THE IMPACT OF BOLMAN AND DEAL'S LEADERSHIP ORIENTATION FRAMES ON PSYCHOLOGICAL EMPOWERMENT, TEAM EFFECTIVENESS AND ORGANISATIONAL CITIZENSHIP BEHAVIOUR

GADIJA ABDULATIEF

Dissertation for the Degree of Master of Commerce in Industrial Psychology at University of the Western Cape

SUPERVISORS

PROF. BRIGHT.MAHEMBE

DR. NELSON GWAMANDA

DECLARATION

I declare that THE IMPACT OF BOLMAN AND DEAL'S LEADERSHIP ORIENTATION FRAMES ON PSYCHOLOGICAL EMPOWERMENT, ORGANISATIONAL CITIZENSHIP BEHAVIOUR AND TEAM EFFECTIVENESS is my own work, that it has not been submitted before for any degree or assessment in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references

Name: Gadija Abdulatief   Date: 30 October 2022

Signed: …………………………...

UNIVERSITY *of the* WESTERN CAPE

ii

ABSTRACT

Leadership plays an important role in the success and sustainability of organisations given the volatile, uncertain, complex, and ambiguous circumstances that most of them exist in. For organisations and their subunits to thrive, management should possess the appropriate leadership skills to lead and manage. Therefore, it is important to explore how leaders interpret and react to their organisational environments to bring about organisational effectiveness. The purpose of the study was to explore the effect of Bolman and Deal's leadership orientation frames on psychological empowerment, organisational citizenship behaviour and team effectiveness. The motivation of the study was to determine whether once leaders know what frame they use to solve problems and realise there are other possible solutions, they broaden their perspectives and that of the teams who report to them. Successful organisations acknowledge that team effectiveness is an essential ingredient for competitive advantage and that it is dependent on employees being empowered to make decisions and find solutions to related problems. Teams that function effectively enhance organisational citizenship behaviour as empowered team members realise their important role of contributing to the mission and vision of the organisation.

Based on the existing literature, a theoretical model was developed to explain the structural relationships between the latent variables. The data for this study were obtained via questionnaires from a non-probability sample of 158 employees in one branch of a selected parastatal organisation in the Western Cape in South Africa. Each participant completed the biographical questionnaire, Bolman and Deal's Leadership Orientation questionnaire, Team Effectiveness questionnaire, Psychological Empowerment questionnaire and the Organisational Citizenship behaviour questionnaire. All the measurement scales went through reliability analyses and adequate reliability was found. The proposed relationships were empirically tested using various statistical methods. Structural equation modelling (SEM) was utilised to establish the degree to which the conceptual model fitted the data obtained from the sample and to test the relationships between the constructs. In line with previous research, relationships between psychological empowerment and team effectiveness, team effectiveness and leadership

iii

orientation, psychological empowerment, and organisational citizenship behaviour and between psychological empowerment and leadership orientation were supported. Contrary to literature, the relationship between leadership orientation and organisational citizenship behaviour was not supported. The limitations and suggestions for future research provide additional insights and opportunities to be explored through future studies.

ACKNOWLEDGEMENTS
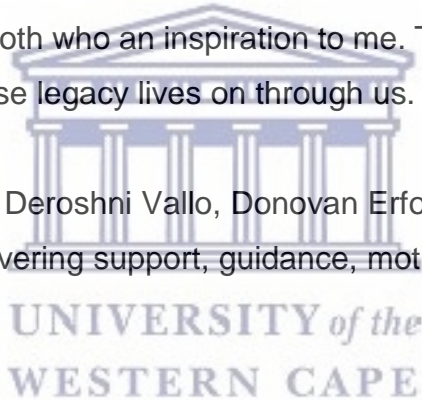
Thank you to my Creator, most Gracious and most Merciful.

I would firstly like to offer my since gratitude to my supervisor, Professor Bright Mahembe whose patience is truly legendary. Thank you for your guidance and assistance throughout this process. Thank you for your academic support and sharing your knowledge.

To Dr. Nelson Gwamanda, for his input, guidance, patience in keeping me on the straight and narrow. Thank you for never giving up.

Thank you to my mother, Adielah Abdulatief and my sister, Soraya Abdulatief, the giants on whose shoulders I stand, both who an inspiration to me. Thank you to the people who are no longer with us but whose legacy lives on through us.

To my tribe, Danielle Quarrie, Deroshni Vallo, Donovan Erfort and Fazlin Jakoet and the late Gavin Wiid for their unwavering support, guidance, motivation, humour and belief in me.

Lastly, to my north star who has always been a shoulder to lean on.

Table of Contents

LIST OF TABLES

UNIVERSITY *of the*

WESTERN CAPE

LIST OF FIGURES

UNIVERSITY *of the*
WESTERN CAPE

https://etd.uwc.ac.za/

CHAPTER ONE

INTRODUCTION, RESEARCH PURPOSE AND RESEARCH OBJECTIVE

1.1 INTRODUCTION AND BACKGROUND OF THE STUDY

Globalisation and more recently the COVID-19 pandemic has had a considerable impact on organisations and business operations. Currently, organisations are operating in more turbulent and challenging times. Previously organisations had to adapt to international markets, multi-cultural workforce and to global citizenship and now they have to adapt to both external and internal changes.

According to Lengnick-Hall et al. (2011), organisations that are adaptable, and responsive and self-motivated are the ones that will do well during turbulent times. Organisational transformation occurs when organisations encounter and overcome trials (Lengnick-Hall et al., 2003). Sutcliffe and Vogus (2003) as cited in Cameron et al. (2003,) postulate that when there are challenging times such as an economic downturn, the organisations that are resilient can adjust positively to change.

Howards et al. (2009) claim that the pressure to change is so immense that even organisations that do not anticipate change are still subject to change but are affected in a detrimental way. The authors further argued that for organisations to traverse the changing landscape of the economy, they should ascertain the nature of the solution that best fits their organisation (Howard et al., 2009). According to Gallos (2003), organisations can improve only when the dynamics within which they exist are understood.

The COVID – 19 pandemic and resultant economic downturns have forced organisations to re-assess their business models, internal processes, and business strategy. Both the employer and employees had to adjust to working from home on a full-time basis or on a

1

rotational basis. How well organisations reacted to the sudden state of emergency depended not only on the disaster management processes they had in place but also on how well the employees adjusted to the change in their work environments. Organisations are now more than ever reliant on employees being effective, displaying efficacy and extra-role behaviours (Organ, 1997; Mahembe et al, 2015).

An organisational response to change entails restructuring the workforce into small teams. Hackman (2002) defines teams as a group of employees who are mutually dependent on each other, working together towards the organisation's objectives. Kozlowski and Bell (2003, p. 334) define work teams as "collectives who exist to perform organisationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, maintain and manage boundaries, and are embedded in an organisational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity", whilst Sundstrom (2002) opines that work teams are central to organisations achieving their targets. These collective goals contribute to the overall strategic goals and the Annual Performance Plan of the organisation. Henderson and Walkinshaw (2002) define team effectiveness in terms of how well the team achieves the targets that have been set for them.
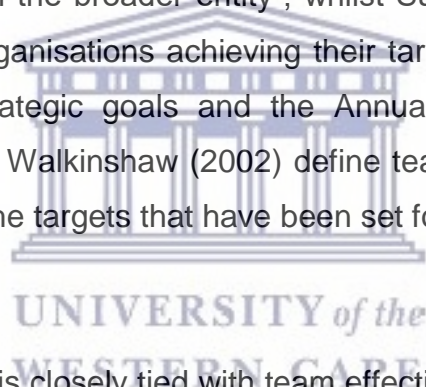
Psychological empowerment is closely tied with team effectiveness since empowerment relates to efficacy. Members must believe that they can perform their work tasks for them to achieve the targets. Initially, empowerment was perceived as a management tool but has since evolved into a motivational construct (Spreitzer, 1995). Chan (2003) opines that empowered employees believe they are equipped with the skills, knowledge, and persistence to impact their work environment and bring about change. According to Bandura (1986) empowered employees displays self – determination and self – efficacy by taking control of their jobs.

Mahembe and Engelbrecht (2013) postulate that for a team to be effective the leadership must be reliable. This is supported by Robbins and Judge (2007) who opines that

2

although the managers are the decision makers and resource allocators the organisational goals are met through the employees performing the tasks. Chen and Kamfer (2006), Morgeson et al. (2010) and Zaccoro (2008), as quoted in Hu and Linden (2011) postulate that team-level leadership aids with social integration, efficient processes and open communication within the team which enhances team motivation and effectiveness.

Traditional leadership theories focus on managers, and not the team members being responsible for solving, disseminating information and being solution focused. There has been a paradigm shift where organisations are realising that team effectiveness is reliant on employees being empowered to make decisions and find solutions to related problems.

Whilst there is a plethora of literature regarding different leadership styles, for example, servant leadership, transformational leadership, transactional leadership and how they affect team effectiveness, psychological empowerment and organisational citizenship behaviour, there is little literature discussing leadership frame (Allen et al., 2016; Mahembe & Engelbrecht, 2014; Zhang & Guo, 2022). The premise of the leadership frame is that prior to a leadership style being identified, leaders first must identify the frame through which they perceive the organisational environment. Gallos and Josey – Bass (2003a) theorises that "when our perspective is hindered by individual bias, our ability to see what is going is influenced and we are unable to utilise the information to make an informed decision".

Bolman and Deal's (2003) multi frame theory hypothesises that leaders interpret and react to their organisational environment through four frames. The focus organisation of the study has had to respond to internal and external changes while still achieving the targets set out in their Annual Performance Plan. Employees had to adjust to initially working remotely followed by working on a rotational basis. The organisation structure is based on the task grade system, seniors are graded on task grade 12, team leaders on

task grade 14 and managers from task grade 18 upwards. For this study, managers, seniors are jointly referred to as leaders.

1.2 RESEARCH PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study is to explore the effect of leadership orientation frames on psychological empowerment, organisational citizenship behaviour and team effectiveness. The secondary goal is to explore the structural relationship between these variables in a South African parastatal organisation in the Western Cape Province.

The objectives of the study are to determine:

- The relationship between leadership frames, team effectiveness, psychological empowerment, and OCB among employees at a parastatal organisation.
- The goodness of fit of the hypothesised model illustrating how leadership orientation frames and psychological empowerment contribute to OCB and team effectiveness.
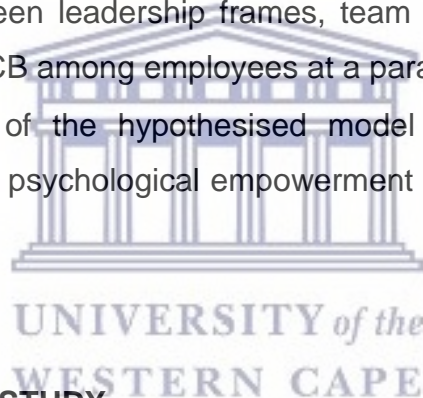
1.3 SIGNIFICANCE OF THE STUDY

The role of leaders in organisations cannot be overemphasised because they determine the direction in which the organisation will follow. Leaders create environments under which organisations will flourish, therefore, the success or failure is hinged on the skills that they utilise. The study of the influence of Bolman and Deal's leadership orientation frames on psychological empowerment, organisational citizenship behaviour and team effectiveness will significantly add to the body of knowledge by giving insights on how the leaders' awareness of the frames they are using affect the extent to which they empower their followers. Employees who are psychologically empowered tend to engage in extra

4

role behaviours which in turn enhances team effectiveness. When teams are effective it increases the chances of organisational success and sustainable competitive advantage.

The results of this study will guide management in nurturing leadership styles that enhances positive organisational behaviours and outcomes. The results can aid in the development of leadership development programs to boost the engagement of employees. The execution of this study is therefore important as it will also give future researchers theoretical and empirical evidence for future research studies.

1.4 STRUCTURE OF THE THESIS

The research paper consists of the following five chapters:

Chapter one sets out the introduction, purpose of the research, objectives of the study, the significance of the study and the structure of the thesis.

Chapter two reviews the theoretical literature and definitions of the constructs relating to the research topic. The theory of how team effectiveness, Bolman and Deal's leadership frames and psychological empowerment influences organisational citizenship behaviour is examined.

Chapter three provides an overview of the methodology applied in the research. The research methodology includes the research design, sampling strategy, data collection methods properties of the measuring instruments and the statistical techniques.

Chapter four presents the findings of the study based on empirical analysis of the data obtained.

Chapter five discusses the results, addresses the theoretical and practical implications, as well as the limitations of the study.

5

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Team effectiveness is, without a doubt, one of the most important characteristics of successful organisations (Mahembe & Engelbrecht, 2013). One of the primary functions of the work teams is to assist the organisation in achieving its strategic goals. Work teams must perform effectively to achieve these goals. One way to achieve team effectiveness is to ensure that employees are empowered. Leadership plays a major role in the organisational context since it impacts on team effectiveness (Mahembe & Engelbrecht, 2013), psychological empowerment and organisational citizenship. Organisations are constantly looking for ways of improving team functioning. This has resulted in researchers writing several scholarly articles to assist in identifying the determinants of team effectiveness (Buljac-Samardzic et al., 2020; Shuffler et al., 2018; Wu & Cormican, 2021). This study seeks to contribute to this endeavour by identifying the role played by leadership frames in promoting team effectiveness via the psychological empowerment of the employees and the creation of OCB.

2.2 CONCEPTUALISING TEAM EFFECTIVENESS

Organisational resilience and competitiveness are dependent on how well the organisation reacts to change. In a large organisation, a response to change is the creation of work teams where a diverse group of people is readily available to assist with the workload.

Teams are characterised by individuals working interdependently to achieve a collective goal (Hackman, 2002; Wu & Cormican, 2021). These collective goals contribute to the overall strategic goals and the annual performance plan of the organisation. Whilst teams differ in the way they operate, they may be similar in the task they perform versus varied,

6

stable versus environments and in terms of their functionality. They are only effective when they achieve or exceed the strategic goals of the organisation.

The promotion of work innovation and improvement in customer services can be achieved best by means of a team-based approach to work (Schuler, 1998). The contributory roles of individual members who make up the team is an integral part of the functioning of the team (Rizzo et al., 1970), thus clarity of team roles and individual members' roles in working towards meeting the goals has a strong impact on team effectiveness (Gladstein, 1984).

Despite the extensive amount of research that has been undertaken regarding team effectiveness there is no one clear definition. Over the years there has been a progression in the various definitions of team effectiveness as per Table 2.1 as well as models of team effectiveness as per Table 2.2.

Table 2.1

Definitions of team effectiveness

Campbell (1990a)	**Evaluation of the results of performance**
Cohen (1994)	Team Effectiveness is multidimensional.
Henderson and Walkinshaw (2002)	Effectiveness relates to achieving organisational targets and objectives.
Mahembe (2010)	Team effectiveness is characterised by a "nomological network of latent variables and is not a random event".

Table 2.2

Models of team effectiveness

McGrath (1964)	Input – Process - Output
Nieva et al. (1978)	Team performance was characterised by four antecedents: (1) external conditions, (2) member resources, (3) team characteristics, (4) task characteristic and demands.
Hackman (1983)	Successful teams: • Have goal/task clarity: know what they are working towards. • Have the necessary skills, knowledge, and ability to perform the tasks. • Teams are diverse and are regulated by established norms and practices. • Appropriate reward system where the team is recognised as a collective. Adequate exposure to learning and development that enables them to update their skillsets. • Coaching and mentoring.
Driskell et al. (1987)	Input–Process–Output model (IPO) • Input factors on their own do not result in effectiveness since the factors are the potential the team have to be productive. Effectiveness is also dependent on the environment the team exists in and the interaction within the team.
Salas et al. (1992)	This is an adaptation of Hackman's (1983) model, however, it is more inclusive since it differentiated between teamwork and task work on an individual and team level. Ongoing performance evaluation and feedback was included in their model.
Klimoski and Jones (1995)	This is an adaptation of the IPO model, where: • Input factors – how the work is allocated and hierarchy within the team; team members are modulated by the informal rules. Leadership affects team performance and size of the team.

	• Process– how well the members get along, their knowledge, skills and efficacy.
	• Output – how well they do their work tasks, satisfaction and turnover.
	Team effectiveness is not reliant on individual members efforts but on variables such as trust between members, interpersonal undercurrents, and subtle ties and or how well members get along. The context within which the teams exist play a major role and can either work for or against the team.

2.3 CONCEPTUALISING PSYCHOLOGICAL EMPOWERMENT

The construct of empowerment can be found in the literature as far back as Lewin's (1947) research on employee involvement and participation, as well as Kanter's (1997) research on organisational change, affirmative action, and quality of life (Maynard et al., 2012). Previously, the focus on empowerment was geared towards structural empowerment that focused on management practices such as delegation of decision making and increasing access to information for individuals on lower levels (Blau & Alba, 1982; Bowen & Lawler, 1992; Mainiero, 1986; Nielsen, 1986). According to Conger and Kanungo (1989) management practices do not necessarily empower employees since they focused on organisational conditions i.e., facets of the job, team and job design, policies and procedures but was not people centric (Kanter, 1977).

Maynard et al. (2012) argued that despite having prevalent management methods, output performance did not increase and that there was insufficient evidence to confirm that empowerment increased performance. Conversely Wagner (1994), Spreitzer (2008) and Hempel et al. (2012) as quoted in Maynard et al. (2012) opine that empowered employees perform better and had a better sense of well–being. Table 2.3 depicts the varied definitions of empowerment.

Table 2.3

Definitions of empowerment

Authors	Definitions
Spreitzer (2007)	Psychological empowerment refers to a set of psychological states that are necessary for individuals to feel a sense of control in relation to their work. It is focused on how employees experience their work.
Zimmerman (1990a)	Psychological empowerment refers to empowerment at the individual level of analysis.
Bandura (1990)	Empowerment is closely related to people's perceptions about themselves in relation to their work environments.
Conger and Kanungo (1990)	Empowerment is a motivational concept of self-efficacy.
Menon (2001)	Empowerment is a psychological state manifested in prepared control, competence, and goal

Despite the considerable definitions for empowerment across various literary fields, there is no one meaning that encompasses all aspects of the construct (Cooney, 2004). Thomas and Velthouse (1990) argue that because there are so many facets to empowerment, limiting it to a single definition would do it an injustice. They define empowerment as "an increased intrinsic task motivation manifested in an individual's orientation to his work role: meaning, competence and impact" (Thomas & Velthouse, 1990), where:

✓ Meaning is the driving force of empowerment (Spreitzer et al., 1997). It is the value of the work goal, or the purpose judged in relation to an individual's ideas or standards. Employees will only feel empowered if their work activities are not in conflict with their value system and if they have purpose that fuel work (Thomas & Velthouse, 1990).

✓ Competence or self-efficacy is an individual's belief in their ability to perform activities with skill (Gist, 1987). Bandura (1989) further defines competence as being "analogous to agency beliefs, personal mastery or effort-performance expectancy".

