser Normalisation rotation for counterproductive**

Statement	Component	
	1	2
“Took money from your employer without permission.”	0.960	
“Threatened someone at work with violence.”	0.953	
“Played a mean prank to embarrass someone at work.”	0.941	
“Hit or pushed someone at work.”	0.925	
“Made an obscene gesture (the finger) to someone at work.”	0.913	
“Stole something belonging to someone at work.”	0.913	
“Purposely dirtied or littered your place of work.”	0.907	
“Destroyed property belonging to someone at work”	0.901	
“Started or continued a damaging or harmful rumour at work.”	0.888	
“Verbally abused someone at work.”	0.880	
“Did something to make someone at work look bad”	0.870	
“Put in to be paid for more hours than you worked”	0.843	
“Withheld needed information from someone at work.”	0.787	
“Looked at someone at work’s private mail/property without permission.”	0.745	
“Threatened someone at work, but not physically.”	0.729	
“Hid something so someone at work couldn’t find it.”	0.728	
“Said something obscene to someone at work to make them feel bad.”	0.722	
“Made fun of someone’s personal life.”	0.708	

Statement	Component	
	1	2
"Stolen something belonging to your employer."	0.684	
"Blamed someone at work for error you made."	0.663	
"Refused to help someone at work."	0.657	
"Insulted or made fun of someone at work."	0.639	
"Took supplies or tools home without permission."	0.634	
"Refused to take on an assignment when asked."	0.582	
"Purposely did your work incorrectly."	0.557	
"Ignored someone at work."	0.502	
"Started an argument with someone at work."	0.406	
"Left work earlier than you were allowed to."		0.795
"Daydreamed rather than did your work."		0.731
"Told people outside the job what a lousy place you work for."		0.717
"Purposely wasted your employer's materials/supplies."		0.653
"Tried to look busy while doing nothing."		0.636
"Purposely failed to follow instructions."		0.617
"Purposely came late to an appointment or meeting."		0.572
"Stayed home from work and said you were sick when you were not."		0.562
"Purposely worked slowly when things needed to get done."		0.532
"Purposely interfered with someone at work doing his/her job."		0.517
"Failed to report a problem so it would get worse."		0.505
"Insulted someone about their job performance."		0.439
"Came to work late without permission."		0.428
"Taken a longer break than you were allowed to take"		0.363

#### **4.4 COMPARISON OF EMPLOYEES' PERCEIVED JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT, PUBLIC SERVICE MOTIVATION AND COUNTERPRODUCTIVE BEHAVIOUR MEANS SCORES BETWEEN GENDER, AGE GROUPS, YEARS OF SERVICE AND DEPARTMENTS**

The third objective was to establish differences in the PSM, JS, OC, WE and CWB between gender, age groups, departments, salary levels, service years and

qualifications. An independent-samples t-test (equal variances assumed) and multivariate analysis of variance tests (MANOVAs) were computed to determine the difference in employee perceived CWE (JS, OC and WE), PSM, and counterproductive behaviour mean scores concerning gender, age groups, years of service and departments.

**Table 4.156: An independent-samples t-test to compare the mean scores of the dependent variables with gender**

Variable	t-value	DF	p-value	Mean difference
PSM	1.100	1029	0.272	0.383
JS	-0.341	1029	0.733	-0.488
OC	2.013	1029	0.044**	1.590
WE	1.696	1029	0.090	2.222
CWB	-1.013	1029	0.311	-1.023

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ;  $p \leq 0.01^{**}$ ”

As shown in Table 4.16, there was a statistically insignificant difference between gender and OC in the 95<sup>th</sup> percentile. The mean difference between male and female respondents was 1.590. Thus, male respondents reported higher OC (mean = 77.51; STD = 13.015) in comparison with their female counterparts (mean = 75.92; STD = 12.329). None of the other variables yielded statistically significant results. To further explore the results presented, an independent sample t-test (equal variances assumed) for gender and the OC factors was computed and presented in Table 4.17 below.

**Table 4.167: An independent-samples t-test to compare the mean scores of OC facets with gender**

Variable	t-value	DF	p-value	Mean difference
AC	0.236	1029	0.813	0.105
CC	1.316	1029	0.188	0.475
NC	2.692	1029	0.007**	1.009

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ”

As per Table 4.17 above, gender had a statistically significant influence on NC in the 99<sup>th</sup> percentile. More specifically, male respondents had a statistically significant

higher mean score (mean = 27.51; STD = 6.143) on NC in comparison to female respondents (mean = 26.50; STD = 5.882). Table 4.18 below illustrates the MANOVA results for age.

**Table 4.178: MANOVA results for age and dependent variables**

Dependent Variable	DF	Mean Square	F	P	Partial Eta Squared
PSM	4	13,683	0,436	0,783	0,002
JS	4	4924,318	9,639	0,000**	0,036
OC	4	785,049	4,944	0,001**	0,019
WE	4	2560,610	5,889	0,000**	0,022
CWB	4	1625,240	6,312	0,000**	0,024

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ”

Age had a statistically significant effect on JS, OC, WE, and CWB, as shown in Table 4.18. The interactions listed above are in the 99<sup>th</sup> percentile. To further explore the findings, MANOVA results for each of the constructs mentioned above will be presented (see Table 4.19).

**Table 4.189: MANOVA results for age and facets of dependent variables**

Variable	DF	Mean Square	F	P	Partial Eta Squared
AC	4	412.703	8.274	0.000**	0.031
CC	4	110.352	3.308	0.011*	0.013
NC	4	98.048	2.712	0.029*	0.010
Work itself	4	177.144	6.151	0.000**	0.023
Supervision	4	333.968	5.244	0.000**	0.020
Co-Workers	4	160.784	5.123	0.000**	0.020
Remuneration	4	324.888	6.282	0.000**	0.024
Promotion	4	359.234	7.763	0.000**	0.029
Vigour	4	422.670	8.621	0.000**	0.033
Dedication	4	252.272	4.384	0.002**	0.017
Absorption	4	256.865	4.764	0.001**	0.018

Variable	DF	Mean Square	F	P	Partial Eta Squared
CWB-organisation	4	496.700	7.417	0.000**	0.028
CWB-individual	4	336.893	4.242	0.002**	0.016

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ”

According to Table 4.19 above, age statistically influenced all the various sub-components of JS, WE, OC, and CWB. More specifically, age statistically significantly predicted NC at the 95<sup>th</sup> percentile while predicting AC, CC, work itself, supervision, co-workers, remuneration, promotion, vigour, dedication, absorption, CWB-organisation and CWB-individual on the 99<sup>th</sup> percentile.

**Table 4.20: MANOVA results for department as an independent variable**

Dependent variables	DF	Mean Square	F	P	Partial Eta Squared
PSM	10	231.483	7.878	0.000**	0.072
JS	10	4320.547	8.802	0.000**	0.079
OC	10	783.468	5.051	0.000**	0.047
WE	10	3262.876	7.855	0.000**	0.072
CWB	10	2726.205	11.423	0.000**	0.101

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ”

According to Table 4.20, department as an independent variable had a statistically significant influence on all the dependent variables on the 99<sup>th</sup> percentile. As a result, further analysis was performed to determine the influence on the facets of each variable (see Table 4.21 below).

Results presented in Table 4.21 revealed that department had a statistically significant influence on all the various sub-components of PSM, JS, WE, OC and CWB. More specifically, department statistically significantly predicted remuneration on the 95<sup>th</sup> percentile. Furthermore, while predicting AC, CC, NC, work itself, supervision, co-workers, promotion, vigour, dedication, absorption, CWB-organisation, CWB-individual, APS, CPV, compassion and SS on the 99<sup>th</sup> percentile.

**Table 4.21: MANOVA results with department as independent variable and facets of PSM, JS, OC, WE and CWB**

Dependent variables	DF	Mean Square	F	P	Partial Eta Squared
AC	10	284.568	5.807	0.000**	0.054
CC	10	148.910	4.578	0.000**	0.043
NC	10	211.850	6.110	0.000**	0.057
Work itself	10	276.640	10.264	0.000**	0.091
Supervision	10	712.414	12.201	0.000**	0.107
Co-Workers	10	232.581	7.774	0.000**	0.071
Remuneration	10	104.677	2.003	0.030*	0.019
Promotion	10	368.626	8.313	0.000**	0.075
Vigour	10	456.069	9.808	0.000**	0.088
Dedication	10	515.646	9.581	0.000**	0.086
Absorption	10	231.672	4.373	0.000**	0.041
CWB-organisation	10	715.058	11.478	0.000**	0.101
CWB-individual	10	840.962	11.526	0.000**	0.102
APS	10	18.440	9.084	0.000**	0.082
CPV	10	16.930	5.794	0.000**	0.054
Compassion	10	14.156	5.779	0.000**	0.054
SS	10	44.053	4.985	0.000**	0.047

“Note: DF, degrees of freedom; p ≤0.05\*, p ≤0.01\*\*”

**Table 4.192: MANOVA results for salary level as an independent variable**

Dependent variables	DF	Mean Square	F	P	Partial Eta Squared
PSM	15	249.508	8.872	0.000**	0.116
JC	15	4021.742	8.442	0.000**	0.111
OC	15	2504.802	19.788	0.000**	0.226
WE	15	4001.342	10.248	0.000**	0.132
CWB	15	4735.467	24.074	0.000**	0.262

Note: DF, degrees of freedom; p ≤0.05\*, p ≤0.01\*\*

According to Table 4.22, salary level as an independent variable had a statistically significant influence on all the dependent variables at the 99th percentile. As a result,

further analysis was performed to determine the influence on the facets of each variable (see Table 4.23 below).

Results presented in Table 4.23 revealed that salary level had a statistically significant influence on all the various sub-components of PSM, JS, WE, OC and CWB. More specifically, salary level statistically significantly predicted AC, CC, NC, work itself, supervision, co-workers, remuneration, promotion, vigour, dedication, absorption, CWB-organisation, CWB-individual, APS, CPV, compassion and SS on the 99<sup>th</sup> percentile.

**Table 4.203: MANOVA results with salary level as an independent variable and facets of PSM, JS, OC, WE and CWB**

Dependent variables	DF	Mean Square	F	P	Partial Eta Squared
AC	15	776.519	19.140	0.000**	0.220
CC	15	341.139	11.718	0.000**	0.148
NC	15	368.499	11.705	0.000**	0.147
Work itself	15	478.621	21.050	0.000**	0.237
Supervision	15	606.422	10.689	0.000**	0.136
Co-Workers	15	323.896	11.748	0.000**	0.148
Remuneration	15	408.196	8.589	0.000**	0.113
Promotion	15	313.827	7.205	0.000**	0.096
Vigour	15	515.105	11.811	0.000**	0.149
Dedication	15	465.123	8.894	0.000**	0.116
Absorption	15	451.759	9.249	0.000**	0.120
CWB-organisation	15	1332.422	26.671	0.000**	0.283
CWB-individual	15	1230.288	19.397	0.000**	0.223
APS	15	14.844	7.414	0.000**	0.099
CPV	15	37.230	14.584	0.000**	0.177
Compassion	15	16.968	7.219	0.000**	0.096
SS	15	117.706	15.537	0.000**	0.187

“Note: DF, degrees of freedom; p ≤0.05\*, p ≤0.01\*\*”

As shown in Table 4.24, service years had a statistically significant effect on JS and engagement at the 99<sup>th</sup> percentile. As a result, additional analysis was conducted to ascertain the effect on the various facets of each variable (see Table 4.25 below).

**Table 4.214: MANOVA results for service years as an independent variable**

Dependent variables	DF	Mean Square	F	P	Partial Eta Squared
PSM	8	28.390	0.905	0.511	0.007
JS	8	1663.297	3.204	0.001**	0.024
OC	8	102.754	0.636	0.748	0.005
WE	8	1157.825	2.647	0.007**	0.020
CWB	8	380.306	1.452	0.171	0.011

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ”

Table 4.25 revealed that service years statistically influenced work itself and absorption in the 95<sup>th</sup> percentile. While co-workers, remuneration, promotion, vigour and dedication were statistically significantly influenced in the 99<sup>th</sup> percentile.

**Table 4.225: MANOVA results with service years as an independent variable and facets of JS and WE as the dependent variable**

Dependent variable	DF	Mean Square	F	P	Partial Eta Squared
Work itself	8	64.728	2.224	0.024*	0.017
Supervision	8	83.933	1.299	0.240	0.010
Co-Workers	8	115.709	3.705	0.000**	0.028
Remuneration	8	152.669	2.936	0.003**	0.022
Promotion	8	146.766	3.142	0.002**	0.024
Vigour	8	134.530	2.700	0.006**	0.021
Dedication	8	150.394	2.612	0.008**	0.020
Absorption	8	106.177	1.955	0.049*	0.015

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ”

**Table 4.236: MANOVA results for qualification as an independent variable**

Dependent variables	DF	Mean Square	F	P	Partial Eta Squared
PSM	9	561.580	21.055	0.000**	0.157
JS	9	20445.453	58.009	0.000**	0.338
OC	9	2771.358	20.052	0.000**	0.150
WE	9	12904.032	38.728	0.000**	0.255

Dependent variables	DF	Mean Square	F	P	Partial Eta Squared
CWB	9	4141.523	18.116	0.000**	0.138

“Note: DF, degrees of freedom;  $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ”

According to Table 4.26, qualification as an independent variable had a statistically significant influence on all the dependent variables on the 99th percentile. As a result, further analysis was performed to determine the influence on the facets of each variable (see Table 4.27 below).

Results in Table 4.27 revealed that qualification had a statistically significant influence on all the various sub-components of PSM, JS, WE, OC and CWB. More specifically, salary level statistically significantly predicted AC, CC, NC, work itself, supervision, co-workers, remuneration, promotion, vigour, dedication, absorption, CWB-organisation, CWB-individual, attraction to the public service, CPV, compassion and self-sacrifice on the 99<sup>th</sup> percentile.

**Table 4.247: MANOVA results with qualification as independent variable and facets of PSM, JS, OC, WE and CWB**

Dependent variable	DF	Mean Square	F	P	Partial Eta Squared
AC	9	769.430	17.114	0.000**	0.131
CC	9	1156.998	48.708	0.000**	0.300
NC	9	486.950	15.021	0.000**	0.117
Work itself	9	826.945	37.007	0.000**	0.246
Supervision	9	2072.820	44.066	0.000**	0.280
Co-Workers	9	942.178	39.484	0.000**	0.258
Remuneration	9	1593.869	40.665	0.000**	0.264
Promotion	9	1210.149	32.495	0.000**	0.223
Vigour	9	1443.267	37.781	0.000**	0.250
Dedication	9	1728.872	39.671	0.000**	0.259
Absorption	9	1743.337	43.774	0.000**	0.278
CWB-organisation	9	1752.334	32.576	0.000**	0.223
CWB-individual	9	1035.823	14.387	0.000**	0.113
APS	9	27.921	14.228	0.000**	0.111
CPV	9	110.437	52.310	0.000**	0.316
Compassion	9	51.516	24.166	0.000**	0.176

Dependent variable	DF	Mean Square	F	P	Partial Eta Squared
SS	9	160.050	20.390	0.000**	0.152

"Note: DF, degrees of freedom; p ≤0.05\*, p ≤0.01\*\*"

#### 4.5 THE CORRELATION COEFFICIENT BETWEEN THE VARIABLES

The fourth objective was to investigate the relationships between PSM, JS, OC, WE and CWB. A Pearson product-moment correlation was used to determine the strength of the relationship amongst the variables, with results displayed in Table 4.28 below.

