

**INFLUENCE OF INTEGRITY AND SERVANT LEADERSHIP ON TRUST IN  
LEADERS AND ETHICAL CULTURE**

**By**

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**THESIS PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF MASTER OF COMMERCE (INDUSTRIAL PSYCHOLOGY) IN  
THE FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES AT  
STELLENBOSCH UNIVERSITY**

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**December 2017**

## **DECLARATION**

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December 2017

## ABSTRACT

This study stems from the need to address unethical behaviour in the workplace. Servant leadership emerged as a tool to address this issue, through the development of an ethical culture. The role of Integrity in Servant Leaders, as well as the effect that trust in leaders have on implementing ethical culture, emerged as important components of this relationship. Thus, the focus of the research is directed towards determining the role of servant leadership in creating an ethical culture in organisations. To achieve this, the concepts of integrity, servant leadership, trust in leaders and ethical culture were investigated.

Literature obtained from a theoretical review of the proposed variables, lead to the conceptualization of the determinants and structural relationships that exist between the concepts. A theoretical model was subsequently developed to explain this, followed by the formulation of substantive hypotheses to empirically determine the validity of the predictions in the literature review.

For the research design, the study followed a quantitative approach, whereby the hypothesised causal relationships between the latent variables were tested by means of an ex post facto correlational design and structural equation modelling (SEM), which was used as an analysis technique.

The research objective of this study was to test the proposed ethical culture structural model, with the research focus on business leaders and subordinates' perceptions of the qualities of these leaders. The Ethical Integrity Test (EIT), Servant Leadership Behavioural Scale (SLBS), Leader Trust Scale (LTS) and Ethical Climate Questionnaire (ECQ) were utilised to gather the relevant data from the population. The respective questionnaires were sent to participants via electronic mail invitations. A convenient probability sample of 279 individuals within varied industries was selected.

From an analysis of the results, significant positive relationships were confirmed between Integrity and Trust in Leader, Integrity and Servant Leadership, Servant Leadership and Trust in Leader, Servant Leadership and Ethical Culture, as well as between Trust in Leader and Ethical Culture.

The study makes inroads into further developing the understanding between ethics and leadership. The positive relationships found between the studied variables have widespread implications for organisational managers in their pursuit of addressing

business ethics, and it provides direction for future research on servant leadership and ethics.

## Opsomming

Hierdie studie het ontstaan op grond van die behoefte om onetiese gedrag in die werksplek aan te spreek. Onlangse etiese skandale het etiek na die voorpunt van besigheidstudies gedryf en het 'n hernieude belangstelling in die rol van etiek in die moderne werksplek aangewakker.

Onetiese werksgedrag bedreig die stabiliteit in die werksomgewing en forseer dus organisasies om strategieë te implementeer om onetiese gedrag te bekamp. Die literatuur dui daarop dat die ontwikkeling van 'n etiese kultuur in organisasies 'n effektiewe strategie sal wees. Dit het die afhanklike veranderlike van die studie gevorm, synde die skepping van 'n omgewing waarin individue spontaan eties optree in ooreenstemming met die algemeen aanvaarde waardes en norme van die organisasie.

Met die bestudering van die literatuur het dienende leierskap navore getree as 'n leierskapstyl om dié kultuur te skep. Dit is die leier se verantwoordelikheid om 'n aktiewe rol te speel in die skepping van 'n etiese klimaat in die werksplek. Dienende leierskap, as 'n waarde-gebaseerde en groep-georiënteerde benadering tot leierskap, word spesifiek beskou as 'n effektiewe benadering om 'n etiese kultuur te ontwikkel. Die rol van integriteit in dienende leierskap, sowel as vertroue in leiers het ook as belangrike elemente in die effektiewe ontwikkeling van 'n etiese organisasiekultuur navore getree.

Gegrondevs op 'n deeglike literatuurstudie is 'n strukturele model ontwikkel om die oorsaaklike verwantskappe tussen die latente veranderlikes te illustreer. Hipoteses is gevolglik geformuleer om die geldigheid van die gepostuleerde verwantskappe empiries te toets.

In terme van die navorsingsontwerp, het die studie 'n kwantitatiewe benadering gevolg en 'n 'n *ex post facto* korrelasie-ontwerp gebruik. Strukturele vergelykingsmodellering (SEM) is as 'n statistiese ontledingstegniek aangewend.

Die *Ethical Integrity Test* (EIT), *Servant Leadership Behavioural Scale* (SLBS), *Leader Trust Scale* (LTS) en *Ethical Climate Questionnaire* (ECQ) is as meetinstrumente gebruik om die relevante data te versamel. 'n Elektroniese vraelys is aan 'n gerieflikheidsteekproef van 279 individue in verskillende bedrywe gestuur.

'n Ontleding van die resultate dui op positiewe verwantskappe tussen integriteit en vertrouwe in leiers, integriteit en dienende leierskap, dienende leierskap en vertrouwe in leiers, dienende leierskap en etiese kultuur, asook die vertrouwe in leiers en etiese kultuur. Die studie bied verdere insigte in die komplekse verband tussen sake-etiek en leierskap. Die positiewe verwantskappe wat tussen die veranderlikes ontdek is, behels wydverspreide implikasies wat bestuurders kan help om 'n etiese kultuur in organisasies te ontwikkel. Die beperkings en aanbevelings van die studie verskaf ook nuttige riglyne vir toekomstige navorsing in die veld.

## **ACKNOWLEDGEMENTS**

I would like to express my sincere gratitude to the following people for their contributions and the valuable role they played in the completion of my study.

First and foremost, I would like to express praise and glory to my Heavenly Father for granting me the wisdom and strength to complete this study. The opportunity to be where I am today is a true blessing and one to which I give all glory to God.

To my wife and pillar of strength, Doret, thank you for always being in my corner and your invaluable encouragement and love every step of the way. Your support, patience and understanding through the many sacrificed late nights, as well as words of encouragement and prayer through the ups and downs really made the difference. I love you so much.

To my parents, Annette and Bryan, thank you for your emotional and financial support throughout my studies. Thank you for always going beyond the call of duty and the inspiring example you have both set for all your children. Your respective academic and life successes has been a true motivator.

LabourNet and specifically my manager, Warryn Kleu, thank you for all the accommodations and granting permission to conduct the study at the company. Similarly thank you to the research participants for taking the time to complete the survey. Your support and honest feedback was pertinent to the success of this study.

To the Department of Industrial Psychology, lecturers and fellow students. Thank you for your valuable inputs, guidance and friendship throughout my studies.

I would also like to extend special gratitude to Dr Bright Mahembe, for his assistance with the data analysis. Thank you very much for the special arrangements and input from your side.

Lastly, I would like to thank my supervisor, Prof Amos Engelbrecht. I have learnt a lot from you over the last few years and this thesis would not have been possible without your guidance and support. My heartfelt thanks for all the assistance and late nights you put in. I hope to have the honour of working with you again in the future.

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# Chapter One

## Introduction, Background and Objectives of the study

### 1.1 Background of the Study

Corruption, fraud, bribery and other systematic problems caused by corporate strategies that are solely centred on profit maximisation, have brought about numerous ethical scandals in recent times. This has not only impacted significantly on the economy, but it has also pushed ethics to the forefront of business studies, triggering a renewed interest in the role of ethics in the modern workplace (Brown, Trevino & Harrison, 2005) and it sent warnings to organisations operating outside the rules of the game.

Because of its adverse financial and reputational impact, specific emphasis was placed on research aiming at curbing the devastating effects of unethical behaviour (Eisenbeiss, Van Knippenberg & Fahrbach, 2015).

When reflecting on research of unethical workplace practices, the natural inclination is to focus on the devastating effects unethical behaviour has revealed, and on examples abroad of giant corporate meltdowns, such as that of WorldCom, Enron, MCI Inc, as well as numerous incidences of corruption and “tendertrepenuers” issues within the South African private sector. While these corporations quite rightly deserve their infamous reputations, and as they serve as a valuable reminder of what can go wrong, caution should be taken against only focusing on such extreme examples, and to embrace a mere reactive approach to ethics to prohibit “giant meltdowns”.

On the contrary, unethical practices in most organisations will not threaten such extreme overnight falls from grace, but they will be more likely to reflect less visible and obvious impacts, at first. More imminent risk would emerge in increments of adverse effects, such as increases in production costs, lowering of employee morale, damage to company reputation and eventually lowering of productivity levels, which too present threats to the sustainability of a business (Nasir & Bashir, 2012).

South African organisations have been plagued by increased crime, lawlessness and the general deterioration of the society’s morals and ethical values (Van Zyl, 2012). On 14 October 2015, NUMSA (South Africa’s largest Trade Union) showed up in their thousands in an organised march against public and private sector corruption. This

event is one of many examples that epitomised the extent of corruption and ethical problems in South Africa, where corruption and ethical scandals are common phenomena. This has necessitated increased awareness of unethical business practices, brought on by the widespread public distrust of business (Spangenberg & Theron, 2005).

The importance of ethics in South Africa, thus cannot be neglected at any cost, because of our own unique contributors such as vast economic inequalities, high unemployment rate, widespread lack of education, political unrest and other social issues, which have made dealing with corruption and other deviant workplace behaviours an all too common occurrence. This results in the manifestation of environments and cultures, which are not conducive to strong ethical practices, which ultimately stifle business efforts and strategies to remain competitive. Thus, strong ethical cultures are needed, as the establishment of effective ethical cultures not only improves businesses' reputations and their employees' morale, but they also drastically influence the performance of the company.

The objective in addressing ethics should thus be to mitigate the risk of such factors that emerge in business cultures. Without a strong emphasis on ethics, organisational environments provide little buffer against systematic problems such as abuse of leadership and management power, bullying leadership styles, work place harassment, discrimination and other forms of employee mismanagement on the one hand, and creating the ripple effect of causing various forms of unethical behaviour from employees on the other hand.

This stance is supported by research, which argues for a value orientated, rather than a compliancy approach to address unethical behaviour, which is reflected in the shift in the field of organisational ethics to a more "agent centred" or culture centred perspective (Rossouw, 2008).

This study argues that it is not only important to implement ethics from a reactive perspective to avoid ethical scandals, but rather to mitigate the company's exposure to all ethical issues both big and small, by means of the proactive establishment of an ethical culture. In the same way the perceived "smaller ethical issues" seriously affect the firm's profitability, because of its effect on employee morale, reputation and productivity, among other adverse effects (Fulmer, 2004).

It is clear from the above statements, that the argument that business ethics is critical to the long-term success of an organisation (Van Aswegen & Engelbrecht, 2009), can no longer be ignored if a business is to remain competitive.

### 1.2 Justification for studying ethical culture

It is common cause that unethical behaviour is not conducive to business efforts and that corporate ethics forms a critical prerequisite for desirable organisational outcomes. Past studies have found that ethical culture is significantly related to a variety of work outcomes such as job satisfaction, organizational commitment, turnover intentions, and organisational citizenship behaviours (Shin, 2012). Ethical culture is regarded as the most important aspect in addressing unethical behaviour (Kaptein, 2009). The way an ethical culture is established and reinforced, affects organisational members' actions significantly when facing ethical decisions (Van Zyl, 2012).

Thus, the problem of ethics from an organisational perspective, as well as the need for ethics in organisations, is not difficult to comprehend. Interventions to address this issue, however, are not that clear-cut, and they require deeper insight into the underlying nature of the problem. Therefore, it necessitates an exploration into the antecedents of unethical behaviour and ethical culture.

A useful starting point is to clarify the obvious fact that organisations themselves are incapable of committing acts of right or wrong, but that such actions are the product of human behaviour (Spangenberg & Theron, 2005). The relevance of highlighting this point is that any ethical intervention needs to target the human resource aspect of an organisation. It is organisational members themselves, specifically those in influential positions, who influence most individual and collective acts of unethical behaviour. Thus, these are not random occurrences, but rather incidences that are systematically determined by human behaviour and therefore they can be caused, or at least mediated by a given stimulus. Thus, an intervention to reduce the problem is possible, and it should most aptly focus on the human and behavioural element of the workplace.

Regarding the specific causes of such human behaviour, the personality component was a focus point in past research (Kaptein, 2011), whereby interventions targeted the individual transgressors or "bad apples" to rid an organisation of unethical behaviour. However, there has since been a shift in focus. Notwithstanding the significance

individual attributes are said to play in contributing to unethical behaviour, the contextual factors derived from the environments in which such individuals operate, may not be overlooked and they are argued to play an even more important role in this regard (Weber, Kurke & Pentico, 2003). This has resulted in a shift in research focus towards the characteristics of the environments in which these unethical behaviours present themselves, rather than towards individual traits.

The implications are that unethical behaviour is not only a function of characteristics within the persons themselves, but it is rather derived from the relationship between these personal characteristics and the variables within the surrounding environment.

These analyses indicate that any intervention aimed at addressing ethics in an organisation would have to target and address the environmental factors that play a role in creating and enabling ethical and unethical practices. For this study, this approach is the most appropriate and it will therefore receive the most attention during this study. From a business perspective – outside the scope of recruitment, selection and to a certain extent training initiatives – organisations have limited control over the individual make-up and attributes of their members.

Thus, the focus of intervention is primarily on the environmental factors, which influence the relationship, and those factors that are most relevant to attain the desired results. Therefore, the workplace ethical culture has been put forward as an important research focus in understanding unethical and deviant workplace behaviour (Victor & Cullen, 1988). In line with this, the need of organisations for a more proactive approach should be adopted to address the issue of ethics at a cultural level. The study should inherently address how such a culture could be achieved.

### [1.3 Overview of previous models of Ethical culture](#)

The multidimensional construct of ethical climate developed by Victor and Cullen (1987, 1988) was introduced to measure the shared moral values and beliefs that groups uphold, regarding ethical norms and behaviour. Ethical climate forms part of the broader domain of work climates, which were studied since the early 1950s and which reflect the psychological mechanism determining “right” behaviour in terms of accepted organisational practices and procedures of ethical content (Martin & Cullen, 2006).

While the concept has been around for quite some time, examining the antecedents of ethical culture still presents itself as a contentious task (Shin, 2012). A distinct lack of research is found that focused on the antecedents of ethical behaviour in organisations (Ardichvili & Jondle, 2009). Previous models illustrate a lack of uniformity between studied constructs, which mostly results in the antecedents that are constrained to broad categories of classification.

An examination of these broad determinants is nonetheless necessary and it serves as a starting point for the formulation of a strategy to address unethical behaviour in the work place. A literature review indicates that the concepts of job satisfaction, trust, organisational commitment, value-based leadership (transformational, authentic, servant and ethical leadership), psychological well-being, job performance, and integrity, were identified to positively correlate with ethical culture. The concepts of dysfunctional behaviour, turnover intention, role ambiguity and role conflict correlate negatively with the concept of ethical culture. A brief overview of past studies on these correlates follows (see Table 1.1).

### **Job Satisfaction**

A positive correlation was found between ethical climate and job satisfaction (Jaramillo et al., 2006; Martin & Cullen, 2006; Mulki, Jaramillo, & Locander, 2006; Schminke, Ambrose, & Neubaum 2005; Tsai & Huang, 2007). Job satisfaction, which is generally conceived as an individual's enjoyment of or fulfilment in their job, is argued to influence the way individuals respond to their perceived ethical environment. If the response is positive, individuals will more likely attribute positive qualities to their perceived environment (Tsai & Huang, 2007).

### **Trust**

Trust is the second identified correlate of ethical culture and it has been proven by various researchers to directly relate to ethical culture (DeConinck, 2011; Mulki, et al., 2006). Trust therefore entails the willingness of individuals to be placed in a situation of vulnerability, dependent on their perceptions that this vulnerability will not be exploited, or expose the trustee to adverse consequences. Thus, the role of trust in creating an ethical culture is based on the premise that employees, who exhibit trust in an organisation, would be more willing to conform to the behavioural norms that are expected from them. Moreover, individuals who feel mistreated, or exhibit distrust of the organisation, are more likely to

act contrary to the desired behaviours of the organisation, which makes it difficult to attain compliance with ethical culture (Tyler & Blader, 2005).