- ✓ Self-determination relates to how much autonomy or freedom an employee has to perform their work (Wagner, 1995).
- ✓ Impact is defined as the extent to which an individual can influence strategic, administrative, or operating outcomes such as work (Ashforth, 1989). Thomas and Velthouse (1990) opined that without a clearly defined goal to work towards as well as the belief that they can cause a change within the organisation, they will not feel empowered.

According to Spreitzer (1995), it is the combination of the four dimensions that creates the construct of psychological empowerment. Spreitzer (1995, 1997) as mentioned in Maynard et al. (2012) opines that psychological empowerment is neither an "organisational intervention" nor is it "a disposable trait but rather "a cognitive state achieved when individuals perceive that they are empowered".

Psychological empowerment is a motivational process since employees must believe that they can work and achieve their job-related goals on their own (Conger & Kanungo, 1988). This motivational process is especially relevant during the economic downturn.

2.4 CONCEPTUALISING ORGANISATIONAL CITIZENSHIP BEHAVIOUR (OCB)

The economic downturn resulting from the effects of the COVID-19 pandemic demonstrated why OCB in organisations is so important. As the world shut down, organisations had to reassess their work processes to adjust to the prevailing situation whilst employees had to adjust to working from home. What differentiates two employees who have the same work role and are on the same salary scale, yet one of the employees is willing to work extra hours to ensure that the departmental and thereby the organisational goal is met? What motivates employees to work beyond what is expected of them?

Organ (1988, p.4) defines organisational citizenship behaviour (OCB) as "individual behaviour that is discretionary, not directly or explicitly recognised by the formal reward system and that in aggregate promotes the effective functioning of an organisation."Organ (1977) added that in relation to OCB even though "these discretionary contributions are organisationally related, they are neither explicitly required nor contractually rewarded by organisations". OCB is an "extra-role" behaviour that benefits the organisation and goes beyond existing role expectations and cannot be forced or taught.

Castro et al. (2004) indicated that because of the gap in the perception between "role" and "extra role", managers find it difficult to differentiate between the two in an organisational setting. According to Borman and Motowidlo (1993), the contextual behaviour constructs are more related to "support the broader organisational, social and psychological environment in which the technical core exists." This description when read in conjunction with Organ's (1998) definition indicates that discretionary and extra-role behaviours relate more to supporting the organisational environment and not the existing work roles.

Whilst the existing literature gives no clear indication of how many dimensions can be linked to OCB, there are common principles that have emerged.
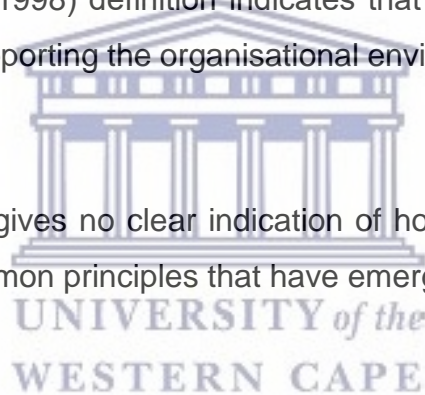
Table 2.4

The dominant themes of organisational citizenship behaviour

Researcher	Themes
Smith et al. (1983)	Altruism and generalized compliance
Organ (1988)	Altruism, conscientiousness, sportsmanship, civic virtue, courtesy.
Lin (1991)	Identification with the organisation, assistance to colleagues, harmony, righteousness, discipline, self–improvement.
Williams and Anderson (1991)	Organisational citizenship behaviour (OCBI) and Organisational citizenship behaviour organisation (OCBO).
Van Dye et al. (1994)	Loyalty, obedience, social participation, functional participation.
Moorman and Blakely (1995)	Interpersonal helping, individual initiative, personal industry, loyal boosterism.
Van Scotter and Motowidlo (1996)	Interpersonal facilitation and job dedication
Farh et al. (1997)	Identification with the company, altruism toward colleagues, conscientiousness, interpersonal harmony, protecting company resources.
Podsakoff et al. (2000)	Helping behaviours, sportsmanship and civic virtue, organisational loyalty, organisational compliance, individual initiative, self-development

Source: Extracted from Mahembe, B., Engelbrecht, A.S., Chinyamurindi, W., & Kandekande, L.R. (2015). A study to confirm the reliability and construct validity of an organisational citizenship behaviour measures on a South African sample. *SA Journal of Industrial Psychology, 41*(1), Art. #1289, 8 pages

Organ (1988) proposed that OCB includes five dimensions, namely, altruism, courtesy, sportsmanship, consciousness, and civic virtue.

13

Smith et al. (1993) defined altruism as "voluntary behaviours where an employee provides assistance to an individual with a particular problem to complete his or her task under unusual circumstances." Considering this definition, altruism refers to assisting or aiding other members of the team or organisation who are overworked, absent or guiding colleagues who are struggling to accomplish tasks. Altruism has become necessary since employees are having to assist their colleagues who are too high risk to be at the office.

According to Organ (1998) conscientiousness refers to "dedication to the job that exceeds what is normally expected of employees." Conscientious employees are perceived as being hardworking and responsible, thus requiring less supervision from the supervisors.

Sportsmanship is defined by Organ (1990, p. 96) as a "willingness to tolerate the inevitable inconveniences and impositions of work without complaining." This relates to employees not complaining and being tolerant to everyday problems they are faced with in the workplace.

Organ (1990, p. 96) defines courtesy as "gestures that help others prevent interpersonal problems from occurring." Courtesy includes behaviours that focus on "the deterrence of problems and taking the necessary and timely steps in order to reduce the effects of problems in the future" (Tambe & Shanker, 2014). Podsakoff and MacKenzie (1997, pp. 133-151) opined that courteous employees made the effort to avoid creating problems for their colleagues thereby avoiding crisis management.

According to Tambe and Shanker (2014), civic virtue relates to "constructive investment on the political processes of the organisation and contribution to this process by freely and frankly expressing opinions, attending meetings and reading organisational communications such as mail, for the well-being of the organisation."

OCB does not only reduce employee turnover rate and absenteeism but increases organisational productivity, reduce costs and results in an increase in customer satisfaction (Podsakoff et al., 2009).

2.5 CONCEPTUALISING LEADERSHIP ORIENTATION FRAMES

Whilst there is a plethora of literature regarding leadership styles such as servant leadership, transformational, traditional, and transactional leadership (Hendricks, 2017; Mahembe & Engelbrecht, 2014), there are fewer studies that delineate multi-framed leadership orientation (Bolman & Deal, 1991). Bolman and Deal (1984) have been credited with introducing a cognitive approach that looks at organisations in terms of 'frames.' A frame of reference refers to the perception or assumptions of what idea, circumstance or experience will be perceived or understood (Merriam-Webster, 2007). According to Vuori (2018), these frames generally direct attention to the issues that are regarded as important for different organisations and these can be loosely described using four metaphors such as machine, family, jungle and temple. Bolman and Deal (1984, 1991) also refer to these frames as windows, prisms, filters, lenses, mindshapes, perspectives and orientations. These frames provide a better understanding of how the leaders in the different frames are likely to operate and respond to the different situations that they are likely to face.

Bolman and Deal (1991) note that leaders process organisational experiences according to one or two of the following frames, structural, political, symbolic, or human resource frame. They must know and understand how they experience problems and what their barriers are to finding solutions. Leaders have to identify their primary frame. It is only when they know and understand their limitations or blind spots that they can consider alternative ways to problem solving and empower their teams to think more creatively and be more solution-focused. The four leadership frames identified by Bolman and Deal (1984) are categorised as: political, structural, human resource and symbolic in nature.

15

2.5.1 *Political Frame*

Bolman and Deal (1991) postulate that the political frame directly addresses the "underlying political forces that set the stage for conflict and power plays" in the organisation. The authors suggest that these statements summarise the political perspective:

- ✓ Organisations are coalitions composed of varied individuals and interest groups (various departments, hierarchical levels, professional groups, ethnic subgroups).
- ✓ There are enduring differences among individuals and groups in their values, preferences, beliefs, information, and perceptions of reality. These differences change slowly, if at all.
- ✓ Most of the important decisions in organisations involve the allocation of scarce resources: they are decisions about who gets what.
- ✓ Because of the scarce resources and enduring differences, conflict is central to organisational dynamics and power is the most important resource.
- ✓ Organisational goals and decisions emerge from bargaining, negotiation and jockeying for positions among members of different coalitions (Bolman & Deal, 1991).

These statements essentially set out the most common sources of political behaviours found in organisations. Alliances form because employees are interdependent. Members of one department will always need assistance or information from other departments.

The concept of enduring differences and scarce resources indicates that most times, politics is rarely visible when employees agree and work together harmoniously. The political frame is more visible and evident in a diverse environment and during difficult times (Bolman & Deal, 1991).

The fourth assumption is the concept of power. Bolman and Deal (1991) suggest that when "power is concentrated at the top of a highly regulated system; politics does not disappear but is forced underground." This usually results in employees having their

emotions or opinions suppressed. The outcome is usually dissent and an unhappy working environment.

The political frame views conflict as natural and inevitable. Conflict is not perceived as an indication that there is a problem in the organisation but that it is part and parcel of dealing with different individuals who have different opinions and beliefs (Bolman & Deal, 1991). In summary, according to Bolman and Deal's (1991) political frame, there is an "ongoing process of bargaining and negotiation" that helps to form an organisation's goals, its processes and procedures and its structure. According to Vuori (2018), "a leader within this frame tries to advance their own agenda by building constantly changing coalitions." The author likened this approach to a jungle where the players compete for scarce resources.

2.5.2 Structural Frame

All organisations, regardless of the type, have goals, coordinating mechanisms, boundaries, levels of authority, communication services and distinct procedures. Therefore, even though organisations differ in terms of their "human architecture" they have many similarities (Bolman & Deal, 1991).

The structural frame focuses on the work environment and not on the individual. The organisational structure is developed to be aligned with the organisation's goals and objectives. This frame defines how organisations assign responsibility, defines their rules and regulations and how these elements affect organisational life (Howard et al., 2009).

The structural frame is based on six assumptions (Bolman & Deal, 2003, p. 45):
- ✓ Organisations exist to achieve established goals and objectives.
- ✓ Organisations increase efficiency and enhance performance through specialisation and a clear division of labour.
- ✓ Appropriate forms of coordination and control measures ensure that diverse efforts of individuals and units' mesh.

17

- ✓ Organisations work best when rationality prevails over personal preferences and extraneous pressures.
- ✓ Structures must be designed to fit organisational circumstances (including its goals, technology, workforce, and environment).
- ✓ Problems and performance gaps arise from structural deficiencies and can be remedied through analysis and restructuring.

Structural leaders provide their teams with clearly defined goals that are linked to specific policies and procedures. By doing so they facilitate the alignment between internal processes of the organisation to the external environment (Sasnett & Ross, 2007).

Some of the drawbacks of this frame are that conflict is detrimental since it prevents employees from achieving organisational goals. Managers who prefer the structural frame do not solve problems within their teams personally but are dependent on senior managers to find solutions. According to Vuori (2018), the organisation is seen through the metaphor of a machine.

2.5.3 Human Resource Frame

The human resource frame is based on the following premises:
- ✓ Organisations exist to serve human needs (rather than the reverse).
- ✓ Organisations and people need each other. Organisations need ideas, energy, and talent; people need careers, salaries, and work opportunities.
- ✓ When the fit between the organisation and the individual is poor, one or both will suffer. Individuals will be exploited or will seek to exploit the organisation or both.
- ✓ A good fit between individual and organisation benefits both: human beings find meaningful and satisfying work, and organisations get the human talent and energy they need.

18

Whilst the structural frame looks at how the structure of an organisation develops in response to the internal and external environment (Sasnett & Ross, 2007), with the human resource frame the organisation is viewed as a family. Individuals have an opportunity to grow and express their talents. The objective of the human resource frame is to construct good relational and work interactions to bring the organisation's needs in line with the human resource needs (Stadtländer, 2007). Howard et al. (2009) advance that this frame consists of organisational development, management of employees, the compensation structure and how employees are kept motivated since it relates to constructs such as employee satisfaction, retention, and training.

2.5.4 Symbolic Frame

The symbolic frame is referred to as the theatre and relates mostly to the organisation's culture, its symbols, and rituals (Howard et al., 2009). Bolman and Deal (1991) hold the view that the symbolic frame "centres on the concept of meaning, belief and faith" as rituals and ceremonies rather than policies and procedures drive the organisations (Howard et al., 2009). It looks at the shared meaning developed through a sound culture that ensures people observe the rituals, artefacts, stories and ceremonies. The role of the leader is in the form of a facilitator who facilitates the creation of a shared culture and meaning. The metaphor used to denote this frame is the "temple."

The symbolic frame is seen as the theatre since all the various role players interact to "create context, culture and meaning as they play their assigned roles and bring artistry and self-expression into their work" (Cohen & March, 1974; Deal & Kennedy, 2000; Weick, 1995). It focuses on the vision and core values of the organisation.

Leadership orientation frames
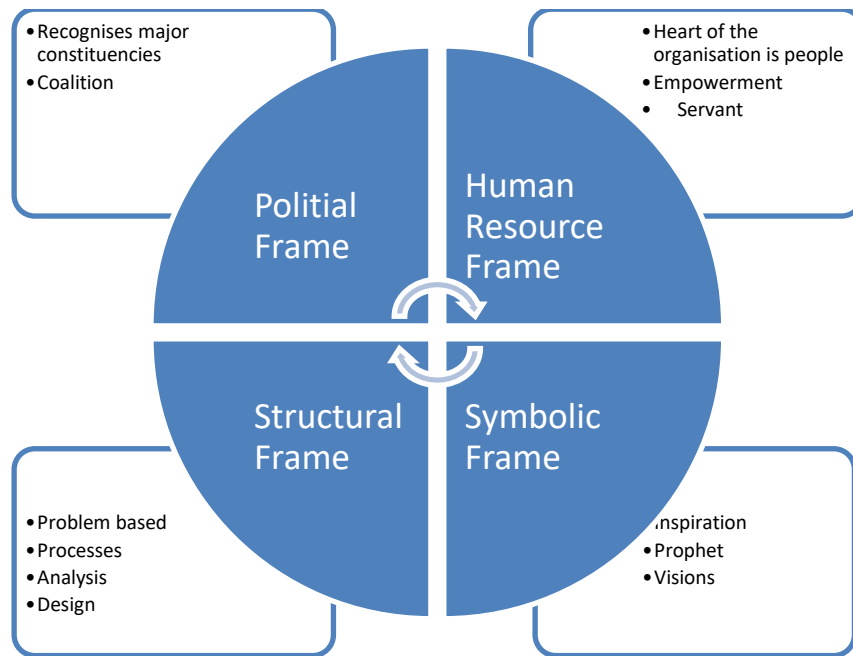
Figure 2.1: Leadership orientation frames

Source: Bolman, L. G., & Deal, T. E. (1991). *Reframing organizations: Artistry, choice, and leadership.* Jossey-Bass/Wiley.

2.6 THE RELATIONSHIP BETWEEN LEADERSHIP FRAMES, TEAM EFFECTIVENESS, PSYCHOLOGICAL EMPOWERMENT AND ORGANISATIONAL CITIZENSHIP BEHAVIOUR

2.6.1 Psychological empowerment and Team effectiveness

Conger and Kanungo (1988) defined psychological empowerment in terms of the motivational processes as individuals or teams need to believe that they can perform their work on their own. This viewpoint is supported by Sargolzaei and Keshgar (2015) who opined that once employees change their attitude, self-limiting beliefs and thought processes the psychological empowerment process starts. They further theorise that once employees have faith, they display the necessary abilities and competencies to

20

perform their job tasks, they can influence their job outcomes, they feel empowered and begin to work effectively (Sargolzaei & Keshgar, 2015). Spreitzer (1995) found a link between psychological empowerment and individual and team performance especially when teams can obtain resources from other departments both in and outside of the organisation. Aucamp (2014) found a significant relationship between psychological empowerment and team effectiveness in a study with a sample of 224 participants operating in a team environment. Sigwela (2020) also confirmed a significant relationship between psychological empowerment and team effectiveness. Gorn and Kanungo (1980) suggests employees are more productive when they are part of the decision-making process emphasising the point that team effectiveness is enhanced by an empowering work environment (Jain, 2017; Ozaralli, 2011; Seibert et al., 2011). Considering the above literature, the following hypothesis is proposed.

Hypothesis 1: *Psychological empowerment has a statistically significant relationship with team effectiveness.*

2.6.2 Leadership Orientation Frames and Team effectiveness

Team members are more liable to experience meaning, impact and autonomy in their work when their leaders delegate responsibilities, ask for and use employee input and who give them a wider span of control (Hackman, 1987; Susman, 1976; Thomas & Velthouse, 1990). There are very few studies that investigated the relationship between leadership orientation frames and team effectiveness. However, there are several studies that found relationships between different leadership styles and team effectiveness (e.g., Thomas & Velthouse, 1990; Tran & Vu, 2021). Tran and Vu (2021) found a statistically significant relationship between transformational leadership and team effectiveness in a sample of 273 participants. Their study also found that spiritual leadership had a weak relationship with team effectiveness. Given how transformational leaders utilise leadership frames to make decisions, it is sensible to suggest that leadership frames have a significant relationship with team effectiveness.

Mahembe and Engelbrecht (2014) in their study of a sample of 288 teachers, found that there was a positive relationship between servant leadership and team effectiveness. Similarly, Bilal et al. (2019) found a strong relationship between project leaders' servant leadership style and project team effectiveness. Yang et al. (2019) conducted a study of 123 teams and the results indicate that spiritual leadership is positively related to team performance. It is against this background that the following hypothesis is proposed.

Hypothesis 2: *There is a statistically significant relationship between leadership orientation frames and team effectiveness.*

2.6.3 Leadership Orientation Frames and Psychological Empowerment

Irrespective of the leadership style a manager displays, whether it is authentic leadership, transformational leadership or servant leadership, they must be able to motivate, empower and drive their subordinates and when to allow more autonomy. Leader empowering behaviours results in employees experiencing empowerment (Fong & Snape, 2015). According to Conger and Kanungo (1998) empowering employees is an important element of effective management.

Mardanov et al. (2008) found that employees' behaviours are often influenced by their perception of their relationships with their leaders. Therefore, if an employee believes they do not have a favourable relationship with their manager, they will likely avoid asking for assistance, helping and generally avoid dealing with their manager. However, if an employee believes they have a good relationship with their manager they will volunteer input and assist where necessary.

Van Der Hoven et al. (2021) found a positive relationship between servant leadership and psychological empowerment in a study with 203 teachers. Abdulrah et al. (2020) conducted a study comprising 260 academic staff members and found that transformational leadership can predict psychological empowerment. A meta-analytic study by Schermuly et al. (2022) found that empowering leadership, transformational

22

leadership and servant leadership were moderately correlated with psychological empowerment. Therefore, based on the above, the following hypothesis is postulated.