**Table 4.258: Results of the correlation test**

Variable		PSM	JS	OC	WE	CWB
PSM	R	1				
	P					
JS	R	0.106	1			
	P	0.001**				
OC	R	0.137	0.430	1		
	P	0.000**	0.000**			
WE	R	0.417	0.675	0.368	1	
	P	0.000**	0.000**	0.000**		
CWB	R	-0.289	-0.127	0.085	-0.223	1
	P	0.000**	0.000**	0.006**	0.000**	

"Note: p ≤ 0.05, p ≤0.01\*\*; small effect r = 0.10 to r = 0.29; medium effect r = 0.3 to r = 0.49; large effect r = 0.5 to r = 1.0"

As can be seen from the Pearson product-moment correlation results, JS had a statistically significant small correlation with PSM as seen from the r-value of 0.106 howbeit significant on the 99<sup>th</sup> percentile. The correlation was positive; thus, as one increased, there would be a concomitant increase in the other. OC had similarly a small statistically significant correlation with PSM (r = 0.137; p = 0.000\*\*) and a medium statistically significant correlation with JS (r = 0.430; p = 0.000\*\*). The relationship was positive. Work engagement had medium associations with both PSM (r = 0.417; p = 0.000\*\*) and OC (r = 0.368; p = 0.000\*\*), while the same had a large statistically significant correlation with JS (r = 0.675; p = 0.000\*\*). Lastly, CWB reverted negative small correlations with PSM (r = -0.289; p = 0.000), JS (r = -0.127; p = 0.000\*\*) and WE (r = -0.223; p = 0.000\*\*). Thus, CWB would decrease with an

increase in JS, PSM and WE. However, CWB had a small statistically significant positive relationship with OC ( $r = 0.085$ ;  $0.006^{**}$ ).

#### 4.6 MULTIPLE REGRESSION ANALYSIS RESULTS

To establish the best predictor of PSM and CWB, namely, JS, OC or WE, multiple regression analysis was performed with PSM and CWB as dependent variables and JS, WE and OC as independent variables.

Multiple regression analysis results related to the best predictor for PSM was presented in Table 4.29. As can be seen, WE statistically significantly predicted PSM positively ( $p = 0.000^{**}$ ). Moreover, 62.8% of the variance in PSM can be attributed to WE. Furthermore, JS also statistically significantly predicted PSM howbeit negatively. Thus, 34% of the variance in PSM could be attributed to JS. OC did not yield a statistically significant result.

**Table 4.269: Multiple regression analysis results with PSM as the dependent variable**

Independent variables	Unstandardised Coefficients		Standardised Coefficients	t	P
	Beta	Std. Error	Beta		
Job satisfaction	-0.083	0.009	-0.340	-8.847	0.000**
OC	0.023	0.013	0.052	1.706	0.088
Work engagement	0.167	0.010	0.628	16.823	0.000**

“Note:  $p \leq 0.05$ ,  $p \leq 0.01^{**}$ ”

As can be seen from Table 4.30, both WE and OC statistically significantly predicted CWB. Firstly, WE predicted 28.2% of the variance in CWB. The effect was negative; thus, as WE increase, there is a 28.2% decrease in CWB. Organisational commitment predicted 19.8% of CWB.

**Table 4.30: Multiple regression analysis results with CWB as a dependent variable**

Independent variable	Unstandardised Coefficients		Standardised Coefficients	t	P
	B	Std. Error	Beta		
<b>JS</b>	-0.016	0.030	-0.022	-0.523	0.601
<b>OC</b>	0.253	0.043	0.198	5.948	0.000**
<b>WE</b>	-0.217	0.031	-0.282	-6.898	0.000**

\*\*Note:  $p \leq 0.05$ ,  $p \leq 0.01$ \*\*

#### **4.7 SUMMARY**

This chapter summarises the empirical findings from the investigation. The data were analysed to determine the answers to the research questions provided in Chapter 1. The raw data were analysed with the SPSS system, and the tables were populated using the SPSS output. The next chapter presents the study's findings, conclusions, and recommendations.

## CHAPTER 5: DISCUSSIONS OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 INTRODUCTION

The findings of the study are discussed in this chapter. The discussion is based on the results obtained on each research objective presented in Chapter 1. Firstly, PSM, JS, OC, WE and CWB levels are discussed, followed by the reliability and validity of the PSM, JS, OC, WE, and CWB scales. After that, the differences in the PSM, JS, OC, WE and CWB between gender, age groups, departments, salary levels, service years and qualifications are discussed. Next followed a discussion on the relationships between PSM, JS, OC, WE and CWB. This is followed by discussing job satisfaction's best predictors of PSM and CWB. Emanating from the results, some managerial implications are discussed, followed by the study's significance and contribution. The limitations and, lastly, the conclusions are discussed.

### 5.2. PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT AND COUNTERPRODUCTIVE WORK BEHAVIOUR LEVELS

The study's first objective was to measure employees' PSM, JS, OC, WE and CWB levels. The results of the descriptive statistics are depicted in Table 5.1.

**Table 5.1: Describe statistics of PSM, JS, OC, WE and CWB levels of employees.**

Factors and scales	Mean	Std. Deviation	Level
APS	4.70	.370	High
CPV	4.63	.400	High
Compassion	4.63	.437	High
SS	3.95	.757	Moderate
<b>PSM Scale</b>	4.48	.350	High
Work itself	3.88	1.084	Neither satisfied nor dissatisfied
Supervision	3.65	1.609	Neither satisfied nor dissatisfied
Co-workers	4.87	1.129	Moderately satisfied

Factors and scales	Mean	Std. Deviation	Level
Pay	3.96	1.453	Neither satisfied nor dissatisfied
Promotion	2.67	1.378	Somewhat dissatisfied
<b>JS Scale</b>	3.81	.919	Neither satisfied nor dissatisfied
Affective	3.49	.895	Slightly low
Continuance	3.57	1.194	Slightly high
Normative	3.38	.754	Slightly low
<b>OC Scale</b>	3.47	.627	Slightly low
Vigour	5.11	1.184	Moderate level
Dedication	5.04	1.527	Moderate level
Absorption	2.57	.616	Low level
<b>WE Scale</b>	5.10	1.238	Moderate level
CWB-person	1.21	.408	Low level
CWB-organisation	1.42	.395	Low level
<b>CWB Scale</b>	1.31	.377	Low level

(Authour own work)

The results revealed positive or above-average levels of PSM, neutral levels of JS, slightly low levels of OC, moderate levels of WE and low levels of CWB. *Therefore, the alternative hypothesis  $H_{1A}$  that employees will have high levels of PSM, JS, OC, WE and low levels of CWB can only be partially supported.*

### **5.3 RELIABILITY AND VALIDITY OF THE PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT, AND COUNTERPRODUCTIVE WORK BEHAVIOUR SCALES**

The study's second objective was to determine the reliability and validity of scales measuring PSM, JS, OC, WE and CWB in the South African public sector. Cronbach's alpha is the most frequently used test to determine the internal consistency of an instrument. The average of all correlations across all split-half combinations is computed using this test. This examination may be used in conjunction with instruments that contain multiple-choice questions. Cronbach's alpha value ranges from 0 to 1. A reliability score of 0.7 or greater is considered satisfactory (Bell *et al.*,

2018). According to Taber (2018:1295), “a value between 0.5 and 0.7 indicates moderate sample adequacy. Stability is determined using test-retest and parallel or alternate-form reliability testing”.

Both instruments examine the same principles. The test scores must be highly correlated for an instrument to demonstrate stability. Correlation coefficients less than 0.3 are generally regarded as insignificant. The term “moderate” refers to values between 0.3 and 0.5, whereas “strong” refers to values greater than 0.5 (Heale and Twycross, 2015).

The Cronbach alpha coefficient for the JS scale was 0.888, which is considered acceptable and consistent. Thus, given the sample characteristics, the scale will revert to the same results after several iterations. Additionally, JS sub-scales ranged between 0.715 and 0.845. Cronbach’s alpha values for OC were 0.664 with sub-scales, *inter alia*, AC, CC and NC ranging between 0.524 and 0.642, indicating moderate sample reliability for the specified scales. The Cronbach alpha coefficient for the WE scale was 0.947, considered excellent, with sub-scales ranging from 0.849 to 0.876. Similarly, the reliability coefficient for the PSM scale was 0.833, with sub-scales ranging from 0.553 (i.e., CPS) to 0.806 (i.e., CPS or SS). Simultaneously, the reliability coefficient for CWB was 0.968, with the two sub-scales reverting a reliability coefficient of 0.893 for organisational CWB and 0.970 for individual CWB.

**Table 5.2: Comparison of Cronbach’s alpha coefficients with previous studies**

Scale and sub-scales	Authors	Cronbach’s alphas	Cronbach’s alphas for this study	Number of items
APS	Kim <i>et al.</i> (2013)	0.70	0.73	4
CPV		0.54	0.55	4
Compassion		0.69	0.74	4
SS		0.78	0.81	4
PSM Scale		0.74	0.83	16
Work itself	Bowling <i>et al.</i> (2018)	0.72	0.72	5
Supervision		0.83	0.83	5
Co-workers		0.77	0.79	5
Pay		0.83	0.85	5

Scale and sub-scales	Authors	Cronbach's alphas	Cronbach's alphas for this study	Number of items
Promotion	Allen and Meyer (1996) validated by Maqsood <i>et al.</i> (2012)	0.82	0.82	5
JS Scale			0.89	25
AC		0.83	0.64	8
CC		0.61	0.60	6
NC		0.64	0.52	8
OC Scale		0.84	0.66	22
Vigour	Schaufeli and Bakker (2004)	0.83	0.85	6
Dedication		0.92	0.88	5
Absorption		0.82	0.85	6
WE Scale			0.95	17
CWB-Organisation	Spector <i>et al.</i> (2006)	0.84	0.89	21
CWB-Person		0.85	0.97	22
CWB Scale		0.81	0.97	43

(Author own work)

Exploratory and confirmatory factor analyses were done to determine the validity of the measuring instruments in the South African public service context. CFA is often used for studies developing and adapting scales with specific reference to (i) psychometrically evaluating measurements; (ii) validation of the structure; (iii) testing the effect of the model, to mention a few (Kořar and Kořar, 2015).

- **Validity for public service motivation**

The factor loadings based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for PSM revealed six items loaded onto Factor 1 measuring APS and four loaded onto Factor 2 measuring CPV. In addition, two items loaded onto Factor 3, measuring compassion, and four loaded onto Factor 4, measuring SS. Although these factors are similar to the scale developed by Kim *et al.* (2013), the items had loaded differently onto the identified facets. Table 5.2 compares the factors and item loading of the scale developed by Kim *et al.* (2013) with results obtained by the research under discussion.

**Table 5.3: Comparison of PSM factors and item loadings**

<b>Kim <i>et al.</i> (2013)</b>	<b>Masukela (2022)</b>
<b>Factor 1: Attraction to public service</b>	<b>Factor 1: Attraction to public service</b>
“I admire people who initiate or are involved in activities to aid my community.”	“It is fundamental that the interests of future generations are taken into account when developing public policies”.
“It is important to contribute to activities that tackle social problems.”	“To act ethically is essential for public servants”.
“ Meaningful public service is very important to me.”	“I empathise with other people who face difficulties”.
“It is important for me to contribute to the common good. “	“I feel sympathetic to the plight of the underprivileged”.
<b>Factor 2: Commitment to public values</b>	“It is important to contribute to activities that tackle social problems”.
“I think equal opportunities for citizens are very important.”	“It is important that citizens can rely on the continuous provision of public services”.
“It is important that citizens can rely on the continuous provision of public services.”	<b>Factor 2: Commitment to public values</b>
“It is fundamental that the interests of future generations are taken into account when developing public policies.”	“I would agree to a good plan to make a better life for the poor, even if it costs me”.
“To act ethically is essential for public servants.”	“I am willing to risk personal loss to help society”.
<b>Factor 3: Compassion</b>	“I believe in putting civic duty before self”.
“I feel sympathetic to the plight of the underprivileged.”	I am prepared to make sacrifices for the good of society”.
“I empathise with other people who face difficulties.”	<b>Factor 3: Compassion</b>
“I get very upset when I see other people being treated unfairly.”	“I think equal opportunities for citizens are very important”.
“Considering the welfare of others is very important.”	“I admire people who initiate or are involved in activities to aid my community”.
<b>Factor 4: Self-sacrifice</b>	<b>Factor 4: Self-sacrifice</b>
“I am prepared to make sacrifices for the good of society.”	“Meaningful public service is very important to me”.

“I believe in putting civic duty before self.”	“It is important for me to contribute to the common good”.
“I am willing to risk personal loss to help society.”	“I get very upset when I see other people being treated unfairly”.
“I would agree to a good plan to make a better life for the poor, even if it costs me.”	“Considering the welfare of others is very important”.

(Authour own work)

- **Validity for JS**

The forced five-factor loading based on a principal component extraction with Oblimin and Kaiser normalisation rotation for JS revealed that four items were loaded onto Factor 1 measuring supervision. There are seven items that loaded onto Factor 2 measuring promotion; three items that loaded onto Factor 3 measuring pay; five items loaded onto Factor 4 measuring co-workers; and four items loaded onto Factor 5 measuring work itself. Although the factor loadings are the same, the items of this study are differently loaded compared with the study of Bowling *et al.* (2018)

**Table 5.4: Comparison of JS factors and item loadings**

<b>Bowling <i>et al.</i> (2018)</b>	<b>Masukela (2022)</b>
<b>Factor 1: Work itself</b>	<b>Factor 1: Work itself</b>
“Overall, I am very pleased with the types of activities that I do on my job”.	“All in all, I would rather have some other kind of duties in my work”.
“I would be more content with my job if I were doing tasks that are different from the ones I do now”. (reverse-scored)	“I would be more content with my job if I were doing tasks that are different from the ones I do now”.
“I am more satisfied with the types of work I currently do that with almost any other work I have ever done”.	“All in all, I am very satisfied with the things I do at work”.
“All in all, I am very satisfied with the things I do at work”.	“Overall, I am very pleased with the types of activities that I do on my job”.
“All in all, I would rather have some other kind of duties in my work”.	
<b>Factor 2: Supervision</b>	<b>Factor 2: Supervision</b>
Overall, I am very pleased with the way my manager supervises me	“All in all, I am very satisfied with this person as my manager.”