### **Organisational commitment**

Vast support is found for the positive relationship between ethical culture and organisational commitment (Jaramillo, Mulki & Solomon, 2006; Martin & Cullen, 2006; Mulki et al., 2006; Schminke et al., 2005; Tsai & Huang, 2007). Organisational commitment alludes to organisational members' acceptance and agreement with organisational objectives, their willingness to make self-sacrifices in the interest of these objectives, as well as individuals' overreaching desire to form part of and remain members of the organisation (Martin & Cullen, 2006). The rationale behind the positive relationship is that increased commitment enhances members to buy into the organisational vision. Furthermore, because of higher commitment, there will be less resistance to any attempted influence, as more cohesion will exist between individual and organisational interests (Tsai & Huang, 2007).

### **Leadership**

Organisational leaders play a significant role in the implementation and development of an ethical culture (Mulki et al., 2006). Various styles of leadership have been identified in research that positively correlate with ethical culture (Ardichvili & Jondle, 2009). These include – but are not limited to – transformational leadership, authentic leadership, servant leadership and ethical leadership.

### **Authentic leadership**

Authentic leadership, due to its ethical considerations and focus on individual values, is argued to play a positive role in the formation of an ethical culture (Ardichvili & Jondle, 2009). Authentic leadership entails being true to oneself and one's own value set, and it is characterised by traits such as self-awareness, self-regulation and moral perspective, which in combination with high ethical standards, guide leader decision making and behaviour (Avolio & Gardner, 2005).

### **Servant Leadership**

The concept of servant leadership is further argued to positively correlate with ethical culture (Reed, Vidaver-Cohen, & Colwell, 2011). Theoretical arguments in support of this are based on the premise that servant leadership is primarily focused on



addressing follower needs (Barbuto & Wheeler, 2006), and as a value-laden style of leadership, it is entrenched in strong ethical principles and it is the custodian of moral agency and accountability (Sendjaya & Pekerti, 2010). Moreover, with respect to the nature of its influence on ethics, servant leadership is centred on teamwork, serving others and building a sense of community (Walumbwa, Hartnell, & Oke, 2010), implicating close relations to the cultural, rather than the compliance based approach of ethics (Sendjaya & Pekerti, 2010).

### **Ethical leadership**

Research further suggests that ethical leadership positively correlates with ethical culture (Brown et al., 2005; Shin, 2012). Ethical leadership is conceptualized as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making” (Brown et al., 2005). The rationale behind the positive correlation between ethical leadership and ethical culture is derived from the ethical leader’s enhancement of ethical conduct among followers. This creates a shared climate of strong ethical work norms (Shin, 2012).

### **Transformational leadership**

Transformational leadership is also cited as a correlate of ethical culture. Through role modelling, inspiration and other mechanisms of influence, transformational leaders focus firstly, on the enhancement of individual follower’s morals, and secondly, on the collective transformation of both leaders and followers towards set objectives (Engelbrecht, Theron & Van Aswegen 2005). In this regard, the focus is not on self-enriching objectives, but rather on considerations for the good of the collective. Strong ethical behaviours exhibited by transformational leaders will thus positively affect the ethical culture of organisations as a collective.

### **Psychological well-being**

The concept of psychological well-being is also argued to positively correlate with ethical culture (Martin & Cullen, 2006). Psychological well-being, as opposed to job satisfaction and organisational commitment, reflects an individual’s internal affective state and positively relates to the ethical culture of an organisation. The implication is that if organisations care for the general well-being of its members, such members will

more likely conform to the desired behavioural norms of the organisation (Martin & Cullen, 2006).

### **Integrity**

Although there is no direct relationship with ethical culture, the concept of integrity also emerged as a prominent and relevant factor within the ethical culture domain. The primary focus in this regard is the role integrity plays in moderating leaders' influence on the ethical culture of an organisation. In addition to the main effect of transformational leadership, the interaction between integrity and transformational leadership specifically causes variance in ethical climate (Engelbrecht et al., 2005). The positive mediating effect that integrity within leaders has, is that it encourages valued, open and honest communication channels with followers (Parry & Proctor-Thomson, 2002) – qualities regarded as important for the formation of an ethical culture. Integrity is also argued to be a prerequisite for leader effectiveness and it has been identified as a mediator of a leader's ability to influence the behaviour of others towards desired organisational goals (Jacobs, 2004).

### **Dysfunctional Behaviour**

In terms of negative relationships, dysfunctional behaviour is argued to correlate negatively with ethical culture (Martin & Cullen, 2006). This principle is easily comprehended, as individual displays of unethical behaviour will not be conducive to a culture centred on strong ethics and morals. Individual acts of counterproductive behaviour will thus not be conducive of an ethical culture.

### **Job Stress: Role ambiguity and Role Conflict**

Role ambiguity and role conflict have further been found to correlate negatively with ethical culture (Jaramillo et al., 2006). When desired objectives are not clearly communicated, individuals misinterpret organisational objectives and expectations. This causes psychological strain by creating feelings of being out of control, as well as perceptions of incompatibility, which emerge between the organisational expectations and own needs and capabilities of the individual (Jaramillo et al., 2006).

## Job performance

The literature review suggests that job performance correlates positively with ethical culture (Jaramillo et al., 2006; Mulki et al., 2006). Empirical evidence suggests that the positive relationship between job performance and ethical culture is mediated by job attitude and job stress (Jaramillo et al. 2006). An ethical culture reduces job stresses and negative attitudes, which in turn results in increased job performance.

## Turnover intention

The concept of turnover intention is further found to correlate negatively with ethical culture (Jaramillo et al., 2006; Mulki et al., 2006; Schminke et al., 2005; Stewart, Volpone, Avery, & McKay, 2011). In the same way that ethical culture positively correlates with job performance, the negative correlation with turnover intention is said to be mediated by job attitude and job stress (Jaramillo et al., 2006), whereby ethical cultures' effect of reducing job stressors, results in a decrease in turnover intention.

**Table 1:1: The correlates of ethical culture**

Correlates	Studies	Relationship
Organisational commitment	Jaramillo et al. (2006) Martin & Cullen (2006) Tsai & Huang (2007) Schminke et al. (2005) Mulki et al. (2006)	Positive Correlation Positive Correlation Positive Correlation Positive Correlation Positive Correlation
Trust	DeConinck (2011) Mulki, et al., 2006 Tyler & Blader (2005)	Positive Correlation Positive Correlation Positive Correlation
Job satisfaction	Jaramillo et al. (2006) Martin & Cullen (2006) Mulki et al. (2006) Schminke et al. (2005) Tsai & Huang (2007)	Positive Correlation Positive Correlation Positive Correlation Positive Correlation Positive Correlation
Psychological well-being	Martin & Cullen (2006) Rosenblatt & Peled (2002)	Positive Correlation Positive Correlation
Authentic leadership	Ardichvili & Jondle (2009) Avolio & Gardner (2005)	Positive Correlation Positive Correlation
Servant Leadership	(Reed et al., 2011). Sendjaya & Pekerti (2010)	Positive Correlation Positive Correlation
Ethical leadership	Brown et al. (2005) Shin (2012)	Positive Correlation Positive Correlation
<b>Table 1.1 (Continued)</b>		

Transformational Leadership	Engelbrecht et al., 2005	Positive Correlation
Integrity	Parry & Proctor-Thomson (2002) Jacobs (2004) Engelbrecht et al., 2005	Moderating effect Moderating effect Moderating effect
Dysfunctional behaviour	Martin & Cullen (2006) Peterson (2002)	Negative Correlation Negative Correlation
Role conflict and Ambiguity	Jaramillo et al. (2006) Schwepker, Ferrell, & Ingram (1997) Schwepker & Hartline (2005)	Negative Correlation Negative Correlation Negative Correlation
Job performance	Jaramillo et al. (2006) Mulki et al. (2006)	Positive Correlation Positive Correlation
Turnover intention	Jaramillo et al. (2006) Mulki et al. (2006) Stewart et al. (2011) Schminke et al. (2005)	Negative Correlation Negative Correlation Negative Correlation Negative Correlation

#### 1.4 Motivation for the Study

A review of previous ethical culture models, provide insight into factors that are identified to play a role in the nomonological network of ethical culture and it is a valuable point of departure with regard to strategizing a solution for the identified problem. Notwithstanding the value derived from examining the broadly mentioned antecedents to address unethical behaviour in this context, a more specific approach was required. This necessitated a breakdown and prioritising of the overlapping characteristics associated with the above-mentioned antecedents, to formulate a more narrowly defined set of variables that could positively influence the formation of an ethical culture.

In this regard, and within the scope of both developing desired organisational cultures and ethical initiatives within organisations, the prevalence of leadership in past studies cannot be ignored. Most researchers have turned to leadership as a source of aid, as leaders naturally take responsibility and play an active role in setting the ethical tone in the workplace (Ncube & Wasburn, 2006). Notwithstanding the acceptance of other factors which played a role in creating an ethical culture in organisations, this study follows suit and adopts the premise that employees mostly seek outside themselves for guidelines on how to behave and conduct themselves ethically (Treviño, 1986). The implication is thus that leadership and the established culture of an organisation should

be at the centre of any intervention, and be a positive source of guidance to employees. Cohen (1993) elaborates further on this view and describes the values and actions of leaders as being vital for creating an ethical culture. It is supported by the influential position and power that leaders possess in the organisation and thus their ability to set the tone for the workplace.

Moreover, while consensus exists in supporting research on perspectives of leadership and culture, proportionately less is known about the ethical dimension of leadership (Brown et al., 2005) and what is exactly the most effective approach to the implementing of ethics. Therefore, this study will strive to target this identified gap in research, by implementing any successful intervention aimed at addressing this problem, and examining the leadership qualities deemed relevant for the formation of an ethical culture.

Since leadership was identified previously as the key factor in most human resource interventions, an investigation would be made into the leadership principles most likely to reap the outcomes of an ethical culture, ensued during the theorising process. During the literature review process, the focus will be to better understand the characteristics of this type of leadership, as well as to comprehend the way it relates to other variables in the nomological network of latent variables that affect the ethical culture of an organisation.

As the formation of an organisational culture does not ensue overnight, a strategic leadership approach was thought necessary, as the implementation of ethics at a cultural level requires a long-term influence. A value-orientated approach was furthermore required, as creating an ethical culture ultimately depends on the establishment of moral, ethical and competent leadership principles (Van Aswegen & Engelbrecht, 2009). Servant leadership emerged as the most relevant leadership approach for this study. Servant leadership, due to its follower orientated focus and since it is deeply entrenched in the ethical domain of leadership, is argued to be an effective means of creating an ethical culture.

Servant leadership is associated with factors such as integrity (Van Aswegen & Engelbrecht, 2009), trustworthiness (Burke, Sims, Lazzara & Salas, 2007), accountability and humility (Sendjaya & Pekerti, 2010), open and honest communication (Parry & Proctor-Thomson, 2002), components of empowerment, and the development of strong relationships with followers. These factors were identified

as relevant for consideration and they lead to further conceptualization of other potential latent variables.

Moreover, due to the emphasis on the caring principle within ethical culture, the theorising process revealed the need for the servant leader's influence to be approached in a credible, moral and consistent manner. Over and above the authentic component, which is already present within the servant leader's framework, this led to the inclusion of leader integrity in this study as an independent variable. A servant leader's ability to create an ethical culture is enhanced by follower's perceptions of such leader's integrity. Integrity within leaders encourages valued, open and honest communication channels with followers (Parry & Proctor-Thomson, 2002). It further enhances leader effectiveness and a leader's ability to influence the behaviour of others towards desired organisational goals (Jacobs, 2004).

Apart from the elements characterised by integrity and servant leadership, the ethical principle of benevolence calls for followers to buy into leaders' ideas and philosophies to be transformed by the leaders' influence. This warrants that followers willingly make themselves vulnerable to leaders and trust that their positions of vulnerability will not be exploited. In this regard, trust in leaders emerged as a determining factor of servant leaders' influence in creating an ethical culture in organisations. Moreover, trust in leaders positively affects the ethical culture of an organisation. Trust in the leader increases follower efforts towards the attainment of organisational goals (Brower, Lester, Korsgaard & Dineen, 2009). Furthermore, employees who exhibit distrust with the organisation, are more likely to act contrary to the desired behaviours of the organisation, making it difficult to attain compliance with the ethical culture (Tyler & Blader, 2005).

Motivation for the study is thus derived from an attempt to better understand the relationships among integrity, servant leadership, trust in leaders and ethical culture. Likewise, ethical culture is a supportive function in organisational success (Eisenbeiss et al., 2015) and it is deemed necessary for long-term sustainability. A comprehension of these relationships is important if organisations are to adopt ethical cultures.

Servant leadership and ethical culture are two subjects that have separately been researched intensively over the years, with comprehensive definitions and findings

established for each. However, the link between leadership, specifically servant leadership, and ethics is vaguer than one might expect (Brown et al., 2005). Therefore, the study would also like to make inroads into further developing the understanding between ethics and leadership, to contribute to the findings of authors such as Brown and Trevino (2006), Engelbrecht et al. (2000, 2005, and 2008), Rossouw and Van Vuuren (2003), Rossouw (2008), and Victor and Cullen (1987, 1988).

In defining the motivation of this study, the objective will be to provide a unique approach to the previously discussed ethical issues plaguing organisations, as well as to explore the unique combination of variables proposed to influence such ethical behaviour positively. To the best of our knowledge, no previous research has investigated the unique combination of latent variables presented in this study.

During the study, all theories will relate to the problem of unethical practices within a South African context, and thereby provide South African companies with insight into the role that leaders have to play in this regard. Thus, the aim is to provide as practicable and appropriate solutions as possible.

### 1.5 Research-initiating Question

Deduced from the above argument, the research-initiating question is:

*Why does variance exist in the ethical culture of organisations – with specific reference to the role that integrity, servant leadership, and trust in leaders play in this regard – without excluding other potential organisational factors?*

### 1.6 Research Objectives

The research objectives will be structured to develop and test an explanatory structural model to explain the variance in Ethical Culture.

It has been postulated that unethical behaviour is systematically determined by various latent variables represented as functions of both the person and the situation. Unethical behaviour is a real issue to organisations, as it prohibits businesses from reaching their organisational objectives. Thus, a solution to reduce this issue is of vital importance.

To achieve this, a comprehensive understanding of the variables (theorised to play a role in this phenomenon) is required. This will be attained by a thorough analysis of these factors, as well as the nature of the relationships they exhibit with one another.

The specific objectives of the study are:

- To develop an explanatory structural model explaining the influence of integrity, servant leadership and trust in leaders in creating an ethical culture;
- To test the absolute and incremental fit of the structural model;
- To evaluate the significance of the postulated paths in the structural model;
- To make necessary changes to the structural model if required;
- To provide expected results and recommendations for further research;
- To explain the practical implications of the results.

### 1.7 Overview of the study

Chapter 1 forms an introductory discussion to the study by theorising a response to the proposed issue of unethical behaviour in the workplace. In the process, certain variables that are of importance to the study, are identified. This early investigation results in the formulation of a research initiating question and research objectives, which are to guide research in the sections to follow.

In Chapter 2, a review of the relevant literature is discussed to formulate a reasoned argument in response to the research-initiating question. The objective of this is to gain a better understanding of the variables that are identified to play a role in this network, as well as the relationships that these variables are proposed to exhibit with one another. This has culminated in a structural model and it provides a response to the research-initiating question.

Chapter 3 describes the methodology that was used to formally test the proposed model. The research design is formulated, the statistical hypotheses are stated, and the sample and operationalisation are explained. This is necessary to empirically validate the theoretical arguments formed in Chapter 2.

Chapter 4 comprises of an examination of the research results obtained from the statistical analysis, as well as the answers for the hypotheses formulated in Chapter 2 and which are also discussed in Chapter 3.

Finally, Chapter 5 includes conclusions and recommendations and the application thereof, to improve organisational ethics. Limitations and areas for future research is proposed and discussed.



## Chapter 2

### **Literature Review on the Influence of Integrity and Servant Leadership on Trust in Leaders and Ethical Culture**

#### 2.1 Introduction

Chapter 1 investigated the issue of unethical workplace practices and the effect of this on contemporary organisations. Ethical culture was proposed as a way to address such practices. The investigation indicated that integrity, servant leadership and trust emerged further as important variables and they are argued to play a significant role in creating an ethical culture.