Hypothesis 3: *There is a statistically significant relationship between leadership orientation frames and psychological empowerment.*

2.6.4 Leadership Orientation Frames and Organisational Citizenship Behaviour

According to Bolman and Deal (1990) each of the leadership frames aids different employee behaviours. Each of the four frames are successful in different scenarios and that is important when leaders encourage employees to participate in extra-role behaviours beyond the scope of their job requirements. These behaviours are developed when employees believe that their leaders are considerate of their well-being and are supportive of them. As a consequence of this, employees respond by carrying out extra-role behaviours without being obligated to do so (Joo & Jo, 2017).

Cheng's (2015) study with 547 participants showed a positive relationship between OCB and leadership orientation frames. The symbolic and structural frame significantly predicted OCB, and when all leadership frames combined, they again predicted OCB. Nguyen et al. (2016) conducted a study on 488 participants from 105 schools and found that not only does each of the leadership orientation frames have a significant positive relationship with OCB but that the global leadership orientation frames positively correlated with OCB. In light of the above, the following hypothesis is proposed.

Hypothesis 4: *There is a positive relationship between leadership orientation frames and OCB.*

2.6.5 Psychological empowerment and organisational citizenship behaviour

Kosar's (2017) study of 156 participants from three organisations indicated that psychological empowerment has a positive effect on OCB. Sargolzae and Keshtegar

(2015) found that the psychological empowerment components of competence, meaningfulness, self-organisation and trust positively improved OCB, and that OCB was predicted by meaningfulness.

Psychological empowerment has a positive relationship with OCB and the employees who exhibit the attributes of empowerment have a propensity to improve service quality which further heightens their feeling of empowerment. (Gorji & Ranjbar, 2013). Gorji and Ranjbar also postulate that employees who are more likely to participate in OCB's and feel more aligned with the organisation are the ones who believe that they have independence, can perform their job tasks and have impact on their work practices and processes.

Bester et al. (2015) found that leader empowering behaviour, and psychological empowerment could predict OCB. In a study consisting of 374 participants from a large private company Joo and Jo (2016) identified a positive link between psychological empowerment and OCB. They found that employees with a higher sense of impact and meaning in their work and who displayed competence and self-determination exhibited more extra-role behaviours like conscientiousness, sportsmanship, civic virtue and courtesy (Organ, 1988). Based on the evidence presented, the following hypothesis is proposed.

Hypothesis 5: *There is a significant relationship between psychological empowerment and OCB.*

The structural model
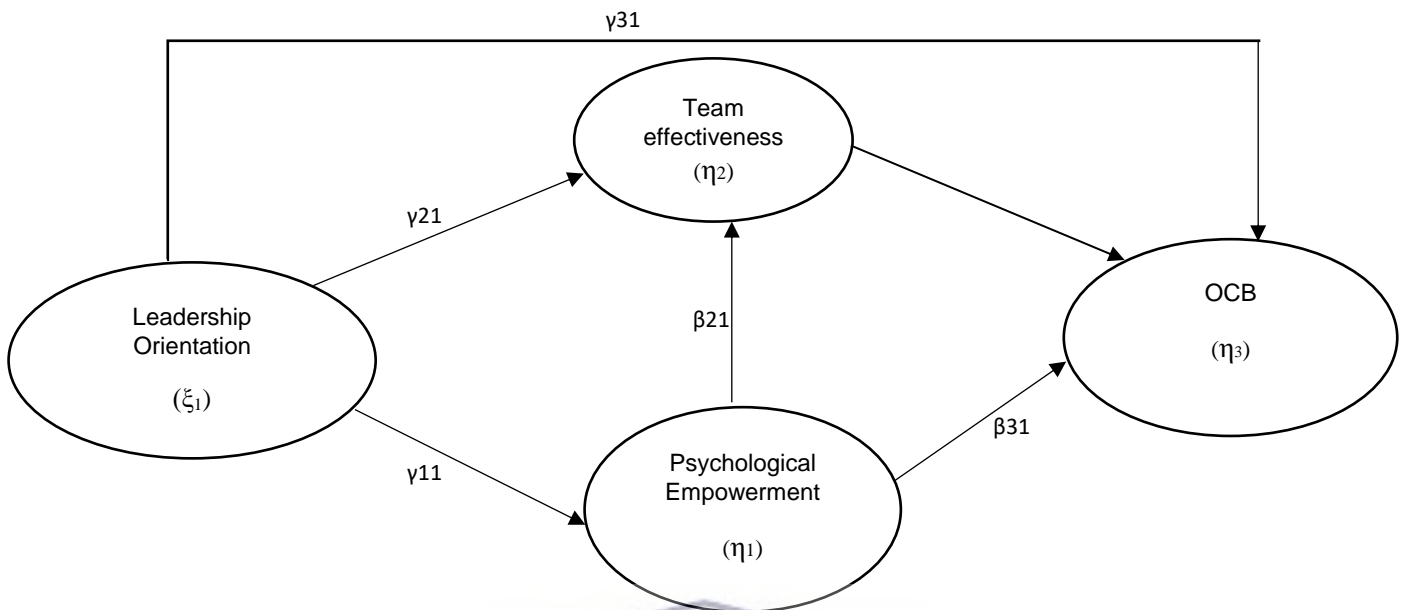
Figure 2.2: The structural model

2.6 CHAPTER SUMMARY

This chapter provided a discussion of the literature relating to team effectiveness, OCB, psychological empowerment, and Bolman and Deal's leadership orientation. The following chapter describes the research methodology applied to answer the research question.

CHAPTER THREE

RESEARCH DESIGN

3.1 INTRODUCTION

The review of the literature in the preceding chapter (chapter 2) highlighted the conceptual definitions of team effectiveness, psychological empowerment, organisational citizenship behaviours and leadership orientation frames. It provided the background of the existing studies regarding the variables under study as well as the relationship between the variables which culminated in the formulation of research hypotheses. The current chapter delineates the methodology that was designed to answer the research question in this study. The study intends to analyse the nature of the relationship between leadership orientation frames, psychological empowerment, organisational citizenship behaviour and team effectiveness. This section presents the research design, sampling method, measuring instruments, ethical considerations and statistical analysis procedures that were utilised to establish the model fit and the strength and paths for the proposed hypotheses.
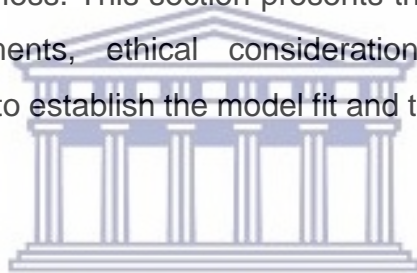
3.2 RESEARCH DESIGN

The research design refers to the plan of how the research question will be answered (Saunders et al., 2012). It details the objectives and proposed outcomes of the study, from who, and where the data were obtained and what methods were used to analyse the data. Therefore, the reason why the research was undertaken and the objectives that need to be achieved determine the type of research design, data sources, data collection and data analysis methods. (Saunders, et al., 2012)

Researchers can either apply the quantitative, qualitative, or multimethod approach to determine the outcome of studies (Sekaran & Bougie, 2003). The focus of quantitative research is to determine and analyse the relationship between variables by either

disseminating questionnaires or interpreting graphs or statistics (Saunders et al., 2012). The quantitative research design utilises the probability sampling method. Some of the advantages of probability sampling are that it ensures generalisability, is more cost-effective and less time-consuming (Saunders et al., 2012).

Qualitative research produces non-numerical data and is obtained through focus group discussions, and face-to-face or telephonic interviews (Saunders et al., 2012). This type of research is more in-depth and comprehensive but can be time-consuming and costly and the results cannot be generalised. The mixed method approach utilises both qualitative and quantitative research designs. The benefits of using the mixed methods design are that the data collection, analysis and interpretation are rich. However, the approach faces the challenge of conceptualising validity (Venkatesh et al., 2013). The current study applied a quantitative research design to investigate the relationship between leadership orientation frames, psychological empowerment, team effectiveness and organisational citizenship behaviour (OCB).

3.3 STATISTICAL HYPOTHESES

Ensuing from the literature review, a theoretical model was developed to investigate the effect between leadership orientation frames, psychological empowerment, team effectiveness and organisational citizenship behaviour (OCB). Figure 3.1 illustrates the structural model. To ascertain the validity of the proposed relationships in the structural model, the following research hypotheses were tested:

Hypothesis one: Psychological empowerment has a significant relationship with team effectiveness.

Hypothesis two: There is a significant relationship between team effectiveness and leadership orientation.

Hypothesis three: There is a significant relationship between psychological empowerment and OCB.

Hypothesis four: There is a significant relationship between psychological empowerment and leadership orientation.

Hypothesis five: There is a significant relationship between leadership orientation and OCB.
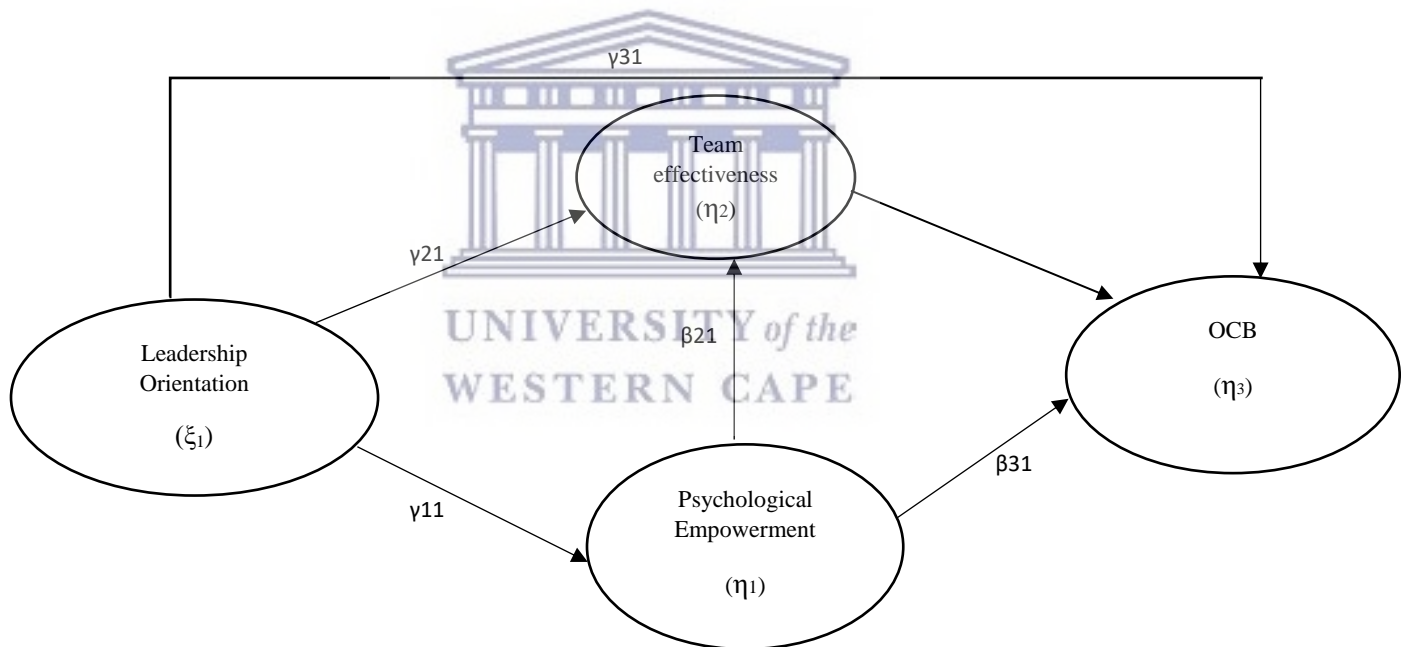
Figure 3.1: The structural model.

3.4 SAMPLING

3.4.1 Population

A population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2011). The population for the present study comprises approximately 245 employees, including interns and trainees at one branch of a selected parastatal organisation in the Western Cape in South Africa. The organisation has additional branches in four provinces and satellite offices in various other provinces.

3.4.2 Sampling procedure

Sekaran (2011) defines a sample as a subset of the population which provides a general idea of what is happening in the population. The researcher can use two types of sampling techniques, probability and non-probability sampling. Probability sampling selects participants at random, allowing each member a chance to be selected. When non-probability sampling is used, there is no assurance that each member has a chance to be selected. A sample size of 158 participants was utilised for this study which is within the acceptable range as the appropriate sample size for research studies is between 30-500 participants (Sekaran, 2012). A non-probability convenient sampling method was used since the sample was easily accessible, cost-effective and less time-consuming. A disadvantage of non-probability sampling is that it lacks generalisability, and not all members of the population have a chance to be selected which results in a low-quality sample (Sekaran, 2003). Table 3.1 sets out the sample profile that was utilised in the study.

3.5 DATA COLLECTION PROCEDURE

The data collection procedure is an integral part of the research study as it tests the proposed hypotheses (Sekaran, 2003). The data collection process can affect the rigour

and effectiveness of the research (Sekaran, 2003). Before distributing and collecting the questionnaires, permission was obtained from the university's research committee and the Learning and Development department of the organisation.

Hard copies of the questionnaire bundles were made available in boxes at drop-off points. Each participant received a bundle that contained the biographical, leadership orientation, psychological empowerment, team effectiveness and organisational citizenship behaviour questionnaires. The information relating to completing the questionnaires was outlined in the information sheet. To maintain anonymity, the recipients were advised not to email their responses but to drop the completed questionnaires in designated boxes. A total of 245 questionnaires were disseminated of which 158 completed questionnaires were returned indicating a 64.5 percent response rate. Employees were assured that their responses would remain anonymous and would be treated with confidentiality. Collection of questionnaires was hindered by the fact that the organisation's premises were closed for the duration of the hard lockdown.
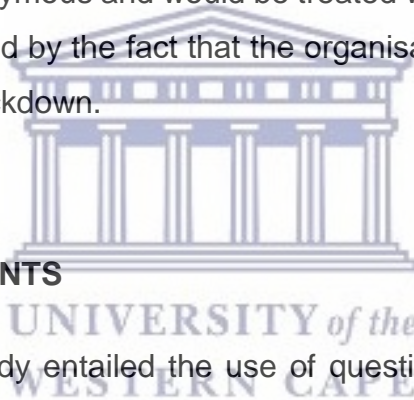
3.6 MEASURING INSTRUMENTS

The nature of the current study entailed the use of questionnaires to gather the data. Questionnaires are advantageous in that their cost is relatively low as compared to other methods, the collection of the data is quick, and the analysis of the data is easy. Four measuring instruments were used that include Bolman and Deal's Leadership Orientation questionnaire (Section B), Psychological Empowerment questionnaire (Section D), Team Effectiveness questionnaire (Section C), and the Organisational Citizenship behaviour questionnaire (Section E). Section A was constituted by the biographical questionnaire.

Table 3.1

Sample profile of the participants

Variable	Frequency	Percentage
Age of participants		
Under 20	1	0.6%
20 -30	24	15.18%
31 – 40	88	55.69%
41 – 50	38	24.05%
51 – 60	7	4.43%
Over 60	0	0
Home Language		
English	89	56.32
Afrikaans	22	13.92%
Xhosa	44	27.84%
Other	4	2.53%
Marital Status		
Single	67	42.40
Married	79	50
Divorced	10	6.32
Other	4	2.53
Race		
African	55	34.81
Coloured	87	55.06
White	10	6.32
Indian	5	3.16
Gender		
Female	95	60.12
Male	60	37.97
Qualifications		
Less than matric	1	0.63
Matric	31	19.62
Technicon/ College Qualification	13	8.22
Diploma	17	
University Degree	94	
Other		

3.6.1 Psychological empowerment

The Measuring Empowerment Questionnaire (MEQ) (Spreitzer, 1995) was used to measure the level psychological empowerment experienced by employees. The MEQ comprises of 12 items measuring Meaning, Competence, Self–Determination and Impact. Examples of items are "*The work I do is very important to me*" (meaning); "*I am confident about my ability to do my job*" (competence)"; *I can decide on my own how to go about doing my work*" (self-determination); "*My impact on what happens in my department is large"* (impact). The MEQ is measured on a seven-point Likert Scale ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach alpha coefficient for the global scale was .92, while the following alpha coefficients were recorded for the subscales: meaning (.92); competence (.90), self-determination (.85) and impact (.84) (Spreitzer, 1995).

3.6.2 Team Effectiveness Questionnaire (TEQ)

Team effectiveness was measured using Larson and LaFasto's (1989) Team Effectiveness Questionnaire. It comprises 11 questions measuring the team effectiveness as experienced by the employees.   Behaviours are grouped into eleven items that measure eight factors that collectively measure team effectiveness such as clear goals, result-orientated structure, competent members, cohesive commitment, excellence, recognition and leadership. The questionnaire is measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Example items for the scale include indicating how far you agree with the following statement "*The team has an established method for monitoring individual performance and providing feedback*" and *Team members trust each other sufficiently to accurately share information, perceptions, and feedback*. The Cronbach alpha coefficient for the whole scale is recorded at .85 (Larson & LaFasto, 2001).

3.6.3 Leadership Orientation

The leadership Orientation Questionnaire (Bolman & Deal, 1990) was used to measure leadership orientation. The questionnaire consists of two sections. The first section consists of thirty-two questions measuring four leadership orientation frames (Structural, Human resource, Political, and Symbolic frames). Each leadership orientation is measured by eight items on a five-point Likert scale ranging from 1 (never) to 5 (always). Examples include describing the person that you are rating in terms of leadership and management style with item like "*Have exceptional ability to mobilise people and resources to get things done*" and "*Build trust through open and collaborative relationships*". The second section comprises six items that require forced ranking of choice using a response scale of 1 to 4. Each of the four items corresponds with a specific frame. The internal consistency reliability of the Leadership Orientation Questionnaire for the four leadership orientation frames ranges from Cronbach alpha .91 and .93. Tan (2014) confirmed the moderately high reliability with Cronbach alpha coefficients within the range of .88 and .91.
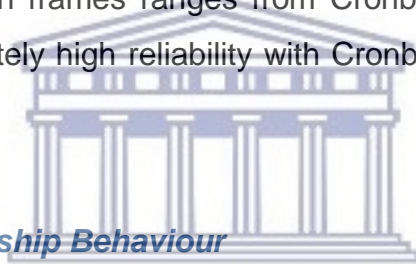
3.6.4 Organisational Citizenship Behaviour

The Organisational Citizenship Behaviour Scale (OCBS) developed by Podsakoff et al. (1990) to measure the strength of the participants' organisational citizenship behaviour was used in the study. The measuring instrument comprises 24 items measuring 5 dimensions, namely, altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. A seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used. The Cronbach alpha values for the subscales ranged from .70 (civic virtue) to .85 (altruism) (Podsakoff et al., 1990). Mahembe et al. (2015) reported reliabilities ranging from 0.80 to 0.98 on a South African sample.

3.7 ETHICAL CONSIDERATION

The following ethical principles were respected during the process of conducting this study. No harm was envisaged in the study; both physically and psychologically. The researcher ensured that the privacy of the participants was always maintained. Participant confidentiality and anonymity was ensured throughout the study, and no information was disclosed without the prior permission from the participants. The participants were not required to write down their names on the questionnaire, thus remaining anonymous. Confidentiality was maintained by guarding the participants' interests and well-being through the protection of their identity from unauthorised parties.