<b>Bowling et al. (2018)</b>	<b>Masukela (2022)</b>
I would be more content with my job if my manager did not work here	"Overall, I am very pleased with the way my manager supervises me."
I am more satisfied with my manager than with almost anyone I have ever worked for	"I am more satisfied with my manager than with almost anyone I have ever worked for."
All in all, I am very satisfied with this person as my manager	"All and all, I would rather work for some other manager."
All in all, I would rather work for some other manager	"I am more satisfied with my opportunities for promotion now than with almost any other promotion opportunities I have ever had."
<b>Factor 3: Co-workers</b>	<b>Factor 3: Co-workers</b>
"Overall, I am very pleased to work with my co-workers".	"All in all, I would rather work with some other kind of co-workers".
"I would be more content with my job if my co-workers did not work here".	'All in all, I am very satisfied with my co-workers".
"I am more satisfied with my co-workers than with almost anyone I have ever worked with before".	"Overall, I am very pleased to work with my co-workers".
'All in all, I am very satisfied with my co-workers".	"I am more satisfied with my co-workers than with almost anyone I have ever worked with before".
"All in all, I would rather work with some other kind of co-workers".	"I am more satisfied with the types of work I currently do that with almost any other work I have ever done".
<b>Factor 4: Pay</b>	<b>Factor 4: Pay</b>
"Overall, I am very pleased with how much money I earn".	"I am more satisfied with my pay now than I have almost ever been".
I would be more content with my job if my pay were not so low	"Overall, I am very pleased with how much money I earn".
"I am more satisfied with my pay now than I have almost ever been".	"All in all, I am very satisfied with my pay".
"All in all, I am very satisfied with my pay".	
"All in all, I would rather have better pay".	
<b>Factor 5: Promotion</b>	<b>Factor 5: Promotion</b>
Overall, I am very pleased with my opportunities for promotion	"All in all, I am very satisfied with my chances for promotion."

<b>Bowling et al. (2018)</b>	<b>Masukela (2022)</b>
"I would be more content with my job if my promotion opportunities were not so poor". (	"I would be more content with my job if my pay were not so low."
I am more satisfied with my opportunities for promotion now than with almost any other promotion opportunities I have ever had	"I would be more content with my job if my manager did not work here."
All in all, I am very satisfied with my chances for promotion	"I would be more content with my job if my co-workers did not work here".
"All in all, I would rather have more opportunities for promotion".)	"All in all, I would rather have better pay".
	"I would be more content with my job if my promotion opportunities were not so poor".
	"All in all, I would rather have more opportunities for promotion".

(Author own work)

- **Validation for work engagement**

The results of the factor loadings are based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for the WES showed eight items loaded onto Factor 1, measuring employee dedication; six items loaded onto Factor 2, measuring employee absorption; and three items loaded onto Factor 3, measuring employee vigour. The factor loadings compared to the WE scale developed by Schaufeli and Bakker (2004) and the research reported on are similar in structure; however, the item loadings differ. A comparison of the two scales is depicted in Table 5.5.

**Table 5.5: Comparison of WE factors and item loadings**

<b>WE scale (Schaufeli and Bakker, 2004)</b>	<b>Work engagement scale (Masukela, 2022)</b>
<b>VIGOUR</b>	<b>VIGOUR</b>
"At my work, I feel bursting with energy."	"I am proud of the work that I do".
"At my job, I feel strong and vigorous."	"At my work, I always persevere, even when things do not go well".
"When I get up in the morning, I feel like going to work."	"Time flies when I'm working".

<b>WE scale (Schaufeli and Bakker, 2004)</b>	<b>Work engagement scale (Masukela, 2022)</b>
"I can continue working for very long periods at a time."	
"At my job, I am very resilient, mentally."	
"At my work, I always persevere, even when things do not go well."	
<b>DEDICATION</b>	<b>DEDICATION</b>
"I find the work that I do full of meaning and purpose. "	"When I get up in the morning, I feel like going to work".
"I am enthusiastic about my job."	"At my job, I feel strong and vigorous".
"My job inspires me."	"My job inspires me".
"I am proud of the work that I do."	"I find the work that I do full of meaning and purpose".
"To me, my job is challenging."	"I am enthusiastic about my job".
	"At my work, I feel bursting with energy".
	"When I am working, I forget everything else around me".
	"I feel happy when I am working intensely".
<b>ABSORPTION</b>	<b>ABSORPTION</b>
"Time flies when I'm working."	"To me, my job is challenging".
"When I am working, I forget everything else around me".	"I get carried away when I'm working".
"I feel happy when I am working intensely."	"It is difficult to detach myself from my job".
"I am immersed in my work."	"At my job, I am very resilient, mentally".
"I get carried away when I'm working."	I can continue working for very long periods at a time.
"It is difficult to detach myself from my job."	"I am immersed in my work".

(Authour own work)

- **Validation for OC**

Regarding OC, the scale factor loadings based on a principal component extraction with Oblimin and Kaiser Normalisation rotation showed that eight items loaded onto Factor 1 measuring CC six items loaded onto Factor 2 measuring AC and seven items loaded onto Factor 3 measuring NC. The factor structure compared to Allen and Meyer's OC scale developed in 1996 and validated by Maqsood *et al.* (2012), and the

results reported on is similar, howbeit the item loadings differ. A comparison of the two scales is depicted in Table 5.6.

**Table 5.6: Comparison of OC factors and item loadings**

Allen and Meyer’s original OC scale (1996), as validated by Maqsood <i>et al.</i> (2012)	Masukela (2022)
<b>AC</b>	<b>AC</b>
“I would be very happy to spend the rest of my career with this organisation”.	“I enjoy discussing my organisation with people outside it”
I enjoy discussing my organisation with people outside it.	“I would be very happy to spend the rest of my career with this organisation”
“I really feel as if this organisation’s problems are my own”.	“I do not feel a strong sense of belonging to my organisation”
“I think that I could easily become as attached to another organisation as I am to this one”.	I do not feel like ‘part of the family at my organisation
“I do not feel like ‘part of the family’ at my organisation”.	“This organisation has a great deal of personal meaning for me.”
I do not feel ‘emotionally attached’ to this organisation.	“I think that I could easily become as attached to another organisation as I am to this one.”
This organisation has a great deal of personal meaning for me.	
“I do not feel a strong sense of belonging to my organisation”.	
<b>CC</b>	<b>CC</b>
I am not afraid of what might happen if I quit my job without having another one lined up.	“Too much in my life would be disrupted if I decided I wanted to leave my organisation now.”
“It would be very hard for me to leave my organisation right now, even if I wanted to”.	“Things were better in the days when people stayed with one organisation for most of their careers.”
“Too much in my life would be disrupted if I decided I wanted to leave my organisation now”.	“It would be very hard for me to leave my organisation right now, even if I wanted to”

Allen and Meyer's original OC scale (1996), as validated by Maqsood <i>et al.</i> (2012)	Masukela (2022)
It wouldn't be too costly for me to leave my organisation now.	"Right now, staying with my organisation is a matter of necessity as much as desire."
Right now, staying with my organisation is a matter of necessity as much as desire.	"If I got another offer for a better job elsewhere I would not feel it was right to leave my organisation."
"I feel that I have too few options to consider leaving this organisation".	"One of the major reasons I continue to work for this organisation is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain."
	"I am not afraid of what might happen if I quit my job without having another one lined up."
	"I feel that I have too few options to consider leaving this organisation."
<b>NC</b>	<b>NC</b>
"I think that people these days move from company to company too often".	"Jumping from organisation to organisation does not seem at all unethical to me."
"I do not believe that a person must always be loyal to his or her organisation".	"I do not think that wanting to be a company man or company woman is sensible anymore."
"Jumping from organisation to organisation does not seem at all unethical to me".	"I think that people these days move from company to company too often."
"One of the major reasons I continue to work for this organisation is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain".	"I do not believe that a person must always be loyal to his or her organisation."
"If I got another offer for a better job elsewhere I would not feel it was right to leave my organisation".	"I really feel as if this organisation's problems are my own"
I was taught to believe in the value of remaining loyal to one organisation.	"I was taught to believe in the value of remaining loyal to one organisation."
"Things were better in the days when people stayed with one organisation for most of their careers".	"It wouldn't be too costly for me to leave my organisation now."

Allen and Meyer's original OC scale (1996), as validated by Maqsood <i>et al.</i> (2012)	Masukela (2022)
I do not think that wanting to be a company man or company woman is sensible anymore.	

(Authour own work)

- **Validation of CWB**

The factor loadings based on a principal component extraction with Oblimin and Kaiser Normalisation rotation for CWB revealed that twenty-seven items loaded onto Factor 1 measured CWB aimed at an individual while fourteen items loaded onto Factor 2 measured CWB towards the organisation. Both scales consist of two factors, but the item loadings differ (see Table 5.7).

**Table 5.7: Comparison of CWB factors and item loadings**

CWB scale Spector <i>et al.</i> (2006)	Masukela (2022)
<b>Factor 1: CWB – individual</b>	<b>Factor 1: CWB – individual</b>
“Started or continued a damaging or harmful rumour at work.”	“Took money from your employer without permission.”
“Insulted someone about their job performance.”	“Threatened someone at work with violence.”
“Made fun of someone’s personal life.”	“Played a mean prank to embarrass someone at work”
“Ignored someone at work.”	“Hit or pushed someone at work”
“Refused to help someone at work.”	“Made an obscene gesture (the finger) to someone at work”
Withheld needed information from someone at work	“Stole something belonging to someone at work”
“Purposely interfered with someone at work doing his/her job.”	“Purposely dirtied or littered your place of work”
“Blamed someone at work for error you made.”	“Destroyed property belonging to someone at work.”
“Started an argument with someone at work.”	“Started or continued a damaging or harmful rumour at work.”

<b>CWB scale Spector <i>et al.</i>(2006)</b>	<b>Masukela (2022)</b>
“Stole something belonging to someone at work”.	“Verbally abused someone at work”.
“Verbally abused someone at work”.	“Did something to make someone at work look bad”.
“Made an obscene gesture (the finger) to someone at work.”	“Put in to be paid for more hours than you worked”.
“Threatened someone at work with violence.”	Withheld needed information from someone at work
“Threatened someone at work, but not physically.”	“Looked at someone at work’s private mail/property without permission.”
“Said something obscene to someone at work to make them feel bad.”	“Threatened someone at work, but not physically.”
“Hid something so someone at work couldn’t find it.”	“Hid something so someone at work couldn’t find it.”
Did something to make someone at work look bad	“Said something obscene to someone at work to make them feel bad.”
“Played a mean prank to embarrass someone at work.”	“Made fun of someone’s personal life.”
“Destroyed property belonging to someone at work.”	“Stolen something belonging to your employer.”
“Looked at someone at work’s private mail/property without permission.”	“Blamed someone at work for error you made.”
Hit or pushed someone at work	“Refused to help someone at work.”
<b>Factor2: CWB – organisation</b>	“Insulted or made fun of someone at work.”
“Purposely wasted your employer’s materials/supplies.”	“Took supplies or tools home without permission.”
“Daydreamed rather than did your work.”	“Refused to take on an assignment when asked.”
“Complained about insignificant things at work”.	“Purposely did your work incorrectly.”
“Told people outside the job what a lousy place you work for.”	“Ignored someone at work.”
“Purposely did your work incorrectly.”	“Started an argument with someone at work.”
“Came to work late without permission”	<b>Factor 2: CWB – organisation</b>

<b>CWB scale Spector et al.(2006)</b>	<b>Masukela (2022)</b>
“Stayed home from work and said you were sick when you were not.”	“Left work earlier than you were allowed to.”
“Purposely damaged a piece of equipment or property”.	“Daydreamed rather than did your work.”
“Purposely dirtied or littered your place of work.”	“Told people outside the job what a lousy place you work for.”
“Stolen something belonging to your employer.”	“Purposely wasted your employer’s materials/supplies.”
“Purposely worked slowly when things needed to get done.”	“Tried to look busy while doing nothing.”
“Refused to take on an assignment when asked.”	“Purposely failed to follow instructions.”
“Purposely came late to an appointment or meeting.”	“Purposely came late to an appointment or meeting.”
“Failed to report a problem so it would get worse.”	“Stayed home from work and said you were sick when you were not.”
“Taken a longer break than you were allowed to take.”	“Purposely worked slowly when things needed to get done.”
“Purposely failed to follow instructions.”	“Purposely interfered with someone at work doing his/her job.”
“Left work earlier than you were allowed to.”	“Failed to report a problem so it would get worse.”
“Took supplies or tools home without permission.”	“Insulted someone about their job performance.”
“Tried to look busy while doing nothing.”	“Came to work late without permission.”
“Put in to be paid for more hours than you worked.”	“Taken a longer break than you were allowed to take”
“Took money from your employer without permission.”	

(Authour own work)

*Based on the results, the alternative hypothesis  $H_{2A}$  that the PSM, JS, OC, WE and CWB scales will be reliable and valid in the South African public-sector context fails to be rejected.*

#### **5.4 DIFFERENCES IN THE PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT AND COUNTERPRODUCTIVE WORK BEHAVIOUR BETWEEN GENDER, AGE GROUPS, DEPARTMENTS, SALARY LEVELS, SERVICE YEARS AND QUALIFICATIONS**

The third objective was to establish differences in the PSM, JS, OC, WE and CWB between gender, age groups, departments, salary levels, service years and qualifications. An independent-samples t-test (equal variances assumed) and multivariate analysis of variance tests (MANOVAs) were computed to determine the difference in employee perceived CWE (JS, OC and WE), PSM, and CWB mean scores concerning gender, age groups, years of service and departments. There were no statistically significant differences between males and females regarding PSM, JS, WE and CWB. However, there was a statistically significant difference between the gender categories and OC in the 95<sup>th</sup> percentile. The mean difference between male and female respondents was 1.590. Thus, male respondents reported higher OC (mean = 77.51; STD = 13.015) in comparison with their female counterparts (mean = 75.92; STD = 12.329). To expound further, gender statistically significantly influenced NC in the 99<sup>th</sup> percentile. More specifically, male respondents had a statistically significant higher mean score (mean = 27.51; STD = 6.143) on NC in comparison to female respondents (mean = 26.50; STD = 5.882). Neither affective nor CC yielded statistically significant results. The relationship between gender and OC tends to produce contradictory outcomes, as it is unclear whether males or females are more devoted (Martin and Roodt, 2008). Lumley (2009) is of the view that gender differences exist in career anchor selection. The relationship between gender and OC tends to produce contradictory outcomes, as it is unclear whether males or females are more devoted (Martin and Roodt, 2008). The findings from different studies on the correlation between gender and JS have been conflicting (Lumley, 2009).

Age statistically affected JS, OC, WE and CWB. The abovementioned interactions are in the 99<sup>th</sup> percentile. Therefore, age statistically influenced various sub-components of JS, WE, OC and CWB. More specifically, age statistically significantly predicted NC at the 95<sup>th</sup> percentile while predicting AC, CC, work itself, supervision, co-workers, remuneration, promotion, vigour, dedication, absorption, CWB-organisation and CWB-

individual at the 99th percentile. According to Lumley (2009), the significant differences between age groups suggest that participants aged 34 to 39 (establishment stage) have a greater preference for autonomy/independence, meaning that these participants appear to want complete control over their work-life balance and do not wish to be governed by company bureaucracy. Furthermore, Lumley (2009) discovered that participants aged 34 to 39 are more emotionally attached to, identify with, and engage with their employer. Most participants aged 34 to 39 are employed at a managerial level and had significantly higher AC scores than workers. In addition, the survey indicated that participants aged 34 to 39 are more satisfied with communication. According to the study's findings, participants younger than 30 (exploratory stage) also scored highly on AC, indicating that individuals younger than 39 had a strong purpose of remaining with their current employer. In addition, Dockel *et al.* (2006) found that older employees become more devoted to an organisation for various reasons, including increased JS, the possibility of promotion, and having "cognitively justified" their continued employment. Strong AC among those aged 35–39 and those younger than 30 may be attributable to both age groups entering establishing professional periods (Lumley, 2009). Moreover, Lumley (2009) emphasises that there appears to be a positive, linear link between age and JS, such that employees become more content with their occupations as their chronological age increases. Furthermore, Martin and Roodt (2008) revealed inconsistent data about the association between age and commitment. When an individual's career and life structure stabilise during middle and late adulthood, there appears to be a positive correlation between age and career anchor choices (Coetzee and Schreuder, 2009).