Chapter 2 will investigate and theoretically reflect on existing literature regarding the topics of integrity, servant leadership, trust and ethical culture. This will entail a review of their respective definitions, as well as an assessment of how the respective variables interact with and effect one another to be able to explore the nature of the respective relationships.

The culmination of this review will be the formulation of the proposed theoretical structural model, created by means of hypothesising specific causal relationships among the latent variables of integrity, servant leadership, trust in the leader and ethical culture.

Chapter 2 thus formulates a response to the initiating research question posed in Chapter 1.

#### 2.2 Conceptualising Ethical Culture

The first variable to be reviewed is ethical culture or ethical climate. The distinction between the two closely related concepts is that whereas ethical climate describes the benchmark of ethical conduct within an organisation, ethical culture describes those aspects, which stimulate the said ethical conduct (Treviño, Weaver & Reynolds, 2006). Such a distinction however is very slight and overlapping, as both variables describe the moral atmosphere of an organisation as well as the general perceptions of acceptable norms of behaviour. Therefore, for clarity and to accurately accredit reviewed researchers work, the two concepts will be used interchangeably in this study.

In terms of the conceptualization of organisational culture, the concept is described as a system of shared ideologies, values and beliefs, which determine or influence behaviour. As organisations comprise of individual members who all think, behave and act in varied ways and with different points of reference, a system of shared understanding is necessary to create unity and collaboration in achieving organisational objectives.

The ethical dimension of such culture, referred to as ethical culture, thus forms part of the broader organisational culture concept, and it is seen as an important component thereof, due to its positive influence on organisations and their employees. Effective organisational ethical culture enhances employee loyalty, enables creativity and ultimately results in higher individual productivity and business performance (Rossouw, 2008).

The purpose of focusing on the cultural component of ethics is based on the argument that organisations should not only focus on ethics at an operational level and as a reactive function, but it should rather incorporate ethics into strategic initiatives. Research indicates that the bottom line productivity of organisations and business ethics are not mutually exclusive objectives and instead, ethics should rather be viewed as a supportive function to achieve performance than as an obstacle standing in the way of success (Eisenbeiss et al., 2015).

Ethical culture's relevance as a business concept is thus clearly justified, and therefore it is utilised as the dependent variable for this study.

The conceptualization of ethical culture has been defined by numerous researchers, who have each unpacked this commonly accepted concept in their own specific way. A review of the respective definitions provides better comprehension of the concept and is a relevant point of departure.

Van Aswegen and Engelbrecht (2009) suggest ethical climate to consist of the shared values and beliefs, which guide individuals in areas such as moral issues, business practices and procedures, as well as other areas concerning an ethical content. This definition highlights that ethical climate entails a common understanding and acceptance of what such values are. The purpose of the internalisation being to ensure accepted values become ingrained in the organisation's broader climate.

In a related definition, Goosen and Van Vuuren (2005) label ethical climate as the integrity approach to institutionalise organisational ethics. This stance argues that the creation of a climate in the workplace is firstly characterised by creating shared perceptions of right and wrong, and secondly, ensuring that the principles that such a climate consist of, comprise elements of honesty and good intention.

In conceptualizing ethical culture, the control aspect thereof has been a subsequent focus point. In this regard, ethical culture has been defined as the “informal control” mechanism for business ethics (Kaptein, 2009). It is alluded to as a mechanism to decide how moral issues should be addressed (Engelbrecht et al., 2005), since ethical culture is perceived as a means of addressing unethical behaviour, as it creates a system of shared assumptions and expectations between organisations and their members (Kaptein, 2009). In this way, ethical behaviour is controlled and directly influenced through institutionalising accepted norms and attitudes.

In conceptualising the concept across organisations, it needs to be noted further that each culture is described as unique to the specific organisational environment. Ethical culture within an organisation therefore sets out their “own rules” and stipulates the way “their” issues are to be dealt with, with specific reference to areas such as accountability, responsibility, trust, equity and other issues of moral content (Engelbrecht et al., 2005).

In terms of ethical culture and its positioning in relation to the broader ethical domain, the culture approach to ethics reflected a shift in organisational ethics research, from a perspective based on enforcing the following of rules, to an approach which rather encourages the internalisation of desired collective cultural norms and behaviours (Roussouw & Van Vuuren, 2003). This shift was most notably expressed through the work of Victor and Cullen (1988), two of the front runners in ethical research, who in their work identified four dimensions that corporate ethical climate consists of:

- The rules of the organisation are seen as the source of ethical norms, with greater emphasis on the following of company procedures.
- Cultural independence is prevalent, whereby followers are treated individually by leaders, in accordance with their specific needs and desires.

- The caring climate that has its focus set on the degree of care and consideration individuals display regarding the interests of others in the organisation, which is observed through acts of benevolence.
- The law and code climate where business actions are always ensured to comply with the applicable law as legislative considerations have priority (Victor & Cullen, 1988).

Thus, the conceptualization and theory behind ethical culture is sound and well established. However, there are still issues, which exist regarding the practical application of the cultural concept, specifically when it is compared to the previously utilised codes and compliance approach.

In the past the subject of organisational ethics placed emphasis on developing and implementing ethical codes, or codes of good practice. This thought process was, that with the creation of codes, leaders' responsibilities were limited to ensuring adherence to rules and where necessary, disciplining contraventions and non-complying staff members. Codes of ethics are necessary, as it firstly sets formal regulations for employees to discern the difference between acceptable and unacceptable behaviour, and secondly, they are needed to comply with the various acts and reporting requirements that regulate companies. The mere development and enforcement of such codes is not enough (Roussouw & Van Vuuren, 2003), as research has proven informal mechanisms centred on relationship building and the creation of mutually accepted norms have a more positive effect on ethical behaviour than rigid rules (Verhezen, 2010). Furthermore, codes do not always have the desired impact on employees. In some cases, they impact negatively on the organisation if not carried out properly. This results in less ethical behaviour than before the implementation (Roussouw & Van Vuuren, 2003).

Pinpointing the negative effects of codes, can vary from situations where employees question the rationale behind implementation – perceiving codes to be merely a showpiece by management (Roussouw & Van Vuuren, 2003) – or alternatively, it can be triggered by employees reacting adversely to strict rules and regulations which they feel inhibit their autonomy (Roussouw, 2008). This could result in employees only exhibiting the bare minimum adherence to requirements, creating an ideology where employees do only enough to get by or to meet the minimum requirement. Thereby they do not act ethically out of their own accord.

Due to the drawbacks in the conventional compliance approach, the shift in organisational ethics is justified. Roussouw (2008) describes this shift moving from an “act centred approach”, with the focus on the specific actions employees should display or not display, to a more “agent centred approach”, where the focus is rather on characteristics that employees should display. The “act approach” in this regard represents the codes system and the “agent approach” represents the culture creation perspective.

With the importance of this shift in mind and to implement such a culture, Kaptein (2011) suggests a focus on ethical values and he identified seven dimensions of ethical behaviour to enhance the ethical culture of an organisation. These dimensions include clarity of ethical standards, ethical role modelling of managers, capability to behave ethically, commitment to behave ethically, visibility of (un)ethical behaviour, openness to discuss ethical issues and reinforcement of ethical behaviour, which would prohibit violations of ethical standards (Kaptein, 2011) if they are addressed.

In summary, codes and compliance are valuable because they create measures of accountability. However, a focus on compliance alone is not enough for business ethics and will not create ethical excellence. Therefore, it is proposed that a strong ethical culture is necessary, whereby bottom line indicators are aligned with mutually accepted strong moral standards and expectations (Verhezen, 2010).

For this study, ethical culture can be defined as the strategic framework, which communicates, controls and holds the individuals accountable to the generally shared and accepted ethical norms of behaviour.

### 2.3 Conceptualising Trust in Leaders

The importance of trust is widely accepted. Interpersonal trust particularly, received significant attention in recent times, due to its effect on enhancing employee morale and ultimately organisational effectiveness, since increased trust results in greater collective efforts and the attainment of organisational goals (Brower et al., 2009; Engelbrecht & Cloete, 2000; Mayer, Davis & Schoorman 1995; Schoorman, Mayer & James, 2007).

Interpersonal trust, as a human relation and interactional process, reduces conflict and uncertainty between parties and significantly influences the leader-follower relationship, due to its key role in interpersonal communication (Rezaei, Salehi, Shafiei

& Sabet, 2012). Numerous researchers propose the importance of trust and its role in effective organisations. The arguments in support thereof are detailed below:

First, trust is important because of the clear positive correlations between trust and productivity that is illustrated by the strong influence that trust has exhibited within individual, team and organisational productivity (Brower et al., 2009). This can be explained by the fact that stronger trust results in more collaborative efforts, dedicated employees, a better functioning team, and overall a unit more focused and committed to the attainment of organisational goals (Brower et al., 2009).

Secondly, trust is important when considering the negative effects that distrust has on leaders in organisational settings. Distrust in leaders results in adverse effects such as increased anxiety and stress, unfounded suspicions and paranoia with higher uncertainty, lower individual and team morale, as well as a subsequent lower commitment and job satisfaction (Engelbrecht & Cloete, 2000).

Thirdly, there is an increased need for trust given the evolution of the structure, composition and dynamics of the modern workforce (Burke et al., 2007). Organisational environments have become more complex and dynamic and have moved towards flatter and more team-orientated structures, which brings with it a greater reliance on the relationship aspect, especially trust relationships (Gao, Janssen, & Shi, 2011). This is brought on by environments which are more reliant on employee initiative, responsibility and decision-making (Burke et al., 2007). These all pose strong arguments in favour of instilling trust.

Finally, trust is a particularly relevant subject within the South African framework. High levels of economic inequality among race groups and a sensitive socio-political history (Brower et al., 2009) have created a social environment plagued with mistrust amongst diverse groups in the general population. This has naturally influenced work environments too, providing managerial implications for South African businesses that need to address problems, which arise when diverse workforces and people from different backgrounds are required to work together (Engelbrecht & Cloete, 2000).

Considering the above, there is clearly a need to understand the elements of trust in leaders and specifically the mechanisms used to influence this concept positively. Moreover, it must be identified how organisations can harness trust at their best and

create trusting relationships between leaders and subordinates to instil desired values and norms.

In pursuit of these objectives, most of the research on trust has focused on the social exchange concept – the relationship between the leader and subordinate and the subsequent effect this has on subordinate behaviours and intentions. This concept suggests that subordinates' propensity to trust leaders is dependent on how positive previous exchanges were with the leader (Brower et al., 2009). If they were positive, the subordinates feel more compelled to reciprocate the behaviour in future exchanges. Rousseau, Sitkin, Burt and Camerer (1998), encapsulate this perspective through their definition of trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another”.

Gao et al. (2011) define trust in leaders as “a psychological state involving positive expectations about the leader's intentions or behaviours with respect to oneself in situations entailing risk”. Exhibiting interpersonal trust in leaders therefore enables followers to accept vulnerability and it promotes risk-taking behaviours in exchanges with leaders (Colquitt, Scott, & LePine, 2007).

The concept trust is therefore to be understood as an aspect of the leader-follower relationship, rather than seen as a fixed or trait-like concept, as was suggested by past researchers (Mayer et al., 1995). In other words, trust is not only a fixed or dispositional trait or inherent quality, which one possesses, but rather something which varies across individuals, depending on the context dynamics of the trustor-trustee relationship at hand.

Burke et al. (2007) acknowledge the contributions made by researchers suggesting trust to be a trait-like concept (Mayer et al., 1995), but rather suggest conceptualising the concept as an emergent state. Thus, trust should be understood as a state, which is dynamic and varied, depending on contextual factors.

Notwithstanding the premise that continued research is needed to uncover and understand both the mechanisms better through which trust is improved in leadership, as well as the factors which moderate the relationship (Burke et al., 2007), Mayer et al. (1995) provides a useful model of organisational trust, encapsulating the influential factors present in the relationship. This provides a valuable framework to distinguish

the concept of trust from other interrelationship elements, based on defining trust as “the willingness of a party to be vulnerable to the actions of another party, based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer et al., 1995).

The key aspect in this regard is trustees’ willingness to be placed in a situation of vulnerability, because of the perception that this vulnerability will not be exploited or it will not expose the trustee to some sort of adverse consequence.

For this study, trust in the leader is defined as a dynamic state, whereby followers willingly make themselves vulnerable to leaders, based on expectations that the exchange relationship will result in positive outcomes.

#### 2.4 Conceptualising Servant Leadership

Due to its significance in determining organisational success and its importance in mobilizing individual efforts towards organisational objectives, leadership is one of the most comprehensively studied concepts in management literature (Parris & Peachey, 2013) and it is a vital component to influence behaviour in an organisation.

With the growing interest in value-laden leadership styles, and to curb the generally self-serving perceptions of corporate leaders, both researchers and practitioners have turned to the theory of servant leadership as a viable business strategy and leadership principle (Parris & Peachey, 2013). The approach exhibits strong intuitive appeal, due to its focus on sought after factors such as follower orientation, service, spirituality, and morality. Therefore, it has emerged as a leadership theory, gaining increasingly more relevance in organisations today.

As a style of leadership, servant leadership departs from the traditional use and application of leadership principles (Sendjaya, Sarros & Santora, 2008). Rather than focusing on the leader and organisational objectives, servant leadership is primarily focused on the follower perspective. Servant leadership is motivated by encouraging greatness in followers and was initially conceptualised as a “way of life” philosophy, with the view that organisations establish themselves to create people who can create a better tomorrow (Greenleaf, 1970). From this perspective, organisational objectives are addressed as the secondary or indirect outcome of any leadership intervention, in contrast to the more traditional leadership approaches, which focus on the opposite.



In exploring the origins of servant leadership, the notion and underlying principles of servant leadership is nothing new. Its roots can be traced back as far as biblical times and its overlapping philosophies are prevalent in historical teachings and the work of many of the world's great teachers and thinkers (Sendjaya & Sarros, 2002). The modern conceptualisation however was first developed by Robert Greenleaf in 1970 in his publication, "*The Servant as Leader*". As the name of the concept suggests, Greenleaf (1970) explored the seemingly paradoxical concepts of serving and leading. This exploration led to the emergence of the notion that leadership starts with the natural feeling that one wants to serve, and to serve first, before any conceptions of leading.

The stance of the servant-acting leader is something which previous leadership philosophies had not yet focused on. It departs from traditional approaches in that firstly, the emphasis is not on the leader, but rather on the follower and servanthood (Sendjaya & Pekerti, 2010). In this way, the desire to serve takes precedent over the position of leadership. Secondly, in terms of the leadership relationship, the focus is on the followers and not on the organizations (Sendjaya & Pekerti, 2010). Most of the leadership approaches emphasise the needs of the organisation and mobilising employee efforts to attain organisational goals, whereas the idea behind servant leadership is that the individual needs come first, and that by addressing the developmental needs and core values of followers first, followers will become transformed and mobilized to later become subservient themselves. In turn, this would then lead to the attainment of organisational objectives in a more sustainable, healthy and growth orientated manner. Thirdly, servant leadership entails the custody of moral agency and moral accountability (Sendjaya & Pekerti, 2010).

Due to the strong emphasis on the developmental needs of followers, as well as altruistic, moral and spiritual values, servant leadership inadvertently facilitates the formation of these values and moral considerations in others (Sendjaya & Pekerti 2010).

This philosophy provided the platform for future research on the proposed style of leadership, but on its own it was of limited value in the academic sphere, as in its originally described form it represented more of a philosophy than a theory. Greenleaf himself referred to the approach as an unorthodox one and highlighted issues in terms

of its practicality, stating “it is meant to be neither a scholarly treatise nor a how-to-do-it manual” (Greenleaf 1977, p. 49).

Fortunately, further contributions have been made in this regard, whereby researchers have developed somewhat of a theoretical framework for this once mere philosophy, and in so doing created a theoretical base for further research (Barbuto & Wheeler 2006; Giacalone & Jurkiewicz, 2003; Sendjaya, Sarros & Santora 2008; Sendjaya & Pekerti 2010).

Further research is exactly what is required. While there has been agreement in focusing on similar constructs such as altruism, self-sacrifice, charismatic, transforming, authentic, and spiritual leadership, there has been difficulties in arriving at a universal definition and a comprehensive framework for the concept of servant leadership. Most research into servant leadership has been anecdotal and further empirical research is therefore required to examine and create a more tenable theory (Parris & Peachey, 2013).

