

**FACTORS INFLUENCING COUNTERPRODUCTIVE WORK BEHAVIOURS OF
SOLDIERS: AN EXPLORATORY STUDY**

BY

ZINHLE LONDIWE NZIMANDE



**THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE MASTER OF COMMERCE (INDUSTRIAL PSYCHOLOGY) AT
STELLENBOSCH UNIVERSITY**

Supervisor: Prof G.A.J. van Dyk

December 2020

DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Z.L. Nzimande

Date: December 2020

ABSTRACT

This study was initiated because of the costly and harmful effect of negative behaviours have on both organisations and society. This study was undertaken to understand the impact of deviant behaviours in the South African military context. The available literature on counterproductive work behaviours (CWB) in the South African military revealed a considerable gap for further research. The purpose was to investigate the impact of organisational justice, work-alienation, leader behaviour, and ethical organisational climate on CWB. A theoretical model was developed to explain the relationships between the latent variables and counterproductive behaviours. Hypotheses were formulated regarding the postulated relationships found between these variables in the literature study. These hypotheses were tested to determine the validity of these propositions and thereafter test the proposed structural model.

The sample comprised of uniformed members of the 5 South African Infantry Battalion from which data was collected utilising the existing instruments. Although two of the scales had extremely low reliability, rendering them unacceptable for use in research, the scales with satisfactory reliability were used to measure the hypothesised paths of the model. The results indicated that non-significant relationships were found to exist between the variables, except one variable that was significant. Only transactional leadership was found to impact significantly on CWB.

ACKNOWLEDGEMENT

I would like to express my sincere appreciation to the following parties who have supported me in completing my thesis:

A special thanks to my supervisor, Prof. G.A.J. van Dyk for whom I have the utmost respect. Thank you for your patience, guidance and support.

Thank you, Prof. M. Kidd, for sharing your statistical expertise with me.

I would also like to extend my heartfelt gratitude to members of 5 SAI Bn and the Department of Defence at large for the support and participation in the research study.

Thank you, Gillian Armstrong for your professional language editing service provided.

Thanks to my family, friends and colleagues for your encouragement all the time.

DEDICATION

This thesis is dedicated to my daughter, Luthando Isiphile Mayiko Nzimande.

TABLE OF CONTENTS

Declaration	i
Abstract	ii
Acknowledgement	iii
Dedication	iv
Table of contents	v
List of tables	ix
List of figures	x
List of accronyms and abbreviations	xi
CHAPTER 1	1
1.1 BACKGROUND AND MOTIVATION	1
1.2 RESEARCH PROBLEM	8
1.3 RESEARCH OBJECTIVES	9
1.3.1 Main objective	9
1.3.2 Theoretical objectives	9
1.3.3 Empirical objectives	11
1.4 RESEARCH PROCESS OVERVIEW	11
1.4.1 Phase 1: Literature review	11
1.4.2 Phase 2: Empirical research	12
1.4.3 Phase 3: Reporting of results and writing of the research report	12
1.5 CHAPTER DIVISION	12
1.6 CHAPTER SUMMARY	13
CHAPTER 2	14
2.1 INTRODUCTION	14

2.2	CONCEPTUALISATION OF COUNTERPRODUCTIVE WORK BEHAVIOUR	15
2.2.1	Theoretical models of counterproductive work behaviour	17
2.2.2	Antecedents of counterproductive work behaviours	21
2.3	CONCEPTUALISATION OF ORGANISATIONAL JUSTICE	24
2.3.1	Dimensions of organisational justice	25
2.4	CONCEPTUALISATION OF WORK ALIENATION	27
2.4.1	Dimensions of work alienation	28
2.5	CONCEPTUALISATION OF LEADERSHIP BEHAVIOUR	30
2.5.1	The theoretical framework of leadership behaviour	31
2.6	CONCEPTUALISATION OF ORGANISATIONAL ETHICAL CLIMATE	32
2.6.1	Dimensions of ethical organisational climate	35
2.7	THE RELATIONSHIP BETWEEN CONSTRUCTS	36
2.7.1	Organisational justice and CWB	36
2.7.2	Work alienation and CWB	37
2.7.3	Leadership behaviour and CWB	38
2.7.4	Organisational ethical climate and CWB	39
2.8	A CONCEPTUAL FRAMEWORK OF FACTORS THAT INFLUENCE COUNTERPRODUCTIVE WORK BEHAVIOURS	40
2.9	CHAPTER SUMMARY	41
	CHAPTER 3	42
3.1	INTRODUCTION	42
3.2	HYPHOTHESES	43
3.3	RESEARCH DESIGN	44
3.4	SAMPLING DESIGN	45
3.5	MEASURING INSTRUMENTS	46

3.5.1	Workplace Deviance Scale (WDS)	47
3.5.2	Justice and Injustice Scale	47
3.5.3	Alienation-Involvement scale	48
3.5.4	Multifactor Leadership Questionnaire (MLQ)	48
3.5.5	Ethical Climate Questionnaire (ECQ)	49
3.6	DATA COLLECTION	49
3.7	DATA ANALYSIS	50
3.7.1	Preliminary statistical analyses procedures	50
3.7.2	Missing values	51
3.7.3	Item analysis	51
3.7.4	Partial least square analysis (PLS-SEM)	52
3.8	CHAPTER SUMMARY	54
CHAPTER 4		55
4.1	INTRODUCTION	55
4.2	RELIABILITY ANALYSIS	55
4.3	PARTIAL LEAST SQUARE (PLS) ANALYSIS	60
4.3.1	Evaluation and interpretation of the outer model	61
4.3.1.1	Composite reliability	61
4.3.1.2	Average variance extracted (AVE)	63
4.3.1.3	Discriminant validity	65
4.3.1.4	Evaluation of outer loadings (item loadings)	68
4.3.2	Evaluation and Interpretation of the inner model	75
4.3.2.1	Multicollinearity	75
4.3.2.2	Evaluation and interpretation of the R-square value	76
4.3.2.3	Evaluation and interpretation of path coefficients	76
4.4	CHAPTER SUMMARY	81

CHAPTER 5	82
5.1 INTRODUCTION	82
5.2 DISCUSSION OF MEASUREMENT INSTRUMENTS UTILISED	82
5.3 DISCUSSION OF RESEARCH FINDINGS	83
5.3.1 The relationship between perceived organisational injustice and CWB	83
5.3.2 The relationship between work alienation and CWB	84
5.3.3 The relationship between leadership behaviours and CWB	84
5.3.4 The relationship between ethical organisational climate and CWB	85
5.4 LIMITATIONS AND RECOMMENDATIONS	85
5.5 CONCLUSION	88
LIST OF REFERENCES	89
REFERENCES	90

LIST OF TABLES

Table 4.1 Summarised reliability analysis of subscales	56
Table 4.2 Composite reliability values all subscales	62
Table 4.3 Average variance extracted (AVE)	64
Table 4.4 Hetrotrait-Monotrait (HTMT) ratios	66
Table 4.5 PLS-SEM outer loadings	69
Table 4.6 Variance Inflation Factors (VIF)	76
Table 4.7 Path coefficients of the structural model of counter-productive work behaviours	79

LIST OF FIGURES

Figure 2.1 A typology of deviant work behaviours	16
Figure 2.2 A causal reasoning model of counterproductive work behaviour	22
Figure 2.3 A proposed structural model of factors that influence CWB	40
Figure 4.1: Composite reliability box-and-whisker plot	63
Figure 4.2: Average variance extracted box-and-whisker plot	65
Figure 4.3 Structural model results with path coefficients	79

LIST OF ACCRONYMS AND ABBREVIATIONS

Average Variance Extracted (AVE)

Counterproductive Work Behaviours (CWBs)

Ethical Climate Questionnaire (ECQ)

Full-Range Leadership Theory (FRLT)

Heterotrait-Monotrait (HTMT)

Multi-level Leadership Questionnaire (MLQ)

Partial Least Square (PLS).

Partial Least Square Structural Equation Modeling (PLS-SEM)

Social Exchange Theory (SET)

South African National Defence Force (SANDF)

Statistical Package for Social Science (SPSS)

Workplace Deviance Scale (WDS)

5 South African Infantry Battalion (5 SAI Bn)

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND AND MOTIVATION

An organisation's human resources play a crucial role in effecting and conducting operations and activities aimed at ensuring the well-being and success of the organisation. Their commitment, loyalty, trust, and other similar attitudes resemble organisational citizenship behaviours and are encouraged to improve organisational functioning (Baruch, 2005). While the literature regarding the positive constructs of organisational psychology has been widely researched, negative constructs such as misconduct and aggression have received less attention in organisational research (Baruch, 2005). Many organisations are faced with employees who exhibit a wide range of work behaviours that harm the wellbeing of the organisation (Aquino, Lewis & Bradfield, 1999). Undesirable behaviours (misbehaviour) in the work environment can be classified as counterproductive work behaviours (CWB), which are pervasive in the workplace across different industries and countries (Bennett & Robinson, 1995; Fox, Spector, & Miles, 2001; Berry, Ones, & Sackett, 2007, as cited in Rauf & Farooq, 2014).

In a study conducted by Harper (1990), about two-thirds of employees engage in some form of theft, fraud, absenteeism, sabotage, and embezzlement. Furthermore, organisations have reported that about two million cases reported by employees involved being physically assaulted at work, harassed, and threatened (Ones & Viswesvaran, 2003). These behaviours have practical consequences for organisations which may result in substantial economic losses. For example, employee theft costs businesses more than \$4 billion in annual losses, and in many cases has led to serious business closure. Moreover, it has affiliated costs concerning morale, loss of assets, reputation, and revenue (Hakstian, Farrell & Tweed, 2002). Although some organisations find it difficult to assign a monetary value to certain employee negative behaviours, in the United States it is estimated that about \$135 billion per annum is spent to address substance abuse at work and about 50 hours per employee per

annum is wasted through absenteeism or presentism (Mikulay, Neuman & Finkelstein, 2001).

Sandberg (as cited in Dineen, Lewicki & Tomlinson, 2006) reported estimated annual losses due to employee fraud of over \$50 billion. Another type of misbehaviour at work that has resulted in involuntary or voluntary termination of employment is bullying. Ottinot (2010) conducted a study on why victims of bullying leave their jobs. The results showed that about 40% of targets of bullying tried to stop bullies or reported them to people inside or outside the organisation, but when they noticed no change in their behaviour, opted to leave their jobs voluntarily. Bullying not only affects the victim but also results in a significant decline in productivity, which damages the image of the organisation. (Lutgen-Sandvik & McDermott, 2008). This shows that most organisation including South African organisations are faced with the challenge of employees' who engage in CWB.

The SANDF's mandate is to "defend and protect the Republic, its territorial integrity and its people" (Constitution of the Republic of South Africa, Act 108 of 1996). The South African Defence Review (2015) highlighted that, given the changing global security environment, the SANDF would be expected to participate in wide-ranging operations (conventional and unconventional). These may include disaster relief, support to government departments, counter-terrorism and counterinsurgency, and responding to safety and security threats at many levels (Van Heerden, 2016). Recently, the SANDF has had to embark on several domestic operations ranging from improving food and water security to maintaining law and order during elections. Climate change is also expected to present new disasters and creates new scenarios where the SANDF will be expected to defend and protect the Republic and its people. Because of the broader African and global security context, the role of the SANDF in the 21st century cannot be precisely defined, and the organisation must do more with ever-diminishing resources. This reality requires an agile and responsive force capable of redefining 'soldiering' as and when new challenges arise. This places primary responsibility on the SANDF to ensure that it optimises its workforce.

Despite the notable attention CWB has received globally and the national level, almost nothing is identified and investigated about the concept within the background of the South African military. An investigation into the SANDF's situation is not as extensive as that in the global community. Therefore, from a study of existing CWB literature, South African researchers have been much slower to comment on the trend than their foreign contemporaries. Today, the SANDF is comparatively complex and resembles many other South African workplaces. This means that the job atmosphere in South Africa attracts workers who carry their expectations, beliefs, and social and cultural standards to the workplace. This diversity is expected to bring different challenges and changes to the organisational culture and practices that could lead to a variety of conflicts in the workplace.

Clearly, many employees engage in some form of CWB. Scholars add that such behaviours are costly and have pervasive consequences that threaten the well-being of the organisation and its stakeholders (Vardi & Wiener, 1996). Given that maximising employee performance forms part of the industrial psychologist's role in an organisation, a clear understanding of the nature and impact of CWB is necessary to attempt to reduce these harmful behaviours. In other words, a thorough understanding of the complexities of employee behaviour and the personal and organisational factors that are likely to inform CWBs is required. Only by fully understanding the nomological networks will industrial psychologists and HR practitioners be able to develop effective interventions aimed at reducing CWBs and the resultant damaging consequences.

Researchers have conceptualised CWB over the years. Robinson and Bennett (1995, p.256) defined CWB as "voluntary behaviour of organisational members that violates significant organisational norms, and in so doing, threatens the well-being of the organisation and/or its members". Sackett (2002, p. 146) defines CWB as "intentional behaviour on the part of an organisation member viewed by the organisation as contrary to its legitimate interests". Brimecombe (2012, p.79) defined CWB as "intentions and behaviours that threaten the overall well-being of organisational members, the organisation itself, and break explicit and implied rules about appropriate behaviours". From the above-mentioned definitions of CWB, three

dimensions can be identified: the act is intentional, not accidental; the person(s) performing the act belongs to the organisation; and the act is against the organisation's interest and set goals. All definitions present the underlying negative consequences for both the organisation and the individual(s).

In this study, CWB is conceptualised as intentional behaviours by an individual(s) aimed at destructing and violating organisational goals for success which inevitably demoralises and demotivates other employees, thus collapsing the effectiveness and efficiency of work processes. CWB not only influences the performance and well-being of the employee engaging in CWB but also colleagues or customers interacting with an employee engaging in CWB, as well as the organisation in which CWB occurs (Whelpley & McDaniel, 2016).

According to Bennett and Robinson (2000) CWB can vary in intensity, significance, and target group and could manifest as production deviance (e.g., working intentionally slowly, taking excessive breaks, wasting organisational resources), property deviance (e.g., stealing from organisation, deliberately damaging equipment), political deviance (e.g., showing favouritism, gossiping about or blaming colleagues), as well as interpersonal deviance (e.g., verbal abuse, sexual harassment or stealing from colleagues). Collins and Griffin (1998) concur with this assertion and posit that CWB varies in seriousness that can range from low (e.g., petty stealing) to high (e.g., violent assault and harassment). Some other less serious forms of CWBs that are prevalent in contemporary organisations include leaving work early or coming to work late without permission, daydreaming, undue absence, surfing the web for personal use during working hours, engaging in social media during working hours, and taking extended breaks. More serious acts include intentionally ignoring the safety procedures, misleading customers, or sabotaging production processes.

Several factors influence CWB; two very distinct ones are personal variables or situational variables. According to Dalal (2005), certain characteristics or traits within an individual dissuade a person from engaging in CWB. Similarly, there are factors within the environment (organisation) that can encourage CWB among employees.

Dalal (2005) conducted a meta-analysis investigating the antecedents of CWB and found that several motivational, attitudinal, and dispositional variables influence the extent to which one will engage in CWBs. Job satisfaction, perceptions of organisational justice, and organisational commitment were found to be negatively related to CWB.

Various models of CWB have been proposed in the existing literature (Marcus & Schuler, 2004; Martinko, Gundlach & Douglas, 2002; Spector & Fox, 2002). One model is the emotion-centred model (Spector & Fox, 2002), which explains how employees' perception of an organisational situation results in a cognitive evaluation of the condition, which triggers emotional reactions (e.g., frustration and anger) and may result in CWBs. In other words, how people feel and what people think will influence the likelihood of engaging in CWB, the scope, and the form of CWB.

The workplace environment consists of both the physical and the social or organisational context. Martinko et al (2002) argue that, when people are faced with an undesirable situation, they engage in cognitive appraisal and evaluate the situation to decide whether or not to engage in some form of CWB. Furthermore, Martinko et al. (2002) integrated various theoretical perspectives regarding the antecedents of CWB into a causal reasoning model. According to their model, situational and individual difference variables inform a cognitive appraisal process resulting in specific emotions that lead to subsequent CWB. Some of their situational variables include inflexible policies, competitive environment, leadership style, rules and procedures, reward systems, task difficulty, and organisational culture and included individual differences such as negative affectivity, emotional stability, integrity, gender, attribution style, and core self-evaluation, locus of control, self-esteem, generalised self-efficacy, and non-neuroticism. In this study, perceived organisational justice, leadership behaviour, work alienation, and organisational ethical climate are examined as factors that influence soldiers at 5 SAI Bn to engage in CWBs.

Organisational justice is one of the main constructs in social sciences and refers to the individual's perception of whether the chosen decision or taken action is morally

correct or fair following basic ethics and law, across various contexts and cultures (Tabibnia, Satpute, & Lieberman, 2008). This construct is important for both employees and employers in a different scope of activities. Researchers of organisational justice advocate that this concept is associated with certain positive outcomes, such as higher levels of job satisfaction (Al-Zu'bi, 2010), increased commitment to the organisation (Cohen-Charash & Spector, 2001), reciprocated trust, and low turnover intentions (Dailey & Kirk, 1992) to mention but a few. While the negative outcomes of organisational justice could be associated with employees' counterproductive behaviours. Several studies have examined the relationship and impact between organisational justice and counterproductive work behaviour. An example is a study conducted by Jeanne, Marina, and Jale (2012), which found a statistically significant impact for interactional justice on CWB.

Work alienation, which can be accepted as a common result of work and organisation-related negative factors, is one of the newly studied drivers of deviant behaviours (Chiaburu, Diaz & De Vos, 2013). In the literature, many researchers have studied many related factors to work alienation such as; management style and practices and job characteristics, lack of decision-making, limited control over the job, organisational commitment, job involvement, performance-related pressure, organisational justice, the negative effect of downsizing, perceived organisational structure, technological changes (Ceylan & Sulu, 2011; Sulu Ceylan & Kaynak, 2010; Nair & Vohra, 2012). According to these studies, it is easy to say that the causes and consequences of alienation are numerous. However, its relation to deviant behaviours is rarely studied (Nair & Vohra, 2012). Accordingly, in this study, we propose a theoretical model where alienation leads to CWB.

The role of leadership in enhancing employee job satisfaction, work motivation, and work performance is well established. As such, good leadership behaviour accelerates the development of most organisations. According to the leader-member exchange (LMX) theory, leaders can positively motivate the behaviour and attitude of their followers (Burch & Guarana, 2014). Put differently, a leader's actions and attitude towards followers have important effects on follower behaviour. In separate studies,

George (1995) and Williams, Podsakoff, and Huber (1992) investigated the impact of a leader's actions on follower's attitudes and found that the followers' perceptions of leader behaviour correlated with subordinate satisfaction with supervision, performance, and organisational commitment. On the other hand, Townsend, Phillips, and Elkins (2000) investigated the outcomes of poor LMX relationships. The results showed that leaders exhibited a higher rate of CWB against the organisation among followers in poor exchange relationships. This suggests that leaders' behaviours have a positive impact on subordinate inclination to engage in CWB.

Organisational leaders play an important role in institutionalising ethics in organisations. Integration of ethics has become an important element in organisations to counter negative behaviour, boost the organisation's image, and encourage attention and retention of employees (Foote & Ruona, 2008). Sims (2003) postulated that an ethical climate promotes an ethical culture through normative behaviour in the organisation and creates conducive working conditions. In contrast, unethical practices implicate the firm's revenue and affect employees' efficiency (Leung, 2008). Thus, promoting ethical values in the organisation is a reactive approach to reduce destructive behaviour among employees.

Numerous researchers have reported that organisational climate was related to employee ethical or unethical behaviours (Victor & Cullen, 1988). For example, Vardi and Wiener's (1996) empirical study conducted among 150 employees from various departments of a metal product company in Northern Israel found a strong negative relationship between organisational ethical climate and deviant behaviour. Hence, a good perception of the social exchange relationship contributes to a good ethical work climate. Therefore, the more an individual perceives an ethical work climate, the more he or she will engage in organisational citizenship behaviour. In contrast, a low perception of ethical organisational climate contributes to deviant behaviour.

In summary, CWB causes large potential losses and poses serious economic risks to organisations, including the military. Furthermore, CWB does not only affect the organisation but also the well-being and performance of its members. As a result,

research examining the factors that contribute to CWB in the South African military context may be of considerable interest.

1.2 RESEARCH PROBLEM

Core values are the heart and soul of the South African Defence Force (SANDF) and its culture. The SANDF's tactical, operational, and strategic strength lies in the degree to which the systems, processes, and behaviours of personnel align with their stated core values, the collective practice of which creates organisational culture. Yet, even with the emphasis on core values such as respect and selfless service, the SANDF continues to experience deviant behaviours that sabotage its culture and values, as well as performance, productivity, force protection, health, readiness, and actions of personnel. In many respects, discipline and the following of orders are at the very essence of what may characterise good soldiers and officers (Borman, Motowidlo, Rose, & Hansen, 1987; Campbell, McHenry, & Wise, 1990). Ill-discipline and sloppiness towards military regulations, on the other hand, may not only hinder productivity and morale, but may also, in extreme situations, endanger human safety. Yet, in the military, where discipline is arguably of even greater value than in most civil organisations (Sumer, Sumer, Demirutku, & Cifci, 2001), the factors that influence CWB, their antecedents, and consequences are far less established. There has been an over-reliance on laws, rules, procedures and policies as means of correcting undesirable behaviour.

The persistent costs associated with CWB are significant in the military because negative behaviours tend to fall under the threshold of legal action, organisations and their members tend to tolerate it and endure it for an extended time, and it is not addressed until it reaches a high level of adverse impact. The typical response of the military, once an individual has been clearly identified as counterproductive, is dismissal from service. This practice provides a decisive and easy response to assign blame but ignores the pervasiveness of CWB despite research that indicates CWB occurs. Thus, research investigating the factors that contribute to CWBs is vital to mitigate the negative consequences of CWBs in the SANDF. This study aims to contribute and add to the literature by providing an understanding of counterproductive behaviours within the SANDF. There is a gap in the research and literature focusing

on the CWBs of soldiers in the SANDF. The study aims to enrich the literature by providing an understanding of deviant behaviours in the SANDF and the factors that influence it. Consistent with this reasoning, this study is guided by the research initiating question: What are the factors that influence CWBs at 5 South African Infantry Battalion (5 SAI Bn)?

In answering the research question, a conceptual review of literature followed by the gathering of data using measuring instruments of different constructs of the study was undertaken. The different subscales contained in the different dimensions of the measuring instruments are expected to prove the underlying statistical relationships as hypothesised by the researcher. The empirical results can be used to guide the formulation of recommendations which encompass relevant intervention strategies for the SANDF to mitigate deviant behaviours. For this study, the dependent variable is CWBs and the independent variables were perceived organisational justice, work alienation, leadership behaviour, and ethical organisational climate. The researcher engages in the analysis of Cronbach's Alpha to determine the reliability of scales.

1.3 RESEARCH OBJECTIVES

The current research seeks to enhance the understanding of the nomological network of CWB in the South African military context. Furthermore, this study examines how situational factors (e.g. perceived justice, work alienation, leadership behaviour, and ethical organisational climate) influence soldier's engagement in CWB.

1.3.1 Main objective

The primary objective of this study is to explore the factors that lead to CWB in the South African military context. Figure 1.1 provides a conceptual model of the proposed relationships between perceived justice, work alienation, leadership behaviour, ethical organisational climate, and CWBs.

1.3.2 Theoretical objectives

The following literature specific objectives have been set, namely to:

- conceptualise counterproductive work behaviours from a theoretical perspective;
- conceptualise perceive organisational justice from a theoretical perspective; conceptualise work alienation from a theoretical perspective;
- conceptualise leadership behaviour from a theoretical perspective;
- conceptualise ethical organisational climate from a theoretical perspective and
- conceptualise the theoretical relationship between perceived justice, work alienation, leadership behaviour, ethical organisational climate, and counterproductive work behaviours.