Anonymity concerns the ethical protection that participants remain nameless, their identity is protected from disclosure and remains unknown (Neuman, 2000). Furthermore, participation in this study was voluntary and participants were made aware that they were free to exit the study at any time with no consequence. With regards to scientific misconduct, all the research obtained was from reliable, valid and credible literature. Furthermore, the analysis and reporting of the data was reported to all the participants. In addition, the shortcomings, limitations and failures of this research investigation were reported.
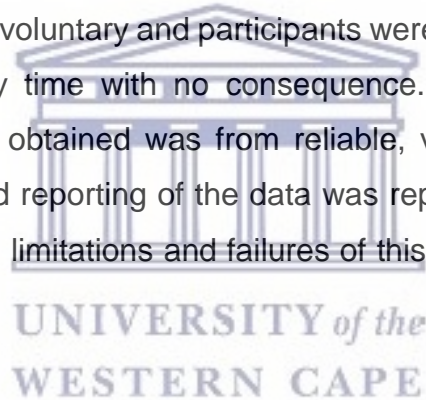
3.8 STATISTICAL ANALYSIS

3.8.1 Missing values

When using self-report measures, missing data is a common occurrence and can affect the conclusions drawn from the data. Participants either omit to answer all questions or fail to respond accurately (Williams, 2015). The problem of missing values had to be attended to before any further analysis of the data for this study was done. Addressing missing values needs careful consideration to determine whether there is a pattern of missingness (Soley-Bori, 2013). The multiple imputation method, available in the LISREL 8.80 software was used to address missing values. This method assists with

compensating for missing data by replacing the missing values with two or more values (Allison, 2001). The advantage of using multiple imputation is that the data set is available for later item and dimensionality analysis since estimates of missing values are obtained for all cases in the initial sample (Mels, 2003). This method does not result in significant reduction in sample size.

3.8.2 Item Analysis

When conducting quantitative research, it is imperative that all the measurement instruments used for the study are reliable and valid. The individual items of the scales should have a reasonable degree of correlation for the results to be meaningful. In this study item analysis was conducted to determine the items that contribute to the internal consistency of the total scale of each subscale and to exclude the items that do not contribute to the total scale. Internal consistency relates to the degree which items in a scale are similar and measure the same construct (Cooper & Schindler, 2003). Unrelated items and items exhibiting a low relationship to the total scale are to be excluded (Pallant, 2010, 2016). The conducting of item analysis was aimed at increasing the homogeneity of the components of the subscale, and in the process, enhance the content validity of the subscale.
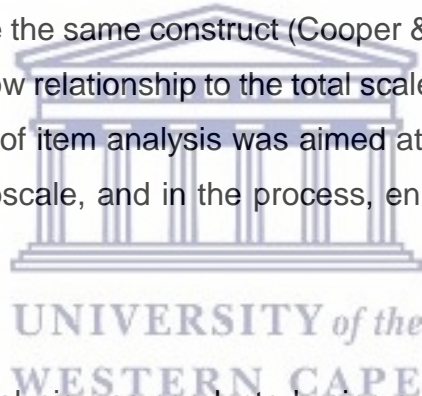
For the current study, item analysis was conducted using a procedure available in SPSS version 28. The procedure calculated Cronbach alpha values, item total correlation, inter-item correlation and the change in subscale reliability when the item is deleted. Nunnally's (1967) parameters were used to determine the reliability levels for the scales (see table 3.2). An item with an item-total correlation of less than .30 was excluded from further analyses and that would result in a significant increase in the scale reliability coefficient when deleted.

Table 3.2

Guidelines for interpreting reliability analysis

Reliability coefficient	Interpretation
0.9 and above	Excellent
0.80 – 0.90	Good
0.70 – 0.79	Adequate
Below 0.70	May have limited applicability

Nunnally, J. C. (1967). *Psychometric theory*. New York: McGraw-Hill.

3.9 EXPLORATORY FACTOR ANALYSIS (EFA)

It is a requirement to determine whether the dimensionality of each scale contributes to an internally consistent description of the relevant measuring model. The researcher can achieve that through conducting exploratory factor analysis (EFA). EFA is used to explore the interrelationships between a set of variables and to explore the underlying theoretical structure of the phenomena (Costello & Osborne, 2005).

EFA is meant to eliminate latent variables that cause manifest variables to differ in the same period (Costello & Osborne, 2005). The present study made use of standard instruments with a predetermined factor structure that has been theoretically determined. EFA was used in the current study to ascertain the uni-dimensionality of each scale. Items with an inadequate factor loading are removed (Pallant, 2016). The following guidelines were followed to determine which items to extract and which items to include when conducting the EFA:

36

- factors with an eigenvalue of 1.0 or more were retained for further investigation and will not be extracted (Tabachnick & Fidell, 2013);

- if an item results in an item-total correlation of less than 0.30 on any factor, it means that the item is measuring something different from the scale as a whole. Therefore, the item will be excluded (Fields, 2005);

- an item loading less than 0.30 on more than one factor would be excluded if the difference between the higher and the lower loading was 0.25 (Nunnally & Bernstein, 1994; Tabachnick & Fidell, 2013); and

- a Kaiser-Meyer-Olkin measure of sampling adequacy (KMO index) cut-off value used in this research study was 0.70. According to Kaiser (as cited in Fields, 2005), values greater than 0.50 is acceptable, values between 0.50 and 0.70 as mediocre, and values between 0.70 and 0.80 as good. Furthermore, values between 0.80 and 0.90 are great and values above 0.90 are superb (Fields, 2005).

3.10 CONFIRMATORY FACTOR ANALYSIS (CFA)

Confirmatory factor analysis (CFA) is a technique for testing the hypotheses or theories relating to the structure underlying a set of variables (Pallant, 2016). Confirmatory factor analysis (CFA) serves to confirm whether a set of measures (the observed data) are related to specific latent variables according to the form described in the measurement model (Blaikie, 2003) by producing a series of fit indices. The goal of CFA is that of assessing the factor structure the manifested variables by verifying if there is a correlation between the observed data and the latent variables according to the form defined in the measurement model.

Certain criteria should be met in order to conduct CFA. Firstly, the data should be identified as continuous, must be normalised, the sample should be adequate, missing data should be addressed, item validation needs to be carried out and the theoretical model should be considered.

3.11 STRUCTURAL EQUATION MODELLING (SEM)

Structural equation modelling (SEM) is a collection of statistical techniques that allow a set of relationships between one or more independent and dependent variables (Tabachnick & Fidell, 2013). SEM aims to assess path-specific hypothesis captured by the structural model. Sem is a popular technique in social science research because it deals directly with how the measure reflects the intended constructs through confirmatory factor analysis.

It simultaneously assesses the quality of measurement and examines the predictive relationships among constructs by performing confirmatory factor analysis and path analysis at the same time (Kelloway, 1998). It is a large sample technique that helps in explaining the patterns of covariances found amongst the observed variables in terms of the relationships hypothesised by the measurement and structural models (Diamantopoulos & Siguaw, 2000).

SEM deals with the structural model which describes the relationship between latent variables themselves while CFA relates to the measurement model which describes how each latent variable is operationalised by corresponding observed variables. SEM was conducted for the current study because it enabled the researcher to test the measurement properties through confirmatory factor analyses. SEM also allowed the researcher to specify and assess complex path models to ascertain the degree to which the entire model is consistent with the empirical data (Diamantopoulus & Siguaw, 2000).

3.12 CHAPTER SUMMARY

Chapter 3 outlines the methodology utilised for the study. Presented are the research design, statistical hypotheses, ethical considerations, data collection procedure, psychometric properties of the research instruments used as well as the statistical analyses methods used for the study. Subsequently, chapter 4 builds on this chapter by presenting the results obtained from the study.
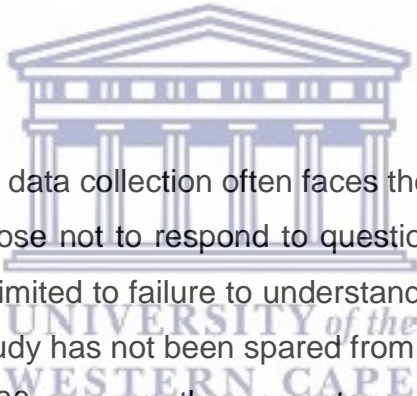
CHAPTER FOUR

PRESENTATION OF RESULTS

4.1 INTRODUCTION

The theoretical model emanated from an extensive study of the available literature relevant to the effect of Bolman and Deal's leadership orientation on team effectiveness, psychological empowerment and organisational citizenship behaviour. Chapter two and three presents the hypotheses that were formulated after the literature review. This chapter presents the results of the research study. The chapter discusses how missing values are accounted for, followed by a discussion of the dimensional and item analyses. The presentation of the overall measurement and structural models concludes the chapter.

4.2 MISSING VALUES

The use of questionnaires for data collection often faces the problem of missing values. Sometimes respondents choose not to respond to questionnaire items due to various reasons that include but not limited to failure to understand items and the reluctance to answer certain items. This study has not been spared from the missing values problem. According to the LISREL 8.80 program the percentage of missing values was 1.68 percent and there was no clear pattern in the missing values. The missing values were subsequently addressed using the multiple imputation option available in the LISREL 8.80 program. Multiple imputation addresses missing values by replacing them with the average for that item.

4.3 ITEM ANALYSIS

Item analysis was performed on the Team Effectiveness Questionnaire (TEQ), the Organisational Citizenship Scale (OCBS), Psychological Empowerment Questionnaire and the Leadership Orientation Questionnaire using the SPSS Reliability procedure

39

(SPSS Inc, 2022). Item analyses play a pivotal role by identifying and excluding items that do not contribute to the internal consistency of the subscale or scale. It also indicates the reliability of the scale or subscale.

4.3.1 Item analysis for the Leadership Orientation questionnaire

The Leadership Orientation questionnaire was developed by Bolman, and Deal (1990) and consists of two sections. The first section consists of 32 questions measuring four leadership frames (Structural frame, Human Resource frame, Political frame and Symbolic frame). Each leadership frame has 8 items. The item analysis for each dimension was performed separately.

4.3.1.1 Item analysis of the Leadership Orientation Structural Frame subscale

The Leadership Orientation's *Structural frame subscale* (Bolman & Deal, 1990) consists of 8 items. An internal consistency reliability of α = 0.87 was obtained for the *Structural Frame subscale* which is above the minimum acceptable level of 0.70 considered adequate (Nunnally & Bernstein, 1994). The corrected item-total correlation values displayed in the Item-Total Statistics table indicate the degree to which each item correlates with the total score. Lower values (below .30) show that the item is measuring something different from the scale as a whole (Pallant, 2016). All the corrected item-total correlations were above .30. The values indicated by the corrected item-total correlations were ranging from .61 to .77. None of the items were identified as problematic and thus none were deleted. The output is presented in table 4.1.

Table 4.1

The Reliability analysis output for the Structural Frame subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on *Standardized* Items	N of Items
0.87	0.900	8

Inter–Item Correlation Matrix								
	LOB1	LOB2	LOB3	LOB4	LOB5	LOB6	LOB7	LOB8
LOB1	1.000	0.552	0.489	0.459	0.575	0.476	0.465	0.386
LOB2	0.522	1.000	0.689	0.653	0.417	0.557	0.337	0.441
LOB3	0.489	0.689	1.000	0.721	0.510	0.630	0.526	0.556
LOB4	0.459	0.653	0.721	1.000	0.446	0.678	0.478	0.507
LOB5	0.575	0.417	0.510	0.446	1.000	0.451	0.587	0.480
LOB6	0.476	0.557	0.630	0.678	0.451	1.000	0.540	0.529
LOB7	0.465	0.377	0.526	0.478	0.587	0.540	1.000	0.702
LOB8	0.386	0.441	0.556	0.507	0.480	0.529	0.702	1.000

Item–Total Statistics					
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Squared Multiple Correlation	Cronbach's Alpha of Item Deleted
LOB1	24.75	27.869	0.607	0.446	0.891
LOB2	24.91	26.507	0.665	0.566	0.885
LOB3	25.20	25.080	0.770	0.654	0.875
LOB4	25.12	25.801	0.773	0.633	0.479
LOB5	24.79	27.224	0.633	0.479	0.889
LOB6	25.12	25.317	0.718	0.554	0.880
LOB7	25.32	24.831	0.689	0.600	0.884
LOB8	25.57	23.941	0.673	0.553	0.888

4.3.1.2 Item analysis for the Human Resource Frame subscale

The *Human Resource subscale* attained a Cronbach alpha of 0.887 which is above the minimum acceptable level of .70 considered adequate (Nunnally & Bernstein, 1994). The *Human Resource subscale* consists of 8 items. The Item–Total Statistics table indicates corrected item-total correlation values which reflect the degree to which each item correlates with the total score. Values below 0.30 indicate that the item measures something different from the scale (Pallant, 2016). The corrected–item-total correlation values ranged from .51 to .81 indicating a fairly strong relationship between each item and the total score (Pallant, 2016). The output is presented in Table 4.2.

Table 4.2

The reliability analysis output for the Human Resource subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.887	0.891	8

Inter–Item Correlation Matrix								
	LOB9	LOB10	LOB11	LOB12	LOB13	LOB14	LOB15	LOB16
LOB9	1.000	0.477	0.480	0.436	0.468	0.468	0.367	0.377
LOB10	0.477	1.000	0.609	0.706	0.124	0.505	0.382	0.496
LOB11	0.480	0.609	1.000	0.774	0.444	0.681	0.568	0.490
LOB12	0.436	0.706	0.774	1.000	0.298	0.662	0.519	0.552
LOB13	0.468	0.124	0.444	0.298	1.000	0.611	0.524	0.289
LOB14	0.468	0.505	0.681	0.662	0.611	1.000	0.710	0.536
LOB15	0.367	0.382	0.568	0.519	0.524	0.710	1.000	0.567
LOB16	0.377	0.496	0.490	0.552	0.289	0.536	0.567	1.000

Item – Total Scales					
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
LOB9	23.47	28.556	0.573	0.405	0.880
LOB10	23.82	28.058	0.596	0.595	0.878
LOB11	24.14	26.006	0.772	0.678	0.861
LOB12	24.06	26.615	0.742	0.718	0.865
LOB13	23.92	26.458	0.513	0.532	0.893
LOB14	24.23	24.457	0.814	0.706	0.855
LOB15	24.58	26.512	0.700	0.577	0.868
LOB16	24.02	27.547	0.611	0.439	0.877

4.3.1.3 Item analysis for the Leadership Orientation Political Frame subscale

The Cronbach alpha for the *Political subscale* is 0.889 which is acceptable since it is above the acceptable level of 0.70 (Nunnally & Bernstein, 1994). The inter-item correlation matrix values range from 0.37 to 0.75. The values from the corrected item-total correlation are all above .30 (Pallant, 2016). The corrected item–total correlation matrix ranged from 0.60 to 0.73. The output is presented in Table 4.3.

Table 4.3

The reliability analysis output for the Political Frame subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.899	.903	8

Inter–Item Correlation Matrix								
	LOB17	LOB18	LOB19	LOB20	LOB21	LOB22	LOB23	LOB24
LOB17	1.000	0.573	0.408	0.589	0.596	0.634	0.416	0.373
LOB18	0.573	1.000	0.486	0.510	0.568	0.696	0.510	0.488
LOB19	0.408	0.486	1.000	0.480	0.589	0.499	0.661	0.694
LOB20	0.589	0.510	0.480	1.000	0.544	0.538	0.393	0.367
LOB21	0.596	0.568	0.589	0.544	1.000	0.587	0.570	0.522
LOB22	0.634	0.696	0.499	0.538	0.587	1.000	0.521	0.522
LOB23	0.416	0.510	0.661	0.393	0.570	0.521	1.000	0.750
LOB24	0.373	0.488	0.694	0.367	0.522	0.522	0.750	1.000

Item – Total Statistics					
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item –Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
LOB17	25.17	29.773	0.639	0.535	0.892
LOB18	25.47	28.684	0.696	0.553	0.887
LOB19	26.03	26.331	0.721	0.589	0.883
LOB20	25.32	29.581	0.606	0.453	0.894

LOB21	25.52	26.188	0.729	0.555	0.883
LOB22	25.46	27.295	0.723	0.608	0.883
LOB23	26.13	26.315	0.726	0.629	0.883
LOB24	26.30	25.446	0.702	0.644	0.887

4.3.1.4 Item analysis for the Symbolic Frame subscale

The Leadership Orientation's *Symbolic frame* (Bolman & Deal, 1990) consists of 8 items. Internal consistency reliability of Cronbach alpha 0.85 was obtained for the *Symbolic Frame subscale* which is above the minimum acceptable level of 0.70 considered adequate (Nunnally & Bernstein, 1994). The corrected item-total correlation values displayed, indicate the degree to which each item correlates with the total score. Lower values (below .30) show that the item is measuring something different from the scale as a whole (Pallant, 2016). All, except 1 item of the corrected item-total correlations were above .30. Item LOB32 had a value of 0.13 which is low and could prove problematic. The output is presented in table 4.4.
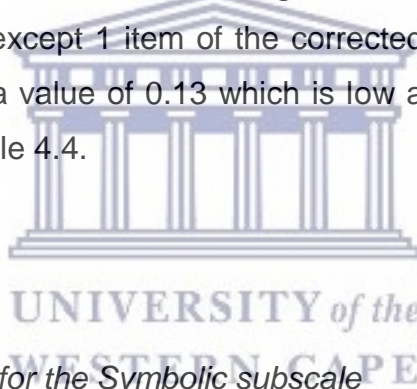
Table 4.4

The reliability analysis output for the Symbolic subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.847	.846	8

Inter–Item Correlation Matrix								
	LOB25	LOB26	LOB27	LOB28	LOB29	LOB30	LOB31	LOB32
LOB25	1.000	0.545	0.417	0.370	0.476	.418	0.366	0.305
LOB26	0.545	1.000	0.714	0.702	0.555	0.705	0.436	0.025
LOB27	0.417	0.714	1.000	0.768	0.353	0.539	0.425	0.048
LOB28	0.370	0.702	0.768	1.000	0.405	0.502	0.450	0.127
LOB29	0.476	0.555	0.353	0.405	1.000	0.419	0.380	0.198
LOB30	0.418	0.705	0.539	0.520	0.419	1.000	0.623	0.016
LOB31	0.366	0.436	0.425	0.450	0.380	0.623	1.000	0.83
LOB32	0.305	0.025	0.048	0.127	0.198	0.016	0.083	1.000

Item – Total Statistics					
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
LOB25	25.49	24.073	0.583	0.426	0.832
LOB26	25.50	20.015	0.787	0.759	0.801
LOB27	26.11	21.312	0.692	0.661	0.815
LOB28	26.03	21.661	0.711	0.663	0.814
LOB29	25.28	24.205	0.561	0.391	0.834
LOB30	26.25	19.770	0.687	0.624	0.817
LOB31	26.45	22.249	0.574	0.453	0.831
LOB32	25.11	26.874	0.129	0.169	0.876

4.3.2 Item analysis of Psychological Empowerment Questionnaire

Item analysis for each of the 4 subscales of the Psychological Empowerment Questionnaire (Spreitzer, 1995) was performed separately. The questionnaire includes 12 items measuring the four dimensions of Psychological Empowerment (*Meaning, Competence, Self–Determination and Impact*).