This necessitated the need to review current literature on the concept, to aid with further development of servant leadership.

In this regard, a useful starting point is the six dimensions of servant leadership that were developed by Sendjaya et al. (2008) and which have proven to be a valuable source in conceptualizing the concept. Sendjaya et al. (2008) propose servant leadership to comprise of the elements of voluntary subordination, authentic self, covenantal relationship, responsible morality, transcendental spirituality and transforming influence. These elements are examined in more detail below.

### **Voluntary subordination**

This dimension of servant leadership relates to the willingness of the leader to be subservient. Although referred to as an altruistic calling (Barbuto & Wheeler, 2006), this dimension does not infer any sense of low self-respect or low self-esteem, but it suggests that servant leaders are willing to endure hardship and suffering on behalf of their followers, and in this way practice self-sacrificial behaviour in placing the need to serve above that of being in a position of power at a superior status (Sendjaya et al., 2008).

This dynamic of the leader-follower relationship is quite the opposite to other forms of leadership, although there are other leadership styles which also adopt certain elements of serving. The distinguishing factor of servant leadership is that such leaders practice voluntary subordination, not only when it is convenient or seen to be beneficial to themselves or the organisation, but they practice it consistently to attend to the legitimate needs of their followers. In this way, it is not merely doing acts of service from time to time, but it is actually more about being a servant in nature (Sendjaya et al., 2008).

### **Authentic self**

The second dimension refers to leaders portraying themselves in relation to others in a truthful and transparent manner by demonstrating characteristics of humility, security, accountability and vulnerability. Open exchanges between leaders and members are crucial in this dimension, and it will be discussed later on in this study, that it is the root of the trust relationship (Sendjaya & Pekerti 2010).

### **Covenantal relationship**

The third major dimension of servant leadership refers to those leadership behaviours, which foster long lasting genuine relationships with followers. Such behaviours are directed at efforts to reach common objectives and they include being acceptable and available to followers, possessing open ended commitment, exhibiting genuine concern, as well as treating followers impartially and with equality (Sendjaya & Pekerti 2010).

### **Responsible Morality**

The fourth dimension relates strongly to the ethical predisposition of servant leadership. As with other value-laden leadership styles, ethics and morality play a vital role, with the emphasis on moral values and the higher order needs of followers with respect to the many ethical challenges posed in the leader-follower relationship (Sendjaya et al., 2008). Responsible morality reflects the importance of morality and ethics in leadership actions and objectives. It is important when considering the ethical predisposition of servant leadership. Responsible morality ensures the prohibition of the compromise of ethical principles, which is often the case in organisational contexts and foster behaviour, which is positive and ethical (Sendjaya & Pekerti 2010).

### **Transcendental Spirituality**

The fifth dimension of servant leadership relates to the servant leader's "calling" to make a difference. This is best explained by the conceptual relationship between servant leadership and spiritual leadership. Transcendental spirituality reflects the morally laden and covenant based relationships that servant leadership promotes, which are said to be embedded in spiritual values (Giacalone & Jurkiewicz, 2003). Thus, servant leadership brings together the constructs of service and meaning (Sendjaya et al., 2008).

### **Transforming Influence**

The final dimension of servant leadership relates to the transforming influence on followers. For servant leadership to be demonstrated, followers must be positively transformed on multiple dimensions, including emotional, intellectual, social, and spiritual levels (Giacalone & Jurkiewicz, 2003).

Considering the dimensions described above, servant leadership is defined as a value-laden leadership style in which leaders, rather than relying on positional power and influencing organisational goals, focus on empowering followers, centred on a leader's intrinsic desire to positively impact the lives of others (Barbuto & Wheeler, 2006).

### **2.5 Conceptualising Integrity of leaders**

Integrity is commonly accepted as a positive and sought after concept, associated most generally with qualities such as honesty, truthfulness, sincerity, a certain correspondence between words and deeds and follow through (Bauman, 2013). Furthermore, integrity includes qualities which are said to regulate self-behaviour and actions towards followers (Martin, Keating, Resick, Szabo, Kwan & Peng, 2013).

The personal make-up and values held by leaders, inadvertently dictate their corporate beliefs (McCann & Holt, 2008) and thus the integrity of leaders unsurprisingly forms an integral part of not only the field of business ethics, but also underpins leaders' ability to influence the behaviour of others regarding desired organisational goals (Jacobs, 2004). Integrity therefore is a vital component in any leader-follower relationship. Research further suggests integrity to be a strong predictor of job performance and it is relevant to the achievement of organisational goals, due to its key role in leadership

effectiveness as well as its impact on organisational trust (Jacobs, 2004). In this study, the role of integrity is even more important, as the specific area of leadership influence is ethical in nature given the significant challenge leaders face when dealing with ethics (McCann & Holt, 2008).

Notwithstanding the importance and acceptance of integrity as a positive and socially desirable characteristic, empirical research on the concept, specifically in terms of its conceptualization, has been somewhat fragmented (Palanski & Yammarino, 2007). Research indicates varying definitions for this widely accepted concept (Bauman, 2013). Researchers vary in focus and allude to numerous factors such as trustworthiness, honesty, full and wholeness, being true and real to oneself and acting consistently in accordance with statements, as leader integrity characteristics.

Such variation has created disparities in understanding and it rather served as an obstacle in the path of accurate accounting for the concept (Bauman, 2013), with some researchers arguing integrity to be a too complex concept to be fully comprehended under a singular definition (Six, De Bakker & Huberts, 2007). To address this complexity and to find commonality, most researchers have described integrity to have two key elements, namely consistency in nature and high morality. A focus on these two elements creates a structure as basis for understanding integrity. Although a broad definition, a leader with integrity exhibits both a wholeness in core character and undivided nature, as well as principles of honesty and strong morality (Palanski & Yammarino, 2007).

Personal consistency can be understood as “the consistency of an acting entity’s words and actions” (Palanski & Yammarino, 2007) or as Simons (2002) describes this as the consistency between words and actions. High integrity in this regard is illustrated as the extent to which an individual’s thoughts, speech and actions are consistent with an internal consistency framework, or else derived from a single group of core values. Integrity includes the consistency and promise-keeping element between the expressed and enacted values of a leader (Palanski, Cullen, Gentry & Nichols 2015).

While personal consistency is an important component of integrity, the focus on this aspect alone fails to take into account the “goodness” aspect of integrity, or what Six et al., (2007) refer to as a moral viewpoint of distinguishing between right and wrong.

After all, individuals can act and behave in a consistent manner, yet it could be antisocial and not conducive to good morale (Koehn, 2005). Consistency therefore serves no purposes if it is arbitrary and self-serving and must entail a level of responsibility to others (Jacobs 2004). This necessitates the need for consistency to be combined with the described second element of morality and ethics. Integrity must exhibit virtuous behaviour (Palanski et al., 2015). Complying with moral and expectable norms is equally important in determining integrity and it relates to how individuals hold consistent strong moral and ethical standards.

After a review of 30 articles, Palanski and Yammarino (2007) outline the definition of integrity by subdividing the meaning of the concept into five categories, and thereby providing a valuable contribution to the problems of the single definition:

1. Integrity as wholeness - suggesting integrity to be synonymous with the overall character of an individual. This component refers to the extent to which internal convictions are aligned with and not in conflict with the holistic view of an individual's personality (Palanski & Yammarino, 2007). Jacobs (2004) describes this as "the physical state of undivided wholeness".
2. Integrity as consistency in words and actions - relating to the personal consistency within social behaviours and the extent to which, what individuals say and do match up (Palanski & Yammarino, 2007). An important component of consistency in words and actions, is follow through, whereby leaders with integrity do not just talk the talk but also adhere to promised obligations and responsibilities (Bauman, 2013).
3. Integrity as consistency in adversity - relating to integrity in challenging situations. Leaders with integrity need to possess a certain unwillingness to compromise any violation to their value system (Bauman, 2013). Consistency in facing adversity, therefore refers to the extent to which individuals remain steadfast when confronted with temptations and other challenges (Palanski & Yammarino, 2007). In this regard, Palanski et al. (2015), liken the consistency in adversity component of behavioural integrity to the courage leaders need to demonstrate, despite adversity.

4. Integrity as being true to oneself - linking to an individual's authenticity and the extent to which one acts in accordance with one's personal conscience (Palanski & Yammarino, 2007). Being true to oneself implies that a leader's moral behaviour should reflect their personal identity (Bauman, 2013).
5. Integrity as moral or ethical behaviour - relating to honesty, morality, justice and compassion and is determined by the extent to which an individual act according to ethical and moral norms (Amann & Stanusch, 2013; Palanski & Yammarino, 2007).

In this study, Leroy, Palanski and Simons' (2012) definition of integrity, as the alignment of words and deeds with an internal personal value set, seems most useful. Leader integrity is firstly argued to be dependent on the extent to which leaders' words are aligned with their actions, and secondly, how such alignment is dependent on the leaders' self-awareness of personal moral values. Integrity then refers to the honesty and accuracy of an individual's character.

## **The relationships between the variables**

This section will address the relationships between the variables and it will specifically discuss the effect that they have on one another in a more orderly manner. The analyses will hereby formulate the justification for the inclusion of each variable in the study.

### [2.6 The relationship between integrity and servant leadership](#)

A review of literature on integrity and servant leadership suggests a distinct commonality between the two concepts. In their respective definitions, specifically within the authenticity domain of servant leadership, both concepts allude to a sense of morality and consistency, characterised by leaders who portray themselves in relation to others in a truthful and transparent manner (Sendjaya & Pekerti 2010). Van Dierendonck (2011) further cites the relatedness of the two concepts, describing authenticity as being true to oneself and integrity as the consistency of public and private representations. Notwithstanding this commonality, integrity, specifically in terms of its characteristics of wholeness and strict adherence to set moral and ethical codes, is proposed to have a positive effect on servant leadership, over and above that

which is explained by the servant leadership characteristics of authenticity. For this reason, the causal relationship is thought relevant.

Integrity's inherent appeal within the scope of leadership is derived from the positive effect it has on the leader-follower relationship, as well as a leader's ability to influence followers. Integrity within leaders encourages valued, open and honest communication channels with followers (Parry & Proctor-Thomson, 2002) and also promotes the follower's desired objectives. Apart from this, leaders who exhibit the characteristics of integrity, also aim to guide and assist the improvement of followers own moral and ethical behaviour. The focus of the moral and specifically the integrity aspect of servant leadership is therefore an important focal point in comprehending how such leaders manage ethics in the organisation. This ensures that the influence on followers is aligned to accepted ethical norms.

Moreover, as a value-laden style of leadership, the role of the integrity of the leader is even more important (Parry & Proctor-Thomson, 2002). This style of leadership is firmly rooted in the "morality" dimension of leadership and it is heavily reliant upon this aspect of the leader's character. Therefore, servant leadership entails being the custodian of both moral agency and accountability (Sendjaya & Pekerti, 2010), a role which if played effectively, would require the custodian first to be true to his own moral self and to be authentic in his approach. Thus, it is argued that servant leaders would be unable to transform and guide followers towards the attainment of their individual goals, without approaching such guidance from an authentic, self-sacrificing and ethical perspective themselves. Hence, it emphasises the relevance of morality and ethics within the scope of servant leadership.

Additional to the described importance of general ethics within the sphere of servant leadership, integrity specifically adds further value over and above the holistic concept of ethics. Integrity is specifically alluded to when describing the very elements that make up the concept of servant leadership, and it shares close ties with authentic leadership and the "real" aspect of servant leadership. There is also a call for servant leaders to portray themselves in relation to others in a truthful and transparent manner,



by demonstrating characteristics of humility, security, accountability and vulnerability (Sendjaya & Pekerti 2010).

Therefore, regarding the relationship, integrity is proposed to influence both the ethical/moral component of servant leadership, as well as the general leader effectiveness component of servant leadership.

In terms of the ethical domain, servant leadership places strong emphasis on being true to oneself and one's own moral principles, open exchanges between leaders and followers, the ability of leaders to display genuine concern for others, as well as leader's steadfastness in the face of compromising ethical principles (Sendjaya & Pekerti 2010). Open, honest and fair interactions with others are further described characteristics of servant leaders (Liden, Wayne, Zhao & Henderson, 2007). These are all factors which rely heavily on the integrity of a leader.

With regard to leader effectiveness, integrity has been shown to enhance the leader's ability to influence the behaviour of others regarding desired organisational goals (Jacobs, 2004). The rationale of this being that honourable leaders who walk the talk and act in the best interest of followers, exhibit more influence over their followers, not only to act ethically, but to buy into organisational goals too. For this reason, integrity is put forth as an important prerequisite for servant leaders in this study, whereby leaders with stronger integrity is thought to exhibit more influence over their followers to achieve desired objectives. In this case the internalisation of desired ethical norms and values would promote servant leadership.

This interpretation is reflected in numerous servant leadership measurements (Mittal & Dorfman, 2012; Sendjaya et al., 2008; Wong & Page, 2003) where the two concepts run a seemingly parallel course, with integrity proposed to be a vital requirement for this style of leadership.

Deduced from the above arguments, a positive relationship between integrity and servant leadership is thus proposed in this study.

## **Substantive Research Hypothesis 1:**

Leader integrity has a significant positive influence on servant leadership in an organisation.

### **2.7 The relationship between Integrity and Trust in Leaders**

The relationship between trust and leader integrity is widely accepted (Mayer et al., 1995) in both business and academic circles. Integrity is a vital element of leadership and is a proven driving force in leader trust (Palanski et al., 2015). Mayer et al. (1995) defines integrity as being “the trustor’s perception that the trustee adheres to a set of principles that the trustor finds acceptable”. Therefore, leaders who display characteristics associated with integrity are more likely to be trusted by followers (Colquitt, et al., 2007), substantiated both theoretically (Simons, 2002) and empirically (Simons, Friedman, Lui & Parks, 2007), with the integrity of leaders exhibiting strong correlations with follower trust.

In understanding this correlation from a theoretical perspective, the relationship between the two variables is derived from the effect which leader integrity has on follower’s propensity to trust. Leaders, who are consistent and perceived by followers as “morally acceptable” in relation to the followers’ own value sets, result in followers exhibiting higher propensity to trust such leaders (Bauman, 2013). The rationale behind the higher propensity to trust being, a higher predictability of the leader’s future behaviour and a mitigation of the perceived risks involved in followers making themselves vulnerable to leaders or placing themselves in situations of uncertainty.

Therefore, behaviour, which exhibits a genuine concern for others, and is consistent and ethical in nature, leads to the instilling of trustworthiness.

The proposed relationship between integrity and trust is thus not difficult to accept on face value. The integrity of the leader plays a significant role in influencing the thought process of followers and it is the foundation upon which decisions are made and where trust is primarily based upon, as a strong relationship between the two variables clearly illustrate (Engelbrecht & Cloete, 2000).

The strong relationship between the variables is further motivated by the stance that leaders will only instil trust and encourage a following from others, once there has developed a loyalty to a commonly accepted behavioural requirement (Heine, 2013), as trust in the leader-follower relationship is significantly influenced by the credibility of

leaders (Engelbrecht, Heine & Mahembe, 2015). With this line of thought, integrity is considered to be the concept encapsulating this commonly accepted behaviour, presenting itself as a major determinant of trust in a leader. This suggests that only once a leader is perceived by followers to be consistent, honest and fair – all aspects of integrity – will trust occur (Morgan & Hunt, 1994).

The nature of the leader-follower relationship therefore needs to be taken into account, whereby a higher value congruence will increase follower's perceptions of leader integrity and their subsequent propensity to trust (Burke et al., 2007). When followers believe that the leader's behaviour is consistent with their own value set, as well as consistent over time, there is a belief that the leader will behave in a predictable and similar manner in future situations (Moorman & Grover, 2009).

What one needs to take cognisance of in this regard is that the accepted behaviour and moral identification is not necessarily a fixed trait, but is rather dependent on what is perceived as acceptable in the relationship by the relevant parties. In terms of perceptions of exhibited trust and integrity of the leader, the value congruence between the parties play a significant role. The more the values of the leader and follower are aligned, the higher these perceptions will be (Spector, Fox, Penney, Bruursema, & Kessler, 2006)

The nature of this proposed link between the two variables is illustrated further by the Mayer et al.'s (1995) model of trust, introduced previously in this study. Although not used in the context of this leadership theory, integrity is also described as a significant predictor of trust in the leader (Moorman & Grover, 2009).