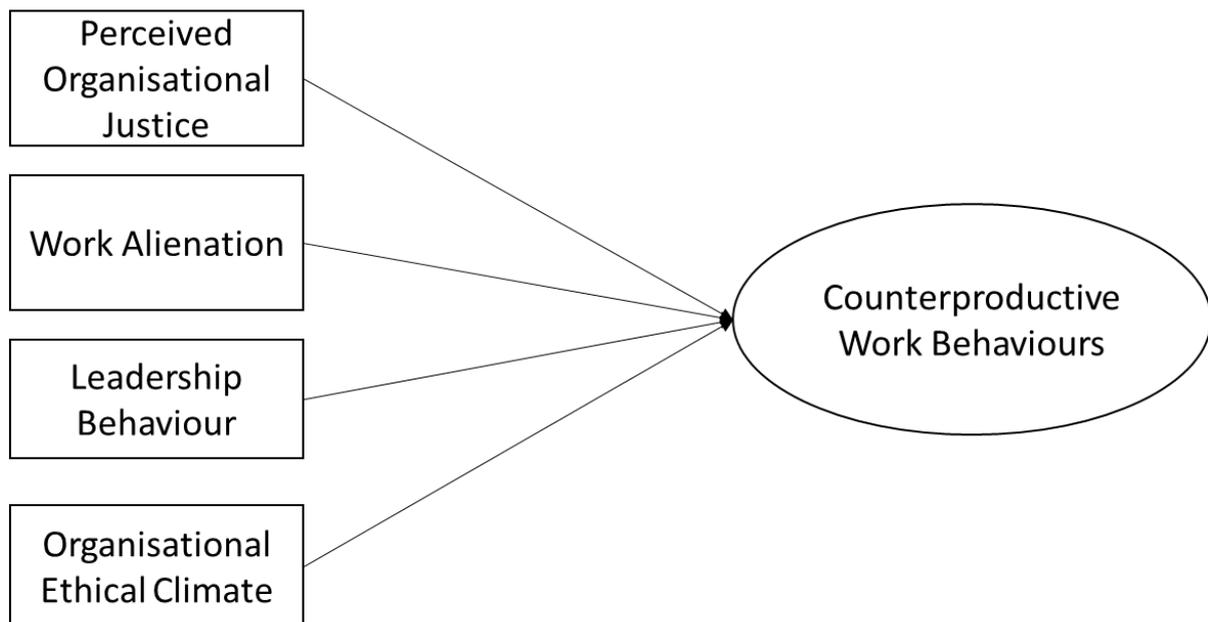


Figure 1.1: Conceptualised model of the counterproductive work behaviours at 5 SAI Bn

1.3.3 Empirical objectives

In addition to the literature specific objectives, the following objectives to empirically evaluate the antecedents of CWB have been set:

- To develop and assess the structural model, based on the current literature, which explains the influence of situational factors on CWB
- To evaluate the significance of the hypothesised paths in the model.
- To make recommendations for further research.

1.4 RESEARCH PROCESS OVERVIEW

The research process followed in this thesis is divided into three phases. Phase one provides a comprehensive review of the literature, phase two discusses the empirical research, lastly, phase three, provides the reporting of results and writing of the research report.

1.4.1 Phase 1: Literature review

During this phase, a comprehensive review of the literature with the main concepts of the study was discussed. This encompassed a detailed analysis of the theoretical framework of the study that provided a clear understanding of the factors of interest in the study and the relationship thereof. Each factor was reviewed in relation to their effect counterproductive work behaviours. The phase also led to the formulation of hypothesised relationships between the constructs and concludes with the construction of a structural model developed based on the literature presented. Constructs referred to in the study include:

- counterproductive work behaviours;
- perceived organisation justice;
- work alienation;
- leadership behaviour;
- ethical organisational climate.

1.4.2 Phase 2: Empirical research

This phase entails the process and instruments used to gather data from the participants. The choice of measuring instruments for each of the variables considered in the study is described in detail in Chapter 3 (see par. 3.5). The study used standardised questionnaires administered using pen-and-pencil evaluation tools to a sample of 261 soldiers at 5 SAI Bn. CWB was measured using the Workplace Deviance Scale (WDS) developed by Bennett and Robinson (2000) was used. Organisational justice was measured by the Justice and Injustice scale developed by (Colquitt, Long, Rodell and Halvorsen-Ganepola, 2015). To measure work alienation, an Alienation-Involvement scale developed by Lefkowitz, Somers and Weinberg (1984) was used (Nair and Vohra, 2009). Leadership behaviour was measured using the MLQ Form 5x – Short instrument (Bass & Avolio, 1995). The organisational ethical climate is measured using the original Ethical Climate Questionnaire (ECQ) of Victor and Cullen (1988). All the instruments have a demonstrated history of acceptable alpha level.

1.4.3 Phase 3: Reporting of results and writing of the research report

This phase reports the results of the hypothesised relationships and provides a discussion thereof. The limitations of the study are addressed and suggestions for future research are made. Finally, general concluding remarks are presented.

1.5 CHAPTER DIVISION

The chapters in the study are presented in the following order:

- Chapter 1: Introduction to the study
- Chapter 2: Literature review
- Chapter 3: Research design and methodology
- Chapter 4: Results
- Chapter 5: Discussion, limitations, and conclusions

1.6 CHAPTER SUMMARY

This chapter encapsulated the introductory arguments and objective for the study. An overview of the research background was defined and described, followed by the research questions and objectives, research process followed, and an overview of the subsequent chapters. The next chapter is the literature review, which begins with an examination of the conceptual and theoretical framework of all constructs. Thereafter, the relationship between the constructs is examined based on previous research.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Given that one of the main requirements for organisational success is the willingness of employees to perform optimally, the task of industrial or organisational psychologists is to recognise and understand factors that improve or hinder employee performance. There has been an unrelenting focus on positive constructs that affect employee performance, such as job satisfaction, commitment, and involvement (Gruys & Sackett, 2003), but to a lesser extent a focus on negative constructs such as misconduct and aggression in the workplace. More recently, researchers have expanded the criteria for evaluating employee effectiveness beyond positive performance to include counterproductive work behaviours (CWBs) (O'Neill & Hastings, 2011; Kelloway, Francis, Prosser & Cameron, 2010). According to Robbins and Coulter (2007), CWBs entail deliberate employee behaviours that are detrimental to the organisation and the individuals within an organisation. Given the negative consequences associated with CWB, this study in part examines why employees engage in CWBs.

The previous chapter outlined the importance of understanding CWB in organisations and argued how organisational justice, work alienation, leadership behaviour, and organisational ethical climate contribute to the presence of CWB in an organisation. Therefore, the relationship between CWBs and these constructs is theoretically examined in this chapter. All of the constructs are examined using their conceptualisation and the relationship between constructs. The chapter concludes with a depiction of the theoretical structure that presents the hypothesised relationships between the latent variables of organisational justice, work alienation, leadership behaviour and organisational ethical climate, and CWB.

2.2 CONCEPTUALISATION OF COUNTERPRODUCTIVE WORK BEHAVIOUR

Puffer (1987) conceptualised CWB as a group of behaviours by employees of an organisation that are harmful to its effectiveness. The prevalence and considerable financial costs and social costs associated with CWB in contemporary organisations prompt a deeper understanding of deviant and CWBs (Robinson & Bennett, 1997). Many organisations report issues related to absenteeism, turnover, and workplace violence, to mention but a few, and some forms of CWB cost labour organisations, including the military industry, millions of rands per year (Robbins, Judge, Odendaal, & Roodt, 2013).

Generally, CWBs refer to "intentional behaviour on the part of an organisation member viewed by the organisation as contrary to its legitimate interests" (Sackett & DeVore, 2001, p. 145). Another description of CWB by Robinson and Bennett (1997) highlights that such behaviours are intentional, carried out by organisational members, tend to violate organisational norms, and are detrimental to the organisation and its members. Examples of CWBs include theft, sabotage, withdrawal, harassment, and drug use (Bennett & Robinson, 2000; Gruys & Sackett, 2003; Robinson & Bennett, 1995; Sackett & DeVore, 2001).

Although some researchers have questioned the intentionality of such behaviour (Marcus, Taylor, Hastings, Sturm, & Weigelt, 2016), others have argued that intention is an essential aspect of defining CWB (Spector & Fox, 2005). Intention refers to the voluntary and purposeful nature of CWB (Sackett & DeVore, 2001). Intent in terms of CWB relates to intentional behaviour by an employee and not a specific intent to harm (Spector & Fox, 2005). Accidental acts that cause harm to the organisation or individuals in it are thus excluded from the definition of CWB (Sackett & DeVore, 2001). Furthermore, Skarlicki and Folger (1997) emphasise that CWB does not only include overtly aggressive acts intended to inflict immediate harm, but also a range of less blatant acts, which collectively and over a longer term cause harm to the organisation or individuals in it. For example, accidents that occur despite following the safety precautions or the inability to adequately perform one's job due to circumstances beyond one's control, are not classified as CWBs.

Several scholars have investigated, scrutinised, and defined the concept of CWB in the workplace. Many of these studies were based on different theoretical perspectives and resulted in various forms of CWBs as well as different construct labels for the same phenomenon (Puffer, 1987; Robinson & Bennett, 1995; Skarlicki & Folger, 1997). Examples include non-compliant workplace behaviour, interpersonal or workplace aggression, anti-social behaviour, workplace deviance, organisational retaliation behaviours, workplace incivility, revenge, bullying cyberloafing, cyber aggression, and insidious workplace behaviour. Despite the different forms and related terms, all refer to a wide range of interpersonally aggressive and hostile workplace behaviours including arguing with, bullying, ignoring or threatening others at work, destroying company or employee property, wasting resources, theft, deliberately withholding information and effort, or withdrawal (e.g. malingering, leaving earlier without permission or taking extended breaks).

Collins and Griffin (1998) examined various definitions of CWB and found that almost all the definitions held that these behaviours reflect a lack of respect for societal and organisational rules and values. Other scholars describe CWBs as acts that violate implicit and explicit workplace rules about civility, respect, and appropriate workplace behaviour that are harmful to the well-being of organisations and its members (Robinson & Bennett, 1995). Gruys and Sackett (2003) describe CWBs as intentional behaviours demonstrated by organisational members that are contradictory to the organisation's legitimate interests.

Similarly, Rotundo and Sackett (2002, p. 67) defined CWB as "voluntary behaviours that are under the control of an organisational member and are carried out to affect the goals of the organisation and harm the well-being of the organisation". Equally important, CWBs can be demonstrated as either overt or passive acts (Fox, Spector, & Miles, 2001). Overt acts are explicit and easily observed by others and thus more likely to result in punishment (e.g. intimidation). Consequently, employees are more likely to opt for passive CWBs such as tardiness, unauthorised absenteeism (e.g., calling in ill when not sick), and reduced performance (Fox et al., 2001).

The common themes are that, from an organisational perspective, these employee behaviours are volitional and harmful to the organisation or individuals in it, thereby negatively impacting on organisational effectiveness. For this research, CWBs are defined as voluntary employee behaviours that are intentionally harmful to the organisation. This definition reflects a broad range of employee behaviours that are detrimental to the organisation or individuals in it. As mentioned earlier, CWBs are a pervasive and costly problem for organisations (Bennett & Robinson, 2000). Organisations are required to cover the financial losses resulting from these destructive behaviours and implement preventative measures as protection from future offences. Besides the financial costs to organisations, CWBs also harm the individuals engaging in them through poor job performance ratings by managers (Rotundo & Sackett, 2002). Moreover, victims of CWBs may suffer physical aggression and violence (Whelpley & McDaniel, 2016), reduced life and job satisfaction, and/or recurrent anxiety and depressive incidents (Bowling & Beehr, 2006).

Therefore, CWBs not only affect the performance of the organisation but also the well-being and performance of an individual engaging in the CWB as well as persons interacting with the individual engaging in CWB (Whelpley & McDaniel, 2016). Because of the inescapable costs associated with CWBs; organisational interventions aimed at reducing these behaviours are required. To develop effective interventions, a deeper understanding of the structure of CWBs is necessary which, in turn, has led to a proliferation of research investigating the structure and factors that influence these behaviours as covered in the subsequent paragraphs.

2.2.1 Theoretical models of counterproductive work behaviour

Research on CWB is developed in an attempt to better understand and address the wide-ranging negative behaviours that employees may engage in the workplace (Carpenter & Berry, 2017). The initial model that has been used in research as the foundation of CWB was developed by Hollinger and Clark (1983). These researchers developed a broad list of CWBs and thus categorised the list into; property deviance and production deviance. The former includes misuse of organisational assets (e.g.

damaging company property or theft), while the latter relates to the violation of organisational performance norms (e.g. unauthorised absence, tardiness, taking long breaks or substance abuse). Robinson and Bennett (1995) theorised that Hollinger and Clark's (1983) categories of behaviour are incomplete as they do not provide for deviant acts of an interpersonal nature. Robinson and Bennett (1995) furthermore realised the need to find parsimony and order in terms of the diverse set of behaviours that have been regarded as deviant in early research. These researchers (Robinson & Bennett, 1995) therefore set out to develop and empirically test a typology of workplace deviance. From their study, a comprehensive typology of CWBs was derived comprising two dimensions (target of behaviour and severity of deviance) and that deviant behaviours can be classified into four types.

The first dimension included behaviours directed towards the organisation, which the authors referred to as organisational deviance and comparable to Hollinger and Clark's (1983) production and property deviance. Included in the first dimension, were behaviours directed towards other organisational members (e.g., gossiping, verbal abuse, and harassment) which are referred to as interpersonal deviance (Robinson & Bennett, 1995). The second dimension included the severity of the transgression ranging from minor (e.g. petty theft such as stealing a pen) to serious offences and even criminal activities (e.g. assault or embezzling money from the organisation). With the two-dimensional solution in mind, Robinson and Bennett (1995) grouped behaviours into four types as illustrated in Figure 2.1.

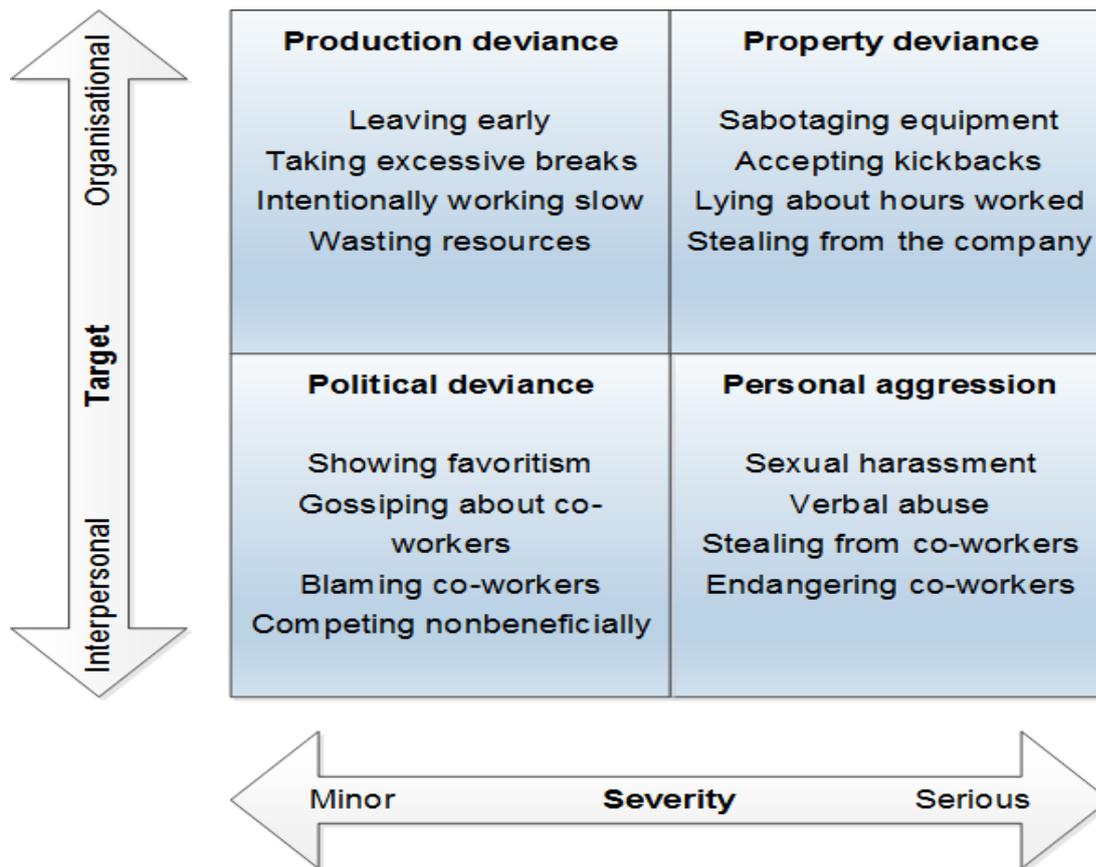


Figure 2.1 A typology of deviant work behaviours. Adapted from “A typology of deviant workplace behaviours: A multidimensional scaling study” by Robinson, S. L., and Bennett, R. J. 1995, *Academy of Management Journal*, 38(2), pp. 555–572.

Robinson and Bennett’s (1995) typology of deviant workplace behaviour thus suggests that behaviour may be directed at two targets, namely the organisation and individuals in it. Organisational deviance includes Hollinger and Clark’s (1983) production and property deviance, while interpersonal deviance introduces two additional types of deviant behaviour that were neglected in earlier research. Political deviance includes minor interpersonal deviant behaviours (e.g. favouritism, gossip and blaming others for one’s mistakes), while personal aggression relates to deviant behaviour of a serious nature aimed at individuals in the organisation such as harassment, abuse and theft from co-workers (Sackett, 2002).

Robinson and Bennett’s (1995) research paved the way for the development of integrated theories of workplace deviance. Researchers were encouraged to develop

and test theoretical models of categories or types of deviance rather than focusing on specific deviant acts. Robinson and Bennett's (1995) typology also enabled more accurate research relating to the antecedents and outcomes of workplace deviance by positing that different types of deviance are likely to have different predictors and consequences.

Bennett and Robinson (2000) operationalised Robinson and Bennett's (1995) typology of deviant workplace behaviour by developing measures aimed at determining the extent to which employees engage in both interpersonal and organisational deviance. According to Gruys and Sackett (2003) the behaviour included in both of these categories may range from minor to serious transgressions, but that the severity of the deviant behaviour should not be regarded as an additional dimension of workplace deviance. Bennett and Robinson (2000), abandoning the severity dimension, thus conceptualised workplace deviance as a two-dimensional construct reflecting organisationally directed and interpersonal deviance (Marcus, Anita, Stephanie, Hastings, & Oliver, 2016). CWB directed towards the organisation includes, for instance, retaliatory actions (Skarlicki & Folger, 1997) or theft of company property (Greenberg, 1993), while CWB directed towards individuals in the organisation includes behaviour such as physical or verbal abuse (LeBlanc & Barling, 2005).

Bennett and Robinson's (2000a) findings were consistent with prior conceptual approaches (Robinson & Bennett, 1995, Skarlicki & Folger, 1997). However, while earlier research regarded organisational and individually directed deviance as two extremes of the same dimension, these targets of CBW were conceptualised and empirically validated to be separate constructs (Berry et al., 2007; Marcus et al., 2016).

In summary, Robinson and Bennett's (Bennett & Robinson, 2000; Robinson & Bennett, 1995) taxonomy and operationalisation of deviant workplace behaviour contributed substantially to the conceptualisation and measurement of CWB. Their two-dimensional model has been well established and verified in numerous studies (Berry et al., 2007; Dalal, 2005; Marcus et al., 2016). CWB directed towards an organisation and CWB directed towards an individual are regarded as separate

dimensions and not two extremes of a single dimension (Bowling, Burns, & Beehr, 2010; Dalal, 2005). The usefulness of separating CWB into organisational and individually directed behaviour has found both theoretical and empirical support in the literature (Berry et al., 2007).

Finally, this study drew on Spector and Fox's (2005) stressor-emotion model of CWB behaviour to argue that, when employees experience stressors in their working environment such as injustice and a lack of support, they are likely to respond with negative emotions. These negative emotions may, in turn, enhance the likelihood that they will engage in behaviour that is detrimental to the organisation or people in it. This is especially true in organisational environments in which employees feel apprehensive and powerless to deal with stressors like the military which is highly authoritative and rigid on rules. In developing interventions aimed at mitigating the occurrence of CWB, an understanding of the antecedents of CWBs is essential and are therefore discussed in the following section.

2.2.2 Antecedents of counterproductive work behaviours

Generally, literature on the causes of workplace deviance has identified two basic sources of workplace deviance as situation-based and person-based factors. Situation-based factors are generally related with the organisational environment, while person-based factors are arising from the personality traits and any other specific characteristics of a person (Appelbaum et al, 2007). In other words, workplace conditions are as effective as personal variables in the emergence of deviant behaviour (Appelbaum et al, 2007). However, the focus of this thesis is on situation-based factors rather than person-based factors that cause employees to engage in CWB.

Aryee, Budhwar and Chen (2002) postulate that the relationships between individuals and the organisation is based on a social exchange theory. One of the main factors that instigate social exchange relationships within an organisation is perceived fair treatment or lack of by organisation's members (Burke, Sims, Lazzara & Salas, 2007).

This means that when environmental conditions are perceived, this perception leads to emotions and attitudes which in turn lead to behaviour (Rotundo & Spector, 2010). According to this theory, employees tend to exhibit positive or negative behaviours based on the treatment they receive from the organisation. Therefore, social exchange theory can, therefore, be utilised as an underlying theory that portrays the process by which employees engage in CWB (Dalal, 2005).

Furthermore, the social exchange theory provides a framework that explains the relationship between CWB and supervisory mistreatment (Thau et al, 2008). This theory suggests that when supervisors engage in abusive behavior, employees are more likely to behave improperly in order to restore the balance in their exchange relationship (Bennett and Robinson, 2000). It is clear that employee's perceptions about their leaders affect their behaviors and attitudes substantially.

Martinko et al. (2002) causal reasoning model also provides an explanation of the antecedents of CWB. According to their model, situational and individual difference variables inform a cognitive appraisal process resulting in specific emotions that lead to subsequent CWB. Some of their situational variables include leadership style, inflexible policies, reward systems, competitive environment, rules and procedures, organisational culture, and task difficulty. The individual factors included attribution style, negative affectivity, integrity, emotional stability, self-efficacy, locus of control, and core self-evaluation, self-esteem, and gender. This model is illustrated in Figure 2.2.

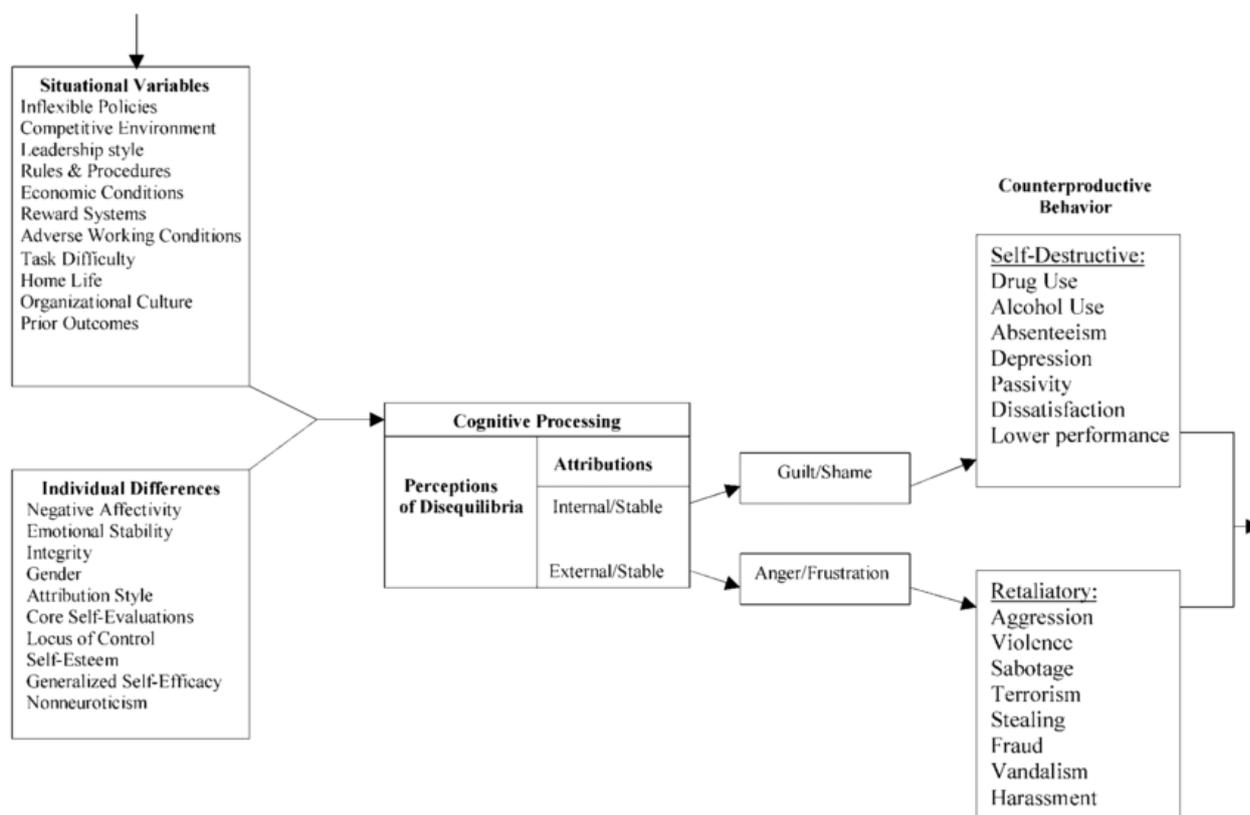


Figure 2.2. A causal reasoning model of counterproductive work behaviour. Adapted from “Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective”, by M.J. Martinko, M.J. Gundlach and S.C. Douglas, 2002, *International Journal of Selection and Assessment*, 10, pp. 36-50.