The department as an independent variable had a statistically significant influence on all the dependent variables at the 99th percentile. Moreover, department had a statistically significant influence on all the various sub-components of PSM, JS, WE, OC and CWB. More specifically, the department statistically significantly predicted remuneration at the 95th percentile. Furthermore, while predicting AC, CC, NC, work itself, supervision, co-workers, promotion, vigour, dedication, absorption, CWB-organisation, CWB-individual, attraction to the public service, CPV, compassion and SS at the 99th percentile.

Salary level as an independent variable had a statistically significant influence on all the dependent variables at the 99th percentile. Furthermore, the results revealed that

salary level had a statistically significant influence on the various sub-components of PSM, JS, WE, OC and CWB. More specifically, salary level statistically significantly predicted AC, CC, NC, work itself, supervision, co-workers, remuneration, promotion, vigour, dedication, absorption, CWB-organisation, CWB-individual, attraction to the public service, CPV, compassion and self-sacrifice at the 99th percentile.

Service years had a statistically significant effect on JS and engagement at the 99th percentile. The results revealed that service years statistically influenced work itself and absorption at the 95<sup>th</sup> percentile. While co-workers, remuneration, promotion, vigour and dedication were statistically significantly influenced in the 99th percentile. According to Lumley (2009), there is a lack of research on the association between years of work experience and the variables of career anchoring, JS, and OC. However, data demonstrate a correlation between tenure, JS and OC. Nonetheless, according to Martin and Roodt (2008), the association between work satisfaction and tenure has revealed inconsistency. In addition, Dockel *et al.* (2006) highlighted that tenure had been consistently favourably connected with OC, specifically between tenure and AC.

Qualification as an independent variable significantly influenced all the dependent variables at the 99th percentile. Furthermore, the results revealed that qualification statistically influenced the various sub-components of PSM, JS, WE, OC and CWB. More specifically, salary level statistically significantly predicted AC, CC, NC, work itself, supervision, co-workers, remuneration, promotion, vigour, dedication, absorption, CWB-organisation, CWB-individual, attraction to the public service, CPV, compassion and self-sacrifice at the 99th percentile.

*Based on the results, the alternative hypothesis  $H_{3A}$  is that there are differences in the perceived PSM, CWE (JS, OC and WE), and CWB between gender, age groups, departments, salary levels, service years and qualifications can be partially supported.*

## **5.5 RELATIONSHIPS BETWEEN PUBLIC SERVICE MOTIVATION, JOB SATISFACTION, ORGANISATIONAL COMMITMENT, WORK ENGAGEMENT AND COUNTERPRODUCTIVE WORK BEHAVIOUR**

The fourth objective was to investigate the relationships between PSM, JS, OC, WE and CWB. A Pearson product-moment correlation was used to determine the strength of the relationship among the variables.

The results revealed that JS had a statistically significant small correlation with PSM, as seen from the r-value of 0.106 in the 99<sup>th</sup> percentile. Moreover, the correlation was positive; thus, there would be a concomitant increase in the other as one increased. Bright (2021) investigated how POP affect the link between PSM and public employee JS and intention to leave. Similarly, Bright (2021) has also discovered beneficial associations between PSM and various work attitudes. Although PSM was a significant factor in POP perspectives and JS, POP somewhat moderated its effects and was the most significant predictor of JS. In addition, persons with high levels of PSM were more likely to hold positive POP perspectives, which increased their JS and decreased their intention to leave the organisation (Bright, 2021). Furthermore, Bright (2021) believes that PSM maintains a direct and indirect association with JS. In other words, respondents with high levels of PSM were much more content with their occupations than those with lower levels of PSM, regardless of their perceptions of how residents evaluated their employers.

Moreover, this finding implies that although POP explains a substantial proportion of the variance between PSM and JS, it does not fully explain the connection (Bright, 2021). Mixed evidence exists about whether PSM is a direct or indirect predictor of these outcomes. Regarding JS, a recent meta-analysis by Boyd and Nowell (2020) revealed a moderately significant relationship between PSM and JS and evidence that job factors may modify the relationship. Most studies have proven that the relationship between PSM and JS depends on SIP via job and organisational type. Boyd and Nowell (2020) emphasise that other researchers discovered a substantial positive correlation between PSM and JS in a sample of Chinese MPA students with full-time public-sector employment. The findings correlate with the findings of Boyd and Nowell (2020); Stefurak *et al.* (2020); Homberg *et al.* (2015), Crucke *et al.* (2021); Bright (2021), Palma (2016), Kim *et al.* (2013), Prysmakova and Vandenabeele (2020) and Breaugh *et al.* (2018) whom all found a positive relationship between PSM and JS.

Organisational commitment had similarly a weak statistically significant correlation with PSM ( $r = 0.137$ ;  $p = 0.000^{**}$ ) and a medium statistically significant correlation with JS ( $r = 0.430$ ;  $p = 0.000^{**}$ ). The relationship was positive. According to Boyd and Nowell (2020), OC and identification and PSM predict employee engagement and wellbeing indicators. The researcher investigates if PSM is a direct or indirect predictor of employee metrics. Regarding organisational citizenship behaviours in the Korean

setting, the researcher observed PSM, work satisfaction, and OC to explain organisational citizenship. The researcher discovered a significant direct relationship between PSM and organisational citizenship.

Similarly, a study of people in the UK prison system revealed a significant positive association between PSM and OCB after controlling for perceived organisational support and perceived fairness (Boyd and Nowell, 2020). Moreover, given the interest in the immediate work surroundings surrounding high-PSM individuals, the researchers propose that the relationship between PSM and OC would depend on the characteristics of their leaders (Potipiroon and Ford, 2017). The relationship between PSM and OC is more nuanced than commonly believed. The strength of this relationship depends on how much one enjoys and finds interest in their profession. Potipiroon and Ford (2017) found that the link between PSM and OC was significantly favourable when intrinsic motivation was strong. The positive effects of PSM on OC were greatest when intrinsic motivation and ethical leadership were high. Without intrinsic motivation and/or ethical leadership, the PSM–OC connection tended to be negative but non-significant (Potipiroon and Ford, 2017). This positive relationship between PSM and OC was confirmed in studies by Boyd and Nowell (2020), Castaing (2006) and Potipiroon and Ford (2017).

Work engagement had medium associations with both PSM ( $r = 0.417$ ;  $p = 0.000^{**}$ ) and OC ( $r = 0.368$ ;  $p = 0.000^{**}$ ), while the same had a large statistically significant correlation with JS ( $r = 0.675$ ;  $p = 0.000^{**}$ ). In line with the study's findings, Mussagulova (2021) found that PSM increases the positive relationship between job resources and WE and has garnered the most attention and relevance. Moreover, the published study on the relationship between WE and PSM in the context of JDR uses both job demands and resources and focuses initially on the moderating effect of PSM by the conceptualisation (Mussagulova, 2021). However, Mussagulova (2021) emphasises that the theorisation of PSM's role in mitigating the link between job resources and WE gives public employees an incentive to organise their job resources to remain engaged, leading to improved performance. The study by Mussagulova (2021) found that public servants with a low level of PSM experience the negative association between red tape and WE more strongly, possibly because their level of PSM is not high enough to absorb the shocks of procedural constraints (Mussagulova, 2021). Mussagulova (2021) described the relationship between PSM and WE and the

role of PSM in enhancing the positive effect of job resources and mitigating the negative effect of job demands on the desired individual and organisational work outcomes. However, the association between PSM and WE are poorly supported. The importance of PSM in improving beneficial impacts of job resources and limiting negative effects of job demands on employee engagement, such as red tape (Mussagulova, 2021). Ugaddan and Park (2017) and Mussagulova (2021) also found a positive relationship between PSM and WE.

CWB reverted negative small correlations with PSM ( $r = -0.289$ ;  $p = 0.000$ ), JS ( $r = -0.127$ ;  $p = 0.000^{**}$ ) and WE ( $r = -0.223$ ;  $p = 0.000^{**}$ ). Thus, CWB would decrease with increased JS, PSM and WE. However, CWB had a small statistically significant positive relationship with OC ( $r = 0.085$ ;  $0.006^{**}$ ). Numerous researchers have attempted to link counterproductive behaviour with negative emotions, namely rage and violence, caused by stress and unpleasant work settings. It involves breaching both rules and laws and social conventions. The link between JS and CWB should therefore be negative. In line with the current study, numerous studies have shown a negative correlation between this behaviour and work satisfaction, speculating that the absence of work satisfaction – and the subsequent urge to “get even” with the employer – are the seeds of workplace deviance (Czarnota-Bojarska, 2015).

Additionally, Czarnota-Bojarska (2015) found a negative association between JS and CWB. Despite relatively high levels of JS, the study indicates a propensity for CWB. The study further revealed relatively low JS levels and elevated CWB levels. According to Baysal *et al.* (2020), the relationship between CWB and OC is one of the most common challenges businesses encounter. The relationship between AC, NC, and CC, as characteristics of OC, and abuse, production deviation, sabotage, theft, and disengagement from CWB was investigated. In addition, Baysal *et al.* (2020) found that AC and NC have a negative direction and significant link with the dimensions of withdrawal and abuse. Vogel *et al.* (2016) and Koumenta (2015) also found a negative association between PSM and CWB. Czarnota-Bojarska (2015) found a negative association between JS and CWB. Baysal *et al.* (2020) found that AC and NC have a negative direction and significant link with the dimensions of withdrawal and abuse, and negative direction and strong correlations exist between the dimensions of commitment, withdrawal, abuse, and theft.

*The results confirmed the alternative hypothesis  $H_{4A}$  that there is a positive relationship between PSM, JS, OC and WE, and a negative relationship between PSM and CWB cannot be rejected.*

## **5.6 BEST PREDICTORS OF PUBLIC SERVICE MOTIVATION AND COUNTERPRODUCTIVE WORK BEHAVIOUR: JOB SATISFACTION, ORGANISATIONAL COMMITMENT OR WORK ENGAGEMENT**

The fifth objective was to establish the best predictor of PSM and CWB: JS, OC or WE. This objective was attained by performing a multiple regression analysis.

Work engagement statistically significantly predicted PSM positively ( $p = 0.000^{**}$ ). Moreover, 62.8% of the variance in PSM can be attributed to WE. Furthermore, JS also statistically significantly predicted PSM howbeit negatively. Thus, 34% of the variance in PSM could be attributed to JS. The OC did not yield a statistically significant result. According to Boyd and Nowell (2020), OC and identification and PSM predict employee engagement.

Both WE and OC statistically significantly predicted CWB. Firstly, WE predicted 28.2% of the variance in CWB. The effect was negative; thus, as WE increase, there is a 28.2% decrease in CWB. Organisational commitment predicted 19.8% of CWB. According to Boyd and Nowell (2020), OC and identification and PSM predict employee engagement and wellbeing indicators. Baysal *et al.* (2020) revealed that counterproductive job behaviours significantly predicted OC and discovered an inverted association between organisational citizenship and CWB.

*Based on the results, the alternative hypothesis  $H_{5A}$  that JS, OC, and WE will predict PSM and CWB is partially supported.*

## **5.7 MANAGERIAL IMPLICATIONS**

This study provides a theoretical and conceptual framework that public-sector managers can use to assess the impact of PSM on CWE and CWB. The results revealed positive or above-average levels of PSM, neutral JS, slightly low OC, and moderate WE levels. In addition, the results revealed low levels of CWB. Therefore, public-sector managers must develop strategies and practices to enhance employees'

JS, OC, and WE levels. Although the results demonstrate low levels of counterproductive work, the scale of corruption, maladministration and poor service delivery may contradict the findings.

Furthermore, public-sector managers could use the validated instruments to assess these critical behavioural outcomes in the public service context. Public-sector managers should also recognise differences in PSM, JS, OC, WE and CWB between gender, age groups, departments, salary levels, service years and qualifications. For example, male respondents reported higher OC than their female counterparts, while male respondents had a statistically significant higher mean score on NC than female respondents. In addition, age statistically influenced various sub-components of JS, WE, OC, and CWB. Department had a statistically significant influence on the various sub-components of PSM, JS, WE, OC and CWB. Salary level had a statistically significant influence on all the various sub-components of PSM, JS, WE, OC and CWB, while service years had a statistically significant effect on JS and engagement. Lastly, qualification statistically influenced the various sub-components of PSM, JS, WE, OC and CWB.

Public managers should understand how PSM influences CWE. The results revealed a positive correlation between PSM and JS, which is also confirmed by similar studies. In addition, OC had a positive relationship with PSM. Furthermore, work engagement, PSM, OC and JS are positively related. Lastly, CWB negatively affected PSM, JS and WE.

## **5.8 SIGNIFICANCE AND CONTRIBUTION OF THE STUDY**

This research empirically developed a reliable and valid framework for evaluating the impact of PSM on CWE (JS, OC, WE) and CWB in the South African Public Service context. This research showed a positive correlation between PSM, JS, OC, WE and a negative relationship with the CWB of employees. As a result of this study, behavioural measuring instruments were developed, which were never tested and validated in the South African public service context. The value of these measuring instruments in the public service is vast as they can be utilised for further research in the South African Public Service. This research contributes to both the theory and

application of organisational behaviour as it enriches the behavioural dimensions such as PSM, JS, OC, WE and CWB in different contexts.

The study's results confirmed PSM's potential positive outcomes or consequences. For example, high levels of PSM led to high levels of JS, OC, WE and low levels of CWB. Therefore, motivated public service employees will have high JS, OC and WE, and these positive work behaviours will help prevent counterproductive behaviour (including corruption), which is necessary for effective corporate governance, service delivery, policy formation, and implementation.

## **5.9 LIMITATIONS OF THE STUDY**

This study was conducted within the quantitative paradigm using a cross-sectional correlational design. The data's reliability depends on the respondents' quality, objectivity and honesty. The respondents may have subjective perceptions regarding their PSM, JS, OC, WE and CWB. The respondents indicate low levels of CWB, such as theft, sabotage and verbal and physical abuse. However, these low levels of CWB do not correlate with the high levels of corruption and poor service delivery characterising the public service. The survey also could not capture in-depth the respondents' emotions, feelings, behaviour and attitudes. Finally, the results cannot be generalised to the other eight provincial governments.

## **5.10 CONCLUSIONS**

Low levels of PSM led to decreased core work evaluations (JS, OC, WE) and increased CWB. This study's primary aim was to develop a framework for assessing the influence of PSM on CWE (JS, OC, WE) and CWB. No previous research has investigated the influence of PSM (independent variable) on core work evaluations such as JS, OC, WE and CWB (dependent variables) in the South African public service context. Therefore, this study filled the gap by developing a framework for assessing the influence of PSM on CWE (JS, OC, WE) and CWB of employees in the North-West Provincial Government departments.