47

4.3.2.1 Item analysis for the Meaning subscale

The *Meaning* subscale was measured by three items and has an internal consistency of α = .92 which is above the minimum acceptable level of .70 considered adequate (Pallant, 2016). The corrected item-total correlation and squared multiple correlations reflect that all items correlated above 0.30 with the total score (Pallant, 2016). The inter-item correlation values range from 0.73 to 0.92 representing a strong relationship between the items (Pallant, 2016). The output is shown in table 4.1.

Table 4.5

The *reliability analysis for the Meaning subscale*

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.921	.921	3

	Item – Total Scales				
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
C1	11.30	5.713	0.747	0.561	0.959
C2	11.75	4.267	0.890	0.855	0.846
C3	11.63	4.490	0.905	0.862	0.831

Inter–Item Correlation Matrix			
Items	C1	C2	C3
C1	1.000	0.725	0.741
C2	0.725	1.000	0.923
C3	00.741	0.923	1.000

4.3.2.2 Item analysis for Competence subscale

Table 4.6 sets out the reliability analysis of the *Competence subscale* which was measured by three items. The subscale has an internal consistency of α = 0.89, which is above the minimum acceptable level of .70 considered adequate (Nunnally, 1967). The inter-item correlation values ranged from 0.66 to 0.93 with all items within the subscale correlating above 0.30, suggesting a strong relationship between items (Pallant, 2016). The Corrected Item–Total Correlation has values above .30.

Table 4.6.

The reliability analysis for the Competence subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.898	.910	3

Item – Total Scales					
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
C4	12.75	2.162	0.851	0.875	0.820
C5	12.77	2.040	0.884	0.888	0.787
C6	12.92	1.880	0.702	0.505	0.966

Inter–Item Correlation Matrix			
Items	C4	C5	C6
C4	1.000	0.935	0.669
C5	0.935	1.000	0.711
C6	0.669	0.711	1.000

4.3.2.3 Item analysis for the Self–Determination subscale

The *Self-determination subscale* has a reliability coefficient of α = .90 which is above the minimum acceptable level of .70 considered adequate (Nunnally, 1967). The Inter–item correlation values ranged from 0.72 to 0.80 suggesting a strong relationship between the items (Pallant, 2010, 2016). Values from the Corrected Item–Total Correlation indicate that all items correlated at above .30 with the total score. None of the items were identified as being problematic and thus none were deleted. The output is shown in Table 4.7.

Table 4.7

The reliability analysis for the Self – Determination subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.905	0.906	3

Item – Total Scales					
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Correlated Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha of Item Deleted
EMPC7	11.66	4.710	0.811	0.675	0.865
EMPC8	11.58	4.552	0.845	0.718	0.837
EMPC9	11.78	4.467	0.782	0.616	0.892

Inter–Item Correlation Matrix			
Items	C7	C8	C9
C7	1.000	0.805	0.721
C8	0.805	1.000	0.764
C9	0.721	0.764	1.000

4.3.2.4 Item analysis for the Impact subscale

The reliability coefficient for the *Impact subscale* is 0.85 which is above the minimum acceptable level of .70 considered adequate (Nunnally, 1967). The corrected item-total correlations were all above 0.30, with the inter-item correlation ranging from 0.47 to 0.93. This indicates a strong relationship between items. This is reflected in Table 4.8.

51

Table 4.8

The reliability analysis for the Impact subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.850	0.845	3

Item – Total Scales					
Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Correlated Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha of Item Deleted
C10	7.33	12.974	0.509	0.276	0.967
C11	8.78	8.938	0.862	0.883	0.643
C12	8.77	9.174	0.822	0.875	0.685

Inter–Item Correlation Matrix			
Items	C10	C11	C12
C10	1.000	0.524	0.477
C11	0.524	1.000	0.935
C12	0.477	0.923	1.000

4.3.3 Item analysis of Team Effectiveness Questionnaire (TEQ)

The Team Effectiveness Questionnaire (Larson & LaFasto, 1989) consists of eleven questions measuring the team effectiveness experiences of team members. The TEQ has an internal consistency of 0.874 which is above the minimum acceptable level of .70 considered adequate (Nunnally, 1967). The corrected item-total correlation reflects that

52

all the items are measuring the same construct. All the values correlated at above .30 with the total score. None of the items was flagged as problematic. The output is shown in table 4.9.

Table 4.9

The reliability analysis for Team Effectiveness Questionnaire

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.874	.880	11

Item – Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
d1	52.47	98.938	0.490	0.450	0.868
d2	52.37	97.102	0.658	0.510	0.859
d3	52.51	98.468	0.555	0.492	0.865
d4	52.09	101.877	0.586	0.472	0.865
d5	53.35	91.375	0.606	0.604	0.861
d6	53.26	96.346	0.507	0.571	0.868
d7	53.68	91.734	0.585	0.513	0.868
d8	52.79	94.880	0.648	0.585	0.858
d9	53.23	91.642	0.639	0.502	0.858
d10	53.04	89.655	0.615	0.712	0.861
d11	53.68	92.131	0.582	0.626	0.863

Inter–Item Correlation Matrix											
	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	d11
d1	1.000	0.529	0.365	0.561	0.253	0.266	0.233	0.465	0.372	0.298	0.222
d2	0.529	.1000	0.463	0.500	0.441	0.280	0.381	0.498	0.449	0.477	0.463
d3	0.365	0.463	1.000	0.406	0.572	0.486	0.522	0.236	0.260	0.282	0.207
d4	0.561	0.500	0.406	1.000	0.332	0.303	0.246	0.516	0.434	0.436	0.329
d5	0.253	0.441	0.572	0.332	1.000	0.666	0.614	0.338	0.309	0.291	0.286
d6	0.266	0.280	0.486	0.303	0.666	1.000	0.576	0.202	0.354	0.107	0.203
d7	0.233	0.381	0.522	0.246	0.614	0.576	1.000	0.360	0.401	0.279	0.306
d8	0.465	0.498	0.236	0.516	0.338	0.202	0.360	1.000	0.555	0.661	0.517
d9	0.372	0.449	0.260	0.434	0.309	0.354	0.401	0.555	1.000	0.571	0.560
d10	0.298	0.477	0.282	0.436	0.291	0.107	0.279	0.661	0.571	1.000	0.757
d11	0.222	0.463	0.207	0.329	0.286	0.203	0.306	0.517	0.560	0.757	1.000

4.3.4 Item analysis of Organisational Citizenship Behaviour Questionnaire

Organ (1988) developed the OCB questionnaire to measure organisational citizenship behaviour experienced by employees. The measurement scale consists of twenty-four items, with five subscales, namely, *sportsmanship, civic virtue, courtesy, altruism*, and *conscientiousness.* Each of the subscales was measured separately.

4.3.4.1 Item analysis for the Sportsmanship subscale

The internal consistency for the *Sportsmanship subscale* is α = .78 which is above the minimum acceptable level of .70 considered adequate (Nunnally, 1967). The output is presented in Table 4.10.

Table 4.10

The reliability analysis output for the Sportsmanship subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.782	0.808	5

Item – Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
OCB11R	24.29	16.106	0.327	0.253	0.836
OCB12R	24.03	15.159	0.703	0.537	0.699
OCB13R	23.91	16.227	0.627	0.570	0.726
OCB14R	23.99	14.974	0.723	0.672	0.692
OCB15R	24.37	14.603	0.543	0.475	0.749

Inter–Item Correlation Matrix					
	OCB11R	OCB12R	OCB13R	OCB14R	OCB15R
OCB11R	1.000	0.489	0.202	0.232	0.177
OCB12R	0.489	1.000	0.608	0.573	0.432
OCB13R	0.202	0.608	1.000	0.707	0.461
OCB14R	0.232	0.573	0.707	1.000	0.685
OCB15R	0.177	0.432	0.461	0.685	1.000

4.3.4.2 Item analysis for the Civic Virtue subscale

The *Civic Virtue subscale* has a reliability coefficient of Cronbach alpha, α = 0.65 which falls below 0.70 which is considered adequate (Nunnally, 1967). Removing item OCB24 would increase the internal consistency reliability to 0.70. The inter-item correlations ranged from 0.045 to 0.774. Item OCB 24 falls below the 0.30 threshold, thus indicating a weak relationship with the total score (Pallant, 2016). The results show that all items correlated at above 0.30 with the total score except item OCB24 which is correlated at 0.228. The output is shown in table 4.11.

Table 4.11

The reliability analysis for the Civic Virtue subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.658	0.667	4

Item – Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
OCB21	14.63	17.866	0.379	0.366	0.652
OCB22	16.01	9.554	0.595	0.612	0.467
OCB23	16.54	8.772	0.683	0.617	0.377
OCB24	14.89	17.765	0.228	0.359	0.702

Inter–Item Correlation Matrix				
	OCB21	OCB22	OCB23	OCB24
OCB21	1.000	0.196	0.238	0.580
OCB22	0.196	1.000	0.774	0.045
OCB23	0.238	0.774	1.000	0.167
OCB24	0.580	0.045	0.167	1.000

4.3.4.3 Item analysis for the Courtesy subscale

The Cronbach Alpha for the *Courtesy subscale* is 0.80 which is above the minimum acceptable level of .70 considered adequate (Nunnally, 1967). The inter-item correlation values range from 0.23 to 0.72. The corrected item-total correlation reflects that the items correlated above 0.30 with the total score (Pallant, 2010, 2016). The output is shown in table 4.12.

Table 4.12

The reliability analysis for the Courtesy subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.803	0.832	5

Item – Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
OCB16	24.58	8.259	0.436	0.325	0.843
OCB17	24.56	7.942	0.699	0.516	0.728
OCB18	24.19	9.327	0.666	0.585	0.750
OCB19	24.34	9.243	0.685	0.673	0.745
OCB20	24.36	9.442	0.598	0.550	0.766

Inter–Item Correlation Matrix					
	OCB16	OCB17	OCB18	OCB19	OCB20
OCB16	1.000	0.566	0.296	0.292	0.236
OCB17	0.566	1.000	0.567	0.503	0.472
OCB18	0.296	0.567	1.000	0.727	0.581
OCB19	0.292	0.503	0.727	1.000	0.729
OCB20	0.236	0.472	0.581	0.729	1.000

4.3.4.4 Item analysis for the Altruism subscale

The *Altruism subscale* has a Cronbach Alpha of 0.864 is which above the minimum acceptable level of 0.70 (Nunnally, 1967). Inter–item correlation values ranged from 0.23 – 0.72. The corrected item-total correlation matrix reflects that all items were greater than 0.50 (Pallant, 2016) and none of the items were identified as problematic. The results are depicted in Table 4.13.

Table 4.13

The reliability analysis for the Altruism subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.864	0.883	5

Item – Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item – Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
OCB1	21.85	21.182	0.707	0.615	0.831
OCB2	21.59	22.728	0.778	0.634	0.827
OCB3	22.23	18.919	0.806	0.668	0.803
OCB4	21.66	23.577	0.617	0.415	0.854
OCB5	22.69	17.145	0.667	0.495	0.864

Inter–Item Correlation Matrix					
	OCB1	OCB2	OCB3	OCB4	OCB5
OCB1	1.000	0.566	0.296	0.292	0.236
OCB2	0.566	1.000	0.567	0.503	0.472
OCB3	0.723	0.676	1.000	0.562	0.666
OCB4	0.485	0.605	0.562	1.000	0.490
OCB5	0.498	0.601	0.666	0.490	1.000

4.3.4.5 Item analysis for the Conscientiousness subscale

The Cronbach Alpha for the *Conscientious subscale* is 0.75 which is greater than the cut-off level of 0.70 (Nunnally & Bernstein, 1994). The values for the corrected item-total correlations were above .30. The inter-item correlation values ranged from 0. 25 to 0.56 (Pallant, 2010). The results are depicted in Table 4.14.

Table 4.14

The reliability analysis for the Conscientious subscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.754	0.778	5

Item – Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item –Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
OCB6	24.48	7.996	0.511	0.355	0.718
OCB7	24.35	8.126	0.548	0.417	0.713
OCB8	24.59	7.096	0.643	0.464	0.670
OCB9	24.84	6.121	0.572	0.392	0.696
OCB10	24.67	6.681	0.447	0.216	0.752

Inter–Item Correlation Matrix					
	OCB6	OCB7	OCB8	OCB9	OCB10
OCB6	1.000	0.546	0.443	0.384	0.252
OCB7	0.546	1.000	0.524	00.314	0.334
OCB8	0.443	0.524	1.000	0.567	0.357
OCB9	0.384	0.314	0.568	1.000	0.406

OCB10	0.252	0.334	0.357	0.406	1.000

4.4 DIMENSIONALITY ANALYSIS

The purpose of this section is to present the results of the Exploratory Factor Analysis (EFA) of the measurement instruments utilised in this research study. It assesses the uni–dimensionality of the subscales. Items that do not have enough factor loadings are removed from further analysis. Dimensional analysis assists by identifying which items are homogenous and therefore measurable.

4.4.1 Dimensional analysis of Measuring Empowerment Questionnaire

Spreitzer (1995) developed the *Measuring Empowerment Questionnaire* to measure psychological empowerment. The questionnaire consists of 12 items that measure 4 dimensions of psychological empowerment (Meaning, Competence, Self–determination and Impact). The dimensional analysis was performed on each of the subscales separately.
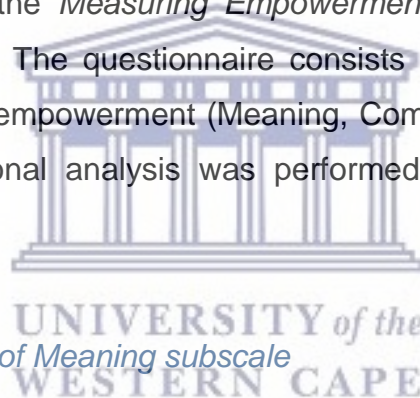
4.4.1.1 Dimensional analysis of Meaning subscale

Exploratory factor analysis indicates that the *Meaning subscale* is factor analysable as indicated by the KMO index of 0.708 and Bartlett's Test of Sphericity index of 423.537 (df = 3; p = 0.000). According to Kaiser (as cited in Fields, 2005), these values are satisfactory and indicate the factor analysability of the correlation matrix of the *meaning subscale*. Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 81% of the variance. The factor matrix indicated that all the items loaded on one factor satisfactorily as all factor loadings were above 0.50. The *Meaning subscale* was found to be uni-dimensional. The output is indicated in Table 4.15.

Table 4.15

Factor Matrix for the Meaning subscale

	Factor
EMPC1	.763
EMPC2	.951
EMPC3	.970

4.4.1.2 Dimensional analysis of the Competence subscale

The KMO and Bartlett's Test of Sphericity index was 0.675 and 431.595 respectively (*df = 3; p = 0.000)*. According to Kaiser (as cited in Fields, 2005), these values are satisfactory and indicate the factor analysability of the correlation matrix of the *competence subscale*. Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 79% of the variance. The factor matrix indicated that all the items loaded on one factor satisfactorily as all factor loadings were above 0.50. Therefore, the *Competence subscale* was found to be uni-dimensional. The output is displayed in Table 4.16.
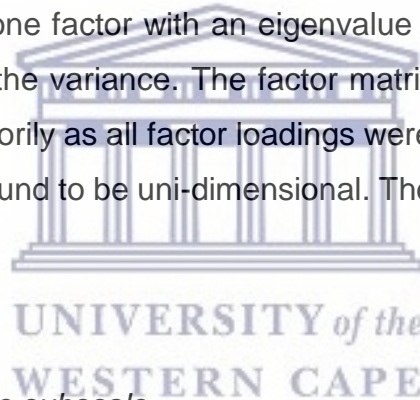
Table 4.16

 Factor Matrix for Competence subscale

	Factor
EMPC4	.939
EMPC5	.995
EMPC6	.713

4.4.1.3 Dimensional analysis of Self Determination subscale

Exploratory factor analysis shows that the *self-determination subscale* is factor analysable as indicated by the KMO index and Bartlett's Test of Sphericity values of 0.745

62

and 310.376 respectively (*df = 3; p = 0.000)*. Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 77% of the variance. All the factor loadings for the *Self-determination subscale* are greater than 0.50. The subscale for *Self-Determination* was found to be uni-dimensional. The results are depicted in Table 4.17

Table 4.17

Factor Matrix for the Self – determination subscale

	Factor
EMPC7	.872
EMPC8	.922
EMPC9	.828

4.4.1.4 Dimensional analysis of the Impact subscale

The KMO and Bartlett's Test of Sphericity index were 0.604 and 372.889 respectively (df = 3; p = 0.000). All the factor loadings for the *impact subscale* were greater than 0.50 except for EMPC10 which has a value of 0.28 (Pallant, 2010). Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 77% of the variance. However, the communalities were of concern due to the high values in the communalities table. Factor analysis is sensitive to outliers and the test analysis reflects that during the process of running the analysis, some of the values reached 1. Table 4.18 reflects the communalities table.

Table 4.18

Communalities matrix for Impact subscale

	Communalities
EMPC10	0.276.
EMPC11	0.883
EMPC12	0.875

4.5 Dimensional analysis of Team Effectiveness Questionnaire

Exploratory factor analysis indicates that the *Team Effectiveness scale* is factor analysable as shown by the KMO of 0.825 and Bartlett's Test of Sphericity index of 435.729 (*df = 21; p = 0.000).* The team effectiveness questionnaire failed the uni-dimensional test since Item TEQd1 and TEQd4 were identified as a complex item as they loaded on more than one factor and the difference between them was less than .25. Item TEQd1 and TEQd4 could be problematic. Factor analysis showed the existence of two factors that account for 45% and 12% of the variance respectively.

Table 4.19

Factor matrix for Team Effectiveness Questionnaire

	Factor	
	1	2
TEQd1	.574	.514
TEQd2	.651	.297
TEQd3	.712	-.055
TEQd4	.595	.414
TEQd5	.785	-.338
TEQd6	.685	-.320
TEQd7	.682	-.309

64

4.6 Dimensional analysis of Leadership Orientation Questionnaire

The Leadership Orientation Questionnaire was developed by Bolman and Deal (1990). The questionnaire consists of 32 questions that relate to the *Structural subscale, the Human Resource subscale, the Political subscale and the Symbolic subscale* respectively. Each subscale will be discussed below.

4.6.1.1 Dimensional analysis of Structural frame subscale

The *Structural subscale* attained a KMO of 0.885 which is greater than 0.60 and Bartlett's Test of Sphericity of 696.86 (*df = 28; p= 0.000).* These values are satisfactory and indicate the factor analysability of the correlation matrix of the *Structural Frame subscale* (Kaiser, as cited in Fields, 2005). Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 53% of the variance. All the items loaded on one factor satisfactorily since all the factor loadings were above 0.50. The output is indicated in Table 4.20

Table 4.20

Factor matrix for Structural frame subscale

	Factor
LOB1	0.647
LOB2	0.721
LOB3	0.828
LOB4	0.788
LOB5	0.665
LOB6	0.766
LOB7	0.712
LOB8	0.702

4.6.1.2 Dimensional analysis of Human Resource frame subscale

Exploratory factor analysis indicates that for the subscale *Human Resource Frame* the KMO index is 0.783 and Bartlett's Test of Sphericity index (*df = 15; p= 0.000).* Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 49% of the variance. The factor matrix indicates that all the factor loadings were above 0.50. The *Human Resource scale* was found to be uni-dimensional. The results are depicted in Table 4.21.