Organisational justice is also a significant predictor of workplace deviance. When wrong behaviour is punished in the organisation, other employees realise that there is a fair punishment system. On the contrary, if a wrong behaviour is rewarded, injustice is felt among the employees. Syaebani and Rachmawati (2011) have found that organisational justice perception have a significant impact on the occurrence of the deviant behaviour. Drawing from the Adams (1965) equity theory, employees are likely to perceive inequity in case they experience dissimilar outputs in response to same inputs compared to others. Consequently, they want to restore their sense of inequity either by action or by cognitive adaptations (Appelbaum et al, 2007). When employees perceive injustice in the organisation, they think they are right about violating organisational norms (Appelbaum et al, 2007). As a result, employees tend to engage in CWB.

Results from a recent meta-analysis investigating the antecedents of CWB, likewise, indicated that several motivational, attitudinal, and dispositional variables influence the extent to which one will engage in CWBs (Dalal, 2005). Job satisfaction, perceptions of organisational justice, and organisational commitment were found to be negatively related to CWB. In summary, when employees perceive unfavourableness in their current situation at work, they are more likely to violate norms and engage in workplace deviance (Appelbaum et al., 2007). In this study, organisational factors that lead to CWBs are examined using the Workplace Deviance Scale (WDS) developed by Bennett and Robinson (2000). Previous studies demonstrated acceptable alphas (see par. 3.5.1).

2.3 CONCEPTUALISATION OF ORGANISATIONAL JUSTICE

Greenberg (1987) was the first to introduce the concept of organisational justice. Based on Adam's (1965) equity theory, Greenberg (1987) conceptualised organisational justice as the perception that individuals are treated justly and ethically. Furthermore, organisational justice entails a personal evaluation of the ethical and moral standing of managerial conduct (Fernandes & Awamleh, 2006; Greenberg, 1993). Various authors have contributed to the development of the foundation of organisational justice (Greenberg, 1993; Cropanzano & Folger, 1991; Fernandes & Awamleh, 2006;). These authors refer to organisational justice as the just and fair manner in which organisations treat their employees. To promote justice, the management of organisations must understand why employees consider certain events as just as well as the implications of those events. Based on industrial psychologists' interest in understanding the behaviour of people in a work context, research on the effects of organisational justice is well-documented (Cropanzano, Bowen & Gilliland, 2007).

Studying organisational justice perceptions is crucial in organisational behaviour because of their connection with both individual and organisational outcomes (Cohen-Charash & Spector, 2001). Research suggests that perceptions of injustice are the most common cause of counterproductive work behaviours (Ambrose, Seabright, & Schminke, 2002). Organisational justice can be viewed as a subjective and descriptive

concept which captures what employees perceive to be right, rather than an objective reality or a prescriptive moral code (Fernandes & Awamleh, 2006). It is also crucial to know the viewpoint of workers before the developing justice mechanisms in the organisation. In South Africa, the Promotion of Equality and the Prevention of Unfair Discrimination Act 4 of 2000 and the Employment Equity Act 55 of 1998 provides for fair and equal employment practices. According to these provisions, employers must take actions to minimise justice violations in the workplace since these may give rise to employees' lawsuits. Organisational justice can thus be viewed as a bond that allows employers and employees to work together effectively without the perception of unfair labour practices. Niehoff and Moorman (1993) suggest that when considering the role that organisational justice plays in organisations, it is important to consider the varied nature of the different dimensions of justice perceptions, that are discussed below.

2.3.1 Dimensions of organisational justice

Cropanzano et al. (2007) distinguish between different types of justice. In other words, employees assess justice in terms of the fairness of the outcome or decision (distributive justice), the fairness of the methods and procedures used to determine the decision or outcome (procedural justice), and the quality of the interpersonal treatment people receive (interactional justice). All these dimensions of justice are related to each other in that they give an overall perception of organisational justice. Although the components of organisational justice are correlated, it is worthwhile to analyse them separately and in detail to establish a causal link with CWBs (Cropanzano et al., 2007).

The first component of justice, distributive justice, is based on Adams' (1965) equity theory and involves perceived fairness of the allocation of results and workloads to and from individuals. Based on the description of distributive justice, employees' treatment within organisations can raise questions about whether there is a fair allocation of outcomes within an organisation or not. Several studies have examined the influence of fair treatment of employees on organisational variables such as organisational citizenship behaviour, leadership trust, and job satisfaction. Distributive

justice relates to cognitive, affective, and behavioural reactions to particular outcomes. When a particular outcome is perceived as unfair, it affects the person's emotions (e.g., experiences anger); cognitions (e.g., cognitively distorts inputs and outcomes of himself/herself or the other); and, ultimately, their behaviour (e.g., withdrawal) (Fernandes & Awamleh, 2006; Greenberg, 1993).

The study of distributive justice furthered the development of procedural justice, the perceived fairness of formal processes, and procedures used to determine outcome decisions (Cohen-Charash & Spector, 2001). Procedural justice concerns how outcomes are allocated. Procedural justice ascertains certain principles specifying and governing the roles of participants within the decision-making processes. A just process is applied consistently to all, free of bias, accurate, representative of relevant stakeholders, correctable, and consistent with ethical norms (Cropanzano et al., 2007). Thus, fair perceptions of procedural justice result in positive job outcomes such as job satisfaction, organisational commitment, and organisational citizenship behaviours. Conversely, procedural injustice reduces cooperation and may result in employees engaging in harmful behaviours (Fernandes & Awamleh, 2006). Furthermore, procedural injustice may result in employees' subsequent reactions that are directed towards the whole organisation rather than towards the outcome (Cropanzano & Folger, 1991; Fernandes & Awamleh, 2006).

The third dimension of organisational justice is interactional justice. This dimension involves the fairness of the treatment that employees receive in the enactment of formal procedures or the explanation of those procedures (Tyler & Bies, 1990). This means that it relates to the social exchange between two participants which may include both the process and procedure of the exchange relationship. Based on the social exchange theory, Colquitt, Conlon, Wesson, Porter and Ng (2001) further expanded interactional justice into informational and interpersonal justice. Informational justice refers to whether one is truthful and provides adequate justification when things go wrong. Interpersonal justice refers to the respect and dignity with which one treats another. When subordinates discuss issues of justice or

fairness, their understanding often hinges on the interpersonal treatment they receive from their managers.

Bies and Moag (1986) identified respect (when employees are treated politely and respectfully), truthfulness (when employees receive realistic and accurate information that is free from deception), justification (providing employees with social account or explanation for actions taken), and propriety of questions (when employees' questions are not considered improper) as attributes of interpersonal justice. Cohen-Charash and Spector (2001) specified that interactional justice is primarily concentrated on the interpersonal side of organisational practices, specifically the interpersonal treatment and communication by management to employees.

Informational justice is thus defined as the "quality of the explanations provided regarding how decisions are made, and the thoroughness of the explanations given" (Colquitt, 2001, p. 392). Interpersonal justice, on the other hand, refers to the "degree of concern, respect, and sensitivity displayed by authority figures over outcomes received" (Colquitt, 2001, p. 398). The experience of injustice is hurtful to individuals and harmful to organisations. Few benefit from unfairness, although many are harmed. Based on the above, this study views justice as an important construct in organisations because the slight perception of injustice can impact job attitudes and behaviour of workers. Thus, perceptions of organisational justice are measured using the Justice and Injustice scale developed by (Colquitt, et. al, 2015). This scale assesses four dimensions of organisational justice, namely distributive justice, procedural justice, interpersonal justice, and informational justice. Previous research demonstrated acceptable alpha levels for this scale (see par. 3.5.2).

2.4 CONCEPTUALISATION OF WORK ALIENATION

Marx's revolutionary study on the impact of the capitalist system on workers gave rise to the term alienation. Alienation at work has been extensively researched by various researchers (Marx, 1932, 1988; Seeman, 1971). According to Marx (1932), alienation develops when employees lose interest in their job and lose control over their

professional wellbeing. Furthermore, work alienation develops from external influences in the work environment that are associated with industrialisation, technological advances, and general transformation of the organisations (Banai & Reisel, 2007).

According to Banai and Reisel (2007), work alienation refers to “a sense of psychological detachment from not only oneself, but also from the social relationships existing within or outside of work environments” (p. 464). As work alienation forms an important part of psychological and sociological research, an understanding of its impact on organisational effectiveness must be examined. The idea is to find solutions to alienation so that the employees’ environments within and outside their organisations are improved (Ceylan & Sulu, 2010). The outcomes of work alienation include but not limited to losing interest in one’s job and putting less effort in job performance and engaging in behaviours that hurt organisational effectiveness (Michaels, Cron, Dubinsky, & Joachimsthaler, 1988).

2.4.1 Dimensions of work alienation

According to Sarros, Tanewski, Winter, Santora, and Densten (2002), work alienation comprises of five dimensions: powerlessness, normlessness, isolation, meaninglessness, and self-estrangement. Sarros et al. (2002) define powerlessness as “a lack of job autonomy in which employees are unable to control their work processes” (p. 286). This definition reflects the assumption employees have about their inability to control or reinforce certain activities or outcomes at work. The lack of control over work activities and outcomes can be associated with the lack of job autonomy.

Seeman (1959) refers to normlessness as “a situation where there is a high expectation that socially unapproved behaviours are required to achieve goals” (p. 787). Ceylan and Sulu (2011) define the term isolation as “being emotionally distant from the organisation and other co-workers and colleagues” (p. 70). Meaninglessness involves employees’ perception that their job is worthless in relation to the strategic

goals of the organisation (Sarros et al., 2002). In other words, meaninglessness exists “when employees feel they contribute little to the overall production process and hence do not see the significance of their role in it” (Temel, Mirzeoglu, & Mirzeoglu, 2013, p. 504). Self-estrangement at work has been associated with job tasks that are narrow in scope and depth, i.e. unable to provide employees with acceptable levels of intrinsic job engagement and fulfilment. A state of meaninglessness at work contributes to an overall feeling of estrangement from the work process. Self-estrangement is a dissociative state involving a cognitive sense of separation between one’s self-image at work and one’s ideal-self, which is experienced as unpleasant, distressful feelings toward one’s work and its environment (Golden & Veiga, 2015). Self-estrangement is a critical dimension in the work-alienation literature, where it tends to be associated with the task conditions of powerlessness and meaninglessness (Sarros et al., 2002). Self-estrangement can occur when the work process is perceived as alien to the individual, and independent of his contributions. Each dimension of work alienation attempts to capture the sense of an employee’s detachment from their job and their intrinsic job needs. However, the concept of work alienation has been recently viewed by most scholars as uni-dimensional, rather than multi-dimensional (Nair & Vohra, 2009; Golden & Veiga, 2015). These researcher argues that Sarros et al. (2002) dimensions of work alienation should be viewed as antecedents or consequences of rather than descriptors of work alienation. This study thus viewed work alienation as a unidimensional concept.

Work alienation may lead to various organisational outcomes that are likely damage organisational effectiveness. Specifically, Valadbigi and Ghobadi (2011) identify the following outcomes of work alienation: low quality of work, poor cooperation, lack of motivation, and organisational commitment. Alienated employees are likely to engage in absenteeism, feeling of purposelessness, disruption of work activities, changes in job designation, more indulgence in immoral activities. In this study, work alienation is examined as an antecedent of CWBs. The Work Alienation Scale developed by Nair and Vohra (2010) is used to measure soldier’s feelings of alienation. Previous research indicated acceptable alphas for this scale (see par. 3.5.3).

2.5 CONCEPTUALISATION OF LEADERSHIP BEHAVIOUR

Leadership behaviour plays a critical role within organisations and it is closely linked to the success of an organisation (Larsson & Vinberg, 2010). Leadership behaviour, according to Rossouw (2014), is an important tool in shaping the organisation's culture, which involves the process of developing the employees to ensure their conduct and behaviour contributes positively towards the organisational objectives. Leaders in the 21st century are faced with an increasing number of responsibilities and the pace of transformation taking place within organisations. As a result, it is important that leaders display observable behaviours that best suits the situation and the people within an organisation. These observable behaviours can contribute towards increasing the success and competence of the organisation. Leadership behaviours correlate positively with the subordinates' perceptions of a leader's effectiveness (Kickul & Neuman, 2000).

Traditionally, the leadership behaviour theory has only included two dimensions, namely relations and task-orientated behaviours (Larsson & Vinberg, 2010). These dimensions relate to different organisational outcomes in different situations, which have been documented by several researchers over the past decades. A third dimension, change-orientation, was introduced in the 1990s as increased change within organisations became evident. To succeed and be effective, leadership behaviour should be unambiguous and visible (Kunzle, Kolbe & Grote, 2010). However, when referring to leadership behaviour as being unambiguous and visible, it can only be limited to the three orientations as documented in the literature.

Leadership is a multidimensional concept, so it is more important to distinguish theoretically between distinct behavioural dimensions, which can be identified within the literature regarding the taxonomies of leadership. One of the "new leadership" theories (Bryman, 1992) has been called the "full-range leadership theory" (FRLT) proposed by Avolio and Bass (1991). The constructs comprising the FRLT denote three typologies of leadership behaviour: transformational, transactional, and non-transactional laissez-faire leadership, which are represented by nine distinct factors.

2.5.1 The theoretical framework of leadership behaviour

Avolio and Bass (1991) argued that existing theories of leadership focused on follower goal and role clarification and the ways leaders rewarded or sanctioned follower behaviour. This transactional leadership was limited to inducing only basic exchanges with followers. They suggested that a paradigm shift was required to understand how leaders influence followers to transcend self-interest for the greater good of their units and organisations to achieve optimal levels of performance. Avolio and Bass (1991) referred to this type of leadership as transformational leadership. Their theory included four transformational and two transactional leadership factors. Later, Bass and Avolio (1994) further expanded the theory based on the results of studies completed between 1985 and 1991. In its current form, the FRLT represents nine single-order factors comprised of five transformational leadership factors, three transactional leadership factors, and one non-transactional laissez-faire leadership described below.

According to Avolio and Bass (1991) transformational leaders are proactive, raise follower awareness for transcendent collective interests, and help followers achieve extraordinary goals. Transformational leadership is theorised to comprise five first-order factors. Idealised influence (attributed) refers to the “socialized charisma of the leader, whether the leader is perceived as being confident and powerful, and whether the leader is viewed as focusing on higher-order ideals and ethics” (Avolio, Bass, & Jung, 1999, p. 452). Idealised influence (behaviour) refers to “charismatic actions of the leader that are centred on values, beliefs, and a sense of mission” (Avolio, et al., 1999, p. 452). Inspirational motivation refers to “the ways leaders energize their followers by viewing the future with optimism, stressing ambitious goals, projecting an idealised vision, and communicating to followers that the vision is achievable” (Avolio, et al., 1999, p. 453). Intellectual stimulation refers to “leader actions that appeal to followers’ sense of logic and analysis by challenging followers to think creatively and find solutions to difficult problems” (Avolio, et al., 1999, p. 453). Individualised consideration refers to ‘leader behaviour that contributes to follower satisfaction by advising, supporting, and paying attention to the individual needs of followers, and thus allowing them to develop and self-actualise” (Avolio, et al., 1999, p. 453).

Transactional leadership is an exchange process based on the fulfilment of contractual obligations and is typically represented as setting objectives and monitoring and controlling outcomes (Avolio & Bass, 1991). Transactional leadership is theorised to comprise three first-order factors. According to Avolio et al. (1999), contingent reward leadership involves leader behaviours that are focused on clarifying role and task requirements and providing followers with material or psychological rewards contingent on the fulfilment of contractual obligations. Management-by-exception active refers to the active vigilance of a leader whose goal is to ensure that standards are met (Avolio, et al., 1999, p. 455). Management-by-exception passive involves leaders who only intervene after noncompliance has occurred or when mistakes have already happened (Avolio, et al., 1999).

Lastly, laissez-faire leadership represents the absence of a transaction of sorts with respect to leadership in which the leader avoids making decisions, abandons responsibility, and does not use their authority. It is considered active to the extent that the leader chooses to avoid acting (Avolio, et al., 1999). This component is generally considered the most passive and ineffective form of leadership. Because leadership is an integral part of any organisation, it is important to have a clear understanding of the causal link between different types of leader behaviours and organisational outcomes. This study investigates the impact of different leader behaviour on CWB. The Multiple Leadership Questionnaire (MLQ)-5X developed by Bass and Avolio (1995) was used to measure different dimensions of leadership behaviour. Previous research established acceptable alpha coefficients for this scale.

2.6 CONCEPTUALISATION OF ORGANISATIONAL ETHICAL CLIMATE

Organisational ethics comprises principles of right and wrong which govern employees' behaviour. These principles are essential to the successful management of counterproductive and unethical behaviours in the workplace (Buckley, Beu, Frink, Howard, Berkson, Mobbs, & Ferris, 2001). Organisational ethics can be defined as "the study of behaviour within an organisational context that is consistent with the principles, norms, and standards of business practices as agreed upon with the community" (Boshoff & Van Zyl, 2011, p. 285).

Organisational ethics is furthermore focussed on shared value systems that guide, channel, shape, and direct employees' behaviour in a productive direction (Buckley et al., 2001). Organisational ethics are deeply concerned with both the moral values and the moral actions of employees (Buckley et al., 2001). Moral values are the basic ideas that are considered desirable or worthwhile for human interaction, while moral actions are the overt expressions and applications of these underlying values. Organisational ethics are called into question when the moral values or the accompanying moral actions of organisational decision-making conflicts with the commonly accepted standards of society (Buckley et al., 2001). These entities, therefore, serve as channelling or shaping mechanisms that encourage appropriate decisions and behaviour at work (Buckley et al., 2001). The rationale for ethics as a good practice in organisations is that the ethical context in the organisation will create an appropriate climate for employees to exhibit ethical behaviours (Buckley et al., 2001).

The term climate refers to the atmosphere in which individuals help, reward, judge, constrain, and perceive each other. It influences the morale and attitude of employees towards their work and environment (Chahal, Dua, Singh & Mahey, 2012). Ethical climates can be seen as subsets of organisational climates consisting of normative values and beliefs which involve moral issues shared by employees (Engelbrecht & Van Aswegen, 2009). Ethical climates can be defined as "the prevailing perceptions of organisational practices and procedures that have ethical content and determine ethical behaviour at work" (Victor & Cullen, 1988, p. 52). The ethical climate of an organisation is the shared set of understandings of what ethically correct behaviour is and how ethical issues should be handled, guiding decision making at all levels in an organisation (Sims 1992; Van Zyl, 2012; Victor & Cullen, 1988). The climate that has been established and reinforced in an organisation makes a big difference in how lower-level employees act when ethical dilemmas are faced (Van Zyl, 2012). The climate consequently sets the tone for decision making at all levels and in all circumstances.

Victor and Cullen (1988) essentially introduced the concept of ethical climate as a way to explain and predict ethical conduct in organisations. An ethical climate is linked to a range of ethical behaviours and possibly even counterproductive behaviours such as absenteeism, turnover, poor performance, and tardiness, which may all be linked to organisational performance. Additionally, an ethical climate involves important consequences for organisations, including the legitimisation of managerial actions, improved trust, consistency of standards and quality of products, greater organisational commitment, and increased effectiveness due to a strengthened organisational culture. Appropriate ethical behaviour during an ethical dilemma will consequently be based on the organisation's ethical climate (Wimbush & Shepard, 1994).

Organisational values and beliefs influence employee decision making and behaviour significantly and are manifested as multiple climates existing within a single organisation (Rossouw, 2014). In general, organisations comprise multiple climate types to address the different facets of organisations. Victor and Cullen (1988) accentuated the notion that organisations have a climate type related to their ethical issues. Most organisations are seen to have a dominant ethical climate type even though different ethical climates exist within and between organisations (Victor & Cullen, 1988).

Research posited that climates of all types exist on two levels: individual and organisational. The psychological level concerns the individual's perception of his/her enclosed climate, while climate on the organisational level involves the aggregated perception of the climate in which the defined group is found. Ethical climates can be analysed on each of these levels (Victor & Cullen, 1988). At the individual level, perception of the ethical climate of the organisation in which the individual works "may influence the types of ethical conflicts considered, the process by which such conflicts are resolved and the characteristics of their resolution" (Victor & Cullen, 1988, p. 55). Field and Abelson (1982) has consequently conceived climate as a key link between the organisation and the individual. an organisation's sub-group (Victor & Cullen, 1988; Wang & Hsieh, 2012).

2.6.1 Dimensions of ethical organisational climate

According to Victor and Cullen (1988), ethical climate comprises of five dimensions: aspects of caring, rules, law and code, independence, and instrumentality. In an ethical climate dominated by the caring dimension, employees would have a sincere interest in the wellbeing of others, both within and outside the organisation, who might be affected by their ethical decisions. This dimension rests on a utilitarian basis, meaning that the policies and practices of the workgroup would foster concern for those affected by employees' decisions. Policies and practices would not only promote this dimension, but most workgroup members would individually conduct themselves in this manner (Victor & Cullen, 1988). An organisation characterised by the 'rules' dimension of an ethical climate would be comprised of workers who adhere strictly to the organisational rules and policies. The deontological foundation for a rules climate requires allegiance to rules and principles. In this case, the rules would serve as a guide for employees' ethical decision making (Victor & Cullen, 1988).

An ethical climate immersed in the law and code dimension would require that employees adhere to the codes and regulations of their profession or government. Workers are guided by their personal moral beliefs in an ethical climate emphasising the independence dimension. According to this dimension of ethical climate, persons would act according to their personal moral beliefs based upon a set of well-considered principles. Individuals would also be self-guided to the extent that others within and outside of the organisation have little or no influence on their ethical decision making (Victor & Cullen, 1988). In an ethical climate based on the instrumental dimension, organisational members are predominantly concerned with their interests, to the exclusion of the interests of others who may be affected (even adversely) by their decisions (Victor & Cullen, 1988).

The different types of corporate ethical climates may advocate that certain climate types may be more prone to particular behaviour problems (Wimbush & Shepard, 1994). Research provides evidence that a substantial relationship exists between employees' attitudes and behaviours and the organisational climate. It has consequently been suggested that an organisational climate may be a significant

factor in shaping the behaviour and attitudes of employees (Cullen, Parboteeah & Victor, 2003). The fundamental justification behind the realm of research on ethical climates seems to be the realisation that perceptions of ethical climates tap essential issues that affect people's reactions to work and their organisations (Martin & Cullen, 2006). As an extension of research on ethical organisational climate, this study undertakes to examine that impact of organisational climate on CWBs. Ethical Climate Questionnaire (ECQ) of Victor and Cullen (1988) which consists of descriptive statements designed to describe the various dimensions of ethical work climate was used to measure this construct. Previous research has demonstrated acceptable alpha levels for this scale (see par. 3.5.5).

2.7 THE RELATIONSHIP BETWEEN CONSTRUCTS

This section of the chapter discusses the relationship between the variables of the study. The relationship between organisational justice and CWB is discussed, followed by the relationship between work alienation and CWB, then the relationship between leadership behaviour and CWB, and lastly the relationship between organisational ethical climate and CWB.

2.7.1 Organisational justice and CWB

Cohen-Charash and Spector (2001) contended that CWBs are reactions to perceived injustice when an employee changes his/her input to restore equity. When employees perceive distributive injustice, they may damage the organisation to make the outcome/input ratio less negative from their perspective. From a procedural justice perspective, perceived injustice leads to negative perceptions of the organisation, and hence, to counterproductive behaviours that harm the organisation (Hershcovis et al., 2007). Individuals who act assertively to restore fairness, frequently engage in retributive behaviour (Crawshaw, Cropanzano, Bell, & Nadisic, 2013). According to these authors, mistreatment and felt injustice lead to moral outrage and to the desire to punish the perpetrators. Thus, employees may respond to unfairness by engaging in CWBs, such as organisational deviance, sabotage, or aggression.

Unfairness may also promote cheating and stealing, and from the wronged individual's point of view, these seemingly anti-social acts are justified as a means to 'even the score' when someone has behaved unfairly (Cropanzano & Moliner, 2013). Martinson, Anderson, Crain, and de Vries (2006) argue that forms of organisational justice are central to predicting CWBs. When people regard the distribution of resources within an organisation - and the decision process underlying that distribution - as fair, their confidence in the organisation is likely to be strengthened. However, when they believe either the distribution or the procedures for distribution are unfair, they may take action to compensate for the perceived unfairness.

Martinson et al. (2006) also contended that perceptions of injustice may threaten the individual's feelings of identification or standing within a group, a threat that may prompt compensatory behaviours, such as CWBs, to protect or enhance his/her group membership or reputation. Based on the empirical arguments outlined above, it is argued here that organisational justice may serve as a key motivation for CWBs in organisations. If employees believe that they cannot change the system, one alternative open to them is to inflict punishment on the person they hold most responsible for violating their sense of justice (Aquino, Lewis, & Bradfield, 1999). This study is thus based on the hypothesis that if soldiers believe that unfair procedures, conduct, or decisions exist in their organisation (demonstrated by each or all of the fairness components mentioned above), they will respond with CWBs to compensate for these injustices.