The study was conducted within the quantitative research paradigm using a cross-sectional correlational survey design. The sample comprised 2 250 public service employees representing all categories of professionals within the 11 provincial

government departments. The study used a stratified random sampling method consisting of four subgroups, namely senior management (SMS salary levels 13–16); middle management (MMS salary levels 11–12), junior middle management (JMM salary levels 8–10) and elementary employees (salary levels 1–7). A total of 1 546 questionnaires were distributed, and 1 031 were completed and returned.

Descriptive statistics were used to determine the levels of perceived PSM, JS, WE, OC and CWB, while descriptive statistical analyses were conducted to ascertain central tendency metrics, such as the mean, median, standard deviation, lowest and maximum scores, and therefore the range of scores. Cronbach's alpha reliability coefficients were calculated to measure the instruments' reliability. Exploratory and confirmatory factor analyses were used to investigate the structural factors and items of the measuring instruments used in this study. An independent-samples t-test and MANOVAs were conducted to establish the differences in JS, WE, OC, PSM and CWB between gender age groups, salary, service years, departments and qualifications. Pearson product-moment correlation was used to measure the relationship between PSM, JS, OC, WE and CWB. Finally, a multiple regression analysis was performed to establish the best predictor of PSM and CWB, namely JS, OC or WE.

The results revealed positive or above-average PSM and neutral JS levels (neither satisfied nor dissatisfied). However, slightly low OC and moderate WE levels were reported. In addition, very low levels of CWB were reported. The measuring instruments were reliable and valid in the South African public service. Male respondents reported higher OC than their female counterparts, while male respondents had a statistically significant higher mean score on NC than female respondents. Age statistically influenced various sub-components of JS, WE, OC and CWB. Department had a statistically significant influence on the various sub-components of PSM, JS, WE, OC and CWB. Salary level had a statistically significant influence on all the various sub-components of PSM, JS, WE, OC and CWB, while service years had a statistically significant effect on JS and WE. Qualification statistically influenced the various sub-components of PSM, JS, WE, OC and CWB. The results revealed a positive correlation between PSM and JS, while OC positively correlated with PSM. Work engagement, PSM, OC and JS are positively related, while CWB negatively affects PSM, JS, and WE. Work engagement and JS significantly predict PSM. Also, WE and OC significantly predict CWB. The primary managerial

implication is that this study provides a theoretical and conceptual framework that public-sector managers can use to assess the impact of PSM on CWE and CWB. Ultimately this research contributes to the theory, conceptualisation and relationships between organisational behavioural dimensions such as PSM, JS, OC, WE and CWB.

## REFERENCES

- Adams, J.S. and Freedman, S., 1976. Equity theory revisited: Comments and annotated bibliography. *Advances in Experimental Social Psychology*, 9:43-90.
- Akkaya, B. 2019. The relationship between primary school teachers' organizational citizenship behaviors and counter-productive work behaviors. *Eurasian Journal of Educational Research*, 19:1-27.
- Albdour, A.A. & Altarawneh, I.I. 2014. Employee engagement and organizational commitment: Evidence from Jordan. *International Journal of Business*, 19:192.
- Alderfer, C.P. 1969. An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance*, 4(2):142-175.
- Allen, N. J. & Meyer, J. P. 1996. Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of vocational behavior*, 49:252-276.
- Amegavi, G.B. & Mensah, J.K. 2020. Commitment to public interest and public service motivation development challenges: A qualitative inquiry. *Public Administration Issues*, 6:67-83.
- Andersen, L.B., Jensen, U.T. & Kjeldsen, A.M. 2020. Public service motivation and its implications for public service. In: *The Palgrave Handbook of the Public Servant*, Springer International Publishing. pp. 1-18.
- Anderson, C.A. & Bushman, B.J. 2002. Human aggression. *Annual Review of Psychology*, 53:27-51.
- Arghode, V. 2012. Qualitative and quantitative research: Paradigmatic differences. *Global Education Journal*, 2012(4):155-163.
- Ariani, D.W. 2013. The relationship between employee engagement, organizational citizenship behavior, and counterproductive work behavior. *International Journal of Business Administration*, 4:46.

- Babbie, E. & Mouton, J. 2001. *The practice of social research*. South African edition. Cape Town: Oxford University Press.
- Babbie, E. 2004. Laud Humphreys and research ethics. *International Journal of Sociology and Social Policy*, 24(3-5):12-19.
- Babbie, E. 2015. *Observing ourselves: Essays in social research*. Long Grove, IL: Waveland Press.
- Bakker, A.B. & Albrecht, S. 2018. Work engagement: current trends. *Career Development International*, 23(1).
- Banerjee, A., Chitnis, U.B., Jadhav, S.L., Bhawalkar, J.S. & Chaudhury, S. 2009. Hypothesis testing, type I and type II errors. *Industrial Psychiatry Journal*, 18(2):127–131.
- Barbaranelli, C., Fida, R. & Gualandri, M. 2013. Assessing counterproductive work behavior: A study on the dimensionality of CWB-Checklist. *Testing, Psychometrics, Methodology in Applied Psychology*, 20:1-15.
- Bar-Haim, A. 2019. *Organizational commitment: the case of unrewarded behaviour*. World Scientific Books, World Scientific Publishing Co. Pte.
- Barsoum, G. 2016. The public sector as the employer of choice among youth in Egypt: the relevance of public service motivation theory. *International Journal of Public Administration*, 39:205-215.
- Battistelli, A., Galletta, M., Vandenberghe, C. & Odoardi, C. 2016. Perceived organisational support, organisational commitment and self-competence among nurses: a study in two Italian hospitals. *Journal of Nursing Management*, 24:E44-E53.
- Baysal, C., Mısırdalı, Y.F. & Sevim, Ş. 2020. Analysis of the relationship between organizational commitment and counter productive work behaviour on academicians. *Serbian Journal of Management*, 15:143-157.
- Bell, E., Bryman, A. & Harley, B. 2018. *Business research methods*. New York: Oxford University Press.

- Bell, E., Harley, B. & Bryman, A. 2022. *Business research methods*. Oxford: Oxford University Press.
- Blum, M.L., Naylor, J.C. & Naylor, J.C. 1968. *Industrial psychology; Its theoretical and social foundations*. New York: Harper & Row.
- Bolton, L. R., Becker, L. K. & Barber, L. K. 2010. Big Five trait predictors of differential counterproductive work behavior dimensions. *Personality and Individual Differences*, 49:537-541.
- Bonett, D.G. & Wright, T.A. 2015. Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36:3-15.
- Boukhelifa, N., Perrin, M.-E., Huron, S. & Eagan, J. 2017. How data workers cope with uncertainty: A task characterisation study. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, 3645-3656.
- Bowling, N.A., Wagner, S.H. & Beehr, T.A. 2018. The facet satisfaction scale: An effective affective measure of job satisfaction facets. *Journal of Business and Psychology*, 33:383-403.
- Boyd, N., Nowell, B., Yang, Z. & Hano, M.C. 2018. Sense of community, sense of community responsibility, and public service motivation as predictors of employee well-being and engagement in public service organizations. *The American Review of Public Administration*, 48:428-443.
- Boyd, N.M. & Nowell, B. 2020. Sense of community, sense of community responsibility, organizational commitment and identification, and public service motivation: a simultaneous test of affective states on employee well-being and engagement in a public service work context. *Public Management Review*, 22:1024-1050.
- Breaugh, J., Ritz, A. & Alfes, K. 2018. Work motivation and public service motivation: disentangling varieties of motivation and job satisfaction. *Public Management Review*, 20:1423-1443.

- Breitsohl, H. & Ehrig, N. 2017. Commitment through employee volunteering: Accounting for the motives of inter-organisational volunteers. *Applied Psychology*, 66:260-289.
- Bright, L. 2021. Does perceptions of organizational prestige mediate the relationship between public service motivation, job satisfaction, and the turnover intentions of federal employees? *Public Personnel Management*, 50:408-429.
- Buda, A.A. & Lin, G.Y.-L. 2017. The relationship between transformational leadership and organisational commitment in Polytechnic Kuching Sarawak. *MOJEM: Malaysian Online Journal of Educational Management*, 5:35-46.
- Büssing, A. & Bissels, T. 1998. Different forms of work satisfaction: Concept and qualitative research. *European Psychologist*, 3(3):209.
- Caillier, J.G. 2014a. Do role clarity and job satisfaction mediate the relationship between telework and work effort? *International Journal of Public Administration*, 37:193-201.
- Caillier, J.G. 2014b. Toward a better understanding of the relationship between transformational leadership, public service motivation, mission valence, and employee performance: A preliminary study. *Public Personnel Management*, 43:218-239.
- Caillier, J.G. 2016. Does satisfaction with family-friendly programs reduce turnover? A panel study conducted in US federal agencies. *Public Personnel Management*, 45:284-307.
- Castaing, S. 2006. The effects of psychological contract fulfilment and public service motivation on organizational commitment in the French civil service. *Public Policy and Administration*, 21:84-98.
- Chen, H., Richard, O.C., Boncoeur, O.D. & Ford Jr, D.L. 2020. Work engagement, emotional exhaustion, and counterproductive work behavior. *Journal of Business Research*, 114:30-41.
- Cho, E. & Kim, S. 2015. Cronbach's coefficient alpha: well known but poorly understood. *Organizational Research Methods*, 18:207-230.

- Chordiya, R., Sabharwal, M. & Goodman, D. 2017. Affective organizational commitment and job satisfaction: a cross-national comparative study. *Public Administration*, 95:178-195.
- Churchill Jr, G.A., Ford, N.M. & Walker Jr, O.C. 1974. Measuring the job satisfaction of industrial salesmen. *Journal of Marketing Research*, 11:254-260.
- Clerkin, R.M. & Fotheringham, E. 2017. Exploring the relationship between public service motivation and formal and informal volunteering. *Journal of Public and Nonprofit Affairs*, 3:23-39.
- Coetzee, M. & Roythorne-Jacobs, H. 2007. *Career counselling and guidance in the workplace: A manual for career practitioners*. Cape Town: Juta.
- Coetzee, M. & Schreuder, D. 2009. Using the Career Orientations Inventory (COI) for measuring internal career orientations in the South African organisational context. *SA Journal of Industrial Psychology*, 35:1-13.
- Cohen, J. 2013. *Statistical power analysis for the behavioral sciences*. New York: Routledge.
- Constitution of the Republic of South Africa*, 1996.
- Costa, P.L., Passos, A.M. & Bakker, A.B. 2016. The work engagement grid: predicting engagement from two core dimensions. *Journal of Managerial Psychology*, 35, 10–26
- Creswell, J.W. 2009. *Mapping the field of mixed methods research*. Los Angeles: SAGE.
- Creswell, J.W. 2013. Steps in conducting a scholarly mixed methods study. *Electronic Journal of Business Research Methods*, 8(2):95-105
- Creswell, J.W., Plano Clark, V.L., Gutmann, M.L. & Hanson, W.E. 2003. Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research*, 209:209-240.

- Creswell, M.W., Bolton, G.L., Hodges, J.C. & Meppen, M. 1998. Combinatorial synthesis of dihydropyridone libraries and their derivatives. *Tetrahedron*, 54:3983-3998.
- Crucke, S., Kluijtmans, T., Meyfrootd, K. & Desmidt, S. 2021. How does organizational sustainability foster public service motivation and job satisfaction? The mediating role of organizational support and societal impact potential. *Public Management Review*, 1-27.
- Crutzen, R. & Peters, G.-J.Y. 2017. Scale quality: alpha is an inadequate estimate and factor-analytic evidence is needed first of all. *Health Psychology Review*, 11:242-247.
- Curtis, E., Comiskey, C. & Dempsey, O. 2015. Correlational research: Importance and use in nursing and health research. *Nurse Researcher*, 6:20-25.
- Czarnota-Bojarska, J. 2015. Counterproductive work behavior and job satisfaction: A surprisingly rocky relationship. *Journal of Management & Organization*, 21:460-470.
- Deng, J., Li, Y., Sun, Y., Lei, R. & Yang, T. 2019. Public service motivation as a mediator of the relationship between job stress and presenteeism: a cross-sectional study from Chinese public hospitals. *BMC Health Services Research*, 19(1):1-8.
- Deshong, H.L., Grant, D.M. & Mullins-Sweatt, S.N. 2015. Comparing models of counterproductive workplace behaviors: the five-factor model and the dark triad. *Personality and Individual Differences*, 74:55-60.
- Dockel, A., Basson, J.S. & Coetzee, M. 2006. The effect of retention factors on organisational commitment: An investigation of high technology employees. *SA Journal of Human Resource Management*, 4:20-28.
- Dunlop, P.D. & Lee, K. 2004. Workplace deviance, organizational citizenship behavior, and business unit performance: The bad apples do spoil the whole barrel. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 25:67-80.

- Etikan, I. & Bala, K. 2017. Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5:00149.
- Faizan, R. & Zehra, N. 2016. *Quality work-life as predictor to organisational commitment under contrasting leadership styles: IT responses from Pakistan's private software houses: 9-23.*
- Fatima, A. 2016. Impact of workplace ostracism on counter productive work behaviors: Mediating role of job satisfaction. *Abasyn Journal of Social Sciences*, 9:388-408.
- Filipkowski, J. & Derbis, R. 2020. The dark triad, goal achievement and work engagement as predictors of counterproductive work behaviors among IT employees. *Current Issues in Personality Psychology*, 8:197-210.
- Fine, G.A. 2012. *Tiny publics: A theory of group action and culture*. New York, NY: Russell Sage Foundation.
- Folger, R. & Skarlicki, D.P. 2005. Beyond counterproductive work behavior: Moral emotions and deontic retaliation versus reconciliation. *Journal of Management*, 34:1127-1151.
- Fox, S., Spector, P.E., Goh, A., Bruursema, K. & Kessler, S.R. 2012. The deviant citizen: Measuring potential positive relations between counterproductive work behaviour and organizational citizenship behaviour. *Journal of Occupational and Organizational Psychology*, 85:199-220.
- Francisco, V. T., Butterfoss, F. D. & Capwell, E. M. 2001. Key issues in evaluation: quantitative and qualitative methods and research design. *Health Promotion Practice*, 2:20-23.
- Franzese, M. & Iuliano, A. 2019. *Descriptive statistics*. (1):672-684
- French, A., Macedo, M., Poulsen, J., Waterson, T. & Yu, A. 2008. *Multivariate analysis of variance (MANOVA)*. San Francisco: San Francisco State University.

- Gay, L.R. & Airasian, P.W. 2000. *Student guide to accompany educational research: Competencies for analysis and application*. Upper Saddle River: Merrill/Prentice Hall
- Geen, R.G. 1998. *Aggression and antisocial behavior*. Handbook of social psychology, 4th ed. New York: McGraw Hill. 317-356
- Gerald, B. 2018. A brief review of independent, dependent and one sample t-test. *International Journal of Applied Mathematics and Theoretical Physics*, 4:50-54.
- Gibson, C. B. 2017. Elaboration, generalization, triangulation, and interpretation: On enhancing the value of mixed method research. *Organizational Research Methods*, 20:193-223.
- Giddens, A. 1974. *Positivism and sociology*. London: Heinemann.
- Gil-Gómez, J.-A., Manzano-Hernández, P., Albiol-Pérez, S., Aula-Valero, C., Gil-Gómez, H. & Lozano-Quilis, J.-A. 2017. USEQ: a short questionnaire for satisfaction evaluation of virtual rehabilitation systems. *Sensors*, 17:1589.
- Goretzko, D., Pham, T.T.H. & Bühner, M. 2021. Exploratory factor analysis: Current use, methodological developments and recommendations for good practice. *Current Psychology*, 40:3510-3521.
- Gould-Williams, J.S., Bottomley, P., Redman, T., Snape, E., Bishop, D.J., Limpanitgul, T. & Mostafa, A.M.S. 2014. Civic duty and employee outcomes: Do high commitment human resource practices and work overload matter? *Public Administration*, 92:937-953.
- Greener, S. 2008. *Business research methods*. *Journal of Occupational and Organizational Psychology*, 87(3), 487-506.
- Grove, S., Burns, N. & Gray. J. 2014. *Understanding nursing research: Building an evidence-based practice*. St. Louis, Mo: Elsevier Saunders.