Engelbrecht et al. (2015) confirmed the above theoretical arguments and found a significantly positive relationship between the two variables. This is due to leaders with integrity that are being viewed primarily as honest and trustworthy. Leaders' behaviour, particularly their display of integrity, affects followers' willingness to trust the leader. It can therefore be hypothesised that:

### **Substantive Research Hypothesis 2:**

Leader integrity has a significant positive influence on trust in leaders in an organisation.

## 2.8 The Relationship between Servant Leadership and Trust in Leaders

Trust is the key in any organisational relationship. Van Dierendonck (2011) argues trust to be an important component of the servant leadership environment, playing a significant role in organisational commitment, employee attitudes and performance, as well as individual self-actualisation. It is generally accepted that leader effectiveness, their ability to influence others, as well as to successfully function within organisational settings, is dependent on the degree to which they gain followers' trust (Burke et al., 2007). Over and above the "intuitive appeal" of servant leadership as a non-conventional approach of influence, studies propose that a focus on leader behaviours which promote empowerment, involvement, participation in decision making process, as well as a collective sharing process, have shown to enhance employees' trust (Erkutlu & Chafra, 2013).

This is supported by research, whereby positive correlations are found between servant leadership and trust in a leader (Joseph & Winston, 2005).

In terms of the dynamics of this relationship, servant leaders earn the trust of followers through selfless service (Greenleaf, 1977), whereby trust is enhanced due to followers perceiving servant leaders' decision making and behaviour patterns to be thoughtful, reliable and of a moral nature (Liden et al., 2007). The proposed argument regarding this relationship is better understood by examining the characteristics of the respective variables.

In an analysis of the factors that servant leadership consist of, the following characteristics all illustrate the picture of a trustworthy leader: voluntary subordination, authentic self, covenantal relationship, responsible morality, transcendental spirituality and transforming influence (Sendjaya et al., 2008). On face value one would assume leaders displaying such behaviours would naturally yield more positive exchanges, and a higher probability of followers internalising and reciprocating such behaviours. The subsequent effect of this is to instil trust in followers.

Research supports this assumption. Leaders, who exhibit genuine concern and care for the interests and needs of others, stimulate stronger relationships with followers (Liden, Wayne, Liao & Meuser, 2014). The covenantal relationship component of servant leadership links closely with this aspect, whereby servant leaders foster long lasting genuine relationships with followers. Efforts of treating followers impartially with equality

(Sendjaya & Pekerti, 2010) are important in creating long lasting relationships, which is proposed to form bonds with followers. Stronger bonds and perceptions of “genuineness” in the relationship will therefore lead to increased benevolence, as followers are comfortable to trust leaders that have their best interests at heart. Such relationships can also base decisions of trust on shared and repeated positive interactions (Erkutlu & Chafra, 2013). The nature of the relationships created by servant leaders therefore increases trustworthiness.

The authenticity and ethical predisposition components of servant leadership are furthermore argued to have a positive influence on trust in leaders. Open exchanges are proposed as the root of the trust relationship (Sendjaya & Pekerti, 2010). Regarding authenticity, servant leaders are perceived to be honest and transparent in their transactions with followers (Sendjaya & Pekerti, 2010). According to an ethical predisposition, high ethical and moral standards are entrenched in servant leadership (Sendjaya & Pekerti, 2010). This combination creates leaders who behave ethically and in a consistent and easily understood manner, resulting in leaders acting more likely within the paradigms of expected behaviour, which is thought to enhance predictability of behaviour. The result of this implies lower risks in engagements, resulting in lower perceptions of being exploited, as well as higher trustworthiness.

Therefore, based on the above arguments, a positive relationship between servant leadership and trust is proposed in this study.

### **Substantive Research Hypothesis 3:**

Servant leadership has a significant positive influence on trust in leaders.

#### [2.9 The relationship between Servant leadership and Ethical Culture](#)

The advantages of ethical culture were put forth previously. As a dependent variable in this study, a culture naturally does not simply manifest itself randomly overnight, but it must somehow be created.

For a culture to be created, it is necessary for the desired culture to be formulated and nurtured, to create an environment where formal compliance is turned into voluntary compliance (Goosen & van Vuuren, 2005). The intended result is that an ethical culture of an organisation will create an environment where individuals want to act ethically out of their own accord, rather than to simply reluctantly follow rigid regulations to avoid punishment. As alluded to previously, the formation of ethical cultures is dependent on

the extent to which individuals can accept and create meaning out of the learned behaviour and accepted norms of members.

In this regard, leadership has revealed to be the most optimal way to create and manage an ethical workforce in an organisation (Van Aswegen & Engelbrecht, 2009). Reed et al. (2011) support this position by stating that “leaders bring out or suppress the tendencies of organizational members to behave in an ethical or unethical fashion”.

According to the literature review, arguments supporting leader influence on ethics, is not a new standpoint. The relationship between leadership and ethics is a widely accepted one, as addressing ethical issues ultimately depends on the establishment of moral, ethical and competent leadership (Van Aswegen & Engelbrecht, 2009). When it comes to ethical culture, however, with the shift in the field of organisational ethics to a more “agent centred” or culture centred perspective (Rossouw, 2008), the role of leadership becomes even more of a necessity, as the active role of leadership in implementing ethics has become even more important.

The reason for this can be explained by examining the role of leaders more closely. A primary role of leadership in any organisation is to articulate the expected behaviour of followers to create behavioural norms within the organisations. Because of their inherent positioning in organisations, leaders are responsible for setting the tone in the work environment (Ncube & Wasburn, 2006). In the ethics domain this responsibility is critical and described as a prerequisite of effective leadership (Engelbrecht et al., 2005), whereby ethical values and the inherent ability of leaders to influence followers to internalize these values, are viewed as “must haves” for effective leadership.

In terms of servant leadership, as a value-laden style of leadership, the approach is firmly rooted in the moral and ethical dimensions of leadership. Moreover, servant leadership is regarded as a group-orientated approach to leadership, centred on teamwork, serving others and building a sense of community (Walumbwa et al., 2010), and is thus argued to be an effective approach to creating an ethical culture (Reed et al., 2011). Notwithstanding the influence of other variables, the previously described dimensions of responsible morality and transcendental spirituality relate closely to the ethical components of servant leadership (Sendjaya et al., 2008). An examination of these dimensions illustrates that the characteristics of a servant leader are regarded to positively influence ethical cultures in organisations.

The dimension of responsible morality, calls for leaders to nurture the moral values and higher order needs of followers within the leader-follower relationship (Sendjaya et al., 2008), placing an onus on leaders to take accountability for and foster the ethical values of followers. The influence of these characteristics on ethical culture, is that the nurturing of moral values is proposed to enhance the joint consensus seeking process of establishing shared ethical values. As followers' higher order needs are met and understood, followers will more likely take cognisance of and embrace organisational needs. This is based on the premise of reciprocity in social exchange. The result of this mutual acceptance and understanding in turn reduces the compromising of set ethical principles, and it further fosters behaviour which is positive and ethical (Sendjaya & Pekerti, 2010).

The dimension of transcendental spirituality alludes to the morally laden and covenant based relationships that servant leadership promotes with followers. The establishment of ethical culture requires nurturing and is regarded as a long term ethical initiative. In this regard, long lasting and genuine relationships with followers will enhance followers to buy into the specific culture and to be encouraged by servant leaders "calling" to make a difference (Sendjaya & Pekerti, 2010).

In examining the proposed emergence of the described culture, the manifestation of an ethical culture through the influence of the servant leadership, is suggested to take a slightly less direct route to the culture objective, in comparison with other leadership approaches. Servant leaders aim to influence social learning of followers through epitomising the values of the organisation and to have as their objective the creation of a servant leadership culture (Reed et al., 2011). In contrast to most other leadership approaches that emphasise the needs of the organisation and mobilise employee efforts to attain organisational goals, servant leadership's primary goal is addressing follower needs (Barbuto & Wheeler, 2006). Notwithstanding those that insist on organisational goals being the primary focus; insisting on a more direct and aggressive leader influence approach, a significant correlation is proposed between servant leadership and the attainment of an ethical culture in this study.

The rationale behind this argument is that the implementation of an ethical culture is long term and strategic in nature. This is similar to servant leadership's long term or "indirect" approach to organisational goals, whereby the focus is primarily on the follower

and the follower needs, with the attainment of organisational specific needs being the subsequent result of individual satisfaction and commitment to the organisation. In this way, as is the case with other organisational objectives, the attainment of cultural change will be approached in a more non-direct manner. However, it yields more favourable long term outcomes, due to its sustainable influence.

The researcher will argue that servant leaders' approach and effect on ethics will be highly effective, as the motivation behind adopting ethical behaviour in followers will be more intrinsically motivated. Leaders, through addressing and satisfying the developmental needs and core values of followers first, will mobilize followers to later become subservient themselves towards these organisational objectives. Thus, an adoption of ethics is created from a more strategic positioning, with desired goals being achieved in a more sustainable, healthy and growth-orientated manner. Servant leadership's influence on ethics therefore relates closer to the cultural perspective than to the compliance based approach (Sendjaya & Pekerti, 2010).

In summation, there is a need to create a strong and sustainable ethical culture, as ethics need to form part of everyday business actions and of the core of the workplace environment. Furthermore, such an ethical climate does not occur at random, but it needs to be created and nurtured by leaders.

Hence, the study argues that for such a culture to be effective, the desired values and behaviour need to be adopted and internalized by all parties involved. As such, the transformation required for such an internalization, requires an authentic approach.

Therefore, a positive relationship between servant leadership and ethical culture is proposed in this study.

#### **Substantive Research Hypothesis 4:**

Servant leadership has a significant positive influence on ethical culture in organisations.

#### [2.10 The relationship between Trust in Leaders and Ethical Culture](#)

While leader trust has been directly linked to ethical climate (DeConinck, 2011; Mulki, et al., 2006) and the importance of trust is widely accepted in both business and ethical domains, few studies have explored the nature and dynamics of the relationship between trust in leaders and organisational ethical culture. This is surprising, since a consideration of the characteristics of the two variables in question, suggests that a



natural link exists. Considering this, an analysis of the relationship seems relevant and it will be approached by investigating how trust in leaders has a positive influence on ethical culture. This will be examined from both a moral and ethical leader perspective, as well as from a leader effectiveness point of view. Both of these are thought to serve as prerequisites for the creation of an effective ethical culture.

The ethical culture will be assessed first. Trust in leaders' influence in creating an ethical culture in organisations rests on the premise that ethical culture is a phenomenon which does not occur randomly, but must be created and nurtured by organisational leaders. In terms of its conceptualization, ethical culture is described as a system of shared assumptions and expectations between organisations and their members (Kaptein, 2009); as well as a framework within which issues of moral content are dealt with (Engelbrecht et al., 2005) and aligned with mutually accepted strong moral standards and expectations (Verhezen, 2010).

In terms of the creation and nurturing of such a framework, leaders' efforts to mobilize follower behaviour towards such shared moral values rely on followers "buying into" both the communicated desired objectives and the leader's intention. As such, leader influence would naturally be hampered, if not practiced effectively or if perceived to be approached from an untrustworthy standpoint. The effectiveness of leader influence as well as the perceived trustworthiness of the leader therefore comes to the fore, as followers' willingness to be influenced will be dependent on whether the leader is acting in their best interests.

In examining leader trust influence from an ethical perspective, a strong focus on ethics is prominent within the description of trust. Integrity as an ethical construct is alluded to specifically (Mayer et al., 1995) when describing the components of a leader that is thought to foster trust from followers, entailing the extent to which leaders exhibit strong moral and ethical principles (Erkutlu & Chafra, 2013). Therefore, an inherent ethical component already exists within the framework of trust.

From a general leader effectiveness perspective, studies have furthermore shown that a leader's trustworthiness has a significant influence on the social exchange process, whereby higher leader trustworthiness leads to higher leader effectiveness (Burke et al., 2007). Moreover, increased trust in leaders triggers greater collective efforts and the more effective attainments of organisational goals (Brower et al., 2009). Within the scope of creating and nurturing an ethical culture, such enhancing characteristics of

leaders seem relevant, as strong influence will naturally be thought to mobilize individuals to accept and practice shared norms of behaviour. Therefore, with ethical culture as a goal in mind, leader trustworthiness would enhance such collective efforts.

Lastly, there is reason to believe that a lack of trust will be detrimental to the creation of an ethical culture. Employees who feel mistreated, or exhibit distrust with the organisation, are more likely to act contrary to the desired behaviours of the organisation, making it difficult to attain compliance with ethical culture (Tyler & Blader, 2005).

This study proposes that followers exhibiting a higher trust in leaders, will have a positive impact on the establishment of an ethical culture within an organisation.

### **Substantive Research Hypothesis 5:**

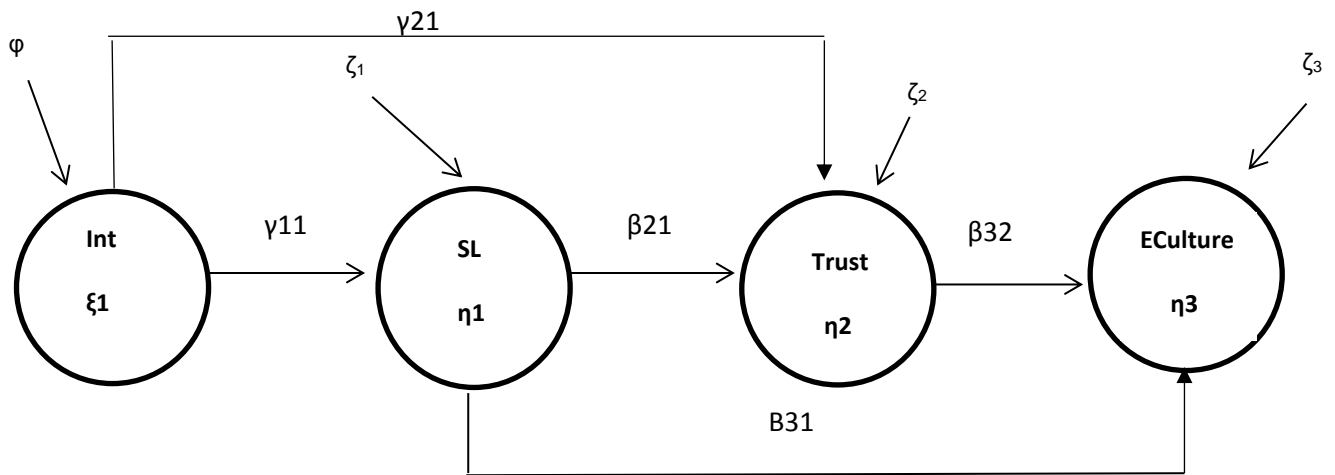
Trust in leaders has a significant positive influence on an ethical culture in organisations.

#### **2.11 Structural Model**

Proceeding the reflection of the above literature that was thought relevant to this study, an integration of the relevant variables is now required, to gain a holistic view on the nature of their relationships. The culmination of this is illustrated by means of a theoretical model representing the proposed exogenous and endogenous latent variables, and the predicted relationships believed to exist between them.

Figure 2.1 indicates that three endogenous latent variables have been identified: Ethical Culture, labelled  $\eta_3$ ; Trust in Leaders, labelled  $\eta_2$ ; and Servant Leadership, labelled  $\eta_1$ . Integrity represents the exogenous latent variable and is labelled  $\xi_1$ .

Furthermore, as described by Hypotheses 1-5, causal relationships have been proposed to exist between the latent variables. Hypothesis 1: Integrity has a significant positive influence on Servant Leadership, which is represented by  $\gamma_{11}$ . Hypothesis 2: Integrity has a significant positive influence on trust in leaders in an organisation and is represented by  $\gamma_{21}$ . Hypothesis 3: Servant Leadership will have a significant positive influence on Trust in Leaders represented by  $\beta_{21}$ . Hypothesis 4: Servant Leadership will have a significant positive influence on Ethical Culture is represented by  $\beta_{31}$ . Hypothesis 5, Trust in Leaders will have a significant positive influence on Ethical Culture ( $\beta_{32}$ ). These relationships each make up the paths in the structural model.