Table 4.21

Factor matrix for the *Human Resource Frame subscale*

	Factor
LOB12	0.866
LOB11	0.852
LOB10	0.737
LOB16	0.628
LOB9	0.607
LOB13	0.429

4.6.1.3 Dimensional analysis of the Political frame subscale

The KMO and Bartlett's Test of Sphericity index for the *Political Frame subscale* is 0.885 and 562.209 respectively (df = 21; p = 0.000) These values are satisfactory and substantiate the factor analysability of the *Political Frame subscale* (Kaiser as cited in Fields, 2005). Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 54% of the variance. Table 4.22 reflects that all factor loadings were above 0.50 and the *Political Frame subscale* was found to be uni-dimensional.

Table 4.22

Factor matrix for the *Political Frame subscale*

	Factor
LOB22	.799
LOB21	.790
LOB17	.730
LOB19	.687
LOB23	.687
LOB20	.684

4.6.1.4 Dimensional analysis of the Symbolic frame subscale

The KMO and Bartlett's Test of Sphericity index for the *Symbolic subscale* is 0.814 and 590.563 respectively (df = 21; p=0.000) According to Kaiser (as cited in Fields, 2005) these values satisfactorily indicate the factor analysability of the *Symbolic subscale*. Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 51% of the variance. The uni-dimensionality of the *Symbolic frame subscale* was confirmed. All the factor loadings were above 0.50. Table 4.23 indicates the results.

Table 4.23

Factor matrix for the Symbolic subscale

	Factor
LOB25	.899
LOB26	.777
LOB27	.774
LOB28	.760
LOB29	.606
LOB30	.582
LOB31	.581

4.7 DIMENSIONAL ANALYSIS OF ORGANISATIONAL CITIZENSHIP BEHAVIOUR (OCB) QUESTIONNAIRE

Organ (1988) developed the 24-item OCB questionnaire measuring 5 dimensions, namely, altruism, conscientiousness, sportsmanship, courtesy and civic virtue. Each of the 5 subscales was assessed separately.

4.7.1.1 The dimensionality analysis output for the Altruism subscale

The *Altruism subscale* attained a KMO index of 0.827 and Bartlett's Test of Sphericity values of 427.267 (*df* = 10; *p* = 0.000). The factor loadings were all above 0.50 and the *Altruism subscale* was found to be uni–dimensional. Only one factor with an eigenvalue greater than 1 was obtained and accounted for 60.9% of the variance. The results are shown in Table 4.24

Table 4.24

Factor matrix for the Altruism subscale

	Factor
OCB1	.786
OCB2	.850
OCB3	.869
OCB4	.666
OCB5	.712

4.7.1.2 The dimensionality analysis output for the Conscientiousness subscale

Exploratory factor analysis of the *Conscientiousness subscale* indicates that it is factor analysable as reflected by the KMO index and Bartlett's Test of Sphericity of 0.742 and 215.367 respectively (df =10; p= 0.000). Only one factor with an eigenvalue greater than

1 was attained and it accounted for 42.3% of the variance. The factor loadings were more than 0.30. The output is illustrated in Table 4.3.

Table 4.25

Factor matrix for the Conscientiousness subscale

	Factor
OCB6	.631
OCB7	.674
OCB8	.777
OCB9	.645
OCB10	.493

4.7.1.3 The dimensionality analysis output for the Sportsmanship subscale

The KMO for the *Sportsmanship subscale* was 0.721 whilst the Bartlett's Test for Sphericity was 333.117 (*df = 10; p= 0.000)*. Only one factor with an eigenvalue greater than 1 was obtained and this contributed to 49.55% of the variance. All items except 1 had a factor loading greater than 0.50, but within the minimum of 0.30 (Pallant, 2010). The results are depicted in Table 4.26

Table 4.26

Factor matrix for the Sportsmanship subscale

	Factor
OCB11	.357
OCB12	.743
OCB13	.768
OCB14	.882
OCB15	.656

4.7.1.4 The dimensionality analysis output for the Courtesy subscale

The *Courtesy subscale* had a KMO of 0.749 and Bartlett's Test of Sphericity of 363.68 (*df = 10; p = 0.000)*. Only one factor with an eigenvalue greater than 1 was obtained and it accounted for 52.1% of the variance. All factors loaded at more than 0.30.
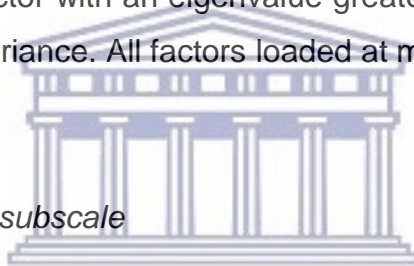
Table 4.27

Factor matrix of the Courtesy subscale

	Factor
OCB16	.438
OCB17	.701
OCB18	.805
OCB19	.854
OCB20	.740

4.7.1.5 The dimensionality analysis output for the Civic Virtue subscale

The KMO and Bartlett's Test of Sphericity was 0.535 and 150.75 respectively (*df = 3; p = 0.000)*. This falls below the acceptable level of 0.60. One factor with an eigenvalue greater

than 1 was obtained and accounted for 53.95% of the variance. In addition, there was one item (OCB21) that loaded less than 0.30. Table 4.28 depicts the results.

Table 4.28

Factor loading of the Civic Virtue subscale

	Factor
OCB21	.247
OCB22	.829
OCB23	.933

4.8 THE OVERALL MEASUREMENT MODEL FIT

The goodness of fit is applied to ascertain whether the observed data in the measurement model matches the empirical data (Diamantopoulos & Siguaw, 2000). The relationship between leadership, psychological empowerment, team effectiveness and psychological empowerment (latent constructs) and the manifest indicators is represented by the measurement model, whilst the structural model delineates the relationship between the latent constructs themselves.

The goodness of fit was determined using the statistical programme LISREL 8.80 by executing the confirmatory factor analysis on the measurement model. The estimates were produced by using the Robust Maximum Likelihood estimation method.

Item parcelling was used on the variables of each of the latent constructs. According to Holt (2004), this is achieved by combining individual items into smaller groups of items within scales and subscales. Table 2.9 provides a summary of the fit indices.

The Root Mean Square Error of Approximation (RMSEA) value is 0.0883 which indicates a poor model fit. According to Diamantopoulos and Siguaw (2000) RMSEA values below 0.05 indicate a good model fit, values between 0.05 and 0.08 indicate a reasonable fit,

71

whilst values above 0.08 indicate a poor or mediocre model fit. The Root Mean Square (RMR) value is 0.0899 and the Standardised RMR value is 0.0762, both values miss the 0.05 level indicative of a good fit model. This creates uncertainty as to the closeness of fit of the model.

The GFI value of 0.871 and AGFI value of 0.810 both miss the 0.90 level which is indicative of a good fit model. The NFI value is 0.870; NNFI is 0.901, CFI is 0.923, NNFI is 0.901, CFI is 0.923, IFI is 0.924 and the RFI value is 0.833 (Table 2.10). The NNFI, CFI, and IFI values are above 0.90 and indicate a reasonable fit. The NFI and RFI values are below 0.90 and indicate a poor fit over the independence model. The measurement model path diagram is depicted in Figure 4.1.

72

Table 4.29

Goodness of Fit statistics for the overall measurement model

Fit Index	Value
Degrees of Freedom	71
Satorra – Bentler Scaled Chi – Square	169.573 (P=0.00)
Chi-square corrected for Non-Normality	247.520 (P=0.00)
Root Mean Square Error of Approximation (RMSEA)	0.0883
90 Percent Confidence Interval for RMSEA	(0.0698; 0.107)
P-Value for Test of Close Fit (RMSEA < 0.05)	0.000626
Normed Fit Index (NFI)	0.870
Non-Normed Fit Index (NNFI)	0.901
Parsimony Normed Fit Index (PNFI)	0.679
Comparative Fit Index (CFI)	0.923
Incremental Fit Index (IFI)	0.924
Relative Fit Index (RFI)	0.833
Critical N (CN)	102.035
Root Mean Square Residual (RMR)	0.0899
Standardised RMR	0.0762
Goodness of Fit Index (GFI)	0.871
Adjusted Goodness of Fit Index (AGFI)	0.810
Parsimony Goodness of Fit Index (PGFI)	0.589

Chi-Square=157.92, df=71, P-value=0.00000, RMSEA=0.066

Figure 4.1 The measurement model

4.8.1 The completely standardised solution factor loading matrix

Table 4.30

Completely standardised lambda – X matrix for the item parcels

	EMPOWER	TEFFECT	OCB	OFRAME
	--------	--------	--------	--------
MEANI	0.520	- -	- -	- -
COMPET	0.621	- -	- -	- -
SELFD	0.803	- -	- -	- -
IMPACT	0.604	- -	- -	- -
TEAM_1	- -	0.524	- -	- -
TEAM_2	- -	0.932	- -	- -
ALTRUISM	- -	- -	0.504	- -
CONSCIEN	- -	- -	0.632	- -
SPORTS	- -	- -	0.380	- -
COURTESY	- -	- -	0.603	- -
CIVIC	- -	- -	0.529	- -
HRFRAME	- -	- -	- -	0.951
LFRAME	- -	- -	- -	0.857
PFRAME	- -	- -	- -	0.839

4.9 THE GOODNESS OF FIT FOR THE STRUCTURAL MODEL

To determine the fit of the structural model version 8.80 of the LISREL programme was used. The Robust Maximum Likelihood estimation was used for the estimates.

The structural model illustrates the relationship between the latent variables whilst it also represents the amount of unexplained variance. To determine the fit between the hypothesized relationships and the data, it is important to focus on the dependent and independent variables.

Table 4.31

Goodness of Fit statistics for the structured model

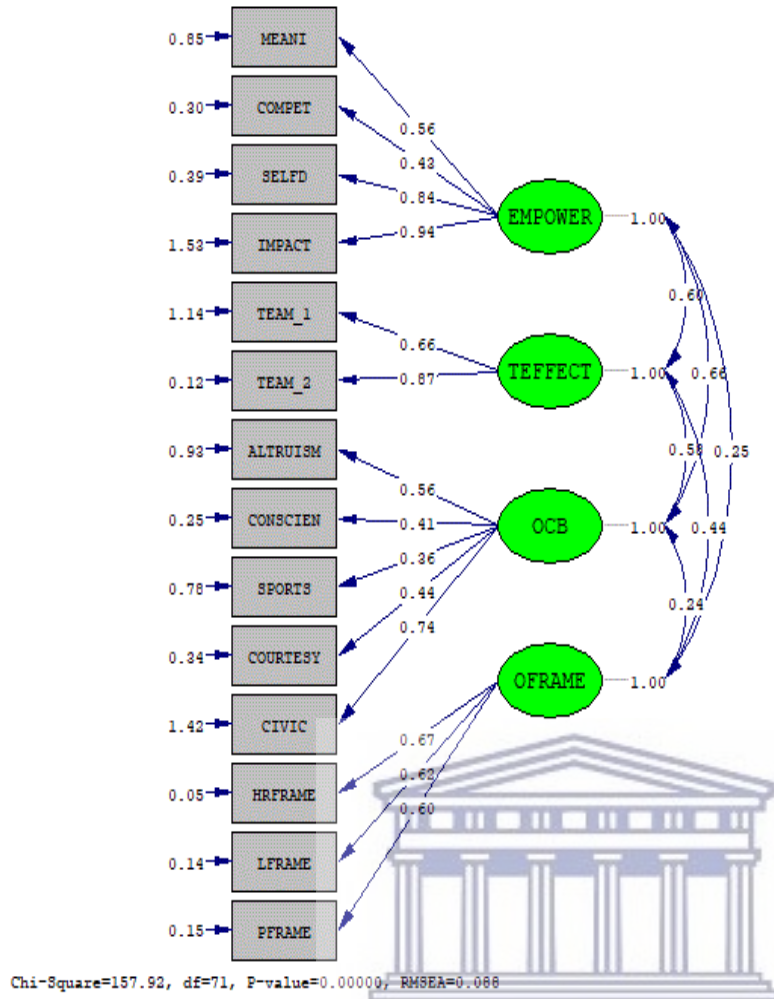| Fit Index	Value
Degrees of Freedom	71
Satorra – Bentler Scaled Chi – Square	157.918 (P=0.00)
Chi-square corrected for Non-Normality	247.520 (P=0.00)
Root Mean Square Error of Approximation (RMSEA)	0.0883
90 Percent Confidence Interval for RMSEA	0.0698; 0.107)
P-Value for Test of Close Fit (RMSEA < 0.05)	0.000626
Normed Fit Index (NFI)	0.870
Non-Normed Fit Index (NNFI)	0.901
Parsimony Normed Fit Index (PNFI)	0.679
Comparative Fit Index (CFI)	0.923
Incremental Fit Index (IFI)	0.924
Relative Fit Index (RFI)	0.833
Critical N (CN)	102.035
Root Mean Square Residual (RMR)	0.0899
Standardised RMR	0.0762
Goodness of Fit Index (GFI)	0.871
Adjusted Goodness of Fit Index (AGFI)	0.810
Parsimony Goodness of Fit Index (PGFI)	0.589

Figure 4.2. The structural model
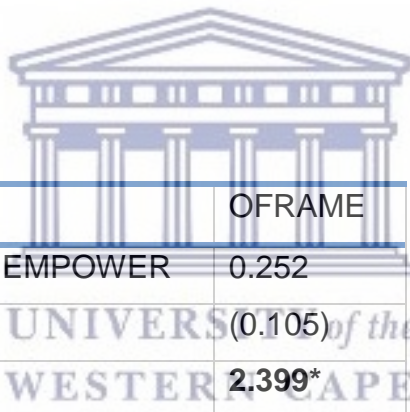
4.9.1 Parameter estimates

Structural model evaluation establishes if the empirical data substantiates the postulated theoretical relationships by analysing the freed elements of the gamma (γ) and beta (ß) matrices. To investigate whether the degree of consistence with the nature of the causal effect that was hypothesized to exist between the latent variables, it is important not only to determine whether the parameter estimates, as indicated by t-value greater than 1.96 are significant (p<0.05) but also to ascertain the nature of the causal effect hypothesized to exist between the latent variables.

77

Table 4.32

The beta matrix

	EMPOWER	TEFFECT	OCB
EMPOWER	-------------------	-----------------	----------------
TEFFECT	0.338	-----------------	0.289
	(0.164)		(0.154)
	2.057*		**1.872***
OCB	0.640	------------------	------------------
	(0.162)		
	3.951*		

Table 4.33

The gamma matrix

	OFRAME
EMPOWER	0.252
	(0.105)
	2.399*
TEFFECT	0.290
	(0.104)
	2.796*
OCB	0.077
	(0.095)
	0.810

Hypothesis one: Psychological empowerment has a significant relationship with team effectiveness.

The t-value for the connection between psychological empowerment and team effectiveness is (t=2.057; p<0.05) which is greater than 1.96 (see table 4.32). Therefore, there is a significant positive relationship between the two variables. This suggests that the proposed relationship between the two variables was supported.

Hypothesis two: There is a significant relationship between leadership orientation and team effectiveness.

There is a statistically significant relationship between team effectiveness and leadership orientation (t=2.796; p<0.05). This suggests that the proposed relationship between these variables was supported (see table 4.33).

Hypothesis three: There is a significant relationship between psychological empowerment and OCB.

There is a statistically significant relationship between psychological empowerment and OCB (t=3.951; p<0.05) indicating that the proposed relationship between these two variables was supported (see table 4.32).

Hypothesis four: There is a significant relationship between leadership orientation and psychological empowerment.

There is a statistically significant relationship between psychological empowerment and leadership orientation (t = 2.399; p<0.05). This suggests that the proposed relationship between the two variables was supported (see table 4.33).

Hypothesis five: There is a significant relationship between leadership orientation and OCB.

The t-value for the connection between leadership orientation and OCB is less than 1.96 (t=0.810; p<0.05) indicating that the proposed relationship between these two variables is not supported (see table 4.32).

4.10 CHAPTER SUMMARY

The purpose of this chapter was to present the results of the statistical analysis obtained through SPSS (version 27) and LISREL (version 8.80). Poor items were identified by performing item and dimensional analysis on the data. Item parceling was used to assess the measurement model. According to the results there is a positive and significant relationship between the latent variables except for the relationship between leadership orientation and OCB (t=0.810, p<0.05).
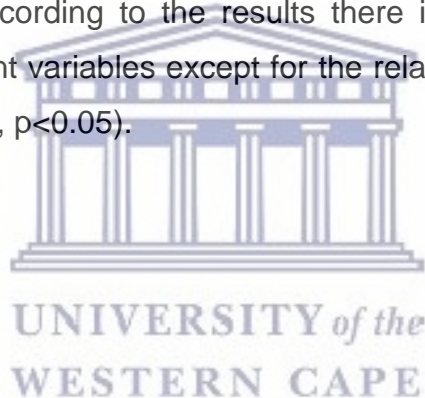
CHAPTER FIVE

DISCUSSION OF RESEARCH RESULTS AND RECOMMENDATIONS FOR FUTURE

RESEARCH

5.1 INTRODUCTION

The primary aim of this study was to conduct an analysis of the relationship between leadership orientation frames, psychological empowerment, and organisational citizenship behaviour and team effectiveness. The secondary aim was to validate a theoretical model depicting the structural relationships between these variables. In this chapter, the results of the study presented in chapter four will be discussed, the limitations of the study will be outlined, practical implications and the direction for future studies will suggested.

5.2 ASSESSMENT OF MODEL FIT

5.2.1 Measurement model

According to Diamantopoulos et al. (2008) a measurement model describes the relationship between the latent variables, which cannot be directly observed but are instead assessed by observable measures. A measurement model describes the relationships between a construct and its measures thereby testing the degree to which the data fits the hypothesised model.

The measurement model fit indices are summarised in Table 4.29 (see chapter four). The RMSEA for closeness fit for the overall measurement model is 0.0883 indicating a poor or mediocre model fit (p-value H_0: RMSEA < 0.05). The closeness of fit of the model is uncertain as the Root Mean Square Residual (RMR) value is 0.0899 and the Standardised RMR value is 0.0762, both values miss the 0.05 level indicative of a good fit model.

Both the GFI value of 0.871 and the AGFI value of 0.810 miss the 0.90 level indicative of a good model fit. Table 4.29 summarises the NFI, NNF, CFI, IFI and RFI values which are 0.870, 0.901, 0.923, 0.901, 0.923, 0.924, 0.833 respectively. The NFI and RFI values are below the acceptable 0.90 indicating that the measurement model shows a mediocre model fit.