- Grove, S.K., Burns, N. & Gray, J. 2012. *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. St. Louis, MO: Elsevier Health Sciences.
- Gupta, R., Dash, S., Kakkar, S. & Yadav, R. 2020. Construct validity of public service motivation in India: a comparison of two measures. In *Evidence-based HRM: a Global Forum for Empirical Scholarship*. London: Emerald.
- Gurbuz, S. & Aytakin, I. 2020. Are work attitudes of generations myth or real? Evidence from the United States and Turkey. *Istanbul Business Research*, 49:248-270.
- Heale, R. & Twycross, A. 2015. Validity and reliability in quantitative studies. *Evidence-Based Nursing*, 18:66-67.
- Herzberg, F. 2005. The motivation-hygiene theory. In Miner, J.B (Ed.) *Organizational Behavior 1: Essential Theories of motivation and Leadership*. New York: ME Sharpe.
- Holloway, I. & Wheeler, S. 2002. *Qualitative research in nursing*. Oxford: Wiley-Blackwell.
- Homberg, F., Mccarthy, D. & Tabvuma, V. 2015. A meta-analysis of the relationship between public service motivation and job satisfaction. *Public Administration Review*, 75:711-722.
- Huang, F.L. 2020. MANOVA: A procedure whose time has passed? *Gifted Child Quarterly*, 64:56-60.
- Imran, M. & Khattak, S.R. 2019. The buffering effect of supervisor support on the relationship between work engagement and behavioral outcomes. *Journal of Managerial Sciences*, 13:59-68.
- Jacobsen, K. & Landau, L. B. 2003. The dual imperative in refugee research: some methodological and ethical considerations in social science research on forced migration. *Disasters*, 27:185-206.

- Jacobson, W.S. 2011. Creating a motivated workforce: How organizations can enhance and develop public service motivation (PSM). *Public Personnel Management*, 40:215-238.
- Jensen, U.T. & Andersen, L.B. 2015. Public service motivation, user orientation, and prescription behaviour: doing Good for society or for the individual user? *Public Administration*, 93:753-768.
- Jin, M.H., McDonald, B. & Park, J. 2018. Does public service motivation matter in public higher education? Testing the theories of person-organization fit and organizational commitment through a serial multiple mediation model. *The American Review of Public Administration*, 48:82-97.
- Johnson, M.W., Christensen, C.M. & Kagermann, H. 2008. Reinventing your business model. *Harvard Business Review*, 86:57-68.
- Junça-Silva, A., Caetano, A. & Lopes, R.R. 2017. Daily uplifts, well-being and performance in organizational settings: the differential mediating roles of affect and work engagement. *Journal of Happiness Studies*, 18:591-606.
- Keashly, L. & Harvey, S. 2005. *Emotional abuse in the workplace*. 201–235.
- Kent State University Libraries. 2017. *SPSS tutorials: independent samples t-test*. <https://libguides.library.kent.edu/SPSS> Date of access: 15 May 2017.
- Kim, S. 2018. Public service motivation, organizational social capital, and knowledge sharing in the Korean public sector. *Public Performance & Management Review*, 41:130-151.
- Kim, S., Vandenabeele, W., Wright, B. E., Andersen, L. B., Cerase, F. P., Christensen, R. K., Desmarais, C., Koumenta, M., Leisink, P. & Liu, B. 2013. Investigating the structure and meaning of public service motivation across populations: Developing an international instrument and addressing issues of measurement invariance. *Journal of Public Administration Research and Theory*, 23:79-102.
- Koc, M. 2018. Research on correlations between academicians' levels of organisational commitment and their intention to quit their job: a comparison

- of state and foundation universities. *Journal of Education and Learning*, 7:163-173.
- Koehler, M., & Rainey, H.G. 2015 Interdisciplinary foundations of public service motivation. In: Perry, J.L. & Hondeghem, A., eds. *Motivation in public management: The call of public service*. London: Oxford University Press. pp. 33-55.
- Kođar, H. & Kođar, E.Y. 2015. Comparison of different estimation methods for categorical and ordinal data in confirmatory factor analysis. *Journal of Measurement and Evaluation in Education and Psychology*, 6.
- Konasani, V.R. & Kadre, S. 2015. Multiple regression analysis. *Practical business analytics using SAS*. Berkeley: Apress. 351-399.
- Kothari, C.R. 2004. *Research methodology: Methods and techniques*. New Delhi: New Age International.
- Koumenta, M. 2015. Public service motivation and organizational citizenship. *Public Money & Management*, 35:341-348.
- Krejcie, R.V. & Morgan, D.W. 1970. Determining sample size for research activities. *Educational and Psychological Measurement*, 30:607-610.
- Krüger, T., Vogel, T. & Wänke, M. 2016. Framing effects in consumer judgement and decision making. In *Routledge international handbook of consumer psychology*, London: Routledge. p. 367-387.
- Kuok, A.C. & Taormina, R.J. 2017. Work engagement: Evolution of the concept and a new inventory. *Psychological Thought*, 10:262-287.
- Laerd Statistics. 2018. *Pearson's product-moment correlation using SPSS Statistics. Statistical tutorials and software guides*. <https://statistics.laerd.com/spss-tutorials/pearsons-product-moment-correlation-using-spss-statistics.php> Date of access: 20 Jan. 2022
- Lancaster, G. 2005. *Research methods in management. A concise introduction to research in management and business consultancy*. Oxford: Elsevier Butterworth-Heinemann.

- Lebrón, M., Tabak, F., Shkoler, O. & Rabenu, E. 2018. Counterproductive work behaviors toward organization and leader-member exchange: the mediating roles of emotional exhaustion and work engagement. *Organization Management Journal*, 15:59-173.
- Lemu, H.G., Trzepieciński, T., Kubit, A. & Fejkiel, R. 2017. *Friction modeling of Al-Mg alloy sheets based on multiple regression analysis and neural networks*, 11(1):48-57.
- Li, C.-H. 2016. Confirmatory factor analysis with ordinal data: Comparing robust maximum likelihood and diagonally weighted least squares. *Behavior Research Methods*, 48:936-949.
- Lincoln, Y.S., Lynham, S.A. & Guba, E.G. 2011. Paradigmatic controversies, contradictions, and emerging confluences, revisited. In *The Sage Handbook of Qualitative Research*. 4th ed., Thousand Oaks: SAGE. 97-128.
- Liu, B. & Perry, J.L. 2016. The psychological mechanisms of public service motivation: A two-wave examination. *Review of Public Personnel Administration*, 36:4-30.
- Liu, B., Tang, N. & Zhu, X. 2008. Public service motivation and job satisfaction in China: An investigation of generalisability and instrumentality. *International Journal of Manpower*, 29 (8):684-699.
- Liu, B.C. & Tang, T.L.P. 2011. Does the love of money moderate the relationship between public service motivation and job satisfaction? The case of Chinese professionals in the public sector. *Public Administration Review*, 71:718-727.
- Liu, S., Luksyte, A., Zhou, L., Shi, J. & Wang, M. 2015. Overqualification and counterproductive work behaviors: Examining a moderated mediation model. *Journal of Organizational Behavior*, 36:250-271.
- Locke, E.A. & Latham, G.P. 1994. Goal setting theory. *Motivation: Theory and Research*, 13:29.
- Locke, E.A. 1969. What is job satisfaction? *Organizational behavior and human performance*. 4(4):309-336.

- Lodico, M.G., Spaulding, D.T. & Voegtler, K.H. 2010. *Methods in educational research: From theory to practice*. New York: John Wiley & Sons.
- Lumley, E.J. 2009. *Exploring the relationship between career anchors, job satisfaction and organisational commitment*. Doctoral dissertation, University of South Africa: Citeseer.
- Lyons, M. 2019. *The dark triad of personality: narcissism, Machiavellianism, and psychopathy in everyday life*. Cambridge: Academic Press.
- Mackenzie, N. & Knipe, S. 2006. Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, 16:193-205.
- Maqsood, A., Hanif, R., Rehman, G. & Glenn, W. 2012. Validation of the three-component model of organizational commitment questionnaire. *FWU Journal of Social Sciences*, 6.
- Martin, A. & Roodt, G. 2008. Perceptions of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution. *SA Journal of Industrial Psychology*, 34:23-31.
- Martínez-Mesa, J., González-Chica, D.A., Duquia, R.P., Bonamigo, R.R. & Bastos, J.L. 2016. Sampling: how to select participants in my research study? *Anais brasileiros de dermatologia*, 91:326-330.
- Martinko, M.J., Gundlach, M.J. & Douglas, S.C. 2002. Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment*, 10:36-50.
- Maslow, A.H. 1943. Preface to motivation theory. *Psychosomatic medicine*. New York: New Press.
- Masouleh, Z.D. & Allahyari, M.S. 2017. The predictability of organisational culture for commitment among faculty members: evidence from Iran higher education. *International Journal of Management in Education*, 11:94-109.
- Mathieu, C., Fabi, B., Lacoursiere, R. & Raymond, L. 2016. The role of supervisory behavior, job satisfaction and organizational commitment on employee turnover. *Journal of Management & Organization*, 22:113-129.

- Mcclelland, D.C. & McClelland, D.C. 1961. *Achieving society*. London: Simon and Schuster.
- McGregor, D. 1960. Theory X and theory Y. *Organization theory*, 358(374):5.
- Mcleod, S. 2007. Maslow's hierarchy of needs. *Simply psychology*, 1.  
<https://canadacollege.edu/dreamers/docs/Maslows-Hierarchy-of-Needs.pdf>  
 Date of access: 21 May.2018
- Merriam, S.B. 2002. Introduction to qualitative research. *Qualitative Research in Practice: Examples for Discussion and Analysis*, 1:1-17.
- Meyer, J.P. & Allen, N.J. 1991. A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1:61-89.
- Miles M.B. & Huberman, A.M. & Saldana, J. 2013. *Qualitative data analysis: A Mathoods sourcebook*. Thousand Oaks: SAGE.
- Moerdyk, A.P., Dodd, N., Donald, F., Kiley, J., Van Hoek, G. & Van Hoek, C.E. 2015. *Organisational behaviour*. Cape Town: Oxford University Press Southern Africa.
- Mogotsi, I., Boon, J. & Fletcher, L. 2011. Modelling the relationships between knowledge sharing, organisational citizenship, job satisfaction and organisational commitment among school teachers in Botswana. *African Journal of Library, Archives & Information Science*, 21.
- Mohajan, H.K. 2017. Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Haret University. Economic Series*, 17:59-82.
- Moravčík, M., Schmid, M., Burch, N., Lisý, V., Morrill, D., Bard, N., Davis, T., Waugh, K., Johanson, M. & Bowling, M. 2017. Deepstack: Expert-level artificial intelligence in heads-up no-limit poker. *Science*, 356:508-513.
- Morse, J.M. & Field, P.A. 1996. An overview of qualitative methods. *Nursing Research*, Boston: Springer. 18-34.

- Mussagulova, A. 2021. Predictors of work engagement: Drawing on job demands–resources theory and public service motivation. *Australian Journal of Public Administration*, 80:217-238.
- Nestor, P.G. & Schutt, R.K. 2018. *Research methods in psychology: Investigating human behavior*. Thousand Oaks: SAGE.
- Neuman, D. 2014. Qualitative research in educational communications and technology: A brief introduction to principles and procedures. *Journal of Computing in Higher Education*, 26:69-86.
- Newman, I., Ridenour, C.S., Newman, C. & Demarco, G.M. 2003. A typology of research purposes and its relationship to mixed methods. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp.167 – 188)..
- Ngulube, P. 2010. Mapping mixed methods research in library and information science journals in Sub-Saharan Africa 2004–2008. *The International Information & Library Review*, 42:252-261.
- Nikkah-Farkhani, Z., Hoshyar, V. & Bagherieh-Mashhadi, A. 2017. The impact of person-organization fit and organizational commitment on counterproductive work behavior: An empirical study on health sector. *13th International Conference On Knowledge, Economy & Management Proceedings*.  
<https://www.researchgate.net/profile/Amirhossein-Bagherieh-Mashhadi/publication/319183094>. Date of access: 31 March 2020.
- North West Province. 2011. *Development strategy 2004 to 2014*.  
<https://www.foresightfordevelopment.org/sobipro/55/154-north-west-provincial-growth-and-development-strategy-2004-to-2014> Date of access: 26 July 2022.
- Palma, R. 2016. Public service motivation and employee outcomes in the Italian public sector: testing the mediating effect of person-organization fit. *Journal of Applied Quantitative Methods*, 11(2):1-16.

- Pandita, S. & Singhal, R. 2017. The influence of employee engagement on the work-life balance of employees in the IT sector. *IUP Journal of Organizational Behavior*, 16:38.
- Parahoo, K. 2014. *Nursing research: principles, process and issues*. London: Palgrave Macmillan.
- Pearce, T. 2015. "Science organized": Positivism and the metaphysical club, 1865-1875. *Journal of the History of Ideas*, 76:441-465.
- Pearson, L.C. & Moomaw, W. 2005. The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, 29:38-54.
- Pedersen, M.J. 2015. Activating the forces of public service motivation: Evidence from a low-intensity randomized survey experiment. *Public Administration Review*, 75:734-746.
- Perry, J.L. 1996. Measuring public service motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*, 6:5-22.
- Perry, J.L. & Vandenabeele, W. 2015. Public service motivation research: achievements, challenges, and future directions. *Public Administration Review*, 75:692-699.
- Perry, J.L. and Wise, L.R. 1990. The motivational bases of public service. *Public Administration Review*: 367-373.
- Polit, D.F. & Beck, C.T. 2004. *Nursing research: Principles and methods*. Philadelphia: Lippincott Williams & Wilkins.
- Polit, D.F. & Beck, C.T. 2012. Gender bias undermines evidence on gender and health. *Qualitative Health Research*, 22:1298.
- Polit, D.F., London, A.S. & Martinez, J.M. 2001. *The health of poor urban women: Findings from the project on devolution and urban change*. New York: Manpower Demonstration Research Corporation.