Note: Int= Integrity; SL= Servant leadership; Trust = Trust in Leaders; ECulture = Ethical culture

**Figure 2.1 Structural model**

### 2.12 Chapter Summary

The purpose of Chapter 2 was to analyse existing literature on the relevant latent variables proposed in this study. Following the conceptualisation of the variables, a discussion was put forward regarding the proposed relationships which exist among them. The literature review culminated in the formulation of a theoretical model, describing the relationships among integrity, servant leadership, trust in leaders and ethical culture, which emerged from an investigation into the described relationships. Chapter 3 will focus on the intended research methodology to validate and empirically measure the proposed relationships.

## Chapter 3

### Research Methodology

#### 3.1 Introduction

Through the integration of a variety of research studies, Chapter 2 presented a sound theoretical illustration of the structural relationships proposed to affect ethical culture in this study. Research hypotheses emerging through these analyses culminated in the proposed structural model. As theoretical hypotheses are not sufficient, further empirical evaluation is required to test the significance of the operational hypotheses (Babbie & Mouton, 2001).

Chapter 3 thus serves to describe the research methodology to test the significance of the hypotheses with the purpose of validating the theoretical arguments. The need for the research methodology phase is derived from the premise that even the best theoretically argued position needs to be scientifically validated, as the structural model explaining the role of servant leadership in creating an ethical culture will only provide value to the extent that full comprehension of the described process can be achieved from the explanation. Such explanation represented by the model closely fitting the obtained empirical data (Babbie & Mouton, 2001).

To ensure close approximation, the credibility and validity of the methods used to arrive at the theoretical verdict must be ensured (Theron, 2013). This necessitates a focus on reducing any flaws which may affect the process and jeopardise the study, to as accurately as possible predict the effects in the model. This is ensured by emphasising objectivity and rationality in the methodology, which are said to be the two characteristics that serve the epistemic ideals of science (Babbie & Mouton, 2001).

Chapter 3 therefore describes the research methodology used to analyse the relationships among the latent variables in the structural model.

#### 3.2 Research problem

Referring back to the research-initiating question of why levels of ethical culture differ in organisations, now requires a reformulation of the question. It is necessary to establish whether the efforts to explain ethical culture through using servant leadership are valid, and whether the structural model is valid.

The research problem is stated as follows: “Is ethical culture in organisations linearly dependent on integrity, servant leadership and trust in leaders?”

The study proposes that the position developed in response to the research-initiating question is still valid in terms of the theoretical argument. Further empirical validation is required to determine the usefulness of this position, however.

### 3.3 Substantive research hypotheses

A choice should be made between various types of research design strategies that can be used to empirically answer research problems in terms of the purpose of the study (Theron, 2013).

The purpose of this study was to identify the role of servant leadership in creating an ethical culture. This, therefore, was the overarching substantive hypothesis. However, through the theoretical argument that arose in response to the literature review, two further variables (integrity and trust in leaders) that play a role were identified and subsequently included in the structural model, and these needed to be included as research hypotheses.

The detailed substantive research hypotheses include:

*Hypothesis 1: Integrity ( $\xi_1$ ) has a positive influence on Servant Leadership ( $\eta_1$ ).*

*Hypothesis 2: Integrity ( $\xi_1$ ) has a positive influence on Trust in Leaders ( $\eta_2$ ).*

*Hypothesis 3: Servant Leadership ( $\eta_1$ ) has a positive influence on Trust in Leaders ( $\eta_2$ ).*

*Hypothesis 4: Servant Leadership ( $\eta_1$ ) has a positive influence on Ethical culture ( $\eta_3$ ).*

*Hypothesis 5: Trust in Leaders ( $\eta_2$ ) has a positive influence on Ethical culture ( $\eta_3$ ).*

### 3.4 Statistical Hypotheses

The logic underlying the proposed research design and nature of the statistical analysis determined the format of the statistical hypotheses. As per the arguments illustrated already, structural equation modelling via ex post facto correlation design was utilised to evaluate the hypotheses. This form of statistical analysis makes use of the conventional LISREL notation system (Du Toit & Du Toit, 2000).

The overarching objective of scientific methodology is to arrive at valid and accurate conclusions regarding the truth of the investigated hypothesis. As has already been stated methodology needs to serve the epistemic ideals of science to achieve this. Science argues that the prediction made by the substantive research hypothesis needs

to be tested empirically and that the validity of the statement made by the hypothesis needs be corroborated with evidence that is detectable by the senses (Babbie & Mouton, 2001). To achieve this, we need to be able to test the operational research hypothesis quantifiably that requires the operational hypothesis to be translated into a statistical one, which is done through the research design.

The substantive hypothesis states that the structural model depicted in Figure 2.1 provides a valid exact account for an ethical culture. If this means the model illustrates a perfect account of the manner in which Integrity, Servant leadership and Trust in Leaders interdependently affect Ethical Culture, the substantive research hypothesis can be translated to statistical hypotheses that represent an exact model fit with the covariance matrix:

H01:  $RMSEA = 0$

Ha1:  $RMSEA > 0$

If the substantive hypothesis stating that the structural model depicted in Figure 2.1 provides an approximate account for an Ethical Culture it means the model illustrates a close account of the manner in which Integrity, Servant leadership and Trust in Leaders interdependently affect Ethical Culture, the substantive research hypothesis can be translated to statistical hypotheses, which represent a close model fit with the covariance matrix:

H02:  $RMSEA \leq 0.05$

Ha2:  $RMSEA > 0.05$

The two overarching substantive research hypotheses were separated into five more detailed, specific substantive research hypotheses. These five detailed research hypotheses translate into the path coefficient statistical hypotheses depicted below:

### **Hypothesis 3**

Ho3:  $\gamma_{11} = 0$

Ha3:  $\gamma_{11} > 0$

### **Hypothesis 4**

Ho4:  $\gamma_{21} = 0$

Ha4:  $\gamma_{21} > 0$

### **Hypothesis 5**

Ho5:  $\beta_{21} = 0$

Ha5:  $\beta_{21} > 0$

### **Hypothesis 6**

Ho6:  $\beta_{31} = 0$

Ha6:  $\beta_{31} > 0$

### **Hypothesis 7**

Ho7:  $\beta_{32} = 0$

Ha7:  $\beta_{32} > 0$

## **3.5 Research design**

The research design reflects the strategy or plan of the evidence collecting process and is seen as a tool for empirically testing the merits of the described relationships (Kerlinger & Lee, 2000). The research design in this study followed a quantitative approach, whereby the hypothesised causal relationships between the latent variables (depicted in Figure 2.1) were tested by means of an ex post facto correlational design. This approach is used when experimental manipulation and random assignment of the exogenous latent variable (integrity) is not possible. This was the case in this study, as there were some endogenous latent variables (servant leadership, trust in leaders and ethical culture) in the structural model, with causal relations hypothesised between them. Furthermore, with only one exogenous latent variable (Integrity) in the structural model, and more than one endogenous variable and causal relationships proposed between the endogenous variables a correlation design with two or more indicators per latent variable was proposed, with structural equation modelling (SEM) suggested as the technique for analysis (Theron, 2013).

In this technique, the researcher obtains measures of the observed variables and calculates the observed covariance matrix. In the process, estimates for the freed-up structural and measurement model parameters are obtained with the objective being to, as closely as possible, reproduce the observed covariance matrix (Kelloway, 1998).

If the fitted model represents close fit between the observed and estimated covariance matrices, it can only be implied that the processes portrayed by the structural model provide one plausible explanation for the observed covariance matrix. However, this is not necessarily an acceptable explanation for the observed covariance unless prior evidence exists to warrant that the measurement model fits closely (Theron, 2013).

### 3.6 Sampling

The purpose of this study was to examine the influence of servant leaders in organisations in effectively creating an ethical culture in their workplace. The measurement focus therefore fell on business leaders and subordinates' perceptions of these qualities. As obtaining measures from all the subjects in the target population was not possible, samples out of the population were drawn to obtain such measures (Kerlinger & Lee, 2000). With sampling the power of the inferential statistics and the extent to which the measures can be generalised to the target population are important. This is dependent on the number and representation of subjects used in the sample. Representativeness is determined by the statistical accuracy that the sample portrays, in terms of how its characteristics relate to those of the target population (Kerlinger & Lee, 2000).

In discussing the research design, it was mentioned that structural equation modelling (SEM) would be used as an analysis technique. SEM requires a relatively large sample size, with 200 respondents described as the minimum for a satisfactory analysis (Kelloway, 1998). In light of this, and to optimise the accuracy of the statistics, a sample of 279 individuals from different industries was selected. For practical reasons, probability sampling was not plausible; instead the non-probability sampling technique of convenience sampling was used for this study. This technique selects and measures those participants that present themselves as available for the study (Babbie & Mouton, 2001).

For collecting the data, numerous organisations from varied industries were approached about participation in the study. Institutional permission was obtained to conduct the research in the organisations. Due to the sensitive nature of the data, anonymity was ensured, whereby organisations and individual participants were informed that their identities would not be revealed in the study.



### 3.6.1 Data collection procedure

A set of questionnaires, one for each construct, was used to gather the relevant data from the population. Invitations to respond via the questionnaires were distributed to participants via email, making use of a web link to the electronic questionnaire.

To ensure confidentiality, all electronic responses were kept anonymous; participants were informed that the individual responses would not be linked to their specific leader. Respondents were asked to rate their own perception of the ethical culture of their organisation; trust in the leader; as well as their leaders' integrity and servant leadership.

### 3.6.2 The demographic profile of the sample

The overall study sample consisted of 279 participants from a variety of industries. In terms of the demographics, this comprised 40.9% male and 59.1% female respondents. The average age of the sample was 33.32 indicating that the majority fell between the ages of 20 and 30 years old. A more descriptive breakdown of the sample in terms of the age and ethnic group, job level and industry is depicted in Table 3.1

**Table 3.1**

***Breakdown of Demographical variables***

Variable	Frequency	Percentage (%)
<b>Gender</b>		
Male	114	40.9%
Female	165	59.1%
<b>Age of participants</b>		
Below 20	1	0.4%
20 – 29	113	40.5%
30 – 39	92	32.9%
40 – 49	45	16.1%
Above 50	24	8.6%
No response	4	1.4%

<b>Table 3.1 (Continued)</b>		
<b>Ethnic/ racial group</b>		
African	15	5.4%
Coloured	86	30.8%
Indian	12	4.3%
White	165	59.1%
Other	1	0.4%
<b>Current job level</b>		
Non-managerial	163	58.4%
Lower level management (first line management)	46	16.5%
Middle level management	46	16.5%
Upper level management	24	8.6%
<b>Organisation's industry</b>		
Manufacturing	12	4.3%
Retail	24	8.6%
Financial Services	21	7.5%
Construction	10	3.6%
Health and Welfare Service	7	2.5%
Public service	6	2.2%
Management Consulting	74	26.5%
Technology	54	19.4%
Tourism	21	7.5%
Transport	50	17.9%

### 3.7 Missing values

It is necessary to address any missing values prior to statistical analysis. This avoids errors with regard to falsely represented indicator variables. The most common

occurrence of missing values emerges because of non-responses from participants. Treatment is needed to address this problem so as to avoid errors in the data.

Five options to treat missing values have been identified (Kelloway, 1998). These include:

- list-wise deletion
- pair-wise deletion,
- imputation by matching
- multiple imputation
- full information maximum likelihood imputation

The choice between approaches is dependent on both the number of values missing, as well as the nature of the data. After the number and nature of all missing values were determined and properly taken into account, the statistical analysis commenced.

### 3.8 Measuring Instruments

As explained in the previous sections, there is a need for the various exogenous and endogenous latent variables included in The Ethical Culture Structural Model to be empirically proven and for valid explanations to be given for the postulated relationships. While this had been shown plausible, by means of the review of literature and the devised model, the need for it to be scientifically measured remained.

The four variables at play thus were examined via four separate questionnaires: Engelbrecht's EIT was used. for Integrity, Sendjaya et al.'s SLBS for Servant leadership, Engelbrecht et al.'s LTS for Trust in Leaders, and Victor and Cullen's ECQ for Ethical Culture.

#### 3.8.1 Integrity instrument

For the purpose of this study, the concept of Integrity was measured by the Ethical Integrity Test (EIT) (Other-rating format) developed by Engelbrecht (cited in Du Toit, 2015). The EIT relies on the definition of integrity being acting in accordance with universally accepted ethical values and norms.

In terms of its structure, the test measures items by means of a 5-point Likert scale (ranging from disagree strongly to agree strongly) and measures 5 dimensions of integrity, being; *behavioural consistency*, *righteousness*, *frankness*, *credibility*, and *fairness*. These dimensions are defined in Table 3.2

**Table 3.2: EIT dimensions**

<b>Dimensions</b>	<b>Definitions</b>
Behavioural consistency	Refers to persistently behaving in an ethical way; exhibiting moral courage to behave consistently in adversity and temptation; and applying the same fundamental principles over time and to a variety of situations. The individual practises what he/she preaches despite social and emotional pressures
Righteousness	Refers to behaving ethically and respectably; practising moral virtues and acting in terms of moral principles
Frankness	Refers to acting with truthfulness, authenticity and sincerity
Credibility	Refers to trustworthy, responsible, reliable and dependable behaviour in accordance with the ethical rules and norms of the organisation.
Fairness	Refers to treating people equitably and with dignity and respect, making impartial and objective decisions, and practising justice for all.

(Du Toit, 2015)

The EIT makes use of 66 items in total, with each dimension having a number of items aimed at measuring that specific dimension. This is depicted in Table 3.2.

From a statistical analysis of the EIT, satisfactory results were produced in terms of Cronbach's Alpha (.971) for the entire scale. The individual dimensions produced the following Cronbach Alphas: behavioural consistency: .736; credibility: .852; frankness: .912; fairness: .862 and righteousness: .911 (Du Toit, 2015). These coefficients exceed .70 and therefore provide an acceptable measure for integrity (Nunnally, 1978).

**Table 3.3: EIT items**

<b>Dimension</b>	<b>No of items</b>	<b>Example of item</b>
Behavioural consistency	10	Item 5: My manager consistently behaves in an ethical way.  Item 19: My manager practises what he/she preaches.
Righteousness	14	Item 20: My manager uses his/her moral beliefs to make decisions.  Item 35: My manager's behaviour is guided by sound principles.
Frankness	14	Item 7: My manager will tell the truth, even under pressure from others.  Item 16: People can believe what my manager says.
Credibility	15	Item 22: People can depend on my manager.  Item 37: My manager keeps promises that he/she makes to others.
Fairness	13	Item 23: My manager's major concern is always what is best for the other person.  Item 28: My manager treats people with dignity and respect.

(Du Toit, 2015)

### 3.8.2 Servant Leadership Instrument

As mentioned in the previous chapter, the trend with regard to leadership and value-laden leadership styles in particular has been to move away from the compliance-based approaches on which many of the past studies on leadership had focused.

Leadership is now seen to be based on influence (Yukl, 2013) by means of followers' observing leader behaviours and internalising them.

In line with this perspective, the Servant Leadership Behaviour Scale (SLBS) developed by Sendjaya et al. (2008) was used in this study to operationalise the concept of Servant Leadership.

The SLBS comprises 35 items measuring the six proposed dimensions of Servant Leadership, namely Voluntary Subordination, Authentic Self, Covenantal Relationship, Responsible Morality, Transcendental Spirituality and Transforming Influence.

The content of the SLBS was validated qualitatively through a literature review and interviews with an expert panel and quantitatively through a number of studies. The internal consistency reliabilities of all six dimensions surpassed the recommended level and Cronbach's coefficient alphas, ranging from 0.72 to 0.93 (Sendjaya et al., 2008)

#### 3.8.3 Trust in Leaders

The Leader Trust Scale (LTS) developed by Engelbrecht et al. (2015) was used to measure the concept of trust in leaders. The measure consists of 13 items, comprising 11 items from the previous instruments developed by Bews (2000) and two from the Workplace Trust Survey (WTS) developed by Ferres, Connell and Travaglione (2004).