2.7.2 Work alienation and CWB

Although Marx did not write extensively about workplace deviance, more contemporary theorists have found that the conceptions of alienation applies to explaining CWBs in modern society (Ceylan & Sulu, 2010). Alienated individuals can find an outlet for creativity outside of their jobs (e.g., hobbies), however, they may also engage in deviant forms of creativity on the margins of, or within their job (Ceylan & Sulu, 2010). Studies have also found that alienation at work is positively related to aggression and resistance toward the organisation (Banai & Reisel, 2007), and alcohol dependence (Golden & Veiga, 2015). Moreover, Banai and Reisel (2007) studied the

effects of work alienation on flight attendants and found that an account of resistance to emotional labour of flight attendants shows that alienated workers are reflexive and possess agency to challenge their alienation in deviant ways. It is thus hypothesised that that soldiers' feelings of alienation will more likely than not lead to CWB.

2.7.3 Leadership behaviour and CWB

Despite the repeated findings that leadership exerts important effects on subordinates, only a few studies have examined characteristics of the leader or leader subordinate relationship as predictors of CWB. One study looking at this relationship examined the effects of social exchange theory of CWBs on employee outcomes (Townsend, Philips, & Elkins, 2000). The theoretical basis of social exchange relationship is that organisational relationships and work roles are negotiated over time through many interactions in which both supervisor and subordinate determine the type and quality of the relationship (Bauer & Green, 1996). When leadership behaviour is perceived to be effective, the social exchange relationships are said to have many positive outcomes including citizenship behaviours, subordinate satisfaction, and subordinate promotions (Bauer & Green, 1996). Conversely, Townsend et al. (2000) examined outcomes of poor leadership behaviours. They found that supervisors reported a higher incidence of CWB (which they termed retaliatory behaviour) against the organisation among subordinates in poor exchange relationships. This research suggests that leaders do have some impact on subordinate readiness to commit retaliatory acts that fit the definition of CWB.

Leaders tend to provide moral guidance to their followers and steer them away from displaying deviant workplace behaviours. Previous studies have implied that appropriate leadership behaviour significantly relates to the employee's productive and just behaviour. According to Organ, Podsakoff, and MacKenzie (2006), appropriate leadership behaviour promotes cooperation among the subordinates and motivates them to work together toward a superordinate goal even if that means sacrificing some of their personal goals and aspirations.

2.7.4 Organisational ethical climate and CWB

Ethical and non-deviant workplace behaviour is becoming a prevalent problem in business as deviant workplace behaviour becomes an important concern. Wimbush and Shepard (1994) suggest that the ethical climate of an organisation could be used to predict not only unethical behaviour, but counterproductive behaviour as well. Peterson (2002) conducted a study to determine whether deviant workplace behaviour could be predicted from the ethical climate of an organisation. Once again, the ECQ was used to determine the ethical climate of organisations of the respondents. To determine workplace deviance, a survey was conducted, similar to that used by Robinson and Bennett (1995). The results that Peterson (2002) obtained indicated several correlations between the type of deviance and the climate identified in the organisation.

The clearest relationship was between political deviance and a caring climate. The implication is that when employees feel that the organisation is concerned with the welfare of its workers, they are less likely to experience, or engage in, CWBs (Peterson, 2002). A second classification which provided consistent results was the category of property deviance. This form of deviant behaviour was related to the climates of rules and professionalism. This would indicate that organisations that do not emphasise the strict adherence to company rules and laws are more vulnerable to property deviance. The significant predictors of production deviance were the instrumental, independence, and caring climates. Although Peterson's (2000) study looked at the influence of each dimension of ethical climate on the type of CWB, which is different from the current study's intention, his study provides basis for the hypothesised relationship in the current study.

Vardi's (2001) empirical study conducted among 150 employees from various departments of a metal product company in Northern Israel found a strong negative relationship between organisational ethical climate and deviant behaviour. Hence, a good perception of the social exchange relationship contributes to a good ethical work climate. Based on this proposition, this study suggests that that the more individual

perceives good perception of ethical work climate, the less likely that they will engage in CWB.

2.8 A CONCEPTUAL FRAMEWORK OF FACTORS THAT INFLUENCE COUNTERPRODUCTIVE WORK BEHAVIOURS

According to the literature, certain factors lead members of the organisation to engage in deviant work behaviours. Figure 2.3 sets out the conceptualised model of factors that influence the CWB of members of the 5 SAI Bn. Factors such as organisational justice, work alienation, leadership behaviour, and organisational climate have a potential influence on CWBs of members of the 5 SAI Bn.

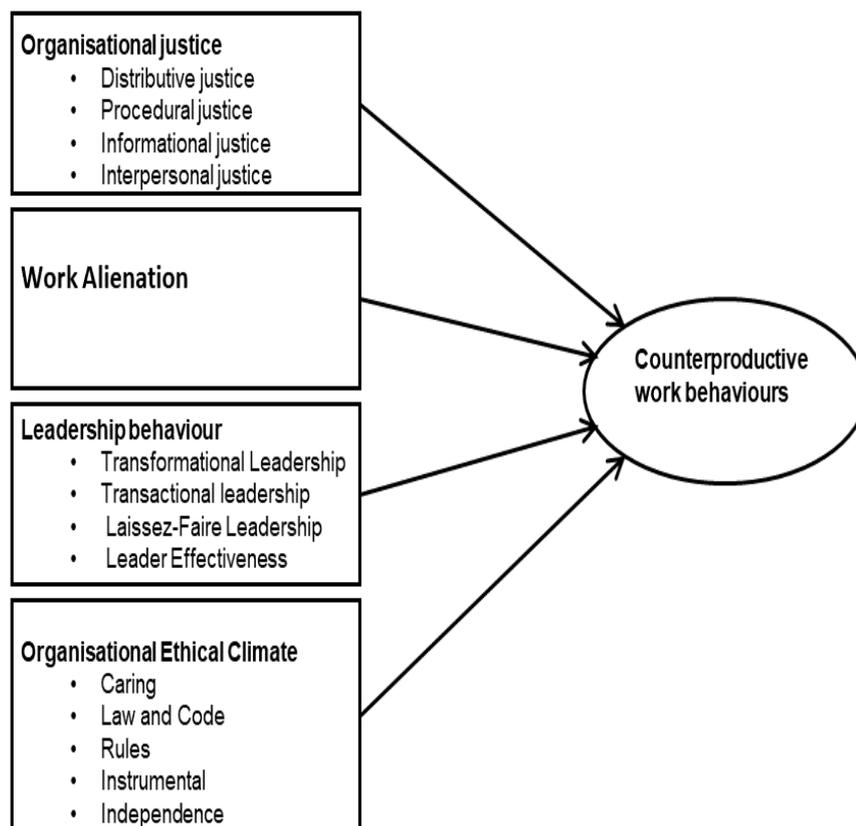


Figure 2.3 A proposed structural model of factors that influence CWB

2.9 CHAPTER SUMMARY

This chapter outlined the theoretical and empirical arguments of CWB, organisational justice, work alienation, leadership behaviour, and organisational ethical climate. The chapter included a thorough review of the definitions of each of the constructs which culminated in the relationships between these constructs. These relationships serve as the basis for the postulated structural model.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter illustrated that CWB is affected by several factors. The most significant antecedents of CWB for this study are organisational justice, work alienation, leadership behaviour, and organisational ethical climate. An in-depth literature review outlined the direct and indirect relationship between these constructs and CWB. The theoretical argument in Chapter 2 led to a proposed conceptual model presenting the relationship between the latent variables. This is depicted in Figure 2.4. This conceptual model describes the organisational factors that motivate employees to engage in CWB to provide answers to the research-initiating question. Extensive research has been conducted in terms of understanding these factors; however, limited research was found regarding the relationship between these factors and the influence on CWB within the South African military context.

This chapter presents the empirical phase of the study. The first section of this chapter sets out the research hypotheses, the research design, the method of sampling, the measuring instruments, and the statistical analysis that will be utilised to test the proposed model and hypothesised relationships. Altogether, the research design and methodologies selected are aimed at achieving the following empirical objectives:

- To develop and assess a structural model, based on the current literature, which explains the influence of situational factors on CWB
- To evaluate the significance of the hypothesised paths in the model.
- To make recommendations for further research

Before engaging in a discussion of the factors above, it is important to create an understanding of research and why it is done. Research is a scientific method used to make sense of things and to provide information and answers to raised questions

(Terre Blanche, Durrheim & Painter, 2006). Research is a cumulative process that consists of five stages (i.e. formulating a testable hypothesis, designing a study, collecting data, analysing data, and drawing conclusions). The research must follow a research design in order to provide a detailed outline or blueprint of the research process, which is used to direct data collection, test hypotheses, control variance and provide answers to the research initiating question (Terre Blanche et al., 2006). It is important to understand that no research design is better than the other. The suitability of the research design followed is mostly determined by the nature, context, and purpose of the research study. Research can either be qualitative, quantitative, or a combination of both (Gravetter & Wallnau, 2011). Qualitative research is a “non-numerical examination and interpretation of observations for the purpose of discovering underlying meanings and patterns of relationships” (Babbie, 2010, p. 394). Quantitative research is “the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect” (Babbie, 2010, p. 422).

This study follows a quantitative research approach because it focuses on the analysis of several variables and makes provision for the use of statistical analysis to determine the significance of the results (Rosnow & Rosenthal, 2008). Given the lack of research which investigates the relationship between organisational justice, work alienation, leadership behaviour and organisational ethical climate and CWB in the SANDF, this study applied an exploratory approach to generate specific research questions that could be addressed in future studies. Babbie and Mouton (2012) indicate that an exploratory study is useful and appropriate when addressing phenomena covered by little existing research.

3.2 HYPHOTHESES

Considering the serious repercussions of CWB within the military, research investigating the factors that influence these behaviours and how to prevent and manage such behaviours is essential. The review of literature in Chapter 2 provided a theoretical framework of understanding CWB and its antecedents upon which empirical relationships between all the constructs of the study was explained. One of

the aims of the study was to investigate the empirical relationship between the variables. To satisfy the research objectives, the following hypotheses were formulated to investigate the hypothesised relationships between the subscales of dependent and independent variables:

H1: There is a significant relationship between perceived justice and CWB.

H2: There is a significant relationship between work alienation and CWB.

H3: There is a significant relationship between leadership behaviour and CWB.

H4: There is a significant relationship between organisational ethical climate and CWB.

3.3 RESEARCH DESIGN

Research design is the framework to be followed in addressing a research problem (Mouton, 1996). In other words, it is a detailed explanation of how the research will be carried out; from data collection to hypotheses testing and answer formulation. A non-experimental research design was used to explore the relationships between the variables. Non-experimental research entails observing the relationships between variables without controlling or manipulating them in any way (Kerlinger & Lee, 2000). In this study, an *ex post facto* correlation design was used to determine the causal relationships between organisational justice, work alienation, leadership behaviour and organisational ethical climate as well as their influence on CWB. An *ex post facto* study observes an empirical relationship between variables and thereafter suggests a reason for that relationship (Babbie, 2010). Although there are limitations in using the *ex post facto* design, such as its incapacity to exert influence over independent variables, inability to assign variables randomly, and the risk of incorrect interpretation, the advantage is that the researcher does not have control over the variables of interest.

Babbie and Mouton (2012) add that the *ex post facto* allows the researcher to examine the relationship between independent and dependent variables. According to Rosnow and Rosenthal (2008), the dependent variable is the factor the researcher observes

and measures to determine how it is affected by the independent variable. The independent variable is the predictor variable because it determines an outcome variable (Field, 2009; Weiten, 2013). In this study, the dependent variable is CWB, whereas the independent variables are organisational justice, work alienation, leadership behaviour, and organisational ethical climate. These variables are considered to be independent and they have been selected due to the interest that the researcher has in determining the effect that these variables have on the dependent variable.

3.4 SAMPLING DESIGN

According to Durrheim (2006), sampling design reflects the researcher's plan of selecting a representative sample from a given population and involves decisions about which people, settings, events, behaviours, and/or social processes to observe. It is thus essential to define the population and sample used in this study. Field (2009) defines population as "the total number of research subjects who share the same characteristics and for which research conclusions will be drawn" (p. 136). In this case, the population is uniformed members of the SANDF. However, due to the practical difficulty of investigating the whole population, the most feasible approach used was to investigate a representative sample. Thus, the sample is uniformed members of 5 SAI Bn.

A convenience sampling method was used to collect data from participants. This sampling method allowed easy access to the participants because most of the 5 SAI Bn members are deployed on operational tasks and some on training and could not be reached at the same time. Thus, participants were selected for inclusion in the sample because of ease of access. The advantages of the convenient sampling method include the availability and willingness to respond to the questionnaires of the sample. Convenient sampling method is an easier, less expensive, and a more timely technique (Gravetter & Forzano, 2012). The sample consists of all uniformed members from different rank groups at 5 SAI Bn. Although this sampling method has its disadvantages, such as bias, its advantages outweigh the disadvantages.

Numerous scholars (De Vaus, 1996; Bryman & Bell, 2003) believe that a large sample size will enable the researcher to draw reliable inferences from the data that was collected. In this regard, a large sample size would decrease bias and meet the criteria as required by the analytical methods employed within the research. However, Bryman and Cramer (1998) argue that the size of the population and that of the sample should be related. In other words, the larger the population, the smaller the sampling ratio can be and vice versa.

Nevertheless, the literature provides general guidelines about a suitable sample size whilst performing Structural Equation Modelling (SEM). Hair, Anderson, Tatham, and Black (1998) believe that a sample size of less than 100 is rather small. Further to this, they suggest that a sample between 100 and 200 is medium-sized and a sample over 200 is regarded as a large sample. Garson (2009), however, believes that a sample size must exceed 100. Accordingly, most researchers who use SEM do not settle for a sample size that is smaller than 100 (El-Gohary, 2010) as this is generally regarded as a practically-acceptable size in this regard.

The application of Partial Least Squares (PLS) as opposed to Linear Structural Relations (LISREL) is recommended for small samples (Haenlein & Kaplan, 2004). The sample of the current study consisted of 261 participants with a response rate of 78%. The sample size thus dictated the data analysis technique and therefore the researcher decided to apply PLS in the current research study.

3.5 MEASURING INSTRUMENTS

The research hypothesis as presented (see par. 3.2) must be operationalised to measure the effect of the independent variables on the dependent variable. Thus, to obtain the empirical evidence that the relationships postulated in the proposed model exists, self-report measures were used to collect data. Each variable was measured by an instrument that was designed to measure that specific variable. Although this study used existing instruments which have been proven to be psychometrically

sound, thorough research on the psychometric properties of these instruments was conducted to justify their selection.

To measure CWB a Workplace Deviance Scale (WDS) developed by Bennett and Robinson (2000) was used. Organisational justice was measured by the Justice and Injustice scale developed by Colquitt, Long, Rodell and Halvorsen-Ganepola (2015). To measure work alienation, an Alienation-Involvement scale developed by Lefkowitz, Somers and Weinberg (1984) was utilised. Leadership behaviour was measured using the MLQ Form 5x – Short instrument of (Bass & Avolio, 1995). Organisational ethical climate will be measured using the original Ethical Climate Questionnaire (ECQ) of Victor and Cullen (1988).

3.5.1 Workplace Deviance Scale (WDS)

The Workplace Deviance Scale (WDS) developed by Bennett and Robinson (2000) will be used to measure the extent to which employees engage in deviant or counterproductive behaviours. The WDS was chosen because it is deemed appropriate when aiming to examine CWB as a general phenomenon (Ones & Dilchert, 2013). Using this instrument to measure CWB thus enabled the researcher to gain a broad understanding of the underlying construct and how it relates to its possible antecedents examined in this study (Bowling & Gruys, 2010). The scale demonstrated acceptable internal consistency with Cronbach's Alphas of .81 for the Organisational Deviance scale and .78 for the Interpersonal Deviance scale (Bennett & Robinson, 2000). In this study, responses on these items were summed to form a total deviance score. These items were measured by means of a 6-point Likert type scale, ranging from 1 (never) to 6 (always). Given that the WDS comprise two distinct but related factors, the dimensional score for each subscale was used to serve as the indicator variables of the CWB latent variable.

3.5.2 Justice and Injustice Scale

Organisational justice was measured using a 40-item Justice and justice scale developed by Colquitt et al. (2015) to assess four dimensions of organisational justice,

namely, distributive justice (eight items), procedural injustice (fourteen items), interpersonal injustice (eight items), and informational injustice (ten items). Distributive justice assesses the fairness of different work outcomes, including pay level, work schedule, workload, and job responsibilities. All these scales consist of a number of negatively worded items which indicate perceptions of injustice and positively worded items which indicate positive perceptions of organisational justice. The measure effectively operationalises the conceptualisation of organisational justice as a multi-dimensional construct, as outlined in Chapter 2 (see par. 2.3.1). By separating the dimensions, the scale enables the researcher to establish whether they differentially influence CWB. This scale reported reliabilities above .70 for all four dimensions in previous research (Whelpley & McDaniel, 2016).

3.5.3 Alienation-Involvement scale

A review of the literature on work alienation indicated that there is much variability in how alienation has been operationalised and measured. While some authors (Sarros et al., 2002) advocate for a multi-dimensional measure, Nair and Vohra (2009) concluded that work alienation is a uni-dimensional construct. Thus to measure work alienation, an eight-item Work Alienation Scale developed by (Nair & Vohra, 2009) was used. Four of the eight items are negatively worded. Previous research indicated an acceptable Cronbach alpha of .95 for this scale. The items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.5.4 Multifactor Leadership Questionnaire (MLQ)

The MLQ is a self-report questionnaire consisting of 45 items relating to the frequency with which the participant displays a range of leader behaviours. The original MLQ-5X that was developed by Bass and Avolio (1995) consists of 45-items. All the items of the scale were positively worded. The items measure the frequency with which the participants perceived their supervisors to display a range of leadership behaviours and are measured on a six-point Likert-type scale (1 = Almost Never, 6 = Almost Always).

Five sub-scales assessed transformational leadership behaviour (idealised attributes, idealised behaviours, inspirational motivation, intellectual stimulation, and individual consideration), while three assessed transactional leadership behaviour (contingent rewards, management by exception (active), and laissez faire leadership is assessed using management by exception (passive) and laissez fair. Evidence from Antonakis, Avoli and Sivasubramaniam (2003) suggest that the MLQ-5X scale to be a reliable and valid measure of leadership behaviours, as the reliability coefficients ranges between .87 to .90.

3.5.5 Ethical Climate Questionnaire (ECQ)

Organisational ethical climate was measured using the original Ethical Climate Questionnaire (ECQ) of Victor and Cullen (1988), which consists of descriptive statements designed to describe the various dimensions of ethical work climate. The ECQ consist of 26 items respectively from the five ethical climate dimensions, namely caring, law and code, rules, instrumental, and the independence dimensions. The ECQ items was administered on a 6-point scale with responses ranging from 'disagree strongly' to 'agree strongly.' Respondents were asked to evaluate the extent to which each item was true of their unit. The instruments placed respondents in the role of observers reporting on and evaluating the perceived ethical climates, rather than focusing on whether respondents perceive the ethical climates as being good or bad (Victor & Cullen, 1988; Cullen, Victor & Bronson, 1993). Previous research has found the Cronbach's Alpha's of the different dimensions to be ranging from .85 to .92 (Cullen et. al., 1993).

3.6 DATA COLLECTION

The data for this research study was gathered using a self-report questionnaire survey. As pointed out by Mitchell and Jolley (2001), self-report questionnaires are often viewed as having the advantage of being easily distributed to a large number of people often at low cost. Furthermore, surveys are able to collect a lot of information on a large sample in a relatively short period. Before commencing with data collection, ethics clearance was obtained from the Stellenbosch University ethics committee. Furthermore, permission to conduct the study at 5 SAI Bn was requested and granted

by the Officer Commanding 5 SAI Bn, the General Officer Commanding SA Infantry Formation as well as Chief Defence Intelligence.

Participation in the study was entirely voluntary. The participants were also advised that they could leave the study at any time. It is also an ethical requirement that the researcher obtains informed consent from all the participants. Therefore, the participants were informed about; the objectives and purpose of the research; what participation in the research would involve; how the research results would be disseminated and used; who the researcher was and her affiliation; how further inquiries could be made; their rights as participants and; where they could gain more information about their research rights. After consenting to partake in the study, questionnaires were distributed for completion, which took a maximum of 60 minutes. Once all the data has been collected from the surveys (questionnaires), the information had to be captured on Microsoft Excel and imported on to a statistical program called SPSS for further analysis. The following section presents the methods of data analysis that were employed.

3.7 DATA ANALYSIS

Various statistical techniques were utilised to analyse the gathered data and to test the hypotheses. These techniques included descriptive statistics, item analysis, and partial least squares structural equation modelling (PLS-SEM). The following discussion motivates the selection and application of this specific data analysis technique and explains the preliminary statistical analyses procedures required.

3.7.1 Preliminary statistical analyses procedures

Before performing PLS-SEM, which involves the testing of the measurement (outer) and structural (inner) models, certain preceding statistical analyses are required. These include the treatment of missing values and item analysis, which will provide an indication of the psychometric properties of the measurement tools used during the current research study.

3.7.2 Missing values

Missing values is a common occurrence during the collection of data. This could be due to non-response or employee absenteeism and can influence the efficiency of the indicator variables if it is not dealt with before the analysis starts (Mels, 2003). Missing values could prove problematic in that it may compromise the sample's representativeness of the intended population. One should therefore address this issue in fitting ways prior to the commencement of any statistical analyses (Field, 2009). There are various methods in which missing values can be rectified. These methods include "list-wise deletion, pair-wise deletion, imputation by matching and multiple imputation" (Mels, 2003, p. 46). To resolve the issue of missing values in the current research study, the researcher decided to apply the method of missing data imputation for those cases where there were limited omitted responses. Thereafter, the researcher applied the method of case-wise deletion.

3.7.3 Item analysis

A measurement instrument usually comprises of items that record the behaviour, which underlies the construct and consequently make the behaviour more observable. These measures contain items which aim to elicit a response from the respondent that, with specific reference to the behavioural sciences, determines the perception of the behavioural manifestation in the underlying latent variable (Kerlinger & Lee, 2000). Item analysis is a technique which can assist the researcher to determine whether the items consistently represent the latent variable and if the item explains a significant proportion of the variance in the latent variable (Field, 2009). The inclusion of certain items in a scale may affect the overall reliability of that scale and thus item analysis was performed to evaluate the psychometric properties of the scale.

Classical measurement theory item analysis was performed on the items of each subscale and the following statistical criteria were used to identify poor items: A Cronbach's Alpha of $>.7$; corrected item-total correlations $>.3$; squared multiple correlations $>.3$; extreme means or small standard deviations; and a noticeable increase in alpha, in comparison to the relevant scale's observed Cronbach's Alpha, if an item is deleted (Field, 2009). In the case where items negatively influenced the

reliability of a construct, the researcher removed these poor items, but discussed these implications under the limitations of the current study.

3.7.4 Partial least square analysis (PLS-SEM)

PLS-SEM path modelling is often the preferred statistical analysis technique for exploratory research due to its strong exploration, as well as prediction, capability. As mentioned, this technique is used for the development of theories by testing and validating exploratory models and provides explanations for endogenous constructs which makes it ideal for prediction-oriented research (Henseler, Ringle, & Sinkovics, 2009). The PLS-SEM path model comprise of two layers: Firstly, an inner layer which demonstrates the relations between the latent variables; and Secondly, an outer layer which demonstrates the relation between the latent variables and the manifest variables (Hair et al., 1998). The emphasis of PLS-SEM is more on prediction as opposed to explanation and is thus considered ideal for studies that seek to identify the antecedents of a given variable.

PLS-SEM, which is an ordinary least squares regression-based technique, utilises the applicable data set to estimate path relationships by means of maximising the variance explained in the endogenous variables and minimising the error terms, or also referred to as the residual variance (Hair, Ringle, & Sarstedt, 2011). Based on the aforementioned approach, PLS-SEM is regarded as a more lenient method to determine the prediction of the variables. Its accuracy pertaining to parameter estimation enables the researcher to determine a statistically significant relationship between two latent variables which is in reality also significant in the population (Hair et al., 2011).

Non-parametric bootstrapping is a procedure that is used during PLS-SEM hypotheses testing when it is impossible to make parametric inferences or when the calculation of standard errors that entail complicated formulas is required. A bootstrap sample is developed by means of repetitive random sampling with replacement from the initial sample as to acquire the mean value and the standard error for each path

model coefficient. If a bootstrapping confidence interval of an estimated path coefficient excludes zero, the null hypothesis will be rejected - this is indicative of a significant relationship between the hypothesised variables (Hair et al., 2011).