- Ponomariov, B. & McCabe, B. 2017. Professionalism vs. public service motivation: can public administration education alleviate the tension? *Administrative Theory & Praxis*, 39:80-99.
- Potipiroon, W. & Ford, M.T. 2017. Does public service motivation always lead to organizational commitment? Examining the moderating roles of intrinsic motivation and ethical leadership. *Public Personnel Management*, 46:211-238.
- Price, P., Jhangiani, R., Chiang, I. & Leighton, D. 2015. *Research methods in psychology*. BC Open Textbook Project. BC Campus.
- Prysmakova, P. & Vandenabeele, W. 2020. Enjoying police duties: Public service motivation and job satisfaction. *Journal of Police and Criminal Psychology*, 35:304-317.
- Raver, C.C., Blair, C. & Willoughby, M. 2013. Poverty as a predictor of 4-year-olds' executive function: new perspectives on models of differential susceptibility. *Developmental Psychology*, 49:292.
- Reio Jr, T.G. & Shuck, B. 2015. Exploratory factor analysis: implications for theory, research, and practice. *Advances in Developing Human Resources*, 17:12-25.
- Republic of South Africa. 2007. *Public Service Amendment Act, No 30 of 2007*. Pretoria: Government Printer.
- Riba, C. & Ballart, X. 2016. Public service motivation of Spanish high civil servants. Measurement and effects. *Revista Española de Investigaciones Sociológicas (REIS)*, 154:65-99.
- Ritz, A. 2011. Attraction to public policy-making: A qualitative inquiry into improvements in psm measurement. *Public Administration*, 89:1128-1147.
- Ritz, A., Brewer, G.A. & Neumann, O. 2016. Public service motivation: A systematic literature review and outlook. *Public Administration Review*, 76:414-426.
- Ruddle, R. & Hall, M. 2019. Using miniature visualizations of descriptive statistics to investigate the quality of electronic health records. *Proceedings of the 12th*

*International Joint Conference on Biomedical Engineering Systems and Technologies-Volume 5: HEALTHINF*, SciTePress. 230-238.

Rutherford, B., Boles, J., Hamwi, G.A., Madupalli, R. & Rutherford, L. 2009. The role of the seven dimensions of job satisfaction in salesperson's attitudes and behaviors. *Journal of Business Research*, 62:1146-1151.

Saunders, M., Lewis, P. & Thornhill, A. 2009. *Research methods for business students*. New York: Pearson Education.

Schaufeli, W.B. & Bakker, A.B. 2003. *The Utrecht work engagement scale (UWES) test manual*. Utrecht: Utrecht University.

Schaufeli, W.B., Bakker, A.B. & Salanova, M. 2006. The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66:701-716.

Schaufeli, W.B. & Bakker, A.B. 2004. Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 25:293-315.

Schaufeli, W.B., Bakker, A.B. & Van Rhenen, W. 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 30:893-917.

Schober, P., Boer, C. & Schwarte, L. A. 2018. Correlation coefficients: appropriate use and interpretation. *Anesthesia & Analgesia*, 126:1763-1768.

Schott, C. & Ritz, A. 2018. The dark sides of public service motivation: A multi-level theoretical framework. *Perspectives on Public Management and Governance*, 1:29-42.

Schuster, J. R., Clark, B. & Rogers, M. 1971. Testing portions of the Porter and Lawler model regarding the motivational role of pay. *Journal of Applied Psychology*, 55:187.

- Shim, D. C. & Faerman, S. 2017. Government employees' organizational citizenship behavior: The impacts of public service motivation, organizational identification, and subjective OCB norms. *International Public Management Journal*, 20:531-559.
- Shim, D.C., Park, H.H. & Eom, T.H. 2017. Street-level bureaucrats' turnover intention: does public service motivation matter? *International Review of Administrative Sciences*, 83:563-582.
- Shrestha, A.K. & Mishra, A.K. 2015. Interactive effects of public service motivation and organizational politics on Nepali civil service employees' organizational commitment. *Business Perspectives and Research*, 3:21-35.
- Smith, P.C., Kendall, L. & Hulin, C. 1969. *The measurement of satisfaction in work and behavior*. Chicago: Rand McNally.
- Spector, P. E. & Fox, S. 2002. An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review*, 12:269-292.
- Spector, P. E. & Fox, S. 2010. Counterproductive work behavior and organisational citizenship behavior: are they opposite forms of active behavior? *Applied Psychology*, 59:21-39.
- Spector, P.E., Fox, S., Penney, L. M., Bruursema, K., Goh, A. & Kessler, S. 2006. The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68:446-460.
- Srivastava, S. & Pathak, D. 2016. Investigating the mediating effect of psychological empowerment on quality of work life-organisational commitment relationship: A study on Indian IT sector managers. *International Journal of Management Development*, 1:196-214.
- Statistics.com, 2022. *Confirmatory factor analysis* [Online]. Available at: <https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/confirmatory-factor-analysis/> Date of access: 6 August 2022

- Stefurak, T., Morgan, R. & Johnson, R.B. 2020. The relationship of public service motivation to job satisfaction and job performance of emergency medical services professionals. *Public Personnel Management*, 49:590-616.
- Strizović, I. 2019. Povezanost percepcije sigurnosti posla i zadovoljstva aspektima posla sa kontraproaktivnim radnim ponašanjima. *Primenjena psihologija*, 12:47-63.
- Taber, K.S. 2018. The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48:1273-1296.
- Takamatsu, S. & Yamaguchi, Y. 2018. Effect of coaching behaviors on job satisfaction and organizational commitment: the case of comprehensive community sport clubs in Japan. *International Journal of Sports Science & Coaching*, 13:508-519.
- Tashakkori, A. & Teddlie, C. 2009. Integrating qualitative and quantitative approaches to research. *The SAGE handbook of applied social research methods*. 2nd ed. Thousand Oaks: SAGE. 283-317.
- Tashakkori, A., Teddlie, C. & Teddlie, C.B. 1998. *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks: SAGE.
- Taylor, J. & Taylor, R. 2015. Does the economy matter? Tough times, good times, and public service motivation. *Public Money & Management*, 35:333-340.
- Teddlie, C. & Tashakkori, A. 2012. Common "core" characteristics of mixed methods research: A review of critical issues and call for greater convergence. *American behavioral scientist*, 56:774-788.
- Terre Blanche, M.T., Terre Blanche, M.J.T., Durrheim, K. & Painter, D. 2006. *Research in practice: Applied methods for the social sciences*. Cape Town: Juta.
- Thabane, L., Radebe, P. & Dhurup, M. 2017. The effect of job satisfaction on the organisational commitment of administrators. *Journal of Economics and Behavioral Studies*, 9:188-198.

- Thiagaraj, D. & Thangaswamy, A. 2017. Theoretical concept of job satisfaction—a study. *International Journal of Research-Granthaalayah*, 5:464-470.
- Top, M., Akdere, M. & Tarcan, M. 2015. Examining transformational leadership, job satisfaction, organizational commitment and organizational trust in Turkish hospitals: public servants versus private sector employees. *The International Journal of Human Resource Management*, 26:1259-1282.
- Ugaddan, R.G. & Park, S.M. 2017. Quality of leadership and public service motivation: A social exchange perspective on employee engagement. *International Journal of Public Sector Management*. 30 (3): 270-285
- Ullah, R. & Khattak, S.R. 2018. The buffering effect of teamwork effectiveness on the relationship between employee work engagement and behavioral outcomes. *Journal of Managerial Sciences*, 12.
- Van Loon, N., Kjeldsen, A. M., Andersen, L. B., Vandenabeele, W. & Leisink, P. 2018. Only when the societal impact potential is high? A panel study of the relationship between public service motivation and perceived performance. *Review of Public Personnel Administration*, 38:139-166.
- Van Witteloostuijn, A., Esteve, M. & Boyne, G. 2017. Public sector motivation ad fonts: personality traits as antecedents of the motivation to serve the public interest. *Journal of Public Administration Research and Theory*, 27:20-35.
- Vandenabeele, W. & Schott, C. 2020. Public service motivation in public administration. In: *Oxford Research Encyclopedia of Politics*. Oxford: Oxford University Press.
- Vandenabeele, W. 2009. The mediating effect of job satisfaction and organizational commitment on self-reported performance: more robust evidence of the PSM-performance relationship. *International Review of Administrative Sciences*, 75:11-34.
- Vandenabeele, W., Ritz, A. & Neumann, O. 2018. Public service motivation: State of the art and conceptual cleanup. In: Edoardo Ongaro, Sandra Van Thiel. *The Palgrave handbook of public administration and management in Europe*. London: Palgrave Macmillan. 261-278.

- Vogel, R., Homberg, F. & Gericke, A. 2016. Abusive supervision, public service motivation, and employee deviance: the moderating role of employment sector. In *Evidence-based HRM: A global forum for empirical scholarship*. Bingley: Emerald Group.
- Vroom, V., Porter, L. & Lawler, E. 2005. Expectancy theories. *Organizational Behavior*, 1:94-113.
- Walsh, M. 2003. Teaching qualitative analysis using QSR NVivo. *The Qualitative Report*, 8:251-256.
- Wang, Q., Lin, M.-H., Narayan, A., Burns, G.N. & Bowling, N.A. 2020. A cross-cultural examination of the relationships between job attitudes and workplace deviance. *Asia Pacific Journal of Management*, 1-24.
- Wang, T.-M., Van Witteloostuijn, A. & Heine, F. 2020. A moral theory of public service motivation. *Frontiers in Psychology*, 11:517763.
- Wang, X., Liu, L., Zou, F., Hao, J. & Wu, H. 2017. Associations of occupational stressors, perceived organizational support, and psychological capital with work engagement among Chinese female nurses. *BioMed research International*, 16(3):203–224.
- Ward, K. D. 2014. Tapping the Americorps pipeline: using secondary data to test the public service motivation construct. *Public Personnel Management*, 43:240-258.
- Watkins, M.W. 2018. Exploratory factor analysis: a guide to best practice. *Journal of Black Psychology*, 44:219-246.
- Webster, J.R., Adams, G.A. & Beehr, T.A. 2014. Core work evaluation: The viability of a higher-order work attitude construct. *Journal of Vocational Behavior*, 85:27-38.
- Westlund, S.G. & Hannon, J.C. 2008. Retaining talent: assessing job satisfaction facets most significantly related to software developer turnover intentions. *Journal of Information Technology Management*, 19:1-15.

- Whelpley, C. E. & Mcdaniel, M. A. 2016. Self-esteem and counterproductive work behaviors: a systematic review. *Journal of Managerial Psychology*, 31(4):850-863.
- Wiles, R., Crow, G., Heath, S. & Charles, V. 2008. The management of confidentiality and anonymity in social research. *International Journal of Social Research Methodology*, 11:417-428.
- Wilson, M., Bakkabulindi, F. & Ssempebwa, J. 2016. Validity and reliability of Allen and Meyer's (1990) measure of employee commitment in the context of academic staff in Universities in Uganda. *Journal of Sociology and Education in Africa*, 14:1-9.
- Wu, R., Ming, S. & Huang, F. 2019. Guanxi and unethical behavior in the Chinese workplace: job satisfaction as a mediator. *Social Behavior and Personality: an International Journal*, 47:1-14.
- Wuensch, K.L. 2009. *Statistical tests of models that include mediating variables*. <http://core.ecu.edu/psyc/wuenschk/MV/multReg/MediationModels.pdf> Date of access: 10 June 2021.
- Yalabik, Z.Y., Rayton, B.A. & Rapti, A. 2017. Facets of job satisfaction and work engagement. *Evidence-based HRM: a global forum for empirical scholarship*, United Kingdom: Emerald Publishing Limited.
- Yilmaz, K. 2013. Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48:311-325.
- Zhang, D. 2017. A coefficient of determination for generalized linear models. *The American Statistician*, 71(4):310-316.
- Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H. & Nikanfar, A.-R. 2015. Design and implementation content validity study: development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*, 4:165.



## **ANNEXURE A: QUESTIONNAIRE**

### **COVER LETTER**

House No 8:Jessie Close

Rowlands Estate

Mahikeng

2745

Dear Participant

I, Phakane Moses Masukela, am currently researching the topic: **Exploring the impact of employee perceived core work evaluation on PSM and counterproductive behaviour.**

Your contribution to this study is extremely important to ensure the project's success. Therefore, all employees from salary level 2 to salary level 16 are requested to participate.

This questionnaire has been structured in such a way that it facilitates quick and easy completion. It can take you up to 45 minutes to complete. Your task is to work through the questionnaire as quickly as possible and answer the questions as accurately and honestly as possible.

Full details are provided on how to complete the questionnaire.

The questionnaire consists of the following sections:

- Section A – Demographic information
- Section B – PSM
- Section C – Core Work Evaluation
- Section D - CWB

Your cooperation in this regard will be highly appreciated.

Yours sincerely

**SECTION A: DEMOGRAPHIC INFORMATION**

1. Gender

Male	Female
1	2

2. Age group

20 – 29	1
30 – 39	2
40 – 49	3
50 – 59	4
60 and older	5

3. Indicate your post-salary level in the appropriate block

Salary level 2	
Salary level 3	
Salary level 4	
Salary level 5	
Salary level 6	
Salary level 7	
Salary level 8	
Salary level 9	
Salary level 10	
Salary level 11	
Salary level 12	

Salary level 13	
Salary level 14	
Salary level 15	
Salary level 16	

4. Number of years of service within the Department

0 – 5 years	1
6 – 10 years	2
11 – 15 years	3
16 – 20 years	4
21 – 25 years	5
26 – 30 years	6
31 – 35 years	7
36 – 40 years	8
41 and more years	9

5. Indicate your department

Department of Education and Sport Development	1
Department of Public Works and Roads	2
Department of Community Safety and Transport Management	3
Department of Social Development	4
Department of Rural, Environment and Agricultural Development	5

Premiers Office	6
Department of Health	7
Department of Local Government and Human Settlement	8
Department of Tourism	9
Department of Economy and Enterprise Development	10
Department of Culture, Arts and Traditional Affairs	11

6. Qualification level

National Certificate (Matric)	1
Higher Certificate	2
Advanced Certificate	3
National Diploma	4
Diploma	5
Post-Graduate Diploma	6
Degree	7
Honours Degree	8
Master's Degree	9
PhD	10

**SECTION B: PUBLIC SERVICE MOTIVATION QUESTIONNAIRE**

**Instructions:** Using the response scale below, indicate your opinion on each item. Please answer all the questions honestly and accurately by making a cross in the appropriate box. If you make a mistake, just draw a line through the cross and make a new cross in the selected box.

1	2	3	4	5
Strongly disagree	Disagree	Unsure	Agree	Strongly agree

<b>Dimensions and Items</b>		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Unsure</b>	<b>Agree</b>	<b>Strongly agree</b>
1	"I admire people who initiate or are involved in activities to aid my community"	1	2	3	4	5
2	It is important to contribute to activities that tackle social problems	1	2	3	4	5
3	Meaningful public service is very important to me	1	2	3	4	5
4	It is important for me to contribute to the common good	1	2	3	4	5
5	I think equal opportunities for citizens are very important	1	2	3	4	5
6	It is important that citizens can rely on the continuous provision of public services	1	2	3	4	5
7	It is fundamental that the interests of future generations are taken into account when developing public	1	2	3	4	5
8	To act ethically is essential for public servants	1	2	3	4	5
9	I feel sympathetic to the plight of the underprivileged	1	2	3	4	5

10	I empathise with other people who face difficulties	1	2	3	4	5
11	I get very upset when I see other people being treated unfairly	1	2	3	4	5
12	Considering the welfare of others is very important	1	2	3	4	5
13	I am prepared to make sacrifices for the good of society	1	2	3	4	5
14	I believe in putting civic duty before self	1	2	3	4	5
15	I am willing to risk personal loss to help society	1	2	3	4	5
16	I would agree to a good plan to make a better life for the poor, even if it costs	1	2	3	4	5

### SECTION C: JOB SATISFACTION QUESTIONNAIRE

Please circle the one number for each question that comes closest to reflecting your opinion about it.