In terms of validation, the LTS has proven psychometrically sound within the South African context. The internal consistency reliability ( $\alpha = 0.972$ ) of the scale surpassed the recommended level of Cronbach's coefficient alpha (Engelbrecht et al., 2015). The reported indices further indicate that a satisfactory measurement model fit was achieved.

#### 3.8.4. Ethical culture

An instrument developed by Victor and Cullen, which was developed to measure ethical climates within organisations, was used to measure ethical culture (Cullen, Victor & Bronson, 1993). The ethical climate questionnaire (ECQ) is targeted at tapping into respondents' views in respect of how members in their particular organisation typically make decisions around everyday business practices and procedures, which require an ethical frame of reference (Victor & Cullen, 1987).

The ECQ consists of 19 items with four subscales. The various questions surrounding the items are answered by means of a 6-point Likert response scale ranging from disagree strongly to agree strongly. The general answers provide valuable information on respondents' perceptions of the ethical climate.

In terms of psychometric evidence, three studies using varied samples have been conducted to test the measure empirically. The results of the latest of these studies conducted on four accounting firms suggest validity of the construct and a high reliability of the scales. The measures of each sub-climate show satisfactory reliabilities ranging between  $0.65 \leq \alpha \leq 0.82$  (Victor & Cullen, 1987). It has further been suggested from the analyses that were conducted that the questionnaire's scales are adequate for investigative research (Weber, 1995).

### 3.9 Statistical Analysis

Once the measurements are obtained from the various measures, prior to the measurement model being fitted, there is a need for the data to be analysed. For such analyses, the various statistical techniques used to test the proposed ethical culture structural model were Item Analysis; Confirmatory Factor Analysis (CFA); and Structural Equation Modelling (SEM).

#### 3.9.1 Item analysis

As discussed previously, various measuring instruments were used to operationalise the latent variables proposed by this study. Such measures rely on items to reflect participants' positions regarding different latent variables or dimensions of latent variables whereby items function as a set of stimuli to which participants respond with observable behaviour, with the purpose of providing an uncontaminated expression of the underlying latent variables.

Item analysis is a statistical technique used to determine the quality and reliability of items in a measure and is used as a tool to identify items not representative of the described latent variable. Item analysis therefore ensures that the variance in X (or Y) is only attributable to variance in  $\xi$  (or  $\eta$  during the operationalisation of latent variables). Although this is not fully attainable in practice, item analysis is used to reach approximations of this ideal (Theron, 2013). The key consideration for the inclusion of items, if the design intentions are to be regarded as successful, is that they are illustrated in a number of item statistics, with items having to prove their inclusion in the measure.

Item analysis consequently is utilised to determine the internal consistency of the various items of the instruments used to measure the latent variables of the ethical culture model. The objective of such analysis is to identify any items, which do not accurately reflect the latent variables (Henning, Theron & Spangenberg, 2004). It is then stated that those that do not achieve this reflection are regarded as poor items, due to the unsuccessful discrimination they display towards different latent variable levels.

Poor items might either be transformed or be deleted from the measure; as they do not contribute to the internal consistency and are seen as misleading or ambiguous (Henning et al., 2004). This process of filtering items improves the reliability and validity of the measure (Anastasi & Urbina, 1997). Decisions about deletion or transformation of the items are thus made based on item statistics obtained from the analysis.

For the purpose of this study, the reliability of the subscales was determined by examining Cronbach's alpha and the Corrected Item-Total Correlation. A minimum coefficient of .70 was regarded as acceptable for Cronbach's alpha to prove the reliability of the scale (Kerlinger & Lee, 2000), whereby scales below .70 qualified for exclusion from subsequent analyses. In terms of the Corrected Item-Total Correlation, values of less than .30 indicate low correspondence with the overall score and suggest that the individual item is not a useful measurement of the specific scale (Pallant, 2007).

### 3.9.2. Confirmatory Factor Analysis

Confirmatory Factor Analysis is a statistical technique used to verify the factor structure of a set of variables (Theron, 2013). LISREL 8.80 was used in this study to perform the confirmatory factor analyses of the respective subscales.

An initial test of acceptable model fit was indicated by a RMSEA < 0.08. If acceptable fit was achieved, each item was then evaluated in respect of its completely standardised factor loadings (LAMBDA-X). Acceptable items in this regard were represented by a value > 0.30, indicating that the item successfully contributed to the coherency of the subscale.

All items must load significantly on the designated latent variable to complete the confirmatory factor analysis procedure. Items, which do not load significantly should be considered for deletion.



### 3.9.3 Structural Equation Modelling

The previous two analyses respectively tested the significance of the items and the relationships between the variables. Structural Equation Modeling (SEM), the next statistical technique that was utilised, evaluated the measurement and structural model fit. This reflects the constitutive definition of the construct's stance in terms of the internal structure and design intention of the developers of the instrument (Theron, 2013). This process enables estimation of the strength of the relationships of the latent variables (Kelloway, 1998).

The usefulness of SEM is found in that researchers in the social sciences are primarily concerned with explaining and predicting models. The issue, however, is that predictor models have become extremely complex and difficult to analyse. SEM thus was introduced to address this, as its use has proven very beneficial in the testing of models with such complexity (Kelloway, 1998). In this study, SEM was used to evaluate the quality of the predictive relationships between the four latent variables. This could be achieved through, firstly, validating the measurement model by means of confirmatory factor analysis and, secondly, fitting the structural model by means of a path analysis. The latter illustrates the construct validity of the ethical culture structural model.

Confirmatory factor analysis is seen as an application of structural equation modelling. The technique is based on testing specific hypotheses on, firstly, the number of factors or latent variables which underlie the observed inter-item covariance matrix, secondly, the nature of the relationship between the variables and, finally, the nature of the loading pattern of the items on the factors (Kelloway, 1998). This is confirmed if the indicators measure the latent variables they are presented to measure, and provides validation of the overall measurement model. If it is interpreted that the overall measurement model provides a perfect account of the latent variables and their relationships, the measurement hypothesis of exact fit will be depicted as:

$H_{08}: RMSEA = 0$

$H_{a8}: RMSEA > 0$

If it is interpreted that the overall measurement model provides only an approximate account of the latent variables and their relationships, the measurement hypothesis of close fit will be depicted as:

$H_{09}$ : RMSEA  $\leq$  0.05

$H_{a9}$ : RMSEA  $>$  0.05

Finally, in evaluation of the measurement model through confirmatory factor analysis, five steps are involved with the SEM analysis. These steps include model specification; evaluation of model identification; estimation of model parameters; testing model fit; and model re-specification (Hair, Black, Babin, Anderson & Tatham 2006).

Model specification involves the selection of the relevant relationships and parameters in the model. This comprises the representation of hypotheses in the form of SEM, whereby the model is illustrated as a series of equations representing the proposed relationships between the variables (Kline, 2011). Model specification is an important step that has to be fully constructed before commencing with any data analysis.

The second step of evaluating the model identification is conducted to confirm that sufficient information is available to determine the parameter estimation, as it is possible to obtain unique estimates for every parameter of the model once a model is identified (Kline, 2011). If thoroughly identified, one unique value for every parameter should be obtained from the observed data.

Following identification of the model, the next step in evaluating the measurement model is evaluating the parameter estimates. LISREL is used in this regard to calculate the implied covariance matrix, for comparison with the observed covariance matrix. This is adjusted to minimise the difference in the corresponding covariance matrix (Diamantopoulos & Siquaw, 2000).

The fourth step is the assessment of model fit. Described as “the goodness-of-fit”, this is conducted to assess the fit between the obtained data and the theorised measurement models. In terms of testing the hypotheses of exact fit  $H_{01}$ : RMSEA = 0 and close fit  $H_{02}$ : RMSEA  $\leq$  0.05.

Finally, model modification is conducted to determine whether any model modification is required based on the model fit results. This process is referred to as model re-specification, whereby any non-significant paths are deleted or others added because

of empirical results (Kelloway, 1998). The purpose of this is to address poor fit in the previous step.

### 3.10 Assessing Model Fit

Structural Equation Modelling (SEM) is commonly used to examine model fit, generally illustrating how well the measures reflect their intended constructs as well as the nature of the relationships among constructs. A variety of goodness-of-fit statistics have been developed and put forward over the years to assess a model's overall fit. These generally fit into three categories, namely absolute, comparative and parsimonious fit (Kelloway, 1998). Notwithstanding the utility of the parsimonious fit indices when comparing two models, it is not the most important indices to consider for the evaluation of model fit. For this reason, parsimonious fit is not discussed in this study.

The assessment of the absolute fit of the model is concerned with the ability of the model to reproduce the actual covariance matrix. The assessment of comparative fit, on the other hand, compares two or more competing models to assess which model provides the better fit to the data. The LISREL programme version 8.80 (Jöreskog & Sörbom, 2006), reports 18 indices of model fit, four of which relate to absolute fit.

#### Absolute fit

Tests of absolute fit examine how well the model fits or reproduces the actual data, explained as the “proportions of the covariances in the sample data matrix explained by the model” (Kline, 2011).

The first measure of fit used to evaluate the overall model fit is the chi-square ( $\chi^2$ ) statistic. The chi-squared test is used to determine the congruence or incongruence between the observed covariance matrices and the reproduced sample covariance matrices. If chi-square values are regarded as statistically significant, this will lead to a rejection of the model, illustrating that the model does not fit perfectly (Diamantopoulos & Siguaw, 2000). The null hypothesis tested by the chi-square is  $H_0: \Sigma = \Sigma(\theta)$ .

The objective with the chi-square ( $\chi^2$ ) statistic is to not reject  $H_0$ , tested by the Satorra Bentler  $\chi^2$  statistic. Kelloway (1998) affirmed a non-significant  $\chi^2$  to indicate the model to fit the data well. This implies that the model can reproduce the population covariance matrix.

The null hypothesis of exact fit is regarded as an unrealistic objective, however, and an assessment of the p-value for test of close fit (RMSEA < 0.05) thus is regarded as the more appropriate test. When interpreting the statistics, consideration should

further be given to the fact that the chi-square is sensitive to the sample size. To avoid this, the problem is not addressed through increasing the sample size, but rather by expressing the  $\chi^2$  in terms of its degrees of freedom (i.e.  $\chi^2/df$ ). Although perfect consensus is lacking, good fit is generally indicated by values between 2 and 5, with less than 2 indicating over fitting of the model (Kelloway, 1998).

Report statistics by LISREL indicate a number of absolute fit indices. The Goodness-of-fit Index (GFI) is a measure of fit of the hypothesised model with the observed covariance matrix. GFI directly examines how well the predicted covariances from the parameter estimates reproduce the sample covariance. The GFI ranges from 0 (poor fit) to 1 (perfect fit), with values exceeding 0.9 assumed to indicate good fit of the model to the data (Kelloway, 1998).

The Root Mean Square Residual (RMR) represents the average value of the difference between the values obtained from the sample covariance matrix and those fitted from the covariance matrix reproduced by the theoretical model (Diamantopoulos & Siguaaw, 2000), alternatively, the standard deviation of the residuals or prediction errors. In interpreting the RMR indices, lower values reflect a better model fit to the data. The standardised RMR illustrates the fitted residuals divided by their estimated standard errors. Standardised RMR has a lower bound of 0 and an upper bound of 1, with values of less than 0.05 indicating good fit with the data (Kelloway, 1998).

The Root Mean Square Error of Approximation (RMSEA) indicates the fit of a model with unknown but optimally chosen parameter values with the population covariance matrix, if it is available. The RMSEA is one of the most widely reported fit indices and is regarded as being exceptionally informative. In terms of the cut-offs, the smaller the values the better the fit to the data. Values lower than 0.08 indicate reasonable model fit, 0.05 indicates good fit and values below 0.01 indicate outstanding fit to the data (Diamantopoulos & Siguaaw, 2000).

### Comparative fit

Comparative fit or incremental fit indices examine the model fit relative to other models. Comparative fit generally assesses two competing models to determine which fits the data better. This is accomplished by assessing the relative improvement in fit of the model compared to the statistical baseline model in which all latent variables are structurally unrelated (Kelloway, 1998). The reported comparative fit measures reported in LISREL are the Normed-Fit Index (NFI), the Non-Normed Fit Index (NNFI),

the Incremental Fit Index (IFI), the Comparative Fit Index (CFI), and the Relative Fit Index (RFI). These fit indices range from 0 to 1, with higher values closer to one, especially those > 0.95, representing good fit (Hooper, Coughlan & Mullen, 2008; Kelloway, 1998).

The goodness-of-fit indices described above are summarised below in Table 3.3.

**Table 0.4**  
**Criteria of goodness-of-fit indices**

Absolute fit measures	Criteria
Minimum fit function Chi-Square	A non-significant result indicates good model fit.
$\chi^2/df$	Values between 2 and 5 indicate good fit
Root Mean Square Error of Approximation (RMSEA)	Values of 0.08 or below indicate acceptable fit, those below 0.05 indicate good fit, and values below 0.01 indicate outstanding fit.
P-Value for Test of Close Fit (RMSEA < 0.05)	Values > 0.05 indicate good fit.
90% Confidence Interval for RMSEA	This is a 90% confidence interval of RMSEA testing the closeness of fit (i.e., testing the hypothesis $H_0: RMSEA < 0.05$ ).
Root Mean Square Residual (RMR)	Lower values indicate better fit, with values below 0.08 indicative of good fit.
Standardised RMR	Lower values indicate better fit, with values less than 0.05 indicating good fit.
Goodness of Fit Index (GFI)	Values closer to 1 and > 0.90 represent good fit.
Comparative fit measures	Criteria
Normed Fit Index (NFI)	Values closer to 1 indicate better fit, with values > 0.90 indicative of acceptable fit and > 0.95 of good fit.
Non-Normed Fit Index (NNFI)	Higher values indicate better fit, with values > 0.90 indicative of acceptable fit and > 0.95 of good fit.
Comparative Fit Index (CFI)	Values closer to 1 indicate better fit, with values > 0.90 indicative of acceptable fit and > 0.95 indicative of good fit.
Incremental Fit Index (IFI)	Values closer to 1 indicate better fit, with values > 0.90 indicative of acceptable fit and > 0.95 of good fit.

<b>Table 3.4 (Continued)</b>	
Relative Fit Index (RFI)	Values closer to 1 indicate better fit, with values > 0.09 indicative of acceptable fit and > 0.95 of good fit.

(Diamantopoulos & Siguaw, 2000; Hooper et al., 2008; Kelloway 1998)

### 3.11. Ethical Considerations

Any research study into human behaviour requires the involvement and participation of people. Although no potential ethical risks or discomforts were foreseen in this study, possibilities of risk are present when people are involved, even when consensual, and risks need to be considered. Therefore, this study addressed this through putting measures in place to safeguard and protect the rights, dignity and wellbeing of participants involved in this research study.

Consideration in terms of ethical risks was addressed by obtaining informed consent from individual participants, as well as maintaining confidentiality and anonymity in the gathering and reporting of individual results. Participation in the study was voluntary; in this regard, the purpose of the study was explained and informed consent obtained before the questionnaires were completed. Personal data were sent directly to the applicable research department of Stellenbosch University and not made available to external parties or participants' employers. Results are only to be presented in aggregate form and feedback provided to the participating organisation only through the results of the study. Adverse consequences of the research for participants due to participation or responding in a specific manner were therefore limited.

In terms of weighing up the balance between possible risks and benefits derived from the study, while individual participants enjoyed no personal benefit from participation in this study, organisations will benefit from the primary results of the research conducted in the organisations and through this be given the opportunity to reflect on the studied variables of ethical culture, servant leadership, trust, and integrity. No potential ethical risks or discomforts were foreseen in this study; therefore, the benefits are predicted to outweigh the potential risks.

A debriefing document prepared for rated managers after data collection was aimed at communicating the purpose of the study, which was to test the hypothesised relationships between the studied variables, not as an instrument to measure managerial performance.

Regarding the instruments used for data collection, permission for the use of instruments not available in the public domain was obtained from the respective authors. These were the Leader Trust Scale (Engelbrecht et al., 2015), the Integrity Scale (Engelbrecht, cited in Du Toit, 2015) and the Servant Leadership Behaviour Scale (Sendjaya et al., 2008).