The advantage of PLS-SEM algorithm is that it calculates the construct scores as precise linear combinations of related observed manifest/indicator variables and thus utilises all the variance in these indicators to explain the endogenous variables. On the other hand, researchers warn against PLS-SEM bias which tends to derive from the fact that latent variables are aggregates of observed manifest variables. It is considered normal for indicators to have measurement error, but when the measurement error is detected in the latent variables (as with PLS-SEM) it may lead to bias in the model estimates (Hair et al., 2014). Consequently, the true path model relationships tend to be underestimated whereas the measurement model's parameters are inclined to be overestimated.

However, Hair et al. (2014) believe that such bias only tends to affect estimates in research studies with small sample sizes and a high level of model complexity. Accordingly, one can deduce that PLS-SEM bias has little influence when the sample size is large and the number of indicators per latent variable is increased as to reflect the true values of latent variables (Hair et al., 2011). Irrespective of the PLS-SEM method bias, it is still widely regarded a useful and effective technique that can be applied to a wide spectrum of research studies – specifically those with smaller sample sizes (Henseler et. al, 2009).

In general, Henseler et al. (2009) argue that researchers prefer to use PLS-SEM for some or all of the following reasons:

- It is ideal for explanatory research or if the research study is an extension of an existing structural theory.
- PLS-SEM provides latent variable scores which can be measured by one or several indicators or manifest variables.

- This technique can estimate extremely complex models with numerous latent and manifest variables.
- PLS-SEM can be applied to small samples and can thus supply estimates of parameters of very small datasets.
- PLS-SEM path modelling makes less rigorous assumptions about the distribution of variables and error terms.
- It can test reflective as well as formative measurement models.

The nature of the current research study, exploring the antecedents of CWB, has set the stage for the utilisation of PLS-SEM. The exploratory and predictive qualities of PLS- SEM thus motivated the application thereof. Moreover, the smaller sample size and complex measurement model, with a fairly large number of latent and manifest variables, further reinforced the researcher's choice in this regard.

3.8 CHAPTER SUMMARY

This chapter presented a detailed overview of the methodology used to ultimately answer the research-initiating question. An overview of the research design and method, sampling method, and the measuring instruments and statistical techniques were provided. Chapter 4 presents the research findings derived from the statistical analyses and the interpretation of these findings.

CHAPTER 4

RESULTS

4.1 INTRODUCTION

Chapter 2 of this study provided the theoretical foundation for identifying the factors that influence CWB. Empirical objectives were set to provide answers to the research problem. This chapter presents the statistical results of the various analyses that were performed and discussed in Chapter 3. Firstly, an item analysis was executed to determine the psychometric integrity of the indicator variables meant to represent the various latent dimensions, inferential statistics, and partial least square results are presented.

4.2 RELIABILITY ANALYSIS

Item analysis was conducted to evaluate the internal consistency amongst the items of the different scales used to measure the latent variables. Item analysis may be conducted for several reasons. First, item analysis indicates the reliability of the indicators of each latent variable. Secondly, item analysis allows screening items before including them in composite item parcels that represent the latent variables. Thirdly, item analysis makes it possible to investigate the homogeneity of the subscales. Item analysis also allows identifying poor items that do not contribute to the internal consistency of the measure. Poor items can be identified by looking at the Cronbach's Alpha to see if items are deleted, inter-item correlation, and squared multiple correlation. The closer to 1 the alpha is, the higher the inter-correlation. The Cronbach's Alpha coefficient extracted from the results indicates the reliability of the scale.

According to numerous researchers, Cronbach's Alpha coefficient should preferably exceed the value of .70 to indicate a reliable item (Kerlinger & Lee, 2000). However, Nunnally (1978) stated that, "what a satisfactory level of reliability is depends on how a measure is being used" (p. 56). For this reason, some researchers have indicated that a Cronbach's Alpha of .60 is also acceptable (Hair et al., 2014). Furthermore, (M. Kidd, personal communication, January 25th, 2020) adds that an alpha value of .60

would also be accepted. In this study, a Cronbach's Alpha coefficient of .60 or higher was regarded as satisfactory. The Corrected Item-Total Correlation was also examined, which indicates the degree to which each item correlates with the total score. Values lower than .20 may indicate variance in the items (Pallant, 2007).

Table 4.1

Summarised reliability analysis of subscales

Latent Variable	Subscale	Number of Items	Mean	SD	α	Inter-Item Correlation
CWB		28	93.48	15.17	.79	.12
Leadership Behaviour	Transformational Leadership	20	62.28	9.12	.64	.09
	Transactional Leadership	7	24.09	5.77	.79	.36
	Laissez fair Leadership	7	19.13	4.42	.49	.13
	Leadership effectiveness	7	28.68	7.04	.77	.29
	Organisational Ethical Leadership	7	24.82	6.84	.89	.56
	Law and Code	4	14.01	3.19	.48	.19
	Rules	4	11.73	3.43	.62	.32
	Instrumental	7	20.28	4.97	.62	.20
	Independence	4	11.36	3.44	.61	.29

Based on the values in Table 4.1, not all scales and subscales have Cronbach's Alphas equal to or higher than the .7 reliability limit. Laissez-fair leadership scale, a subscale of the leadership behaviour scale, achieved questionable (.49) reliability.

Moreover, the Law and Code of the Ethical Organisational Climate fell within the unacceptable range (.48). The remainder of the scales and subscales showed internal reliability as the Cronbach's Alphas ranged from .6 to .89.

The inter-item correlations of the various scales and subscales indicated that the item correlations ranged between (.09 to .56). It is evident that only a few of the items consistently measured the same construct, as most of the inter-item correlations were very low (.09 to .29). The CWB scale (.12), a subscale of leadership behaviour scales, transformational leadership (.09), laissez-faire leadership (.13) and leadership effectiveness (.29), and law and code (.19). Instrumental (.20) and independence (.29) of the Ethical Organisational Climate scale did not meet the inter-item correlation reliability criteria. In terms of the evidence presented above, the subscales with questionable inter-item correlation were flagged for further investigation. A discussion of the subsequent analyses follows below.

CWB was measured with 28 items and obtained the reliability coefficient Cronbach's Alpha of .79, which is acceptable based on George and Mallery's (2003). Overall CWB was computed as the unit average of organisational deviance scale and interpersonal deviance scale scores. Responses on these items were summed to form a total CWB score. Although the results suggested that the Cronbach's Alpha of the CWB scale will improve to .80 upon the removal of a single item the scale, the researcher retained this item because the Cronbach's Alpha of .79 is good and acceptable in terms of reliability. The average inter-item correlation for this scale is lower (.12) than the acceptable limit, thus the researcher considered further assessment upon the evaluation of the measurement model.

The results of perceived organisational justice scales and work alienation revealed alarming alpha values which were .00. Despite attempts to delete items in order to improve alpha level, these scales demonstrated extremely problematic Cronbach alpha values. The next step was to evaluate the average inter-item correlation of all the scales and sub-scales of these constructs. None of the scales had close to acceptable levels of inter-item correlation. Based on this reason, the researcher opted

to exclude these constructs from further analysis. This is because including these scales with problematic reliability scores would negatively affect the overall measurement model (M. Kidd, personal communication, January 25th, 2020). Furthermore, the statistical procedure of conducting a factor analysis could not be performed as the results indicate that there may be a possible problem with how the participants responded to the questions. This is noted as a limitation of the study and discussed in detail in Chapter 5 (see par. 5.4).

Leadership behaviour was measured using subscales that measure the respondent's perceptions of their leader's behaviour. This scale achieved a Cronbach's Alpha of .64, which is considered an acceptable reliability measure according to George and Mallery (2003). Moreover, it appears that the Cronbach's Alpha of this scale will not improve upon the removal of any of the items. Based on Cohen's (1988) reliability criteria, the average inter-item correlation of .09 will be rated as problematic, which indicates that the items did not consistently measure the same construct. The current researcher provisionally decided to retain this scale as the overall reliability statistics seemed satisfactory. However, this was further assessed upon the evaluation of the measurement model.

To measure transactional leadership, 7 items were used in this study. This scale achieved a Cronbach's Alpha of .79 which is considered an acceptable reliability measure according to George and Mallery (2003). Although it appears that the Cronbach's Alpha of this scale will improve by .85 upon the removal of one of the items, the researcher decided to retain this item as the reliability co-efficient of .79 is still acceptable. Furthermore, the average inter-item correlation of .36 was obtained and indicate a medium-strength inter-item correlation thus supporting the overall reliability of this scale.

Laissez-faire leadership was measured using 7 items and achieved a Cronbach's Alpha of .49. The results suggested that the Cronbach's Alpha of this scale will improve to .60 upon the removal of a single item of this scale. However, the researcher noted this improvement and decided to retain this item because the improvement is not high

enough to justify the removal. The average inter-item correlation for this scale is lower (.16) than the acceptable limit, thus the researcher considered further assessment upon the evaluation of the measurement model.

The five dimensions of the Ethical Organisational Climate (caring, law and code, rules, instrumental and independence) were measured with 26 items. Four of the subscales obtained Cronbach's Alphas of above .60, which is considered as acceptable according to George and Mallery (2003). On the other hand, law and code subscale obtained a below the limit Cronbach's Alpha of .48. The average inter-item correlation of all the five scales ranged from .19 to .56. Further analysis of each subscale is explained below.

The Caring subscale of the Ethical Organisational Climate scale adhered to George and Mallery's (2003) reliability criteria with Cronbach's Alphas of .89. Although the results suggest that the removal of a single item increases the alpha co-efficient by .90, the researcher decided to retain this item as the Cronbach's Alpha of .89 is considered as good. Moreover, the average inter-item correlation was good with a value of .56 which is within the acceptable limits.

The law and code dimension of the Ethical Organisational Climate scale obtained a reliability alpha of .48, which is below the recommended reliability criteria. The results suggest that removing one item (ECQ11) significantly increases the Cronbach's Alpha by .71. The researcher decided to remove this item to increase the alpha level. Furthermore, the average inter-item correlation of .56 was obtained and indicates a strong inter-item correlation, thus supporting the overall reliability of this scale.

The Rules subscales of the Ethical Organisational Climate scale adhered to George and Mallery's (2003) reliability criteria with Cronbach's Alphas of .62. Although the results suggest that the removal of a single item increases the alpha co-efficient by .79, the researcher decided to retain this item as the Cronbach's Alpha of .62 is considered as good anyway. Moreover, the average inter-item correlation was good

with a value of .32, which is within the acceptable limits.

To measure the Instrumental dimension of Ethical Organisational Climate scale, 7 items were used. This scale achieved a Cronbach's Alpha of .64, which is considered an acceptable reliability measure according to George and Mallery (2003). Although it appears that the Cronbach's Alpha of this scale will improve by .73 upon the removal of one of the items, the researcher decided to retain this item as the reliability coefficient of .64 is still acceptable. Furthermore, the average inter-item correlation of .20 was obtained and indicate a low strength inter-item correlation thus the researcher considered further assessment upon the evaluation of the measurement model.

To measure Independence dimension of Ethical Organisational Climate scale, 7 items were used in this study. This scale achieved a Cronbach's Alpha of .61, which is considered an acceptable reliability measure according to George and Mallery (2003). Although it appears that the Cronbach's Alpha of this scale will improve by .79 upon the removal of one of the items, the researcher decided to retain this item as the reliability co-efficient of .64 is still acceptable. Furthermore, the average inter-item correlation of .29 was obtained and indicate a low strength inter-item correlation thus the researcher considered further assessment upon the evaluation of the measurement model.

4.3 PARTIAL LEAST SQUARE (PLS) ANALYSIS

The PLS-SEM comprises of two steps. According to Hair Jr, Hult, Ringle, and Sarstedt, (2017) the first step deals with evaluating the measurement model (outer model) which looks at the quality (reliability and validity) of the instruments, and second step, evaluates the structural model (inner model), which refers to the evaluation of the structural components of the model and the matching hypotheses. The researcher followed these steps by firstly establishing the reliability of the latent variables after which, the researcher evaluated path coefficients to determine the significance of the hypothesised relationships between variables (Hair Jr et al., 2017).

4.3.1 Evaluation and interpretation of the outer model

To determine the psychometric properties of each latent variable of the measurement model, composite reliability, average variance extracted (AVE), Heterotrait-Monotrait (HTMT) ratio and outer loadings were evaluated.

4.3.1.1 Composite reliability

The composite reliability score measures the reliability of the latent variable scales. Hulland (1999) suggested that a reliability coefficient of .70 or higher is regarded as satisfactory, however, for exploratory research, a reliability coefficient .40 or higher is also acceptable (Hulland, 1999; Bryman & Bell, 2011). Table 4.2 shows that the reliability scores of the latent variables, except for LB_Transformational and LB_Transactional, were found to be > .40 and can be considered adequate. However, the composite reliability of the transactional leadership scale is at .0 and transformational leadership scale at .20, which is not acceptable. This shows that these subscales lack reliability. Further investigation of the sub-scales was needed.

Table 4.2 *Composite reliability values all subscales*

Subscale	Original Sample	Confidence Intervals	
		2.50 %	97.5%
CWB	.80	.74	.84
LB_Transformtional	.21	.04	.40
LB_Transactional	.00	.00	.79
LB_Liazers Faire	.65	.01	.71
LB_Effectiveness	.81	.50	.85
OEC_Caring	.92	.89	.93
OEC_Law and Code	.52	.08	.67
OEC_Rules	.42	.00	.77
OEC_Instrumental	.69	.01	.77
OEC_Independence	.74	.03	.79

The box-and-whisker plot (Figure 4.1) indicates the composite reliability for all subscales. The figure indicates the central tendency (median, indicated by the bar), the dispersion range (highest and lowest) in the I - shaped bar range. The boxes indicate the middle 50% of responses (Bryman & Bell, 2011).

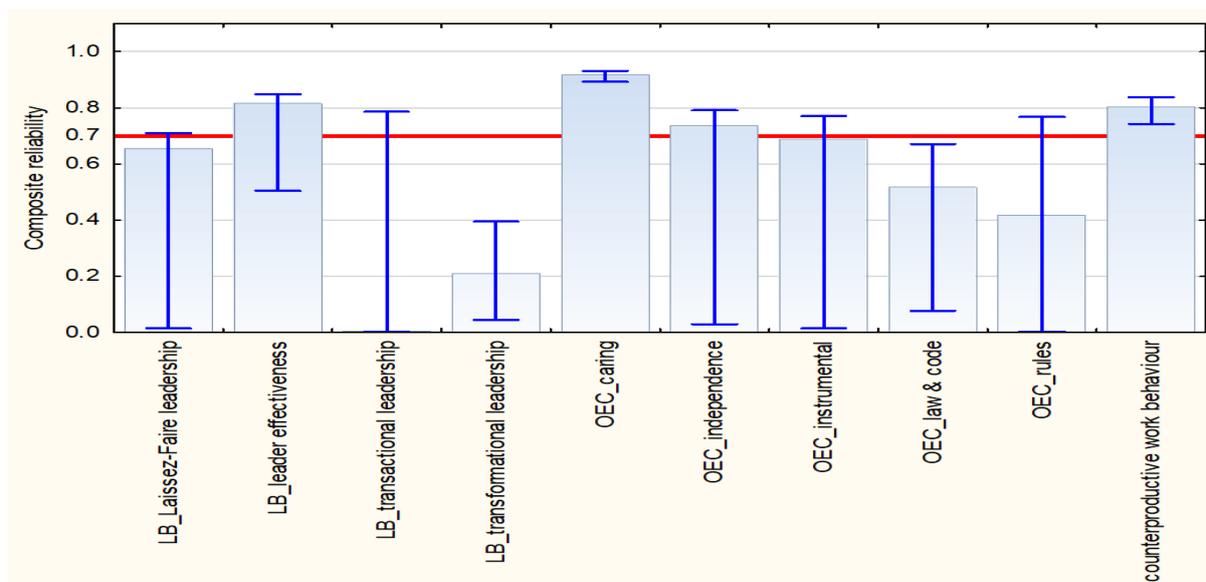


Figure 4.1: Composite reliability box-and-whisker plot

4.3.1.2 Average variance extracted (AVE)

The extent to which a measure correlates positively with alternative measures of the same construct is reflected in its convergent validity and is derived from an evaluation of the outer loadings of the indicators (indicator reliability) and the average variance extracted (AVE), where high values indicate that associated indicator variables have too much in common (Hair Jr et al., 2017). Average variance extracted (AVE) is thus commonly used to establish convergent reliability on the construct level. AVE measures the level of variance captured by a construct against the level due to error measurement (Alarcón & Sánchez, 2015). AVE scores of .50 and higher suggest that the indicator variables measure the relevant constructs as the construct explains more than half the variance of its indicators. AVE scores of below .50 indicates that more variance remains in the error of items than the variance explained by the construct (Alarcón & Sánchez, 2015; Hair Jr et al., 2017). The box-and-whisker plot (Figure 4.2) indicates the AVE values for all subscales. Table 4.3 furthermore indicates the exact AVE value for each subscale.

Table 4.3

Average variance extracted (AVE)

Subscale	Original Sample	Confidence Intervals	
		2.50 %	97.5%
CWB	.18	.16	.21
LB_Transformtional	.29	.26	.33
LB_Transactional	.14	.14	.39
LB_Liazers Faire	.24	.12	.33
LB_Effectiveness	.38	.20	.42
OEC_Caring	.61	.55	.66
OEC_Law and Code	.44	.32	.50
OEC_Rules	.41	.23	.54
OEC_Instrumental	.29	.13	.29
OEC_Independence	.44	.17	.52

From Table .3 and Figure 4.2, it is evident that the AVE values of only the OEC_Caring subscale was above .50, which indicates that this construct explained more than 50% of the variance in the items.

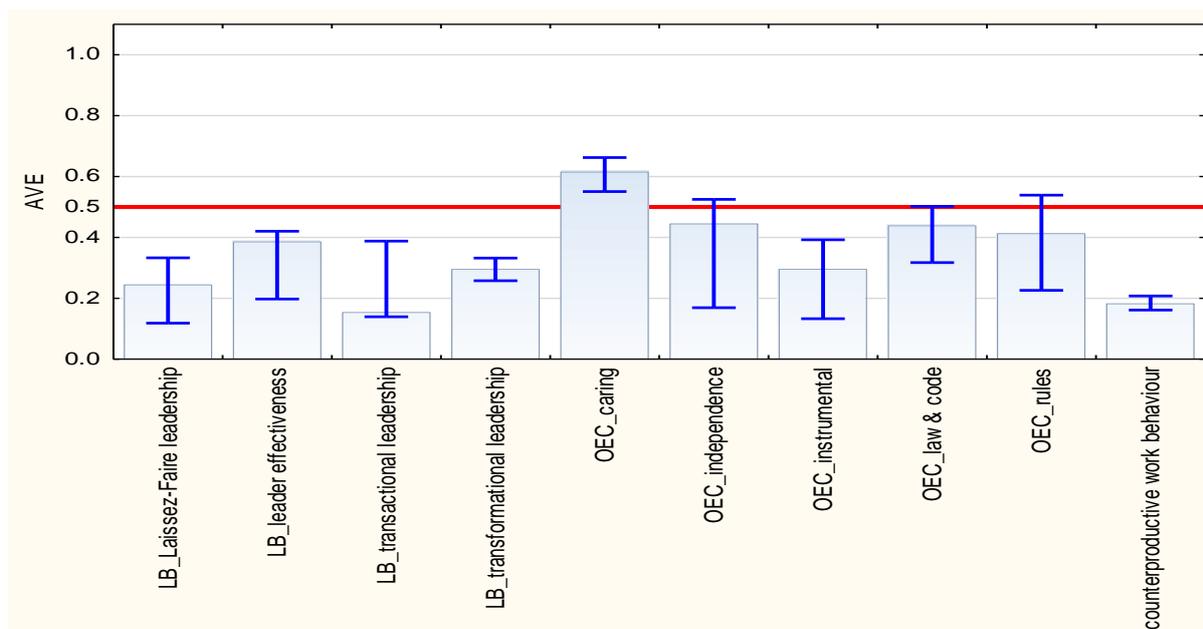


Figure 4.2: Average variance extracted box-and-whisker plot

However, for the remaining variables, more variance remains in the error variance (in other words unexplained variance) than the variance explained by the construct. It can thus be viewed as a limitation in the present study or constraining factor in the model. It is however not uncommon in studies to obtain lower AVE values (Alarcón & Sánchez, 2015) therefore the researcher continued with the statistical analysis. The inference can be made that the specific latent variable does not explain sufficient variance in terms of the items, being marginally below .50.

4.3.1.3 Discriminant validity

Discriminant validity is achieved when the measures of constructs on a theoretical basis, are not supposed to be highly related to one another and are indeed found not to be highly correlated (Hublely, 2014). Establishing discriminant validity is essential since it allows for the confirmation that the hypothesised structural paths do indeed exist and that they do not merely reflect statistical inconsistencies. In other words, discriminant validity determines the true distinctiveness of one variable from others in the measurement model (Hair Jr et al., 2017). It assesses whether constructs are independent or whether there is a margin of overlap between the constructs.

The Heterotrait-Monotrait (HTMT), proposed by Henseler, Ringle and Sarstedt (2015) assesses the average correlation among the indicator variables across constructs, relative to the average correlation among indicators variables within the same construct. This is to determine how strongly the indicators or items of the various measures of the latent variables correlate with one another. This method has been noted as the superior method in assessing discriminant validity on the basis that it more reliably detects the lack of discriminant validity in comparison to the other methods (Voorhees, Brady, Calantone, & Ramirez., 2016). A HTMT value of <1 indicates that the true correlations with the constructs differ. If the HTMT value exceeds this threshold then one may conclude that there is a lack of discriminant validity. Moreover, the bootstrapping method, which was applied in this study, makes provision for constructing confidence intervals for the HTMT ratio. The same threshold applies for the confidence interval as for the HTMT value. Thus, if the confidence interval value is ≥ 1 then it is bound to lack discriminant validity (Alarcón & Sánchez, 2015). The HTMT ratios for all the constructs are displayed in Table 4.4.

Table 4.4 *Hetrotrait-Monotrait (HTMT) ratios*

Constructs		Original Sample	Confidence Intervals		Discriminate
			2.50%	97.5%	
LB_leader effectiveness	LB_Laissez-Faire Leadership	0,5	0,43	0,53	yes
LB_transactional leadership	LB_Laissez-Faire Leadership	0,47	0,35	0,55	yes
LB_transactional leadership	LB_Leader Effectiveness	0,28	0,22	0,31	yes
LB_transformational leadership	LB_Laissez-Faire Leadership	0,21	0,21	0,21	yes
LB_transformational leadership	LB_Leader Effectiveness	0,25	0,21	0,25	yes
LB_transformational leadership	LB_Transactional Leadership	0,26	0,23	0,26	yes
OEC_caring	LB_Laissez-Faire Leadership	0,34	0,23	0,43	yes
OEC_caring	LB_Leader Effectiveness	0,42	0,3	0,51	yes
OEC_caring	LB_Transactional Leadership	0,19	0,12	0,26	yes
OEC_caring	LB_Transformational Leadership	0,31	0,2	0,39	yes
OEC_independence	LB_Laissez-Faire Leadership	0,21	0,12	0,22	yes

OEC_independence	LB_Leader Effectiveness	0,27	0,17	0,35	yes
OEC_independence	LB_Transactional Leadership	0,21	0,14	0,26	yes
OEC_independence	LB_Transformational Leadership	0,21	0,17	0,2	yes
OEC_independence	OEC_Caring	0,28	0,16	0,4	yes
OEC_instrumental	LB_Laissez-Faire Leadership	0,23	0,18	0,24	yes
OEC_instrumental	LB_Leader Effectiveness	0,19	0,16	0,19	yes
OEC_instrumental	LB_Transactional Leadership	0,18	0,15	0,19	yes
OEC_instrumental	LB_Transformational Leadership	0,24	0,21	0,24	yes
OEC_instrumental	OEC_Caring	0,2	0,13	0,27	yes
OEC_instrumental	OEC_Independence	0,57	0,45	0,68	yes
OEC_law & code	LB_Laissez-Faire Leadership	0,35	0,2	0,41	yes
OEC_law & code	LB_Leader Effectiveness	0,34	0,22	0,41	yes
OEC_law & code	LB_Transactional Leadership	0,3	0,18	0,39	yes
OEC_Law & Code	LB_Transformational Leadership	0,26	0,19	0,28	yes
OEC_Law & Code	OEC_Caring	0,74	0,64	0,84	yes
OEC_Law & Code	OEC_Independence	0,38	0,22	0,52	yes
OEC_Law & Code	OEC_Instrumental	0,35	0,22	0,45	yes
OEC_Rules	LB_Laissez-Faire Leadership	0,25	0,16	0,32	yes
OEC_Rules	LB_Leader Effectiveness	0,17	0,13	0,18	yes
OEC_Rules	LB_Transactional Leadership	0,19	0,13	0,23	yes
OEC_Rules	LB_Transformational Leadership	0,24	0,18	0,28	yes
OEC_Rules	OEC_Caring	0,31	0,19	0,45	yes
OEC_Rules	OEC_Independence	0,54	0,44	0,6	yes
Counterproductive Work Behaviour	LB_Laissez-Faire Leadership	0.3	0.29	0,29	yes
Counterproductive Work Behaviour	LB_Leader Effectiveness	0.29	0.24	0,29	yes
Counterproductive Work Behaviour	LB_Transactional Leadership	0.27	0.25	0,27	yes
Counterproductive Work Behaviour	LB_Transformational Leadership	0.65	0.57	0,68	yes
Counterproductive Work Behaviour	OEC_Caring	0.35	0.24	0,42	yes
Counterproductive Work Behaviour	OEC_Independence	0.28	0.26	0,28	yes

Counterproductive Work Behaviour	OEC_Instrumental	0.28	0.28	0,28	yes
Counterproductive Work Behaviour	OEC_Law & Code	0.4	0.31	0,45	yes
Counterproductive Work Behaviour	OEC_Rules	0.29	0.23	0,29	yes

The current researcher assessed the measurement model against the HTMT threshold and from the above it is clear that all constructs achieved discriminant validity. It is therefore concluded that the latent variable measures all seem to measure the construct they are intended to measure. Validity, when compared to another, suggests that these are in fact separate constructs. Therefore, the constructs meet the required discriminant validity levels. Based on these results, each latent variable was found to be distinct, and thereby measures what it is supposed to measure.