Items	Strongly disagree	Disagree	Somewhat disagree	Neither agree or	Somewhat agree	Agree	Strongly agree
1. "Overall, I am very pleased with the types of activities that I do on my job"..	1	2	3	4	5	6	7
2. "I would be more content with my job if I were doing tasks that are different from the ones I do now".	1	2	3	4	5	6	7
3. "I am more satisfied with the types of work I currently do that with almost any other work I have ever done"..	1	2	3	4	5	6	7

Items	Strongly disagree	Disagree	Somewhat disagree	Neither agree or	Somewhat agree	Agree	Strongly agree
4. "All in all, I am very satisfied with the things I do at work"..	1	2	3	4	5	6	7
5. "All in all, I would rather have some other kind of duties in my work". (reverse-scored)	1	2	3	4	5	6	7
6. Overall, I am very pleased with the way my manager supervises me.	1	2	3	4	5	6	7
7. I would be more content with my job if my manager did not work here (reverse-scored)	1	2	3	4	5	6	7
8. I am more satisfied with my manager than with almost anyone I have ever worked for.	1	2	3	4	5	6	7
9. All in all, I am very satisfied with this person as my manager.	1	2	3	4	5	6	7
10. All in all, I would rather work for some other manager (reverse-scored)	1	2	3	4	5	6	7
11. "Overall, I am very pleased to work with my co-workers"..	1	2	3	4	5	6	7
12. "I would be more content with my job if my co-workers did not work here". (reverse-scored)	1	2	3	4	5	6	7
13. "I am more satisfied with my co-workers than with almost anyone I have ever worked with before".	1	2	3	4	5	6	7
14. 'All in all, I am very satisfied with my co-workers"..	1	2	3	4	5	6	7
15. "All in all, I would rather work with some other kind of co-workers". (reverse-scored)	1	2	3	4	5	6	7
16. "Overall, I am very pleased with how much money I earn"..	1	2	3	4	5	6	7
17. I would be more content with my job if my pay were not so low (reverse-scored)	1	2	3	4	5	6	7

Items	Strongly disagree	Disagree	Somewhat disagree	Neither agree or	Somewhat agree	Agree	Strongly agree
18. "I am more satisfied with my pay now than I have almost ever been" ..	1	2	3	4	5	6	7
19. "All in all, I am very satisfied with my pay" ..	1	2	3	4	5	6	7
20. "All in all, I would rather have better pay". (reverse-scored)	1	2	3	4	5	6	7
21. Overall, I am very pleased with my opportunities for promotion.	1	2	3	4	5	6	7
22. "I would be more content with my job if my promotion opportunities were not so poor". (reverse-scored)	1	2	3	4	5	6	7
23. I am more satisfied with my opportunities for promotion now than with almost any other promotion	1	2	3	4	5	6	7
24. All in all, I am very satisfied with my chances for promotion.	1	2	3	4	5	6	7
25. "All in all, I would rather have more opportunities for promotion". (reverse-scored)	1	2	3	4	5	6	7

#### SECTION D: ORGANISATIONAL COMMITMENT QUESTIONNAIRE

Instructions: Listed below are comments about how people may feel about their organisations. Using the seven-point scale provided, please indicate your level of agreement or disagreement with each comment.

Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
1	2	3	4	5	6

Statements		Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
1	"I would be very happy to spend the rest of my career with this	1	2	3	4	5	6
2	I enjoy discussing my organisation with people outside	1	2	3	4	5	6
3	"I really feel as if this organisation's problems are my	1	2	3	4	5	6
4	"I think that I could easily become as attached to another	1	2	3	4	5	6
5	"I do not feel like 'part of the family' at my organisation". (R)	1	2	3	4	5	6
6	I do not feel 'emotionally attached' to this organisation. (R)	1	2	3	4	5	6
7	This organisation has a great deal of personal meaning for me	1	2	3	4	5	6
8	"I do not feel a strong sense of belonging to my organisation".	1	2	3	4	5	6
9	I am not afraid of what might happen if I quit my job without	1	2	3	4	5	6
10	"It would be very hard for me to leave my organisation right now,	1	2	3	4	5	6
11	"Too much in my life would be disrupted if I decided I wanted to	1	2	3	4	5	6
12	It wouldn't be too costly for me to leave my organisation now. (R)	1	2	3	4	5	6

13	Right now, staying with my organisation is a matter of	1	2	3	4	5	6
14	"I feel that I have too few options to consider leaving this	1	2	3	4	5	6
15	"I think that people these days move from company to company	1	2	3	4	5	6
16	"I do not believe that a person must always be loyal to his or her	1	2	3	4	5	6
17	"Jumping from organisation to organisation does not seem at all	1	2	3	4	5	6
18	"One of the major reasons I continue to work for this	1	2	3	4	5	6
19	"If I got another offer for a better job elsewhere I would not feel it	1	2	3	4	5	6
20	I was taught to believe in the value of remaining loyal to one	1	2	3	4	5	6
21	"Things were better in the days when people stayed with one	1	2	3	4	5	6
22	I do not think that wanting to be a "company man" or "company	1	2	3	4	5	6

**SECTION E: WORK ENGAGEMENT QUESTIONNAIRE**

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the '1' (one) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 7) that best describes how frequently you feel that way.

<b>Never</b>	<b>Almost never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Very Often</b>	<b>Always</b>
1	2	3	4	5	6	7

Items and factors		Ne ver	Al mo	Rar ely	So me	Of ten	Ver y	Alw ays
<b>VIGOUR</b>								
WE1	At my work, I feel bursting with energy	1	2	3	4	5	6	7
WE4	At my job, I feel strong and vigorous	1	2	3	4	5	6	7
WE8	When I get up in the morning, I feel like going to work	1	2	3	4	5	6	7
WE12	I can continue working for very long periods at a time	1	2	3	4	5	6	7
WE15	At my job, I am very resilient, mentally	1	2	3	4	5	6	7
WE17	At my work, I always persevere, even when things do not go well	1	2	3	4	5	6	7
<b>DEDICATION</b>								
WE2	I find the work that I do full of meaning and purpose	1	2	3	4	5	6	7

Items and factors		Ne ver	Al mo	Rar ely	So me	Of ten	Ver y	Alw ays
WE5	I am enthusiastic about my job	1	2	3	4	5	6	7
WE7	My job inspires me	1	2	3	4	5	6	7
WE10	I am proud of the work that I do	1	2	3	4	5	6	7
WE13	To me, my job is challenging	1	2	3	4	5	6	7
<b>ABSORPTION</b>								
WE3	Time flies when I'm working	1	2	3	4	5	6	7
WE6	When I am working, I forget everything else around me	1	2	3	4	5	6	7
WE9	I feel happy when I am working intensely	1	2	3	4	5	6	7
WE11	I am immersed in my work	1	2	3	4	5	6	7
WE14	I get carried away when I'm working	1	2	3	4	5	6	7
WE16	It is difficult to detach myself from my job	1	2	3	4	5	6	7

## SECTION F: COUNTERPRODUCTIVE WORK BEHAVIOUR

Please indicate as honestly and accurately how often you have done each of the following things listed below on your present job?

<b>Never</b>	<b>Once or twice</b>	<b>Once or twice per month</b>	<b>Once or twice per week</b>	<b>Every day</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

<b>How often have you done each of the following things on your present job?</b>		<b>Never</b>	<b>Once or twice</b>	<b>Once or Twice per month</b>	<b>Once or twice per week</b>	<b>Every day</b>
1	"Purposely wasted your employer's materials/supplies"	1	2	3	4	5
2	"Daydreamed rather than did your work"	1	2	3	4	5
3	Complained about insignificant things at work	1	2	3	4	5
4	"Told people outside the job what a lousy place you work for"	1	2	3	4	5
5	"Purposely did your work incorrectly"	1	2	3	4	5
6	"Came to work late without permission"	1	2	3	4	5
7	"Stayed home from work and said you were sick when you were not"	1	2	3	4	5
8	Purposely damaged a piece of equipment or property	1	2	3	4	5

How often have you done each of the following things on your present job?		Never	Once or twice	Once or Twice per month	Once or twice per week	Every day
9	“Purposely dirtied or littered your place of work”	1	2	3	4	5
10	“Stolen something belonging to your employer”	1	2	3	4	5
11	“Started or continued a damaging or harmful rumour at work”	1	2	3	4	5
12	Been nasty or rude to a client or customer	1	2	3	4	5
13	“Purposely worked slowly when things needed to get done”	1	2	3	4	5
14	“Refused to take on an assignment when asked”	1	2	3	4	5
15	“Purposely came late to an appointment or meeting”	1	2	3	4	5
16	“Failed to report a problem so it would get worse”	1	2	3	4	5
17	“Taken a longer break than you were allowed to take”	1	2	3	4	5
18	“Purposely failed to follow instructions”	1	2	3	4	5
19	“Left work earlier than you were allowed to”	1	2	3	4	5
20	“Insulted someone about their job performance”	1	2	3	4	5
21	“Made fun of someone’s personal life”	1	2	3	4	5

How often have you done each of the following things on your present job?		Never	Once or twice	Once or Twice per month	Once or twice per week	Every day
22	"Took supplies or tools home without permission"	1	2	3	4	5
23	"Tried to look busy while doing nothing"	1	2	3	4	5
24	Put in to be paid for more hours than you worked	1	2	3	4	5
25	"Took money from your employer without permission"	1	2	3	4	5
26	"Ignored someone at work"	1	2	3	4	5
27	"Refused to help someone at work"	1	2	3	4	5
28	Withheld needed information from someone at work	1	2	3	4	5
29	"Purposely interfered with someone at work doing his/her job"	1	2	3	4	5
30	"Blamed someone at work for error you made"	1	2	3	4	5
31	"Started an argument with someone at work"	1	2	3	4	5
32	Stole something belonging to someone at work	1	2	3	4	5
33	Verbally abused someone at work	1	2	3	4	5
34	"Made an obscene gesture (the finger) to someone at work"	1	2	3	4	5
35	"Threatened someone at work with violence"	1	2	3	4	5

How often have you done each of the following things on your present job?		Never	Once or twice	Once or Twice per month	Once or twice per week	Every day
36	“Threatened someone at work, but not physically”	1	2	3	4	5
37	“Said something obscene to someone at work to make them feel bad”	1	2	3	4	5
38	“Hid something so someone at work couldn’t find it”	1	2	3	4	5
39	Did something to make someone at work look bad	1	2	3	4	5
40	“Played a mean prank to embarrass someone at work”	1	2	3	4	5
41	“Destroyed property belonging to someone at work”	1	2	3	4	5
42	“Looked at someone at work’s private mail/property without permission”	1	2	3	4	5
43	Hit or pushed someone at work	1	2	3	4	5
44	“Insulted or made fun of someone at work”	1	2	3	4	5
45	Avoided returning a phone call to someone you should at work	1	2	3	4	5

**Thank you for your participation in this study.**

## ANNEXURE B: ETHICAL APPROVAL



Private Bag X6001, Potchefstroom  
South Africa 2520

Tel: 018 299-1111/2222

Web: <http://www.nwu.ac.za>

18 June 2019

*Per e-mail*

Dear P M Masukela,

### **FEEDBACK POST FACTO: ETHICS APPLICATION 18062019: P M MASUKELA (16486285)(NWU-00667-19-A4) PHD IN BUSINESS Management**

**Your ethics application on, Exploring the impact of employee perceived core  
work evaluation on public service motivation and counterproductive  
behaviour, that served on the Post Facto meeting of 18 June 2019 refers.**

#### **Outcome:**

Approved as a minimal risk study. A number **NWU-00667-19-A4** is given for three years of ethics clearance.

Kind regards,



Prof Jan Meyer

Chairperson: Post Facto Ethics

FEMS

## ANNEXURE C: APPROVAL LETTER OF EMPLOYER



### **Office of the Premier**

North West Provincial Government  
REPUBLIC OF SOUTH AFRICA



3<sup>rd</sup> Floor,  
Garona Building  
Private Bag X129,  
MMABATHO  
2735

**ADMINISTRATOR**

Tel: +27 (18) 388-4276  
Fax: +27(18) 388- 3293  
E-mail: [mtselangoe@nwpg.gov.za](mailto:mtselangoe@nwpg.gov.za)

Enq: Mr. D. Miya

Tel: 018 388 5608

Mr. P.M. Masukela

NWU School of Business and Governance  
Private Bag x2046

Mmabatho

2735

Dear Mr. P.M Masukela

### **PERMISSION TO CONDUCT RESEARCH WITHIN THE NORTH WEST PROVINCIAL GOVERNMENT**

Kindly be advised that your request for permission to conduct a research study within the Provincial Government of North West titled: **“Exploring the impact of employee perceived core evaluation on the public service motivation and counterproductive behaviour”**, has been acceded to.

It must however be noted that: Certain information in the public service is classified and you will not be favoured with such. Relevant officials to be interviewed will have to be consulted well in advance to negotiate interview dates/times and the required information.

Further, the Provincial Government, through the Office of the Premier, will require a copy of your endorsed thesis or dissertation. For further assistance, please be at liberty to contact Mr. Molutsi Mothibi, Deputy Director of Research in the Office of the Premier on the details: Tel: 018 388 3391 email: [MolutsiMothibi@nwpg.gov.za](mailto:MolutsiMothibi@nwpg.gov.za)

On behalf of the Provincial Government, we would like to wish you all the best with your research project.

Regards,

  
\_\_\_\_\_  
**MR. S. MPANZA**  
**ADMINISTRATOR**

DATE 05/02/2019.

## **ANNEXURE D: TURNITIN SUMMARY REPORT**

## ANNEXURE E: CONFIRMATION OF PROFESSIONAL EDITING



# Blue Diamonds Professional Editing Services (Pty) Ltd

Polishing your brilliance

Email: [jacquibaumgardt@gmail.com](mailto:jacquibaumgardt@gmail.com)

Website: [www.jaybe9.wixsite.com/bluediamondsediting](http://www.jaybe9.wixsite.com/bluediamondsediting)

26 July 2022

### Declaration of professional editing

Developing a framework for assessing the influence of public service motivation on core work evaluation and counterproductive work behaviour

by

**PM Masukela**

---

I declare that I have edited and proofread this thesis. My involvement was restricted to language usage and spelling, completeness and consistency and referencing style. I did no structural re-writing of the content.

I am qualified to have done such editing, being in possession of a Bachelor's degree with a major in English, having taught English to matriculation, and having a Certificate in Copy Editing from the University of Cape Town. I have edited more than 400 Masters and Doctoral theses, as well as articles, books and reports.

As the copy editor, I am not responsible for detecting, or removing, passages in the document that closely resemble other texts and could thus be viewed as plagiarism. I am not accountable for any changes made to this document by the author or any other party subsequent to the date of this declaration.

Sincerely,

A handwritten signature in black ink that reads "J Baumgardt".

**Dr J Baumgardt**

**UNISA: D. Ed. Education Management**

**University of Cape Town: Certificate in Copy Editing**

**University of Cape Town: Certificate in Corporate Coaching**

**Full member: Professional Editors Guild (BAU001)**

---

Blue Diamonds Professional Services (Pty) Ltd (Registration Number 2014/092365/07)

Sole Director: J Baumgardt