5.2.2 Structural model

Since the structural model specifies relationships between constructs (Diamantopoulos et al., 2008), the purpose thereof is to ascertain if the theoretical relationships are supported by the data. According to Kenny (2011) the structural model delineates the causal and correlational links between the dependent and independent variables.

The RMSEA value for the structural model is 0.0883 indicating a mediocre model fit. The RMR and standardized RMR are 0.0899 and 0.0762 respectively which are above 0.05 denoting a poor model fit. The NNF (0.901), CFI (0.9023) and IFI (0.901) values are above 0.90 demonstrating a reasonable model fit, whilst the NFI (0.870) and RFI (0.833) values signify a poor model fit (see Table 4.31). Most of the fit indices show poor model fit with the data.

5.3 ASSESSMENT OF MODEL HYPOTHESES

The results of the hypotheses will now be discussed.

Hypothesis one: Psychological empowerment has a significant relationship with team effectiveness.

The t-value for the connection between psychological empowerment and team effectiveness is greater than 1.96 (t=2.057; p<0.05) signifying that there is a significant positive relationship between the two variables.

This result is consistent with previous findings of Seibert et al. (2011) which show that psychological empowerment and team performance have a positive relationship. Ozaralli (2003) found a strong relationship between psychological empowerment and perceived team effectiveness. In a study with a sample of 224 participants operating in a team environment, Aucamp (2014) found a significant relationship between psychological empowerment and team effectiveness. Similarly, in a sample of 210 (t=2.746; p <0.05), Sigwela (2020) confirmed a significant relationship between psychological empowerment and team effectiveness. This confirms the findings of this study that psychological empowerment has a positive relationship with team effectiveness.

Hypothesis two: There is a significant relationship between leadership orientation and team effectiveness.

There is a statistically significant relationship between team effectiveness and leadership orientation (t=2.796; p<0.05). This suggests that the proposed relationship between these variables exists. Previous studies have found significant relationships between several leadership styles and team effectiveness. Tran and Vu (2021) found that there is a statistically significant relationship between transformational leadership and team effectiveness in their study with a sample of 273 participants.

Mahembe and Engelbrecht (2014) found that there was a positive relationship between servant leadership and team effectiveness when they studied sample of 288 teachers. Similarly, Bilal et al. (2019) found a strong relationship between project leaders' servant leadership style and project team effectiveness. Yang et al. (2019) conducted a study of 123 teams and found that spiritual leadership was positively related to team performance and team OCB. Therefore, considering the above studies, sufficient research exists on the positive relationship between leadership styles and team effectiveness, thus supporting the findings of this study relating to leadership orientation frames and team effectiveness.

Hypothesis three: There is a significant relationship between psychological empowerment and OCB.

There is a statistically significant relationship between psychological empowerment and OCB (t=3.951; p<0.05) indicating that the proposed relationship between these two variables exists. This is consistent with the findings of Bester et al. (2015) that leader empowering behaviour, and psychological empowerment could predict OCB. In a study consisting of 374 participants from a large private company Joo and Jo (2016) found a positive relationship between psychological empowerment and OCB. The same study found that employees with a higher sense of impact and meaning in their work, who displayed competence and self-determination were more likely to engage in OCBs like conscientiousness, sportsmanship, civic virtue and courtesy (Organ, 1988).

Hypothesis four: There is a significant relationship between leadership orientation and psychological empowerment.

There is a statistically significant relationship between psychological empowerment and leadership orientation (t = 2.399; p<0.05) indicating that the proposed hypotheses was confirmed. Previous studies have found positive relationships between leadership styles and psychological empowerment. A meta-analysis by Schermuly et al. (2022) found that empowering leadership, transformational leadership and servant leadership were moderately correlated with psychological empowerment.

Van Der Hoven et al. (2021) found a positive relationship between psychological empowerment and servant leadership in their study with 203 teachers. The results of a study by Abdulrah et al. (2020) comprising 260 academic staff members showed that transformational leadership can predict psychological empowerment (t = 9.624; p<0.01).

Hypothesis five: There is a significant relationship between leadership orientation and OCB

The t-value for the connection between leadership orientation and OCB is less than 1.96 (t=0.810; p>0.05) indicating that the proposed relationship between these two variables is not supported. OCB has a weak negative effect on leadership orientation. This is in contrast to a study by Nguyen et al. (2016) who found that not only does each of the leadership frames have a significant positive relationship with OCB, but the global leadership orientation frames score also correlated with OCB.

Cheng (2015) in a study with 547 participants also found a positive relationship between OCB and leadership orientation with the symbolic and structural frame significantly predicting OCB. The global leadership orientation positively correlated with OCB.

5.4 LIMITATIONS TO THE STUDY

The current study was conducted in only one of the organisation's branches thereby affecting the generalisability of the study as the results cannot be applied throughout the organisation. The research was limited to participants who responded and did not give every employee in the branch a chance to participate. Moreover, the study utilised a smaller sample size which explains the poor model fit.

Self-reporting questionnaires were used in the study implies that not only are the responses subjective, but they are also subject to emotional variances and bias experienced at the time when questionnaires were completed. The study was limited to the quantitative research method and did not differentiate between the various task grades within the leadership framework of the organisation.

Bolman and Deal's Leadership Orientation framework is not often applied in organisational settings and has mostly been utilised in a school environment. Additional studies in the corporate environment should be done.

5.5 SUGGESTIONS FOR FUTURE RESEARCH

Future studies should use probability sampling and be undertaken on a larger sample to enhance the generalisability of the study. In addition, the Leadership Orientation (Self) questionnaire can be administered to several managers across the organisations to determine their leadership orientation. More studies need to be undertaken regarding perceived leadership orientation based on the Leadership Orientation Self and Other in organisational settings.

In the future, a multi-method longitudinal approach could be used. The longitudinal approach to research is more comprehensive since it takes place over a longer period therefore it is possible to determine causation. Future studies should make use of larger sample sizes to improve the reliability and validity of results.

5.6 PRACTICAL IMPLICATIONS

The study was motivated by the importance of understanding the effect leadership orientation frames on psychological empowerment, team effectiveness and OCB. The results reflect a positive relationship between leadership orientation, psychological empowerment team effectiveness and OCB.

A variety of studies have shown the positive impact that leadership has on team effectiveness. This study has shown a positive relationship between leadership orientation and team effectiveness, as well as team effectiveness and psychological empowerment which confirms that leadership plays a significant role on several facets of

86

team effectiveness. Different leadership styles also influence different team outcomes (Tran & Vu, 2021). One of the critical perspectives of Bolman and Deal's leadership theory is that using multiple leadership frames improves a leader's ability to make clear decisions and act effectively (Bolman & Deal, 1991). For team members to be effective (achieving the organisational goals and annual performance plan) the leaders (managers, supervisors and team leaders) must make sound decisions in a short period. According to Mahembe and Engelbrecht (2014) a team leader must be able to work towards specific goals, encourage members, accommodate a variety of personality types and create a symbiotic work environment. This ability is underpinned by the leadership orientation theory since leaders can use three or more frames, depending on the situation (Bolman & Deal, 1991) thereby enhancing team effectiveness, which in turn results in employees feeling empowered in the jobs

The results of the study showed a weak relationship between leadership orientation and OCB. This result could be ascribed to this specific sample which was small. However, it should be seen as a cautionary note to the organisation since employees look towards their leaders to provide guidance, support (Bilal et al., 2020) and motivation to improve productivity. The organisation's leaders need to participate in the extra-role behaviours to keep employees motivated. Motivated employees are more loyal and dedicated to the organisation (Ansari & Upadhyah, 2021) which reduces employee turnover.

5.7 CONCLUSION

The aim of the study was to ascertain whether Bolman and Deal's leadership orientation had an influence on psychological OCB and team effectiveness. The data obtained from the sample as well as the statistical analysis results were presented in Chapter four. Chapter five dealt with the interpretation and possible explanation of the results. The outcome of the data analysis reflected that there was a significant positive relationship between psychological empowerment and team effectiveness, psychological empowerment and OCB and leadership orientation and team effectiveness. The results showed a weak relationship between leadership orientation and OCB.

87

The limitations of the study and practical implications have been discussed and possible future research has been highlighted. The analysis of the data of this study can provide the organisation with some understanding of the importance of leaders knowing their leadership orientation frames which assist them with steering the organisation to optimal performance. Hopefully, the study will also highlight the importance of fostering an empowering environment for the employees to enable them to create meaning and efficacy in their jobs.

REFERENCES

Abdulrab, M., Zumrah, A. R., Alwaheeb, M. A., Al-Mamary, Y. H. S., & Al-Tahitah, A. (2020). The Impact of Transformational Leadership and Psychological Empowerment on Organisational Citizenship Behaviours: A PLS-SEM Approach. *Journal of Critical Reviews*.

Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, *39*(1), 123-148.

Ansari, K. R., & Upadhyay, R. K. (2020). Organisational citizenship behaviour and team effectiveness in service industry: a moderated mediation model. *Journal of Indian Business Research*, *13*(2), 308-323.

Ashforth, B. E. (1989). The experience of powerlessness in organisations. *Organisational Behaviour and Human Decision Processes*, *43*(2), 207-242.

Aucamp, L. (2014). *The influence of transformational leadership on trust, psychological empowerment, and team effectiveness* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*(3), 359.

Bandura, A. (1989). Regulation of cognitive processes through perceived self-efficacy. *Developmental Psychology*, *25*(5), 729.

Bandura, A. (1990). Selective activation and disengagement of moral control. *Journal of Social Issues*, *46*(1), 27-46.

Bester, J., Stander, M. W., & Van Zyl, L. E. (2015). Leadership empowering behaviour, psychological empowerment, organisational citizenship behaviours and turnover

intention in a manufacturing division. *SA Journal of Industrial Psychology*, *41*(1), 1-14.

Bilal, A., Siddiquei, A., Asadullah, M. A., Awan, H. M., & Asmi, F. (2021). Servant leadership: a new perspective to explore project leadership and team effectiveness. *International Journal of Organisational Analysis*, *29*(3), 699-715.

Blaikie, N. (2003). *Analysing quantitative data*. London: SAGE Publications Ltd doi:10.4135/9781849208604

Blau, J. R., & Alba, R. D. (1982). Empowering nets of participation. *Administrative Science Quarterly*, *27*(3), 363-379.

Bolman, L. G., & Deal, T. E. (1984). *Modern approaches to understanding and managing organisations*. San Francisco: Jossey-Bass.

Bolman, L. G., & Deal, T. E. (1990). Leadership orientations. *Brookline, MA: Leadership Frameworks*.

Bolman, L. G., & Deal, T. E. (1991). Leadership and management effectiveness: A multi-frame, multi-sector analysis. *Human resource management*, *30*(4), 509-534.

Bolman, L.G., & Deal, T. E. (2003). *Reframing organisations: Artistry, Choice and Leadership.* San Fransisco: Jossey-Bass Inc.

Bordin, C., Bartram, T., & Casimir, G. (2007). The antecedents and consequences of psychological empowerment among Singaporean IT employees. *Management Research News, 30*(1), 34-46.

Borman, W.C., & Motowidlo, S.J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. a. Schmidt (Ed.), *Personality selection* 71-98, San Fransisco: Jossey-Bass.

Bowen, D. E., & Lawler III, E. E. (1992). Total quality-oriented human resources management. *Organisational Dynamics*, *20*(4), 29-41.

Buljac-Samardzic, M., Doekhie, K. D., & van Wijngaarden, J. D. (2020). Interventions to improve team effectiveness within health care: a systematic review of the past decade. *Human Resources for Health*, *18*(1), 1-42.

Cameron, K., & Dutton, J. (Eds.). (2003). *Positive organisational scholarship: Foundations of a new discipline*. Berrett-Koehler Publishers.

Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organisational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organisational psychology* (pp. 687-732). Consulting Psychologists Press.

Castro, C. B., Armario, E. M., & Ruiz, D. M. (2004). The influence of employee organisational citizenship behaviour on customer loyalty. *International Journal of Service Industry Management*, *15*(1), 27-53.

Chan, F. T. (2003). Performance measurement in a supply chain. *The International Journal of Advanced Manufacturing Technology*, *21*(7), 534-548.

Chen, G. , Kanfer, R. , Kirkman, B.L, & Allen, D. (2007). A multilevel study of leadership, empowerment and performance in teams. *Journal of Applied Psychology, 92*(2), 331-346.

Chiang, C. F., & Hsieh, T. S. (2012). The impacts of perceived organisational support and psychological empowerment on job performance: The mediating effects of organisational citizenship behavior. *International Journal of Hospitality Management*, *31*(1), 180-190.

Chien, M. H. (2003, July). A study to improve organisational citizenship behaviors. In *International Congress on Modelling and Simulation (MODSIM03)* (3),1364-1367.

Chin, W. W., & Newsted, P. R. (1999). Structural Equation Modeling Analysis with Small Samples Using Partial Least Squares. In R. H. Hoyle (Ed.), *Statistical Strategies*

for Small Sample Research (1st ed., pp. 307-341). Thousand Oaks, CA: SAGE Publications, Inc.

Cohen, E. G. (1994). Restructuring the Classroom: Conditions for Productive Small Groups. *Review of Educational Research*, *64*, 1-35. http://dx.doi.org/10.3102/00346543064001001

Cohen, M. D., & March, J. G. (1974). Leadership and ambiguity: The American college president.

Conger, J. A., & Kanungo, R.N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review, 13*(3), 471-482.

Cooney, R. (2004). Empowered self-management and the design of work teams. *Personnel Review, 33*(6), 677–692. https://doi.org/10.1108/00483480410561556

Cooper, D.R., & Schindler, P.S. (2003). *Business research methods* (8ᵗʰ ed.). Boston: McGraw-Hill.

Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation, 10*(1), 7.

Diamantopoulos, A., & Siguaw, J.A. (2000). *Introducing LISREL: A guide for the uninitiated*. London: Sage.

Diamantopoulos, A., Riefler, P., & Roth, K. P. (2008). Advancing formative measurement models. *Journal of Business Research*, *61*(12), 1203-1218.

Driskell, J. E., Salas, E., & Hogan, R. (1987). *A taxonomy for composing effective naval teams*. NAVAL TRAINING SYSTEMS CENTER ORLANDO FL.

Duchek, S. (2020). Organisational resilience: a capability-based conceptualization. *Business Research*, *13*(1), 215-246.

Farh, J. L., Zhong, C. B., & Organ, D. W. (2004). Organisational citizenship behaviour in the People's Republic of China. *Organisation Science*, *15*(2), 241-253.

Fiedler, F. E. (1964). A contingency model of leadership effectiveness. In *Advances in experimental social psychology* (Vol. 1, pp. 149-190). Academic Press.

Fields, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London: Sage.

Fong, K. H., & Snape, E. (2015). Empowering leadership, psychological empowerment and employee Outcomes: Testing a multi‐level mediating model. *British Journal of Management*, *26*(1), 126-138.

Gallos, J. V. (2003). *Part 1. An introduction to reframing organisation.* Josse-Bass/A Wiley Company. San Fransisco.

Gallos, J. V. (2006). Reframing Complexity: A Four-Dimensional Approach to Organisational Diagnosis. *Development, and Change. Organisation development. San Francisco: Jossey-Bass.*

Garg, A. & Suri, S. (2013), Analysing the impact of psychological empowerment on organisational citizenship behaviour in the public banking sector. *International Journal of Marketing, 2*(7), 80-94.

Gist, M. E. (1987). Self-efficacy: Implications for organisational behavior and human resource management. *Academy of Management Review*, *12*(3), 472-485.

Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly*, 499-517.

Gorji, M. B., & Ranjbar, M. (2013). Relationship between psychological empowerment of employees and organisational citizenship behavior. *Australian Journal of Basic and Applied Sciences*, *7*(1), 67-75.

Gorn, G. J., & Kanungo, R. N. (1980). Job involvement and motivation: Are intrinsically motivated managers more job involved? *Organisational Behavior and Human*

93

https://etd.uwc.ac.za/

Performance, *26*(2), 265-277.

Hackett, R. D., Wang, A. C., Chen, Z., Cheng, B. S., & Farh, J. L. (2018). Transformational leadership and organisational citizenship behaviour: A moderated mediation model of leader-member-exchange and subordinates' gender. *Applied Psychology*, *67*(4), 617-644.

Hackman, J. (1987). The design of work teams. *Handbook of organisational behavior*, 315-342.

Hackman, J. R. (1983). *A normative model of work team effectiveness*. OFFICE OF NAVAL RESEARCH ARLINGTON VA.

Hackman, J. R. (2002). *Leading teams: Setting the stage for great performances*. Boston, MA: Harvard Business school Press.

Hair Jr., J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise Multivariada de Dados (Multivariate Data Analysis)* (6th ed.). Porto Alegre: Bookman.

Hempel, P. S., Zhang, Z. X., & Han, Y. (2012). Team empowerment and the organisational context: Decentralization and the contrasting effects of formalization. *Journal of Management*, *38*(2), 475-501.

Henderson, S., & Walkinshaw, O. (2002). Command team assessment: Principles, guidance and observations. *Unpublished report. QinetiQ, Fort Halstead*.

Hendricks, C. R. (2017). The influence of transformational leadership on perceptions of organisational justice, intention to quit and Organisational Citizenship Behaviour among selected call centre employees in the financial services industry.

Holt, J. K. (2004). Item parcelling in structural equation models for optimum solutions. In *annual meeting of the mid-western educational research association* (pp. 2-7).

Howard, C. , Logue, K. , Quimby, M., & Schoeneberg, J. (2009). Framing change: A new approach to management analysis. *OD PRACTITIONER, 41*(1), 25-31.

Hu, J. & Liden, R. C. (2011). Antecedents of team potency and team effectiveness: An examination of goal and process clarity and servant leadership. *Journal of Applied Psychology*, *96*(4), 851-862.

Irving, J. A., & Longbotham, G. J. (2007). Leading effective teams through servant leadership: An expanded regression model of essential servant leadership themes. *International Journal of Leadership Studies*, *14*(1), 806-817.

Joo, B. K., & Jo, S. J. (2017). The effects of perceived authentic leadership and core self-evaluations on organisational citizenship behaviour: The role of psychological empowerment as a partial mediator. *Leadership and Organisation Development Journal*, *38*(3), 463-481.

Kanter, S. L. (1997). *Revitalizing General Education in a Time of Scarcity. A Navigational Chart for Administrators and Faculty.* Allyn and Bacon, 160 Gould St., Needham Heights, MA 02194-2310.

Kanungo, R. N., & Conger, J. A. (1990). The quest for altruism in organisations. In S. Srivastva & D. L. Cooperrider, *Appreciative management and leadership: The power of positive thought and action in organisations* (pp. 228–256). Jossey-Bass/Wiley.

Karambayya, R. (1990, August). CONTEXTUAL PREDICTORS OF ORGANISATIONAL CITIZENSHIP BEHAVIOR. In *Academy of Management Proceedings* (Vol. 1990, No. 1, pp. 221-225). Briarcliff Manor, NY 10510: Academy of Management.