4.3.1.4 Evaluation of outer loadings (item loadings)

Lastly, the reliability of the item loadings was evaluated by conducting a PLS bootstrap analysis with a 95% confidence interval. The confidence interval was utilised to establish whether the item loadings were indeed significant. If zero falls within the 95% confidence interval, it can be concluded that the item loadings are not statistically significant (Langenhoven, 2014). Another way to assess for outer loading reliability, is to assess the p-value for the t-test which must be smaller than .05. Thus, ($p < .05$) is statistically significant at the 95% confidence interval (Boos, 2003). Table 4.5 provides statistical information on the outer loadings.

Table 4.5

PLS-SEM Outer Loadings

Constructs	Manifest Variable	Latent Variable	Loadings	95% lower	95% upper	Significance from C	p-value from T-test
ECQ1 <- OEC_Caring	ECQ1	OEC_Caring	0.77	0.66	0.85	yes	0
ECQ10 <- OEC_Law & Code	ECQ10	OEC_Law & Code	0.42	-0.06	0.65	yes	0.02
ECQ11 <- OEC_Law & Code	ECQ11	OEC_Law & Code	-0.49	-0.72	0.68	yes	0.04
ECQ12 <- OEC_Rules	ECQ12	OEC_Rules	-0.63	-0.79	0.98	no	0.33
ECQ13 <- OEC_Rules	ECQ13	OEC_Rules	0.66	-0.68	0.89	no	0.2
ECQ14 <- OEC_Rules	ECQ14	OEC_Rules	0.59	-0.66	0.87	no	0.22
ECQ15 <- OEC_Rules	ECQ15	OEC_Rules	0.68	-0.72	0.87	no	0.2
ECQ16 <- OEC_Instrumental	ECQ16	OEC_Instrumental	0.31	-0.38	0.62	no	0.22
ECQ17 <- OEC_Instrumental	ECQ17	OEC_Instrumental	0.6	-0.57	0.79	no	0.1
ECQ18 <- OEC_Instrumental	ECQ18	OEC_Instrumental	0.72	-0.69	0.87	yes	0.09
ECQ19 <- OEC_Instrumental	ECQ19	OEC_Instrumental	0.54	-0.48	0.77	no	0.1
ECQ2 <- OEC_Caring	ECQ2	OEC_Caring	0.82	0.75	0.87	yes	0
ECQ20 <- OEC_Instrumental	ECQ20	OEC_Instrumental	0.59	-0.53	0.81	no	0.1
ECQ21 <- OEC_Instrumental	ECQ21	OEC_Instrumental	-0.12	-0.48	0.52	no	0.65
ECQ22 <- OEC_Instrumental	ECQ22	OEC_Instrumental	0.66	-0.92	0.92	no	0.24
ECQ23 <- OEC_Independence	ECQ23	OEC_Independence	0.82	-0.74	0.92	no	0.06
ECQ24 <- OEC_Independence	ECQ24	OEC_Independence	0.52	-0.49	0.83	no	0.13
ECQ25 <- OEC_Independence	ECQ25	OEC_Independence	0.87	-0.82	0.95	yes	0.07
ECQ26 <- OEC_Independence	ECQ26	OEC_Independence	0.29	-0.64	0.83	no	0.42
ECQ3 <- OEC_Caring	ECQ3	OEC_Caring	0.88	0.83	0.91	yes	0

ECQ4 <- OEC_Caring	ECQ4	OEC_Caring	0.84	0.76	0.88	yes	0
ECQ5 <- OEC_Caring	ECQ5	OEC_Caring	0.8	0.73	0.85	yes	0
ECQ6 <- OEC_Caring	ECQ6	OEC_Caring	0.75	0.65	0.82	yes	0
ECQ7 <- OEC_Caring	ECQ7	OEC_Caring	0.57	0.43	0.68	yes	0
ECQ8 <- OEC_Law & Code	ECQ8	OEC_Law & Code	0.29	-0.69	0.95	no	0
ECQ9 <- OEC_Law & Code	ECQ9	OEC_Law & Code	0.88	-0.24	0.86	no	0
IODES1 <- Counterproductive Work Behaviour	IODES1	Counterproductive Work Behaviour	0.84	-0.29	-0.01	yes	0.04
IODES10 <- Counterproductive Work Behaviour	IODES10	Counterproductive Work Behaviour	0.8	-0.01	0.37	no	0.06
IODES11 <- Counterproductive Work Behaviour	IODES11	Counterproductive Work Behaviour	0.75	-0.09	0.19	no	0.42
IODES12 <- Counterproductive Work Behaviour	IODES12	Counterproductive Work Behaviour	0.88	-0.39	-0.04	yes	0.02
IODES13 <- Counterproductive Work Behaviour	IODES13	Counterproductive Work Behaviour	0.74	0.15	0.49	yes	0
IODES14 <- Counterproductive Work Behaviour	IODES14	Counterproductive Work Behaviour	-0.15	-0.01	0.38	yes	0.04
IODES15 <- Counterproductive Work Behaviour	IODES15	Counterproductive Work Behaviour	0.18	0.26	0.57	yes	0
IODES16 <- Counterproductive Work Behaviour	IODES16	Counterproductive Work Behaviour	0.06	0.57	0.76	yes	0
IODES17 <- Counterproductive Work Behaviour	IODES17	Counterproductive Work Behaviour	-0.22	0.52	0.72	yes	0
IODES18 <- Counterproductive Work Behaviour	IODES18	Counterproductive Work Behaviour	0.35	0.51	0.72	yes	0
IODES19 <- Counterproductive Work Behaviour	IODES19	Counterproductive Work Behaviour	0.21	0.52	0.72	yes	0
IODES2 <- Counterproductive Work	IODES2	Counterproductive Work Behaviour	0.44	0	0.35	yes	0.04

Behaviour							
IODS20 <- Counterproductive Work Behaviour	IODS20	Counterproductive Work Behaviour	0.68	0.58	0.76	yes	0
IODS21 <- Counterproductive Work Behaviour	IODS21	Counterproductive Work Behaviour	0.63	0.62	0.76	yes	0
IODS22 <- Counterproductive Work Behaviour	IODS22	Counterproductive Work Behaviour	0.63	0.47	0.68	yes	0
IODS23 <- Counterproductive Work Behaviour	IODS23	Counterproductive Work Behaviour	0.63	0.4	0.65	yes	0
IODS24 <- Counterproductive Work Behaviour	IODS24	Counterproductive Work Behaviour	0.18	-0.08	0.27	no	0.21
IODS25 <- Counterproductive Work Behaviour	IODS25	Counterproductive Work Behaviour	0.68	0.45	0.69	yes	0
ECQ1 <- OEC_Caring	ECQ1	OEC_Caring	0.71	0.19	0.57	yes	
IODS26 <- Counterproductive Work Behaviour	IODS26	Counterproductive Work Behaviour	0.41	0.08	0.49	yes	0
IODS27 <- Counterproductive Work Behaviour	IODS27	Counterproductive Work Behaviour	0.31	0.45	0.66	yes	0
IODS28 <- Counterproductive Work Behaviour	IODS28	Counterproductive Work Behaviour	0.58	0.01	0.39	yes	0.04
IODS3 <- Counterproductive Work Behaviour	IODS3	Counterproductive Work Behaviour	0.2	0.11	0.46	yes	0
IODS4 <- Counterproductive Work Behaviour	IODS4	Counterproductive Work Behaviour	0.29	0.01	0.41	yes	0.04
IODS5 <- Counterproductive Work Behaviour	IODS5	Counterproductive Work Behaviour	0.21	0.01	0.41	yes	0.03
IODS6 <- Counterproductive Work Behaviour	IODS6	Counterproductive Work Behaviour	0.22	-0.1	0.32	yes	0.32
IODS7 <- Counterproductive Work Behaviour	IODS7	Counterproductive Work Behaviour	0.1	0	0.42	no	0.05

IODS8 <- Counterproductive Work Behaviour	IODS8	Counterproductive Work Behaviour	0.21	0.07	0.47	yes	0.01
IODS9 <- Counterproductive Work Behaviour	IODS9	Counterproductive Work Behaviour	0.27	0.33	0.59	yes	0
MLQ1 <- LB_Transformational Leadership	MLQ1	LB_Transformational Leadership	0.47	-0.64	-0.41	yes	0
MLQ10 <- LB_Transformational Leadership	MLQ10	LB_Transformational Leadership	-0.54	-0.59	-0.34	no	0
MLQ11 <- LB_Transformational Leadership	MLQ11	LB_Transformational Leadership	-0.48	-0.7	-0.52	yes	0
MLQ12 <- LB_Transformational Leadership	MLQ12	LB_Transformational Leadership	-0.62	-0.61	-0.33	yes	0
MLQ13 <- LB_Transformational Leadership	MLQ13	LB_Transformational Leadership	-0.49	-0.6	-0.32	yes	0
MLQ14 <- LB_Transformational Leadership	MLQ14	LB_Transformational Leadership	-0.47	-0.68	-0.43	yes	0
MLQ15 <- LB_Transformational Leadership	MLQ15	LB_Transformational Leadership	-0.57	-0.66	-0.41	yes	0
MLQ16 <- LB_Transformational Leadership	MLQ16	LB_Transformational Leadership	-0.55	-0.68	-0.45	no	0
MLQ17 <- LB_Transformational Leadership	MLQ17	LB_Transformational Leadership	-0.57	0.13	0.46	yes	0
MLQ18 <- LB_Transformational Leadership	MLQ18	LB_Transformational Leadership	0.3	0.05	0.41	yes	0.01
MLQ19 <- LB_Transformational Leadership	MLQ19	LB_Transformational Leadership	0.24	0.4	0.63	yes	0
MLQ2 <- LB_Transformational Leadership	MLQ2	LB_Transformational Leadership	0.53	0.22	0.47	yes	0
MLQ20 <- LB_Transformational Leadership	MLQ20	LB_Transformational Leadership	0.35	-0.9	0.97	no	0.22

Leadership							
MLQ21 <- LB_Transactional Leadership	MLQ21	LB_Transactional Leadership	0.89	-0.5	0.75	yes	0.62
MLQ22 <- LB_Transactional Leadership	MLQ22	LB_Transactional Leadership	-0.18	-0.62	0.81	yes	0.43
MLQ23 <- LB_Transactional Leadership	MLQ23	LB_Transactional Leadership	-0.34	-0.49	0.75	yes	0.58
MLQ24 <- LB_Transactional Leadership	MLQ24	LB_Transactional Leadership	-0.2	-0.38	0.68	yes	0.8
MLQ25 <- LB_Transactional Leadership	MLQ25	LB_Transactional Leadership	-0.07	-0.53	0.74	yes	0.45
MLQ26 <- LB_Transactional Leadership	MLQ26	LB_Transactional Leadership	-0.29	-0.34	0.65	yes	0.97
MLQ27 <- LB_Transactional Leadership	MLQ27	LB_Transactional Leadership	0.01	-0.61	0.78	no	0.67
MLQ28 <- LB_Laissez- Faire Leadership	MLQ28	LB_Laissez-Faire Leadership	0.15	-0.4	0.68	no	0.53
MLQ29 <- LB_Laissez- Faire Leadership	MLQ29	LB_Laissez-Faire Leadership	0.18	0.42	0.65	yes	0
MLQ3 <- LB_Transformational Leadership	MLQ3	LB_Transformational Leadership	0.55	-0.54	0.86	yes	0.04
MLQ30 <- LB_Laissez- Faire Leadership	MLQ30	LB_Laissez-Faire Leadership	0.69	-0.44	0.75	no	0.17
MLQ31 <- LB_Laissez- Faire Leadership	MLQ31	LB_Laissez-Faire Leadership	0.42	-0.57	0.87	yes	0.1
MLQ32 <- LB_Laissez- Faire Leadership	MLQ32	LB_Laissez-Faire Leadership	0.64	-0.54	0.76	yes	0.15
MLQ33 <- LB_Laissez- Faire Leadership	MLQ33	LB_Laissez-Faire Leadership	0.49	-0.49	0.79	no	0.08
MLQ34 <- LB_Laissez- Faire Leadership	MLQ34	LB_Laissez-Faire Leadership	0.58	-0.27	0.44	yes	0.55
MLQ35 <- LB_Leader Effectiveness	MLQ35	LB_Leader Effectiveness	0.11	-0.39	0.37	yes	0.88
MLQ36 <- LB_Leader Effectiveness	MLQ36	LB_Leader Effectiveness	-0.03	-0.37	0.78	yes	0.01
MLQ37 <- LB_Leader	MLQ37	LB_Leader	0.67	-0.27	0.74	yes	0.01

Effectiveness		Effectiveness					
MLQ38 <- LB_Leader	MLQ38	LB_Leader	0.6	-0.42	0.87	yes	0
Effectiveness		Effectiveness					
MLQ39 <- LB_Leader	MLQ39	LB_Leader	0.78	0.49	0.67	no	0
Effectiveness		Effectiveness					
MLQ4 <- LB_Transformational Leadership	MLQ4	LB_Transformational Leadership	0.59	-0.14	0.65	yes	0.01
MLQ40 <- LB_Leader	MLQ40	LB_Leader	0.47	-0.73	0.89	yes	0.01
Effectiveness		Effectiveness					
MLQ41 <- LB_Leader	MLQ41	LB_Leader	0.84	-0.61	0.82	yes	0.01
Effectiveness		Effectiveness					
MLQ43 <- LB_Leader	MLQ43	LB_Leader	0.77	0.77	0.88	no	0.02
Effectiveness		Effectiveness					
MLQ5 <- LB_Transformational Leadership	MLQ5	LB_Transformational Leadership	0.7	0.74	0.77	yes	0
MLQ6 <- LB_Transformational Leadership	MLQ6	LB_Transformational Leadership	0.68	0.8	0.74	yes	0
MLQ7 <- LB_Transformational Leadership	MLQ7	LB_Transformational Leadership	0.75	0.8	0.8	yes	0
MLQ8 <- LB_Transformational Leadership	MLQ8	LB_Transformational Leadership	0.75	0.44	0.8	yes	0
MLQ9 <- LB_Transformational Leadership	MLQ9	LB_Transformational Leadership	0.3	0.88	0.44	yes	0

In terms of the present study, *most* of the outer loadings were found to be statistically significant, where zero did not fall within the 95% confidence interval and the p-values remained lower than .05. However, the results also show that the items of some of the scales are not statistically significant. This creates some doubt about the reliability of these items. **Due to the positive reliability results of this measure in the other analyses, the statistical analyses using this measure continued, although the results for this scale should be interpreted with caution. This is one of the limitations of this study that will be discussed in Chapter 5.**

4.3.2 Evaluation and Interpretation of the inner model

The structural model was analysed to assess the quality of the proposed relationship between the latent variables, and thus the model fit. The purpose of the PLS structural model analysis was to examine to what extent the variables are related to each other. The relationships between the exogenous and endogenous latent variables, and their influence, were tested, as well as the relationships among the endogenous latent variables. The analysis of the structural model, also known as the inner model, included testing for multicollinearity, evaluation of the R-squares, and evaluation and interpretation of the path coefficients effects.

4.3.2.1 Multicollinearity

When conducting a regression analysis, it is assumed that the predictors are uncorrelated. If predictors correlate too highly, it can affect the results of the regressions analysis (Hair et.al., 2011). Therefore, multicollinearity was tested using a VIF (variance inflation factor). VIFs measure the extent to which the coefficients are inflated when compared to a case in which the predictors are not related. This shows the amount of correlation between the predictors during the analysis. When examining VIF results, various cut-off levels are recommended by different research. The VIF coefficients indicate the correlation between predictors in a regression analysis. A value of (VIF =5) normally signifies further investigation, while a value of (VIF = 10) indicates serious multicollinearity (Hair Jr et al., 2017; Henseler et al., 2009). All the scores for VIF in the study were within limits. Therefore, it was determined that no problems of multicollinearity exist in the models as shown in Table 4.6

Table 4.6

Variance Inflation Factors (VIF)

	Variance Inflation Factors
	CWB
LB_Laissez-Faire leadership	1.051
LB_leader effectiveness	1.268
LB_transactional leadership	1.208
LB_transformational leadership	1.254
OEC_caring	1.871
OEC_independence	1.273
OEC_instrumental	1.403
OEC_law & code	1.611
OEC_rules	1.309

4.3.2.2 Evaluation and interpretation of the R-square value

The R-square value determines the amount of variance in the endogenous variables, which can be explained by the remaining variables of the model (Langenhoven, 2014). According to Hair Jr et al. (2017), R-square values of .20 and higher are considered high in behavioural studies, as it indicates the predictive accuracy depending on the complexity of the model. The R-square value of *CWB* was .47, which indicates that 47% of the variance in *CWB* can be explained by the effect of the remaining latent variables in the model. In other words, this suggests that the total model accounts for 47% of the variance observed in *CWB*.

4.3.2.3 Evaluation and interpretation of path coefficients

The purpose of PLS path modelling is to facilitate prediction and not to test a theory (Henseler et al., 2009). The path coefficients had to be assessed to determine the

strength and significance of the hypothesised relationships (Langenhoven, 2014). To examine the significance of the relationships between the variables, the bootstrapping method was used. Bootstrapping makes provision for the estimation of quantities that are related to the sampling distribution. This entails the estimation of the 95% confidence intervals and the p-value to test the null hypothesis (Boos, 2003). The corresponding coefficient would not be deemed statistically significant if zero were to fall within the 95% confidence interval. Conversely, the corresponding coefficient would be deemed statistically significant should zero not fall within the 95% confidence interval. According to Hair Jr et al. (2017), a bootstrap distribution can be seen as a reasonable approximation of an estimated coefficient's distribution in the population. Path coefficients were thus evaluated to determine the strength and statistical significance of the hypothesised paths in the structural model. Table 4.7 confirms the statistical significance of the path coefficients in the current study. The researcher firstly determined whether zero falls within the 95% confidence interval and secondly whether $p < .05$ as to confirm the statistical significance of the relationship. A p-value of less than .05 is regarded as statistically significant at the 95% confidence interval.

Table 4.7

Path coefficients of the structural model of counter productive work behaviours

	Path coefficient	95% Lower	95% Upper	Significant CI	p-value from t-test
LB_Laissez-Faire Leadership -> Counterproductive Work	-.11	-0.23	0.16	no	0.24
LB_Leader Effectiveness -> Counterproductive Work Beha	.03	-0.07	0.14	no	0.55
LB_Transactional Leadership -> Counterproductive Work	.12	-0.22	0.2	no	0.34
LB_Transformational Leadership -> Counterproductive Wo	.54	0.42	0.64	yes	0
OEC_Caring -> Counterproductive Work Behavior	.03	-0.1	0.15	no	0.69
OEC_Independence -> Counterproductive Work Behavior	.01	-0.14	0.14	no	0.9
OEC_Instrumental -> Counterproductive Work Behavior	.08	-0.17	0.2	no	0.43
OEC_Law & Code -> Counterproductive Work Behavior	.18	-0.11	0.28	no	0.02
OEC_Rules -> Counterproductive Work Behavior	-.09	-0.16	0.13	no	0.25

The structural model, which was statistically derived from the analysis (statistical testing), is depicted in Figure 4.3. The value inside the circles of the latent variables indicate the R-Square Value (.47), which are also indicated in Table 4.7 above. Furthermore, the path coefficients values are indicated on the connecting lines of the variables (Vlok, 2017).

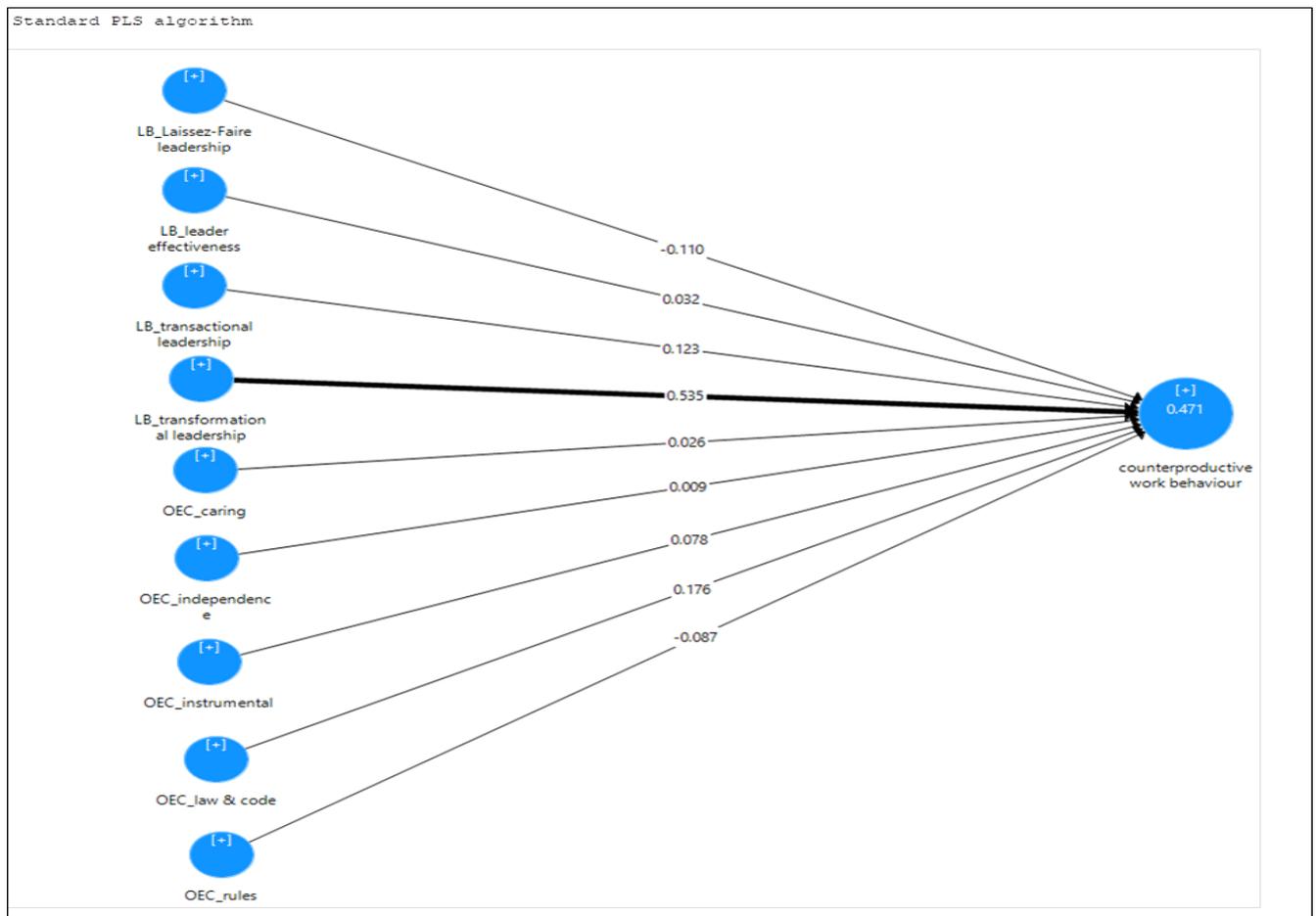


Figure 4.3 Structural model results with path coefficients

The results of all the path coefficients is presented in the following paragraphs.

Hypothesis 1: In the proposed CWB structural model it is hypothesised that perceived organisational justice negatively influences CWB. This means that when soldiers at 5 SAI Bn perceive the overall justice of the organisation to be fair, they will be less prone to engage in CWB. In which perceived organisational justice was measured by the four dimensions which include distributive justice, procedural justice, interactional justice, and formational justice. The hypothesised relationship between dimensions of organisational injustice and CWB could not be established as all the subscales of organisational injustice yielded poor reliability results due to negatively worded items that participants may not have clearly understood. The researcher thus decided to remove this scale all together from the analysis. This is noted as a limitation of the current study (see par. 5.4).

Hypothesis 2: In the proposed CWB structural model, it is hypothesised that work alienation negatively influences CWB. This means that when soldiers feel alienated in their work they will less likely engage in CWB. The hypothesised relationship between work alienation and CWB could not be established as this measure of work alienation yielded poor reliability results due to negatively worded items that participants may not have clearly understood. The researcher thus decided to remove this scale all together from the analysis. This is noted as a limitation of the current study (see par. 5.4).

Hypothesis 3: In the proposed CWB structural model, it is hypothesised that there is a significant relationship between leadership behaviour and CWB. The researcher looked at the relationship between each dimension of leadership behaviour as discussed in the literature review (see par. 2.5.1) and CWB. The hypothesised relationship between transformational leadership behaviour and CWB was established as being significant. The PLS path coefficient was .54, with zero not falling within the 95% confidence interval. This means that transformational leadership positively influence soldier's likelihood to engage in CWB. This finding support the hypothesis that leadership behaviour influence CWB.

The relationship between transactional leadership behaviour and CWB was established as being insignificant. The PLS path coefficient was .12, with zero not falling within the 95% confidence interval. This means that transactional leadership behaviour did not demonstrate a significant causal link with CWB. Thus the hypothesis claiming a significant relationship between these constructs is rejected. Similarly, the relationship between the laissez-faire leadership style and CWB was not found to be significant. The PLS path coefficient was -.11, with zero not falling within the 95% confidence interval. Based on these findings, the researcher partially rejected that hypothesis that leadership behaviour has an impact on counterproductive work behaviours. This is because only one (transformational leadership) out three dimensions of leadership behaviour indicated a significant relationship while two dimensions (transactional and laissez faire leadership) showed no relationship at all.

Hypothesis 4: In the proposed CWB structural model, it is hypothesised that there is a significant relationship between organisational ethical climate and CWB. The researcher looked at the relationship between each dimension of organisational ethical climate and its effect on CWB. The relationship between the caring dimension of organisational ethical climate and CWB was established as being insignificant. The PLS path coefficient was .03 with zero not falling within the 95% confidence interval. The relationship between law and code and CWB was established as being insignificant. The PLS path coefficient was equal to .18 with zero falling within the 95% confidence interval. The relationship between rules and CWB was established as being insignificant. The PLS path coefficient was equal to -.09 with zero falling within the 95% confidence interval. The hypothesised relationship between rules and CWB was established as being insignificant. The PLS path coefficient was equal to .08 with zero falling within the 95% confidence interval. The hypothesised relationship between independence and CWB was established as being not significant. The PLS path coefficient was equal to .01 with zero falling within the 95% confidence interval.

4.4 CHAPTER SUMMARY

This chapter provided the statistical results. The validation of the measurement model entailed reliability (item) analysis that was conducted to determine the internal consistency of the measuring instruments' items. Thereafter, PLS-SEM was performed to assess both the measurement and the structural models. The application of PLS enabled the researcher to evaluate the reliability of the latent variables and subsequently interpret the structural model's path coefficients. In terms of the analyses performed with respect to the reliability analysis of the instruments, the results suggested that two scales, Perceived Organisational justice and Work Alienation Scale, did not accurately measure the constructs and thus removed from further analysis. This is noted as a limitation in the present study. From the formulated hypotheses, although the relationship between variables were not found to be significant, the path coefficients and structural model still indicated valuable results in terms of the nomologic network of variables and the interaction between the variables. Chapter Five provides a discussion of the results, limitations, recommendations, and conclusions.

CHAPTER 5

DISCUSSIONS, LIMITATIONS, AND CONCLUSIONS

5.1 INTRODUCTION

This chapter elaborates on the research findings that were presented in Chapter 4 and provides limitations and recommendations for future research. Firstly, a discussion of the measurements utilised is provided. This is followed by a discussion of the inferential statistics in the form of PLS analysis results (measurement and structural model). Lastly, this chapter discusses the limitations and provides future directions for research.

5.2 DISCUSSION OF MEASUREMENT INSTRUMENTS UTILISED

The measurement model presented several constraining factors and the measures that operationalised perceived organisational justice and work alienation raised some concern regarding their utility within the specific context of the current research study. The perceived organisational justice and work alienation scales were flagged as problematic due to their overall poor reliability statistics. Thus, these measures did not explain enough of the variance in the respective latent variable in the current study, and they may not effectively operationalise the relevant construct within the given context. The researcher decided to remove these scales from the analysis with the advice of Prof M. Kidd a Statistician and research advisor, January 25th, 2020.

The other measures of CWB, leadership behaviour, and ethical organisational climate, obtained acceptable reliability coefficients based on George and Mallery's (2003) reliability criteria. However, some of the subscales obtained a weak inter-item correlation of less than .03 and the researcher subjected these subscales to composite reliability and evaluation of outer loadings. The results found that these measures obtained acceptable composite reliabilities and outer loadings and were thus retained in the current study.

5.3 DISCUSSION OF RESEARCH FINDINGS

The study was guided by the research-initiating question: What factors influence counterproductive work behaviours among soldiers at 5 SAI Bn? Various studies that previously examined deviant work behaviours were consulted (see par. 2.2 to 2.6). Although some studies have investigated this phenomenon (Sumer, et al., 2001), most of those undertaken to investigate this concept were directed towards civilian organisations and only to a lesser extent in the military. None have reviewed workplace deviance in the South African military environment.

The relationship between CWB; and perceived organisational justice, work alienation, leadership behaviour, and ethical organisational climate as established through this research identifies several unique factors. Moreover, this research intended to advance an understanding of the factors such as perceptions of organisational justice, work alienation, leadership behaviours, and ethical climate of an organisation, and their impact on soldiers' proneness to engage in deviant work behaviour. The results of the study suggest that soldiers at 5 SAI Bn organisations do experience incidences or frequencies of CWB, however, the relationship between incidences of CWB and the proposed factors has been deemed insignificant with the exception of only two factors; transformational leadership and the caring dimension of organisational ethical climate.

5.3.1 The relationship between perceived organisational injustice and CWB

This study hypothesised (H1) that soldiers who perceive the organisation as not fulfilling an appropriate reward and work environment would report CWB. The results from the reliability analysis of the perceived organisational injustice instruments indicate that the items did not measure the construct. This may have been due to the nature of the items in the instrument which are negatively worded. The assumption is that participants might have misunderstood the questions, and therefore the relationship between this construct and CWB could not be measured. Moreover, participants may have not given sufficient attention to carefully read both the question and answer categories and thus missed the intended meaning of the items. Accordingly, the proposed hypothesis that soldiers' perception of organisational

injustice positively influences CWB could not be tested based on a poor measurement of the scale. This is a limitation of the present study (see par. 5.4).

5.3.2 The relationship between work alienation and CWB

This study tested the relationship between work alienation and CWB. It was hypothesised that when soldiers feel alienated at work, that is they feel that their work is not interesting, they may resort to CWB (H2). The results from the reliability analysis of the work alienation instruments indicate that the items did not measure the construct, which made it impossible to test this relationship in the current study. Poor reliability results could have been due to the nature of the items in the instrument, which are negatively worded. The assumption is that participants may have misunderstood the questions, and therefore the relationship between this construct and CWB could not be measured. Moreover, participants may not have given sufficient attention to carefully read both the question and answer categories, and thus missed the intended meaning of the items. This is noted as a limitation of the current study below (see par. 5.4).

5.3.3 The relationship between leadership behaviours and CWB

The hypothesis that there is a significant relationship between leadership behaviour and CWB was partially supported by this study (H3). The results suggest a positive significant relationship between transformational leadership and CWB. This means that leaders whose leadership is transformational (i.e. those who help followers achieve extraordinary goals) influence soldiers' proneness to engage in CWB. These findings are contrary to literature in that, Kickul and Neuman (2000) argue that leadership behaviours correlate negatively with the subordinates' perceptions of a transformational leader. The relationship between transactional leadership behaviour and CWB was negative but non-significant. While a positive but non-significant relationship was found between laissez-faire leadership and CWB. This implies that soldiers under a laissez-faire leadership style are more likely to engage in deviant work behaviour because this particular leadership behaviour indirectly influences subordinates in terms of how decisions or indecision of the leader affect the overall soldier's performance. Since the laissez-faire leadership style does not involve

excessive controlling of subordinates, it makes it easy for employees to have discretion over their jobs, and hence engage in CWB (Larsson & Vinberg, 2010).

5.3.4 The relationship between ethical organisational climate and CWB

CWB was predicted to a lesser level when soldiers perceive the overall and ethical climate of their unit or organisation as positive or acceptable (H4). The results found that an insignificant positive relationship exist between all dimensions of organisational ethical climate and CWB except for the dimension of law and code. This implies that when employees feel that the organisation is concerned with the welfare of its workers (i.e. they are caring, have rules that guide behaviour and the work climate fosters independence) they are less likely to experience, or engage in, CWBs (Peterson, 2002). Based on these findings, it may be said that soldiers at 5 SAI Bn are more likely to engage CWB when the ethical climate is perceived not to be intact. Because of the strict rules that govern the conduct of soldiers in the military, it is reasonable to expect that the negative but non-significant relationship exist between the dimension of law and code and CWB. This is because the more the emphasis on rules, the less likely that employees will break those rules. This means that organisations that do not emphasise the strict adherence to rules and laws are more vulnerable to CWB (Peterson, 2002).

5.4 LIMITATIONS AND RECOMMENDATIONS

Throughout this study, several limitations were noted. The first limitation of this study pertains to how information was gathered from the research participants. This study utilised a self-report method to gather data from participants. According to Sallis and Saelens (2015), self-reporting is one of the most popular methods of gathering data and is regarded as the most useful in gathering large amounts of information at a relatively low cost. Notwithstanding the benefits of self-administered questionnaires, they allow for participants to provide information that would render the study vulnerable to response bias (Sallis & Saelens, 2015). Response bias would occur when the research participants responded to the questionnaires in a socially desirable manner, but also if they engaged in extreme and acquiescent responding (Paulhus & Vazire, 2007; Sallis & Saelens, 2015). According to Van de Mortel (2008), socially desirable

responding is the tendency for research participants to convey a favourable image of themselves through providing particular responses to questionnaires. Future studies should rather use other methods of data gathering such as behaviour observations to assess participants' extend to which they engage in CWB.

A second limitation of this study includes the sampling technique that was utilised, i.e., the non-probability convenience sampling method. This study also made use of a relatively small sample size ($n = 261$) of 5 SAI Bn soldiers who were available at the time of the study. Since the sample size was too small to perform traditional Structural Equation Modelling (SEM); the Partial Least Squared approach was used instead (Hair et al., 2006). The latter method more accurately estimates parameters in smaller sample sizes. However, despite using an approach that caters to a smaller sample size, both the sampling method and size of the sample strongly suggest that the results of the study cannot be generalised to the broader SANDF. Future studies focussing on the factors that influence CWB should thus use much larger samples of research participants, while also critically considering the sampling method that is chosen for future studies.

Thirdly, most of the research participants may have struggled to understand the questions, such as questions pertaining to perceived organisation injustice and work alienation, where the statistics indicated that there were problems with these measurement items. This includes reversed items in which participants could not comprehend the questions fully. Another reason could be a language barrier as most participants do not have formal education. It is acknowledged that these two instruments with negative items impacted the results of the study significantly. As noted by Donaldson and Grant-Vallone (2002), accurate measurement of organisational behaviour is important when conducting organisational research and the majority of research in the field is conducted utilising different forms of self-report questionnaires. Furthermore, the statistical procedure used did not favour improving the overall reliability results of the study. Ideally, if undesirable reliability coefficients were achieved during the statistical analysis of the data set, it would be beneficial to subject the data to a factor analysis to identify whether results were more reliable once

problem items were removed. It is recommended that to validate results, factor analysis should be mandatory, to determine whether the structural model properly fits.

Another limitation of this study linked to the previous one concerns the aspect of confidentiality. The constructs in this study were seen to be sensitive topics based on the questions asked in the questionnaire, particularly with regards to the extent to which an individual engages in some form of misbehaviour within the SANDF, their feelings of work alienation, and perceptions of organisational justice. As a result the demographic characteristics of the sample were not reported. Although this study was a low risk study as determined by the Stellenbosch University Ethics Committee, variance in data was limited in some instances. This could indicate that participants were worried about the confidentiality of the responses, even though confidentiality was ensured. It was clearly communicated that all results obtained would not be available to anyone outside of the study, nor would it be possible to trace responses to respective individuals. Nonetheless, respondents may have felt inclined to provide the most positive answers. It could be suggested that future research provide measurement tools that allowed participants to feel more comfortable and confident about revealing certain information.

Furthermore, the structural model might have been more effective if it had excluded other significant constructs in the process of investigation. The purpose of this study was restricted to a focus on the constructs of perceived organisational injustice, work alienation, leadership behaviour, and organisational ethical climate, which represent the core factors. However, there may be other variables which influence CWB that were not investigated in this study, and therefore might be built on by future studies.

Lastly, the limitation of this study pertains to the lack of measurement accuracy. There were major discrepancies between the reliability estimates, the Cronbach's alpha and Composite reliability of all scales. Although both these reliability estimates are based on different formulas this is viewed as a limitation in the present study or constraining factor in the model.

5.5 CONCLUSION

The data obtained from the sample group and the results provided from the statistical analysis provided some important outcomes of the study at hand. The purpose of this chapter is to interpret these findings in the best way possible and provide a sufficient explanation and understanding thereof. A non-significant relationship was found to exist between the variables with the exception of one variable that was significant. These results contribute to a meaningful learning experience, as the findings were contrary to the literature. However, the results provided insight into the strength and direction of the relationships between these particular constructs, based on the South African military sample. In practice, this offered awareness of certain downfalls and implications that need to be considered. These challenges further allowed the researcher to consider other influencing factors, and the possible interventions to mitigate the effect of CWB within the SANDF.

The literature provided a comprehensive framework that is theoretically and empirically grounded for other researchers to build on, but the current study recognises that the measurement instruments used to measure variables of the study may need to be modified to suit the military sample to provide useful and meaningful path estimates obtained. Finally, the findings here have highlighted that organisations may be able to reduce the occurrence of CWB that undermines their effectiveness by developing managerial interventions/policies, such as the enhancement of organisational justice, leadership effectiveness, and ethical climate of an organisation. Although the implementation of such interventions may incur financial pressure for the SANDF, both leaders and subordinates will receive benefits in the long run.

LIST OF REFERENCES

- Adams, J. (1965). Towards an understanding of inequity. *Journal Abnormal and Social Psychology*, 69, 422-436.
- Alarcón, D., & Sánchez, J.A. (2015). *Assessing convergent and discriminant validity in the ADHD-R IV rating scale*. Spanish STATA Meeting, October 22, 2015, University of Pablo de Olavide, Seville, Spain.
- Alarcón, D., Sánchez, J. A., & De Olavide, U. (2015). Assessing convergent and discriminant validity in the ADHD-R IV rating scale: User-written commands for Average Variance Extracted (AVE), Composite Reliability (CR), and Heterotrait-Monotrait ratio of correlations (HTMT). In *Spanish STATA Meeting*, 1-39.
- Al-Zu'bi, H. A. (2010). A study of relationship between organisational justice and job satisfaction. *International Journal of Business and Management*, 5(12), 102.
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24(3), 452-471.
- Ansari, M.E., Maleki, S.V., Mazraeh, S., & Khazaeli, H. A. (2013). Individual, job, and organisational predictors of counterproductive work behavior. *Journal of Basic Applied Science Research*, 3(4), 78-86.
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the multifactor leadership questionnaire (MLQ). *The Leadership Quarterly*, 14, 261 – 295
- Appelbaum, S., Iaconi, G., & Matousek, A. (2007). Positive and negative deviant workplace behaviors: Causes, impacts, and solutions. *Corporate Governance*, 7, 586-598. 10.1108/14720700710827176.
- Aquino, K., Lewis, M. U., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organisational Behavior*, 20(7), 1073-1091.

- Aryee, S., Budhwar, P., & Chen, Z. (2002). Trust as a mediator of the relationship between organisational justice and work outcomes: Test of a social exchange model. *Journal of Organisational Behavior*, 23, 267 - 285.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441 – 462.
- Avolio, B.J. & Bass, B.M. (1991) Manual for the full range of leadership. Binghamton, New York, USA: Bass, Avolio & Associates.
- Babbie, E. (2010). *The practice of social research*. 6th Ed. USA, Belmont: Wadsworth, Cengage Learning.
- Babbie, E., & Mouton, J. (2012). *The practice of social research*. USA, Belmont: Wadsworth, Cengage Learning.
- Banai, M., & Reisel, W.D. (2007). The influence of supportive leadership and job characteristics on work alienation: A six-country investigation, *Journal of World Business*, 42(4), 463–476.
- Bartels, L.K., Harrick, E., Martell, K.M., & Strickland, D. (1998). The relationship between ethical climate and ethical problems within human resource management. *Journal of Business Ethics*, 17, 799–804.
- Bartone, P. T. (2006). Resilience under military operational stress: Can leaders influence hardiness? *Military Psychology*, 18(1), 131-148.
- Baruch, Y. (2005). Bullying on the net: Adverse behaviour on e-mail and its impact. *Information & Management*, 42(2), 361-371.
- Bass, B. M., & Avolio, B. J. (1995). *The multifactor leadership questionnaire (Form 5-45)*. California, USA: Consulting Psychologist Press.

- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. New York, USA: Free Press.
- Bass, B.M. (1996). *A new paradigm of leadership: A survey of theory and research*. New York, USA: Free Press.
- Bauer, T. N., & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. *Academy of Management Journal*, 39(6), 1538-1567.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349.
- Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organisational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology*, 92(2), 410–424.
- Bies, R. J. (2005). Are procedural justice and interactional justice conceptually distinct? In J. Greenberg & J. A. Colquitt (Eds.), *Handbook of Organisational Justice* (p. 85–112). Lawrence Erlbaum Associates Publishers.
- Bies, R.J., & Moag, J.F. (1986) Interactional justice: communication criteria of fairness. In: R.J., Lewicki, B.H., Sheppard, B.H. and M.H. Bazerman, M.H., (Eds.), *Research on Negotiations in Organisations* (p. 43-55) JAI Press, Greenwich.
- Boos, D. D. (2003). Introduction to the bootstrap world. *Statistical Science*. 18 (2), 168-174.
- Borman, W. C., Motowidlo, S. J., Rose, S. R., & Hansen, L. M. (1987). Development of a model of soldier effectiveness (Tech. Rep. No. 741). *Alexandria, VA: US Army Research Institute for the Behavioural and Social Sciences*. 1, 330-341.
- Boshoff, E., & Van Zyl, E. S. (2011). The relationship between locus of control and ethical behaviour among employees in the financial sector. *Koers*, 76(2), 283-303.

- Bowling, N., & Beehr, T. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *The Journal of Applied Psychology*, 91, 998-1012.
- Bowling, N.A., Burns, G.N., & Beehr, T. (2010). Productive and counterproductive attendance behavior: An examination of early and late arrival to and departure from work. *Human Performance*, 23, 305 - 322.
- Brimecombe, M. J. (2012). Exploratory investigation of the predictors of counterproductive work behaviours among major league baseball employees. *Sport Management Review*, 7, 79-91.
- Brimecombe, M., Magnusen, M.J., & Bunds, K. (2013). Navigating the storm: A counterproductive work behaviour and leadership case study in a Division I FBS School, *Sport Management Review*, 7, 1-19.
- Bryman A., & Cramer D. (1997) *Quantitative data analysis with SPSS for Windows*. London, UK: Routledge.
- Bryman, A. (1992). *Charisma and leadership in organizations*. London: Sage Publications.
- Bryman, A., & Bell, E. (2003). Breaking down the quantitative/qualitative divide. *Business Research Methods*, 2(1), 465-478.
- Bryman, A., & Bell, E. (2011). Reliability and validity in qualitative research. *Business Research Methods*, 2, 215-243
- Buckley, M. R., Beu, D. S., Frink, D. D., Howard, J. L., Berkson, H., Mobbs, T. A., & Ferris, G. R. (2001). Ethical issues in human resources systems. *Human Resource Management Review*, 11(1-2), 11-29.
- Burch, T. C., & Guarana, C. L. (2014). The comparative influences of transformational leadership and leader–member exchange on follower engagement. *Journal of Leadership Studies*, 8(3), 6-25.

- Burke, C. S., Sims, D. E., Lazzara, E. H., & Salas, E. (2007). Trust in leadership: A multi-level review and integration. *The Leadership Quarterly*, 18(6), 606–632.
- Burns, J. M. (1978). *Leadership*. New York, USA: Harper & Row.
- Campbell, J. P., McHenry, J. J., & Wise, L. L. (1990). Modeling job performance in a population of jobs. *Personnel Psychology*, 43(2), 313-575.
- Carpenter, N. C., & Berry, C. M. (2017). Are counterproductive work behavior and withdrawal empirically distinct? A meta-analytic investigation. *Journal of Management*, 43(3), 834–863.
- Ceylan, A., & Sulu, S. (2010). Work alienation as a mediator of the relationship of procedural injustice to job stress, *South East European Journal of Economics and Business*, 5(2), 65–75.
- Ceylan, A., & Sulu, S. (2011). Organisational injustice and work alienation. *E M Ekonomika Management* (2), 65-77.
- Ceylan, A., & Sulu, S. (2011). Organizational injustice and work alienation, *Ekonomie a Management*, 14, 65–78.
- Chahal, R., Dua, S., Singh, N., & Mahey, S. (2012). Study of organisational climatic factor for employee effectiveness: A study of Jalandhar leather factories. *International Journal of Management & Information Technology*, 1(2), 21-30.
- Chiaburu, D. S., Diaz, I., & De Vos, A. (2013). Employee alienation: relationships with careerism and career satisfaction. *Journal of Managerial Psychology*, 28(1), 4-20.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295-336.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Michigan, USA: Lawrence Erlbaum Associates, Publishers.

- Cohen-Charash, Y., & Mueller, J. S. (2007). Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviours related to envy? *Journal of Applied Psychology, 92*(3), 666-698.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organisations: A meta-analysis. *Organisational Behaviour and Human Decision Processes, 86*(2), 278-321.
- Collins, J. M., & Griffin, R. W. (1998). The psychology of counterproductive job performance. *Journal of Applied Psychology, 6*(2), 36-48.
- Colquitt, J. A. (2001). On the dimensionality of organisational justice: a construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386-402.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y. (2001). Justice at the millennium: a meta-analytic review of 25 years of organisational justice research. *Journal of Applied Psychology, 86*(3), 55-72.
- Colquitt, J. A., Long, D. M., Rodell, J. B., & Halvorsen-Ganepola, M. D. (2015). Adding the "in" to justice: A qualitative and quantitative investigation of the differential effects of justice rule adherence and violation. *Journal of Applied Psychology, 100*(2), 278-285.
- Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: a meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology, 98*(2), 199-218.
- Crawshaw, J., Cropanzano, R., & Bell, C., & Nadisic, T. (2013). Organisational Justice: New insights from behavioural ethics. *Human Relations, 66*(7), 885-904.
- Cropanzano, R., & Moliner, C. (2013). Hazards of justice: egocentric bias, moral judgments, and revenge-seeking. *Deviant and Criminal Behavior in the Workplace, 5*, 155-160.

- Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organisational justice. *Academy of Management Perspectives*, 21(4), 34-48.
- Cropanzano, R., Prehar, C. A., & Chen, P. Y. (2002). Using social exchange theory to distinguish procedural from interactional justice. *Group & Organisation Management*, 27(3), 324-351.
- Cullen, J. B., Parboteeah, K. P., & Victor, B. (2003). The effects of ethical climates on organisational commitment: A two-study analysis. *Journal of Business Ethics*, 46(2), 127-141.
- Cullen, J. B., Victor, B., & Bronson, J. W. (1993). The ethical climate questionnaire: An assessment of its development and validity. *Psychological Reports*, 73(2), 667-674.
- Dadi, V. (2012). The black British clerical worker's response to psychological contract violation. *International Journal of Human Resource*, 2(4), 69-82.
- Dailey, R. C., & Kirk, D. J. (1992). Distributive and organisational commitment. *Journal of Managerial Procedural Justice as Antecedents of Job Psychology*, 17(4), 250-266.
- Dalal, R. S. (2005). A meta-analysis of the relationship between organisational citizenship behavior and counterproductive work behaviour. *Journal of Applied Psychology*, 90, 1241-1255.
- De Vaus, D. A. (1996). Analysing data. *Surveys in Social Research*, 129-232.
- Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. *MIS Quarterly*, 39(2), 1-20.
- Dilchert, S., Ones, D. S., Davis, R. D., & Rostow, C. D. (2007). Cognitive ability predicts objectively measured counterproductive work behaviors. *Journal of Applied Psychology*, 92(3), 616.