Kariuki, A., & Kiambati, K. (2017, July - Aug). Empowerment, Organisational Commitment, Organisation Citizenship Behavior and Firm Performance. *Management Studies, 5*(4), 290-300.

Kelloway, E. K. (1998). *Using LISREL for Structural Equation Modelling: A Researcher's Guide.* United States of America: Sage.

Kenny, D. A. (2011). *Structural models with latent variables. Structural Equation Modelling.* Retrieved from http://davidakenny.net/cm/sem.htm#Mm

Kirkman, B. L., & Rosen, B. (1999). Beyond self–management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, *42*(1), 58-74.

Klimoski, R., & Jones, R. G. (1995). Staffing for effective group decision making: Key issues in matching people and teams. *Team effectiveness and decision making in organisations*, *29*, 1-332.

Kosar, R. (2017). The impact of psychological empowerment on organisational citizenship behaviour and knowledge sharing behaviour: The mediating role of employee engagement and moderating role of leader-member exchange. *Jinnah Business Review, 5*(2), 1-12.

Kosar, R. (2017). The Impact of psychological empowerment on organisational citizenship behaviour and knowledge sharing behaviour: The mediating role of employee engagement and moderating role of leader–member exchange. *Jinnah Business Review*, *5*(2), 1-12.

Kozlowski, S. W. J., & Bell, B. S. (2003). Work groups and teams in organisations. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology (Vol 12): Industrial and Organisational Psychology* (pp. 333–375). New York: Wiley.

Larson, C. E., & LaFasto, F. M. J. (1989). *Teamwork: What must go right/what can go wrong.* Sage Publications, Inc.

Lengnick-Hall C. A., Beck T.E., & Lengnick-Hall M.L. (2011). Developing a capacity for organisational resilience through strategic human resource management. *Human Resource Management Review, 21*(3), 243-255.

Lengnick-Hall, M. L., & Moritz, S. (2003). The impact of e-HR on the human resource management function. *Journal of Labour Research*, *24*(3), 365.

Lewin, H. S. (1947). The way of the Boy Scouts. *The Journal of Educational Sociology*, *21*(3), 169-176.

Lin, S. J. (1991). Relationship between compensation equity, procedural justice, organisational commitment and organisational citizenship behaviour. *Doctoral dissertation, National Chengchi University, Taiwan*.

Mahembe, B., & Engelbrecht, A. S. (2013). The relationship between servant leadership, affective team commitment and team effectiveness. *SA Journal of Human Resource Management*, *11*(1), 1-10.

Mahembe, B., & Engelbrecht, A. S. (2014). The relationship between servant leadership, organisational citizenship behaviour and team effectiveness. *SA Journal of Industrial Psychology*, *40*(1), 1-10.

Mahembe, B., Engelbrecht, A. S., Chinyamurindi, W., & Kandekande, L. R. (2015). A study to confirm the reliability and construct validity of an organisational citizenship behaviour measure on a South African sample. *SA Journal of Industrial Psychology*, *41*(1), 1-8.

Mainiero, L. A. (1986). Early career factors that differentiate technical management careers from technical professional careers. *Journal of Management*, *12*(4), 561-575.

Makvandi, A., Naderi, F., Makvandi, B., Pasha, R., & Ehteshamzadeh, P. (2018). Academic Optimism and Organisational Citizenship Behaviour amongst Secondary School Teachers. *International Journal of Emotional Education*, *10*(1), 164-166.

Mardanov, I. T., Heischmidt, K., & Henson, A. (2008). Leader-member exchange and job satisfaction bond and predicted employee turnover. *Journal of Leadership & Organisational Studies*, *15*(2), 159-175. doi:10.1177/1548051808320985

Mathieu, J., Maynard, M.T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of*

97

Management, *34*(3), 410-476.

Maynard, T. M., Gilson, L. L., & Mathiue, J. E. (2012). Empowerment-Fad or fab? A multilevel review of the past two decades of research. *Journal of Management*, *38*(4), 1231-1281.

McGrath, J. E. (1964). *A social psychological approach to the study of negotiation*. ILLINOIS UNIV URBANA.

Mels, G. (2003). *A workshop on structural equation modelling with LISREL 8.54 for Windows*. University of Port Elizabeth.

Menon, S. (2001). Employee empowerment: An integrative psychological approach. *Applied Psychology*, *50*(1), 153-180.

Merriam-Webster. (2007). Plagiarism. In *Merriam-Webster.com dictionary*. Retrieved January 18, 2022, from https://www.merriam-webster.com/dictionary/frame%20of%20reference

Morgeson, F. P., DeRue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of Management*, *36*(1), 5-39.

Neuman, W. L. (2000). *Social research methods: Qualitative and quantitative approaches* (4th ed.). Boston: Allyn and Bacon.

Nguyen, B., Chang, K., Rowley, C., & Japutra, A. Organisational citizenship behavior, identification, psychological contract. *Teaching and Teacher Education*, *20*(3), 277-289.

Nieva, V. F., Fleishman, E. A., & Rieck, A. (1978). Team dimensions: Their identity, their measurement, and their relationship (DTIC Research Note 85-12). *Alexandria, VA*.

Nour-Mohammad, Y., Habibollah, S., & Jamshid, M. (2013). The relationship between human resource productivity (HRP) and organisational citizenship behaviour

(OCB). *African Journal of Business Management*, *7*(32), 3168-3176.

Nunnally, J. C. (1967). *Psychometric theory*. New York: McGraw-Hill.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Organ, D. (1977). A reappraisal and reinterpretation of the satisfaction-causes-performance hypothesis. *Academy of Management Review, 2*, 46-53.

Organ, D. W. (1988). *Organisational citizenship behaviour: The good soldier syndrome*. Lexington Books/DC Heath and com.

Organ, D. W. (1990). The motivational basis of organisational citizenship behaviour. *Research in Organisational Behaviour*, *12*(1), 43-72.

Organ, D. W. (1997). Organisational citizenship behavior: It's construct clean-up time. *Human Performance, 10*(2), 85–97. https://doi.org/10.1207/s15327043hup1002_2

Organ, D., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organisational citizenship behaviours. *Personnel Psychology*, 48, 775-802.

Özaralli, N. (2003). Effects of transformational leadership on empowerment and team effectiveness. *Leadership & Organization Development Journal, 24*(6), 335–344. https://doi.org/10.1108/01437730310494301

Pallant, J. (2010). *SPSS Survival Manual: A step by step guide to data analysis using SPSS for Windows (Version 10 and 11).* Philadelphia: Open University Press.

Pallant, J. (2016). *SPSS Survival Manual: A Step-by-Step Guide to Data Analysis Using SPSS Program* (6th ed.). London, UK: McGraw-Hill Education.

Park, G.R. , Moon, G.W. , & Jung, J.G. (2017). A consideration on the relationship between empowerment and organisational citizenship behaviour: Focussing on

domestic studies in Business Administration Field. *The SIJ Transactions on Industrial, Financial & Business Management (IFBM), 5*(1), 5-10.

Penner, L. A., Midili, A. R., & Kegelmeyer, J. (1997). Beyond job attitudes: A personality and social psychology perspective on the causes of organisational citizenship behaviour. *Human Performance, 10*(2), 111-131.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual-and organisational-level consequences of organisational citizenship behaviours: A meta-analysis. *Journal of Applied Psychology, 94*(1), 122.

Podsakoff, P. M., & MacKenzie, S. B. (1997). Kerr and Jermier's substitutes for leadership model: Background, empirical assessment, and suggestions for future research. *The Leadership Quarterly, 8*(2), 117–132. https://doi.org/10.1016/S1048-9843(97)90012-6

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organisational citizenship behaviours. *The Leadership Quarterly, 1*(2), 107-142.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organisational citizenship behaviours: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management, 26*(3), 513-563.

Polit, D. (2015). Assessing measurement in health: beyond reliability and validity. *Int J Nur Stud, 52*(11), 1746-1753.

Raub, S., & Robert, C. (2010). Differential effects of empowering leadership on in-role and extra-role employee behaviours: Exploring the role of psychological empowerment and power values. *Human Relations, 63*(11), 1743-1770.

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organisations. *Administrative Science Quarterly*, 150-163.

Robbins, S. P., & Judge, T. (2009). *Organisational behaviour*. Pearson South Africa.

Robbins, S. P., Judge, T. A., & Sanghi, S. (2007). *Organisational Behaviour [with CD]*. Prentice-Hall of India.

Roddy, T. P. (2010). *Frame analysis of the self-perceived leadership orientations of headmasters of the independent schools association of the southwest, southern association of independent schools, and the association of independent schools of greater Washington member schools*. The University of New Orleans.

Salas, E., Dickinson, T. L., Converse, S. A., & Tannenbaum, S. I. (1992). Toward an understanding of team performance and training. *Teams: Their training and performance*, 3-29.

Sargolzaei, F., & Keshtegar, A. A. (2015). The effect of psychological empowerment to improve employees' organisational citizenship behaviour (study of Maskan Bank branches management of Zahedan city). *Research Journal of Fisheries and Hydrobiology*, *10*(9), 605-611.

Sasnett, B., & Ross, T. (2007). Leadership frames and perceptions of effectiveness among health information management program directors. *Perspectives in Health Information Management/AHIMA, American Health Information Management Association*, *4*.

Saunders, M., Lewis, P. & Thornhill, A. (2012). *Research Methods for Business Students*. Pearson Education, London.

Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students* (7th ed.). Essex: Pearson's Education Limited.

Schermuly, C. C., Koch, J., Creon, L. E., Drazic, I., & Graßmann, C. (2022). Developing and Testing an Instrument to Measure the Culture for Psychological Empowerment in Organisations (IMPEC). *European Journal of Psychological Assessment*.

Schuler, R. (1998). *Managing Human Resources* (6th ed.). Cincinnati: South-Western College Publishing.

Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organisations: a meta-analytic review. *Journal of Applied Psychology*, *96*(5), 981.

Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organisations: a meta-analytic review. *Journal of Applied Psychology*, *96*(5), 981.

Sekaran, U. (2003). *Research methods for business: A skill building approach*. John Wiley & sons.

Sekaran, U. (2011). *Research methods for business: A skill building approach*. John Wiley & Sons.

Sekaran, U., & Bougie, R. (2003). *Research method of business: A skill building approach*. New York: John Willey & Sons.

Sha, N. (2007). *A study of the relationship between job satisfaction and procedural justice experienced by employees in a brick manufacturing company and their organisational citizenship behaviour* (Doctoral dissertation, University of the Western Cape).

Shah, A., & Hussain, N. (2022). An Empirical Study to Evaluate the Impact of Ethical Leadership on Organisational Citizenship and Innovative Behaviour: Mediated by Psychological Empowerment at the Workplace: none. *Reviews of Management Sciences*, *4*(1), 125-138.

Shuffler, M. L., Diazgranados, D., Maynard, M. T., & Salas, E. (2018). Developing, sustaining, and maximizing team effectiveness: An integrative, dynamic perspective of team development interventions. *Academy of Management Annals*, *12*(2), 688-724.

Sigwela, T. (2020). *The relationship between authentic leadership, psychological empowerment, work engagement and team effectiveness* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Smith, C. A. O. D. W. N. J. P., Organ, D. W., & Near, J. P. (1983). Organisational citizenship behaviour: Its nature and antecedents. *Journal of Applied Psychology*, *68*(4), 653.

Soley-Bori, M. (2013). Dealing with missing data: Key assumptions and methods for applied analysis. *Boston University*, *4*(1), 19.

Spreitzer, G. (2007). Giving peace a chance: Organisational leadership, empowerment, and peace. *Journal of Organisational Behaviour: The International Journal of Industrial, Occupational and Organisational Psychology and Behaviour*, *28*(8), 1077-1095.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, *38*(5), 1442-1465.

Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal*, *39*(2), 483-504.

Spreitzer, G. M. (1997). Toward a common ground in defining empowerment. In *National Academy of Management Meetings, 1995, Vancouver, BC, Canada; An earlier version was presented at the conference*. Elsevier Science/JAI Press.

Spreitzer, G. M. (2008). Taking stock: A review of more than twenty years of research on empowerment at work. *Handbook of Organisational Behaviour*, *1*, 54-72.

Spreitzer, G. M., Kizilos, M. A., & Nason, S. W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness satisfaction, and strain. *Journal of Management*, *23*(5), 679-704.

Srivastava, P., & Jain, S. (2017). A leadership framework for distributed self-organized

scrum teams. *Team performance management: An international journal*.

Stadtländer, C. T. H. (2007). Book Review: Reframing Organisations: Artistry, Choice, and Leadership. *EJBO-Electronic Journal of Business Ethics and Organisation Studies*.

Stander, M. W., & Rothmann, S. (2010). Psychological empowerment, job insecurity and employee engagement. *SA Journal of Industrial Psychology*, *36*(1), 1-8.

Statistics, I. S., (2021). IBM Corp. Released 2021. IBM SPSS Statistics for Windows, Version 28.0. Armonk, NY: IBM Corp. *Google Search*.

Staw, B. M., & Epstein, L. D. (2000). What bandwagons bring: Effects of popular management techniques on corporate performance, reputation, and CEO pay. *Administrative Science Quarterly*, *45*(3), 523-556.

Susman, G. I. (1976). *Autonomy at work: A sociotechnical analysis of participative management*. Greenwood.

Sypawka, W. (2008). *A study of division Deans in the North Carolina community college system self-perceived leadership style based on Bolman and Deal's Four Frame Theory*. East Carolina University.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston: Pearson.

Tambe, S., & Shanker, M. (2014). A Study of Organisational Citizenship Behaviour (OCB) And Its Dimensions: A Literature Review. *70 International Research Journal of Business and Management-IRJBM. Search in*.

Tan, M.H.J., Chua, Y.P., & Tie, F.H. (2014). 'Leadership orientations of an educational leader in a private university in Malaysia'. *Procedia Social and Behavioural Sciences*, *114*, 681–686.

Tannenbaum, S. I., Salas, E., & Cannon-Bowers, J. A. (1996). Promoting team

effectiveness in M. A. West (Ed.), *Handbook of Work Group Psychology* (pp. 503-529). Chichester: John Wiley.

Taylor, J. (2013). Goal setting in the Australian public service: Effects on psychological empowerment and organisational citizenship behaviour. *Public Administration Review*, *73*(3), 453-464.

Thakre, N., & Mathew, P. (2020). Psychological empowerment, work engagement, and organisational citizenship behaviour among Indian service-sector employees. *Global Business and Organisational Excellence*, *39*(4), 45-52.

Theron, C. J. (2010). *The impact of psychological empowerment and job satisfaction on organisational commitment amongst employees in a multinational organisation* (Unpublished Master's dissertation). University of the Western Cape, Cape Town, South Africa.

Thomas, K. W., & Tymon, W. G. (1994). Does empowerment always work: Understanding the role of intrinsic motivation and personal interpretation. *Journal of Management Systems*, *6*(2), 1-13.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An interpretative model of intrinsic task motivation. *Academy of Management Review, 15*(4), 666-681.

Tran, T. B. H., & Vu, A. D. (2021). Transformational Leadership Versus Shared Leadership for Team Effectiveness. *Asian Academy of Management Journal*, *26*(2), 143-171.

van Der Hoven, A. G., Mahembe, B., & Hamman-Fisher, D. (2021). The influence of servant leadership on psychological empowerment and organisational citizenship on a sample of teachers. *SA Journal of Human Resource Management*, *19*, 12.

Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organisational citizenship behaviour: Construct redefinition, measurement, and validation. *Academy of*

Management Journal, *37*(4), 765-802.

Vandyne, L., Cummings, L. L., & Parks, J. M. (1995). Extra-role behaviours-in pursuit of construct and definitional clarity (a bridge over muddied waters). *RESEARCH IN ORGANISATIONAL BEHAVIOR: AN ANNUAL SERIES OF ANALYTICAL ESSAYS AND CRITICAL REVIEWS, VOL 17, 1995*, *17*, 215-285.

Veloen, M. (2016). *The influence of paternalistic leadership on organisational commitment and organisational citizenship behaviour at selected organisations in the Western Cape Province* (Doctoral dissertation, University of the Western Cape).

Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative–quantitative divide: Guidelines for conducting mixed methods research in information systems1. *MIS Quarterly, 1*(1), 1-20.

Vuori, J. (2018). Understanding academic leadership using the four-frame model. *Theoretical and Methodological Perspectives on Higher Education Management and Transformation-An advanced reader for PhD students*.

Wagner III, J. A. (1995). Studies of individualism-collectivism: Effects on cooperation in groups. *Academy of Management Journal, 38*(1), 152-173.

Wagner, E. D. (1994). In support of a functional definition of interaction. *American Journal of Distance Education*, *8*(2), 6-29.

Walumbwa, F. O., Wang, P., Wang, H., Schaubroeck, J., & Avolio, B. J. (2010). RETRACTED: Psychological processes linking authentic leadership to follower behaviours. *The Leadership Quarterly*, *5*(21), 901-914.

Weick, K. E. (1995). *Sensemaking in organisations* (Vol. 3). Sage.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organisational commitment as predictors of organisational citizenship and in-role behaviours. *Journal of Management*, *17*(3), 601-617.

Williams, R. (2015). *Missing Data Part 1: Overview, Traditional Methods.* Retrieved from https://www.google.co.za/url?q=https://www3.nd.edu/~rwilliam/xsoc63993/l13.pdf&sa=U&ved=0ahUKEwino6CHmqrLAhXKtxQKHcVFCLEQFggNMAE&usg=AFQjCNG9QjaL0L7VuQwDdGsc5iFi7zTiww

Witt, L. A. (1991). Exchange ideology as a moderator of job attitudes-organisational citizenship behaviours relationships. *Journal of Applied Social Psychology*, *21*(18), 1490-1501.

Wofford, J. C. (1982). *Organisational behaviour: Foundation for organisational effectiveness*. Arden Shakespeare.

Wu, Q., & Cormican, K. (2021). Shared Leadership and Team Effectiveness: An Investigation of Whether and When in Engineering Design Teams. *Frontiers in Psychology*, *11*, 569198.

Yang, F., Huang, X., & Wu, L. (2019). Experiencing meaningfulness climate in teams: How spiritual leadership enhances team effectiveness when facing uncertain tasks. *Human Resource Management*, *58*(2), 155-168.

Yukl, G. (2008). How leaders influence organisational effectiveness. *The Leadership Quarterly*, *19*(6), 708-722.

Zaccaro, S. J., Heinen, B., & Shuffler, M. (2008). Team leadership and team effectiveness. In *Team effectiveness in complex organisations* (pp. 117-146). Routledge.

Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The Leadership Quarterly*, *12*(4), 451-483.

Zhu, W., Sosik, J. J., Riggio, R. E., & Yang, B. (2012). Relationships between transformational and active transactional leadership and followers' organisational identification: The role of psychological empowerment. *Journal of Behavioural and Applied Management*, *13*(3), 168-212.

Zimmerman, M. A. (1990). Taking aim on empowerment research: On the distinction between individual and psychological conceptions. *American Journal of Community Psychology*, *18*(1), 169-177.

Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, *23*(5), 581-599.