- Dineen, Brian & Lewicki, Roy & Tomlinson, Edward. (2006). Supervisory guidance and behavioral integrity: Relationships with employee citizenship and deviant behavior. *The Journal of Applied psychology*. 91, 622-35.
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organisational behavior research. *Journal of Business*, 6(1), 32-45.
- Durrheim, K. (2006). Research design. *Research in practice: Applied Methods for the Social Sciences*, 2, 33-59.
- El-Gohary, H. (2010). E-marketing—A literature review from a small business' perspective. *International Journal of Business and Social Science*, 1(1), 214-244.
- Engelbrecht, A. S., & Van Aswegen, A. S. (2009). The relationship between transformational leadership, integrity, and an ethical climate in organisations. *SA Journal of Human Resource Management*, 7(1), 1-9.
- Fernandes, C., & Awamleh, R. (2006). Impact of organisational justice in an expatriate work environment. *Management Research News*. 29(11), 701-712.
- Field, A. P. (2009). *Discovering statistics using SPSS*. London, England: SAGE.
- Field, R. G., & Abelson, M. A. (1982). Climate: A reconceptualization and proposed model. *Human Relations*, 35(3), 181-201.
- Fine, S., Horowitz, I., Weigler, H., & Basis, L. (2010). Is good character good enough? The effects of situational variables on the relationship between integrity and counterproductive work behaviors. *Human Resource Management Review*, 20(1), 73-84.
- Folger, R., & Cropanzano, R. (2001). Fairness theory: justice as accountability, In, J. Greenberg and R. Cropanzano, R. (Eds). *Advances in Organisational Justice*, (pp1-50), California, USA: Stanford University Press.

- Foote, M. F., & Ruona, W. E. (2008). Institutionalizing ethics: A synthesis of frameworks and the implications for HRD. *Human Resource Development Review*, 7(3), 292-308.
- Fortin, M. (2008). Perspectives on organisational justice: concept clarification, social context integration, time and links with morality. *International. Of Journal. Management. Review*. 10, 93–126.
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behaviour (CWB) in response to job stressors and organisational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behaviour*, 59, 291–309.
- Furnham, A., & Taylor, J. (2011). *Bad apples: identify, prevent & manage negative behaviour at work*. CA, USA: Springer.
- Garson, George. (2009). Computerized simulation in the social sciences: A survey and evaluation. *Simulation and Gaming*. 40 (2). 267-279.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 4th ed. Boston, USA: Allyn & Bacon.
- George, J. M. (1995). Leader positive mood and group performance: The case of customer service. *Journal of Applied Social Psychology*, 25, 778-794.
- Giordano, C., Ones, D.S., & Viswesvaran, C. (2018). Integrity testing and counterproductive work behaviour. In B.J. Carducci, J.S. Mio & R.E. Riggion (Ed.), *Wiley-Blackwell encyclopedia of personality and individual differences: Clinical, applied, and cross-cultural research* pp88-102. Hoboken, NJ: John Wiley & Sons,
- Golden, T.D. & Veiga, J.F. (2015). Self-estrangement's toll on job performance: The pivotal role of social exchange relationships with coworkers, *Journal of Management*, 44(4), 1573–1597.

- Gravetter, F. J., & Forzano, L. B. (2012). *Research methods for the behavioral sciences*. USA, California: Wadsworth, Cengage Learning.
- Gravetter, F. J., & Wallnau, L. B. (2011). *Essentials of statistics for the behavioural sciences*. 7th ed. USA, California: Wadsworth, Cengage Learning.
- Greenberg, J. & Baron, (2009). *Behaviour in Organisations*. 9th Edition, London, England: Prentice Hall.
- Greenberg, J. (1987). A taxonomy of organisational justice theories. *Academy of Management Review*, 12(1), 9-22.
- Greenberg, J. (1993). Justice and organisational citizenship: A commentary on the state of the science. *Employee Responsibilities and Rights Journal*, 6(3), 249-256.
- Greenberg, J., & Giacalone, R. A. (Eds.) (1997). *Antisocial behavior in organisations*. London, England: Sage.
- Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behaviour. *International Journal of Selection and Assessment*, 11(1), 30–42.
- Hackman, J. R. & Oldham, G.R. (1980). *Work redesign*. Lexington, Kentucky: Addison Wesley.
- Haenlein, M., & Kaplan, A. M. (2004). A beginner's guide to partial least squares (PLS) analysis. *Understanding Statistics*, 3, 283-297.
- Hair Jr, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM)*. CA, Los Angeles: Sage Publications.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate Data Analysis*. CA, Los Angeles: Sage Publications.

- Hair, J., Anderson, R., Tatham, R. and Black, W. (1998) *Multivariate data analysis*. 5th Edition, Upper Saddle River, New Jersey: Prentice Hall.
- Hair, J., Ringle, C. and Sarstedt, M. (2011) PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice*, 19, 139-151. Retrieved from
- Hakstian, A. R., Farrell, S., & Tweed, R. G. (2002). The assessment of counterproductive tendencies by means of the California psychological inventory. *International Journal of Selection and Assessment*, 10(1-2), 58-86.
- Harper, F. E. W. (1990). *A brighter coming day: A Frances Ellen Watkins Harper reader*. New York, USA: Feminist Press.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Bingley, United Kingdom: Emerald Group Publishing Limited.
- Hershcovis, M. S., Turner, N., Barling, J., Arnold, K. A., Dupré, K. E., Inness, M., & Sivanathan, N. (2007). Predicting workplace aggression: a meta-analysis. *Journal of Applied Psychology*, 92(1), 228.
- Hershcovis, S., Turner, N., Barling, J., Arnold, K., Dupré, K., Inness, M., LeBlanc, M., & Sivanathan, N. (2007). Predicting workplace aggression: A meta-analysis. *The Journal of Applied Psychology*. 92. 228-38.
- Hollinger, R. C., & Clark, J. P. (1983). *Theft by employees*. Lexington, Kentucky: Lexington Books.
- Hubley, A. M. (2014). Discriminant validity. *Encyclopedia of Quality of Life and Well-being Research*, 1664-1667.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195-204.

- Jeanne L, R. Marina, B. Jale, M. (2012). Interactional Justice and Counterproductive Work Behaviours: The mediating role of negative emotions, social behaviour and personality. *Society for Personality Research*, 40(8), 1341-1356.
- Kanungo, R. N. (1992). Alienation and empowerment: Some ethical imperatives in business. *Journal of Business Ethics*, 11(5-6), 413-422.
- Kelloway, E. K., Francis, L., Prosser, M., & Cameron, J. E. (2010). Counterproductive work behavior as protest. *Human Resource Management Review*, 20(1), 18-25.
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of Behavioral Research*. 4th ed. New York, USA: Holt.
- Kickul, J., & Neuman, G. (2000). Emergent leadership behaviors: The function of personality and cognitive ability in determining teamwork performance and KSAs. *Journal of Business and Psychology*, 15(1), 27-51.
- Kunzle, B., Kolbe, M., & Grote, G. (2010). Ensuring patient safety through effective leadership behaviour: a literature review. *Safety Science*, 48(1), 1-17.
- Lambert, E. G., Cluse-Tolar, T., Pasupuleti, S., Hall, D. E., & Jenkins, M. (2005). The impact of distributive and procedural justice on social service workers. *Social Justice Research*, 18(4), 411-427.
- Langenhoven, A. (2014). *How job demands and resources predict burnout, engagement and intention to quit in call centres*. Unpublished Thesis (MComm) University of Stellenbosch. Retrieved from <http://scholar.sun.ac.za/handle/10019.1/98070>.
- Larsson, J., & Vinberg, S. (2010). Leadership behaviour in successful organisations: Universal or situation-dependent?. *Total Quality Management*, 21(3), 317-334.
- LeBlanc, M. M., & Barling, J. (2005). *Understanding the Many Faces of Workplace Violence*. In S. Fox & P. E. Spector (Eds.), *Counterproductive work behavior:*

- Investigations of actors and targets* (p. 41–63). American Psychological Association.
- Leung, A. S. (2008). Matching ethical work climate to in-role and extra-role behaviors in a collectivist work setting. *Journal of Business Ethics*, 79(1-2), 43-55.
- Liberman, B., Seidman, G., Mckenna, K. Y., & Buffardi, L. E. (2011). Employee job attitudes and organisational characteristics as predictors of cyberloafing. *Computers in Human Behavior*, 27(6), 2192-2199.
- Liljegren, M., & Ekberg, K. (2009). The associations between perceived distributive, procedural, and interactional organisational justice, self-rated health and burnout. *Work*, 33(1), 43-51.
- Lind, E. (2001). Fairness heuristic theory: Justice judgments as pivotal cognitions in organisational relations. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organisation justice* (p. 56–88). Stanford University Press.
- Litzky, B. E., Eddleston, K. A., & Kidder, D. L. (2006). The good, the bad, and the misguided: How managers inadvertently encourage deviant behaviors. *Academy of Management Perspectives*, 20(1), 91-103.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7(3), 385-425.
- Lutgen-Sandvik, P., & McDermott, V. (2008). The constitution of employee-abusive organisations: A communication flows theory. *Communication Theory*, 18(2), 304-333.
- Lutgen-Sandvik, P., & McDermott, V. (2011). Making sense of supervisory bullying: perceived powerlessness, empowered possibilities. *Southern Communication Journal*. 76. 342-368.

- Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behaviour at work: A general perspective. *Journal of Applied Psychology, 89*(4), 647.
- Marcus, B., Taylor, O. A., Hastings, S. E., Sturm, A., & Weigelt, O. (2016). The structure of counterproductive work behavior: A review, a structural meta-analysis, and a primary study. *Journal of Management, 42*(1), 203–233.
- Martinko, M. J., Gundlach, M. J., & Douglas, S. C. (2002). Toward an integrative theory of counterproductive workplace behaviour: A causal reasoning perspective. *International Journal of Selection and Assessment, 10*(1/2), 36–50.
- Martinson, B. C., Anderson, M. S., Crain, A. L., & De Vries, R. (2006). Scientists' perceptions of organisational justice and self-reported misbehaviors. *Journal of Empirical Research on Human Research Ethics, 1*(1), 51–66.
- Marx, K. (1932), The economic and philosophical manuscripts, *Marx-Engels Gesamtausgabe, 13*, Berlin, Germany: Prometheus Books,
- Marx, K. (1988), Economic and philosophical manuscripts of 1844 and the communist manifesto, *Marx-Engels Gesamtausgabe, 1st Edn*, Berlin, Germany: Prometheus Books.
- Mayer, D., Nishii, L., Schneider, B., & Goldstein, H. (2007). The precursors and products of justice climates: Group leader antecedents and employee attitudinal consequences. *Personnel Psychology, 60*(4), 929-963.
- McGurn, M. (1988). Spotting the thieves who work among us. *Wall Street Journal, 7*, 16-21.
- Mels, G. (2003). *A workshop on structural equation modelling with LISREL 8.54 for Windows*. Chicago, USA: Scientific Software International.
- Michaels, R.E., Cron, W.L., Dubinsky, A.J., & Joachimsthaler, E.A. (1988). Influence of formalization on the organizational commitment and work alienation of salespeople and industrial buyers, *Journal of Marketing Research, 25*, 376–383.

- Mikulay, S., Neuman, G., & Finkelstein, L. (2001). Counterproductive workplace behaviors. *Genetic, Social, and General Psychology Monographs*, 127(3), 279-298.
- Mitchell, M., & Jolley, J. M. (2001). *Research design explained*. 4 ed. London, UK: Wadsworth Publishing.
- Monanu O, G. Okoli I, E., & Adibe C, G. (2015). Examining the link between organisational justice and counterproductive work behaviour. *Journal of Business & Management Studies*, 1(2), 1-10.
- Moorman, R. H. (1991). Relationship between organisational justice and organisational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, 76(6), 845.
- Mottaz, C.J. (1981). Some determinants of work alienation. *Sociological Quarterly*, 22(4), 515-529.
- Mouton, J. (1996). *Understanding social research*. Cape Town, South Africa: Van Schaik Publishers.
- Nair, N., & Vohra, N. (2009). Developing a new measure of work alienation. *Journal of Workplace Rights*, 14(3), 293-309.
- Nair, N., & Vohra, N. (2012). The concept of alienation: towards conceptual clarity. *International Journal of Organisational Analysis*, 20(1), 25-50.
- Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management*, 24(3), 391-419.
- Neuman, W.L. (2003). *Social research methods: Qualitative and quantitative approaches*, 5th ed. Boston, England: Pearson Education, Inc.

- Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organisational citizenship behavior. *Academy of Management Journal*, 36(3), 527-556.
- Northouse, G. (2007). *Leadership theory and practice*. London, England: Sage Publication Inc.
- Northwestern National Life Insurance Company (US) Employee Benefits Division. (1993). *Fear and violence in the workplace: A survey documenting the experience of American workers*. Michigan, USA: Northwestern National Life.
- Nunnally, J. C. (1978). *Psychometric theory*. 2nd ed. New York, USA: McGraw-Hill.
- O'Neill, T. A., & Hastings, S. E. (2011). Explaining workplace deviance behavior with more than just the "Big Five". *Personality and Individual Differences*, 50(2), 268-273.
- Ones, D. S., & Viswesvaran, C. (2003). Personality and counterproductive work behaviours. In M. Koslowsky, S. Stashevsky, & A. Sagie (Eds.), *Misbehaviour and Dysfunctional Attitudes in Organisations* (pp. 211–249). Hampshire, UK: Palgrave Macmillan.
- Ones, D., & Dilchert, S. (2013). Counterproductive work behaviors: Concepts, measurement, and nomological network. *APA Handbook of Testing and Assessment in Psychology*. 643-659.
- Ones, D.S., Viswesvaran, C., & Schmidt, F.L. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of Applied Psychology*, 78(4), 679-703.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2005). *Organisational citizenship behaviour: Its nature, antecedents, and consequences*. London, UK: Sage Publications.

- Ottinot, R. C. (2010). A multi-level study investigating the impact of workplace civility climate on incivility and employee well-being. *Unpublished Doctoral Theses. University of Florida*. <https://scholarcommons.usf.edu/etd/3537>
- Pallant, J. (2007). *SPSS survival manual—A step by step guide to data analysis using SPSS for windows*. 3rd ed. Maidenhead, England: Open University Press.
- Paulhus, D. L., & Vazire, S. (2007). The self-report method. *Handbook of Research Methods in Personality Psychology*, 1, 224-239.
- Peterson, D.K. (2002). Deviant workplace behavior and the organisation's ethical climate. *Journal of Business and Psychology*, 17, 47–61.
- Podsakoff, P. M., Bommer, W. H., Podsakoff, N. P., & MacKenzie, S. B. (2006). Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions, and behaviors: A meta-analytic review of existing and new research. *Organisational Behavior and Human Decision Processes*, 99(2), 113-142.
- Puffer, S. M. (1987). Prosocial behavior, noncompliant behavior, and work performance among commission salespeople. *Journal of Applied Psychology*, 72(4), 615.
- Rauf, K., & Farooq, A. (2014). Adaptation and validation of counterproductive work behaviour checklist. *International Journal of Novel Research in Humanity and Social Sciences*, 1, 39-49.
- Robbins, S. P., & Coulter, M. K. (2007). *Management*. Upper Saddle River, 9th Edn. New Jersey: Pearson.
- Robbins, S. P., Judge, T. A., Odendaal, A., & Roodt, G. (2013). *Organisational behaviour: Global and Southern African perspectives*. Pinelands, Cape Town, South Africa: Pearson Education.

- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviours: A multidimensional scaling study. *Academy of Management Journal*, 38(2), 555–572.
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organisational Behaviour*, 15(3), 245–259.
- Robinson, S., & Bennett, R. (1997). Workplace deviance: Its definition, its manifestations, and its causes. In R. J. Lewicki, R. J. Bies, & B. H. Sheppard (Eds.), *Research on negotiation in organisations*, (6th ed.), pp. 3–27. Bingley, UK: Emerald Group Publishing Limited.
- Rose, M. (1988). *Industrial behaviour*, London, UK: Penguin.
- Rosnow, R. L., & Rosenthal, R. (2008). Assessing the effect size of outcome research. In A. M. Nezu & C. M. Nezu (Eds.), *Evidence-based outcome research: A practical guide to conducting randomized controlled trials for psychosocial interventions* (p. 379–401). Oxford University Press.
- Rossouw, G.J. (2014). Perfectly imperfect leadership: feature-leadership. *HR Future*, 20-21.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, 87(1), 66–80.
- Sackett, P. R., & DeVore, C. (2001). Counterproductive behaviours at work. In N. Anderson, D. Ones, H. Sinangil, & C. Viswesvaran (Eds.), *Handbook of Industrial, Work & Organisational Psychology* (1st ed., pp. 145–164). London, UK: SAGE Publications.
- Sackett, P.R. (2002), The structure of counterproductive work behaviors: dimensionality and relationships with facets of job performance. *International Journal of Selection and Assessment*, 10, 5-11.

- Sallis, J.F. & Saelens, B.E. Assessment of physical activity by self-report: status, limitations and future directions. *Research Quarterly for Exercise and Sport*, 71(2), 1-14.
- Sarros, J.C., Tanewski, G. a., Winter, R.P., Santora, J.C., & Densten, I.L. (2002), Work alienation and organizational leadership, *British Journal of Management*, 13(4), 285–304.
- Schumm, W. R., Rice, R. E., Bell, D. B., & Schuman, P. M. (1996). Marriage trends in the US Army. *Psychological Reports*, 78(3), 771-784.
- Scott, B. A., Colquitt, J. A., & Zapata-Phelan, C. P. (2007). Justice as a dependent variable: Subordinate charisma as a predictor of interpersonal and informational justice perceptions. *Journal of Applied Psychology*, 92(6), 1597-1610.
- Seeman, M. (1959). On the meaning of alienation, *American Sociological Review*, 24(6), 783–791.
- Seeman, M. (1971). The urban alienations: Some dubious theses from Marx to Marcuse, *Journal of Personality and Social Psychology*, *American Psychological Association*, 9(2), 135–143.
- Serfontein, J. J. (2010). *The impact of strategic leadership on the operational strategy and performance of business organisations in South Africa*. Doctoral dissertation, Stellenbosch: University of Stellenbosch.
- Sims, R. R. (2003). *Ethics and corporate social responsibility: Why giants fall*. Westport, USA: Greenwood Publishing Group.
- Sims, R.R. (1992). The challenge of ethical behaviour in organisations. *Journal of Business Ethics*, 11(7), 505-513.
- Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82(3), 434–443.

- Sookoo, N. (2013). Perceptions of injustice and alienation dynamics within the workplace. *Journal of the Department of Behavioural Sciences*, 3(1), 81-99.
- Sparks, J.R. & Schenk, J.A. (2001). Explaining the effects of transformational leadership: An investigation of the effects of higher-order motives in multi-level marketing organisations. *Journal of Organisational Behaviour*, 22, 849-869.
- Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organisational citizenship behavior. *Human Resource Management Review*, 12(2), 269-292.
- Spector, P. E., & Fox, S. (2010). Counterproductive work behaviour and organisational citizenship behaviour: Are they opposite forms of active behaviour? *Journal of Business and Psychology* 59(1), 21–39.
- Spector, P. E., & Zhou, Z. E. (2013). The moderating role of gender in relationships of stressors and personality with counterproductive work behaviour. *Journal of Business and Psychology*, 29(4), 669–681.
- Sulu, S., Ceylan, A., & Kaynak, R. (2010). Work alienation as a mediator of the relationship between organisational injustice and organisational commitment: Implications for healthcare professionals. *International Journal of Business and Management*, 5(8), 27-38.
- Sumer, H. C., Sumer, N., Demirutku, K., & Çifci, O. S. (2001). Using a personality-oriented job analysis to identify attributes to be assessed in officer selection. *Military Psychology*, 13(3), 129-146.
- Syaebani, M., & Rachmawati, R. (2011). Relationship between Organizational Justice Perception and Engagement in Deviant Workplace Behavior. *The South East Asian Journal of Management*. 5. 37-49.

- Tabibnia, G., Satpute, A. B., & Lieberman, M. D. (2008). The sunny side of fairness: preference for fairness activates reward circuitry (and disregarding unfairness activates self-control circuitry). *Psychological Science*, 19(4), 339-347.
- Temel, C., Mirzeoglu, N., & Mirzeoglu, A.D. (2013), An investigation of physical education teachers' work alienation level according to some variables, *International Journal of Academic Research*, 5(4), 502– 508.
- Terre Blanche, M., Durrheim, K., & Painter, D. (2006). Research in practice: Applied methods for the social sciences. Cape Town, South Africa: Juta Limited.
- Thau, S., Bennett, R., Mitchell, M., & Marrs, M. (2009). How management style moderates the relationship between abusive supervision and workplace deviance: An uncertainty management theory perspective. *Organizational Behavior and Human Decision Processes*, 108, 79-92.
- Townsend, J., Phillips, J.S., & Elkins, T.J. (2000). Employee Retaliation: The neglected consequence of poor leader-member exchange relations. *Journal of Occupational Health Psychology*, 5, 457-463.
- Tummers, L., & den Dulk, L. (2011). *Meaningful work for a meaningful life? Work alienation and its effects in the work and the family context*. New York, USA: Random House
- Tyler, T. R., & Bies, R. J. (1990). Beyond Formal Procedures: The Interpersonal Context of Procedural Justice. In J. Carroll (Ed.), *Applied Social Psychology and Organisational Settings* (pp. 77-98). Hillsdale, New Jersey: Erlbaum Associates.
- Valadbigi, A., & Ghobadi, S. (2011). The study of the elements of work alienation: A case study of the urmia white cement factory, western Azarbayjan province, Iran, *Asian Social Science*, 7(6), 206–220
- Vallas, S. P., & Yarrow, M. (1987). Advanced technology and worker alienation: Comments on the Blauner/Marxism debate. *Work and Occupations*, 14(1), 126–142.

- Van de Mortel, T. F. (2008). Faking it: social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, 25(4), 40-48.
- Van Heerden, A. (2016). Behavioural Sciences Capability [Review of the *book Military Psychology for Africa*, by GAJ van Dyk]. *Scientia Militaria: South African Journal of Military Studies*, 44(2), 178-187.
- Van Zyl, E.S. (2012). Utilising human resource management in developing an ethical corporate culture. *African Journal of Business Ethics*, 6(1), 50–55.
- Vardi, Y. The Effects of Organisational and Ethical Climates on Misconduct at Work. *Journal of Business Ethics* 29, 325–337 (2001).
- Vardi, Y., & Weitz, E. (2004). *Misbehaviour in organisations: Theory, research, and management*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Vardi, Y., & Wiener, Y. (1996). Misbehaviour in organisations: A motivational framework. *Organisation Science*, 7(2), 151-165.
- Varma, A., Stroh, L. K. & Schmitt, L. B. (2001). Women and international assignments: The impact of supervisor-subordinate relationships. *Journal of World Business*, 36: 380-388.
- Victor, B. & Cullen, J.B. (1988). The organisational bases of ethical work climates, *Administrative Science Quarterly*, 3(1), 101-125.
- Victor, B., & Cullen, J. B. (1987) A theory and measure of ethical climates in organisations. *Research in Corporate Social Performance and Policy*, 9, 51-71.
- Vlok, A. (2017). *A competency profile for technology innovation leaders in knowledge intensive organisations in South Africa*. (Unpublished doctoral thesis) University of Stellenbosch. Stellenbosch, South Africa.
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119-134.

- Wang, Y. D., & Hsieh, H. H. (2012). Toward a better understanding of the link between ethical climate and job satisfaction: A multilevel analysis. *Journal of Business Ethics*, 105(4), 535-545.
- Weatherbee, T., & Kelloway, E. K. (2006). A Case of Cyberdeviancy: Cyberaggression in the Workplace. *Human Resource Management Review*, 20, 35-44.
- Weiten, W. (2013). *Psychology: themes and variations*. South African Edition. Cape Town, South Africa: Junaid Hassim.
- Whelpley, C. E., & McDaniel, M. A. (2016). Self-esteem and counterproductive work behaviours: a systematic review. *Journal of Managerial Psychology*, 31(4), 850-863.
- Williams, M.L., Podsakoff, P.M., & Huber, V. (1992). Effects of group-level and individual-level variation in leader behaviours on subordinate attitudes and performance. *Journal of Occupational and Organisational Psychology*, 65, 115-129.
- Wimbush, J.C., Shepard, J.M. (1994). Toward an understanding of ethical climate: Its relationship to ethical behavior and supervisory influence. *Journal of Business Ethics* 13, 637–647.
- Wofford, J.C., Whittington, J.L., & Goodwin, V.L. (2001). Follower motive patterns as situational moderators for transformational leadership effectiveness. *Journal of Managerial Issues*, 13, 196-211.
- Yang, L. Q., Spector, P. E., Zhang, X. C., Johnson, R. E., Rodopman, O. B., & Li, H. Y. (2007). The roles of negative emotion and sensitivity to injustice in the organisational justice–counterproductive work behaviour relationship. In *67th Academy of Management Annual Meeting, Philadelphia, PA*.