The procedures followed in conducting this study furthermore were aligned and in accordance with the ethical standards prescribed by the Research Ethics Committee for Human Research (Humanities). The Ethics Committee of Stellenbosch University granted ethical clearance for the study.

### 3.11 Summary

As previously stated, the methodology for a study is vital to research. It is through this process that the theoretical arguments posited in Chapter 2 could be subjected to empirical testing to validate the theoretical arguments.

The research methodology, firstly, included statements of the overarching and specific substantive hypotheses to illustrate the hypothesised relationships between the variables and, secondly, a description of the research design, in this case an ex-post facto design, to test the merit of the described relationships (Kerlinger & Lee, 2000). Thirdly, it included the stated statistical hypotheses. This was necessary so as to evaluate them by means of corroborating the hypotheses with evidence detectable by the senses (Babbie & Mouton, 2001). Fourthly a description of the sample and sampling procedure used to make generalisations to the target population. Fifthly, Chapter 3 has provided a description of the instruments used to measure integrity, servant leadership, trust in leaders and ethical culture, so as to show the operationalisation and how the latent variables were psychometrically justified. Finally, a description was given of how data obtained from the instruments was analysed by making use of item analysis, confirmatory factor analysis and structural equation modelling.

While this is a complex and demanding process, it serves the epistemic ideal of science in seeking to arrive at the most correct and accurate outcome, which is needed to validate the study and reduce flaws, which may infiltrate and jeopardise a study (Babbie & Mouton, 2001; Theron, 2013). A strong emphasis was placed on reaching this ideal in the study.

## Chapter Four

### Research Results

#### 4.1 Introduction

Chapter 1 set the background context pertaining to the issue of unethical workplace practices and the effects thereof on contemporary organisations. The need for ethics in organisations was argued and the research-initiating question of why ethical culture varies across organisations was put forward. This was supported through a comprehensive study of existing literature on the identified variables, which culminated in the formulation of a theoretical model describing the relationship between integrity, servant leadership, trust in leaders and ethical culture that emerged from the examination of the postulated relationships. In Chapter 3, hypotheses were formulated to support this response and the methodology used to objectively and systematically test the hypotheses were highlighted by outlining the research design, the unit of analysis, measures used, sampling design, as well as the ethical considerations and the manner in which the data was analysed to determine both the measurement and structural model fit.

The present chapter now provides a comprehensive description of the results obtained from the statistical analysis and also provides the answers to the hypotheses formulated in Chapter 2, which are also discussed in Chapter 3.

With regard to the process reported in Chapter 3, the four measured constructs, namely integrity, servant leadership, trust in leaders and ethical culture were all subjected to reliability analysis, as well as confirmatory factor analysis to ensure acceptable psychometric properties before determining the strength of the hypothesised relationships among the variables under investigation. The structural model containing the different relationships between constructs was subjected to structural equation modelling with a view to determine the significance of the beta and gamma relationships specified in the model.

#### 4.2 Missing values

The most common occurrence of missing values emerges as a result of non-responses from participants. Given the format of the questionnaire, missing values were not a problem in this study, as the entire sample completed the questionnaire electronically, whereby participants were only permitted to proceed to the next section once all the



previous section's answers had been completed. Therefore, only complete questionnaires were utilised for the analyses.

### 4.3 Item analysis

Item analysis (via SPSS) was conducted on the four measurement scales to ensure the quality and internal reliability of the items in each scale, as well as further to identify poor items not representative of the described latent variable. Item analysis is necessary in studies of this nature as it ensures that the respective items on an instrument accurately reflect the latent variable they intend to measure (Henning et al., 2004).

The reliability of the subscales was determined by Cronbach's alpha, which has as its lower end an acceptable minimum coefficient of .70 to prove the reliability of the scale (Kerlinger & Lee, 2000). This therefore was used as the standard for satisfactory reliability in this study by which items of scales with alpha below .70 qualified for exclusion from subsequent analyses.

The "Corrected Item-Total Correlation" was further examined. This measures the correlation between the individual item score and the overall scale score. Values of less than .30 indicate low correspondence with the overall score and suggest that the individual item is not a useful measurement of the specific scale (Pallant, 2010). Consideration thus had to be given to removing items with low Corrected Item-Total Correlations as their exclusion had the potential effect of a higher Cronbach alpha for the entire scale.

#### 4.3.1 Reliability analysis of the Ethical Integrity Test (EIT)

The EIT measure consists of 66 items and five subscales of integrity, namely behavioural consistency, righteousness, frankness, credibility and fairness. Each subscale was subjected to item analysis.

##### 4.3.1.1 Reliability results: Behavioural Consistency

The reliability results for the 10 items in the Behavioural Consistency subscale are represented in Table 4.1. Excellent reliability was indicated as the scale achieved a Cronbach alpha of .929. All items furthermore achieved a strong correlation to the overall test score, as the item-total correlation for all items were above the satisfactory cut-off value of .30. Therefore, there were no concerns regarding the quality of the items in this subscale.

**Table 4.1****Reliability and Item-Total statistics of the Behavioural Consistency subscale**

<b>Reliability Statistics</b>					
Cronbach's Alpha					
Based on					
Standardised					
	Cronbach's Alpha	Items	N of Items		
	.929	.929	10		

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
INT5	35.55	37.903	.774	.615	.920
INT14	35.75	38.457	.692	.605	.925
INT19	35.68	37.434	.788	.715	.919
INT24	35.65	38.955	.732	.611	.922
INT29	35.45	38.263	.842	.739	.916
INT34	35.59	38.027	.821	.758	.917
INT39	35.52	39.358	.803	.703	.919
INT44	35.41	41.846	.565	.463	.930
INT49	35.18	41.275	.641	.624	.926
INT54	35.17	41.524	.600	.540	.928

*4.3.1.2 Reliability results: Righteousness*

The reliability results for the 14 items in the Righteousness subscale are represented in Table 4.2. An excellent reliability coefficient of .963 was achieved. An inspection of the item-total correlation column indicates that all the correlations were above the .30 acceptable level (Pallant, 2010). All the items therefore achieved a strong correlation with the overall test score, as the item-total correlation. Hence, no items were deleted.

**Table 4.2****Reliability and Item-Total statistics of the Righteousness subscale**

<b>Reliability Statistics</b>					
Cronbach's Alpha					
Based on					
Standardised					
	Cronbach's Alpha	Items	N of Items		
	.963	.963	14		

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
INT1	51.01	90.129	.751	.608	.961
INT6	51.05	88.648	.842	.760	.959
INT10	51.11	89.358	.825	.731	.960
INT15	51.08	91.594	.683	.516	.963
INT20	51.25	88.757	.792	.668	.960
INT25	51.12	92.385	.656	.466	.963
INT30	51.27	91.109	.656	.502	.963
INT35	51.15	88.793	.867	.787	.959
INT40	51.13	88.955	.794	.689	.960
INT45	51.08	88.854	.884	.812	.958
INT50	51.08	88.580	.852	.775	.959
INT55	51.04	89.254	.876	.814	.959
INT59	51.15	89.061	.791	.678	.960
INT63	50.99	89.795	.826	.733	.960

**4.3.1.3 Reliability results: Frankness**

The 14 items in the Frankness dimension of Integrity indicated strong reliability. The Cronbach alpha was found to be excellent, reflecting a value of .956. All the items resulted in item-total correlation above .30, indicating the items to be good. The reliability and item-total results are presented in [Table 4.3](#).

**Table 4.3****Reliability and Item-Total statistics of the Frankness subscale**

<b>Reliability Statistics</b>					
Cronbach's Alpha					
Based on					
Standardised					
	Cronbach's Alpha	Items	N of Items		
	.956	.956	14		

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
INT2	52.18	82.085	.793	.705	.953
INT7	52.10	82.210	.809	.707	.952
INT11	51.94	83.770	.799	.730	.952
INT16	52.01	83.331	.787	.663	.953
INT21	52.04	81.873	.877	.840	.950
INT26	51.78	85.860	.788	.668	.953
INT31	52.01	82.791	.857	.797	.951
INT36	51.90	84.196	.827	.736	.952
INT41	51.69	89.215	.483	.467	.959
INT46	51.62	89.013	.588	.550	.957
INT51	51.90	84.340	.822	.735	.952
INT56	51.95	83.685	.822	.735	.952
INT60	52.01	83.784	.754	.645	.954
INT65	51.92	86.041	.687	.516	.955

*4.1.1.4 Reliability results: Credibility*

The Credibility subscale consists of 15 items. Strong reliability was indicated through an excellent Cronbach alpha value of .944. As indicated in

[Table 4.4](#), the items were good as the item-total correlations were all satisfactory, with the results being above .30.

**Table 4.4****Reliability and Item-Total statistics of the Credibility subscale**

Reliability Statistics		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.944	.946	15

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
INT3	54.95	100.260	.408	.344	.948
INT8	54.67	93.826	.767	.756	.939
INT12	54.61	94.375	.805	.804	.938
INT17	54.72	94.038	.800	.788	.938
INT22	54.54	94.839	.762	.652	.939
INT27	54.47	99.854	.471	.302	.946
INT32	54.67	92.890	.781	.686	.938
INT37	54.70	94.922	.810	.718	.938
INT42	54.70	94.210	.830	.754	.937
INT47	54.65	95.186	.798	.704	.938
INT52	54.61	93.973	.865	.807	.937
INT57	54.61	96.195	.703	.532	.940
INT61	54.34	97.922	.677	.531	.941
INT64	55.06	99.895	.408	.329	.948
INT66	54.67	94.755	.838	.725	.937

*4.3.1.5 Reliability results: Fairness*

The Fairness subscale consists of 13 items. The Cronbach's alpha result of .955 was excellent and indicated strong reliability. Table 4.5, below, further indicates satisfactory

item-total correlations as all items achieved above .30. No items were therefore flagged as problematic.

**Table 4.5**

***Reliability and Item-Total statistics of the Fairness subscale***

Reliability Statistics		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.955	.956	13

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
INT4	46.16	83.908	.755	.609	.952
INT9	46.08	84.353	.815	.694	.950
INT13	46.38	83.338	.746	.644	.952
INT18	46.24	83.379	.814	.722	.950
INT23	46.40	82.730	.817	.747	.950
INT28	45.89	85.406	.765	.677	.952
INT33	46.41	82.754	.743	.610	.953
INT38	46.30	82.823	.804	.671	.951
INT43	46.05	90.587	.462	.292	.959
INT48	46.06	84.838	.807	.690	.951
INT53	46.11	84.649	.851	.772	.950
INT58	46.21	82.858	.841	.742	.950
INT62	45.95	85.005	.806	.737	.951

#### 4.3.2 Reliability analysis of the Servant Leadership Behavioural Scale (SLBS)

The SLBS consists of 35 items reflecting the six described domains of Servant Leadership. The six domains are reflected by six subscales, namely Voluntary Subordination, Authentic Self, Covenantal Relationship, Responsible Morality,

Transcendental Spirituality and Transforming Influence. Each subscale was subjected to item analysis.

#### 4.3.2.1 Reliability results: Voluntary Subordination

Table 4.6 represents the reliability results for the subscale of Voluntary Subordination. The Cronbach alpha for the 7-item subscale was found to be .928. This indicates excellent reliability. All items furthermore presented an item-total correlation above the recommended cut-off value of .30, resulting in no items being flagged as problematic.

**Table 4.6**

***Reliability and Item-Total statistics of the Voluntary Subordination subscale***

Reliability Statistics		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.928	.928	7

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
C1	23.54	22.522	.768	.618	.918
C7	23.44	22.830	.755	.591	.919
C13	23.30	23.722	.709	.518	.923
C19	23.17	23.263	.730	.555	.921
C25	23.39	22.276	.831	.701	.912
C30	23.33	21.885	.798	.659	.915
C34	23.24	22.555	.818	.686	.913

#### 4.3.2.2 Reliability results: Authentic Self

The Authentic Self subscale consists of six items. The Cronbach alpha result of .906 was excellent and indicated strong reliability. Table 4.7 below further indicates satisfactory item-total correlations as all items achieved above .30. No items were therefore flagged as problematic.

**Table 4.7****Reliability and Item-Total statistics of the Authentic Self subscale**

Reliability Statistics		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.906	.906	6

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
C2	19.34	15.829	.786	.636	.882
C8	19.18	16.965	.721	.528	.892
C14	19.12	16.971	.750	.568	.888
C20	19.11	16.895	.714	.525	.893
C26	18.91	18.003	.672	.470	.899
C31	19.19	15.828	.805	.650	.879

*4.3.2.3 Reliability results: Covenantal Relationship*

As illustrated by Table 4.8 below, the Covenantal Relationship dimension of Servant Leadership, as assessed by the SLBS, resulted in an excellent Cronbach alpha value of .933. All the items furthermore resulted in satisfactory item-total correlation, achieving above the .30 cut-off value. Therefore, no items were deleted.

**Table 4.8****Reliability and Item-Total statistics of the Covenantal Relationship subscale**

Reliability Statistics		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.933	.934	6



**Table 4.8 (Continued)**

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
C3	19.67	17.394	.773	.613	.925
C9	19.65	16.531	.828	.701	.918
C15	19.71	16.551	.827	.700	.918
C21	19.65	16.604	.814	.672	.919
C27	19.82	16.284	.778	.621	.925
C32	19.73	16.271	.805	.653	.921

#### 4.3.2.4 Reliability results: Responsible Morality

The Responsible Morality subscale consists of five items. Excellent reliability was indicated through a Cronbach alpha value of .928. As indicated in Table 4.9, there was no need to delete items, as the item-total correlations were all satisfactory, with the results being above .30.

**Table 4.9**

#### **Reliability and Item-Total statistics of the Responsible Morality subscale**

<b>Reliability Statistics</b>		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.928	.929	5

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
C5	15.36	10.770	.801	.650	.913
C11	15.39	10.196	.776	.612	.918
C17	15.39	10.866	.806	.662	.913
C23	15.54	10.019	.831	.721	.907
C28	15.54	10.083	.845	.731	.904

#### 4.3.2.5 Reliability results: Transcendental Spirituality

The Transcendental Spirituality subscale of Servant Leadership consists of four items and resulted in a good (Nunnally, 1978) Cronbach alpha of .879. As can be seen in Table 4.10 the item-total correlations for all the items were satisfactory in being above .30, therefore no items were deleted.

**Table 4.10**

***Reliability and Item-Total statistics of the Transcendental Spirituality subscale***

Reliability Statistics		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.879	.879	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
C4	11.36	6.821	.672	.477	.869
C10	11.30	5.990	.748	.605	.841
C16	11.46	6.163	.755	.576	.838
C22	11.42	5.978	.781	.633	.827

#### 4.3.2.6 Reliability results: Transforming Influence

The Transforming Influence subscale consists of seven items and resulted in an excellent Cronbach alpha of .948. As can be seen in Table 4.11, based on the item-total correlations, no items were presented as problematic as all were regarded as satisfactory, representing values above .30.

**Table 4.11*****Reliability and Item-Total statistics of the Transforming Influence subscale***

<b>Reliability Statistics</b>					
Cronbach's Alpha					
Based on					
Standardised					
	Cronbach's Alpha	Items	N of Items		
	.948	.948	7		

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
C6	23.00	28.522	.733	.555	.948
C12	23.04	26.401	.832	.709	.940
C18	23.18	26.095	.848	.731	.938
C24	23.06	27.209	.778	.630	.944
C29	23.15	25.728	.873	.770	.936
C33	23.13	26.470	.874	.785	.936
C35	23.06	26.328	.842	.739	.939

**4.3.3 Reliability analysis of Leader Trust Scale (LTS)**

The LTS consists of 13 items without subscales. Item analysis was conducted on the items comprising the LTS as seen below in Table 4.12, whereby an excellent Cronbach alpha of 0.979 was found. All the items furthermore obtained strong item-total correlations above .30. Therefore, no items were flagged as problematic.

**Table 4.12****Reliability and Item-Total statistics of the Leader Trust Scale**

<b>Reliability Statistics</b>					
Cronbach's Alpha					
Based on					
Standardised					
	Cronbach's Alpha	Items	N of Items		
	.979	.979	13		

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
D1	60.31	159.379	.827	.714	.978
D2	60.57	155.563	.825	.726	.979
D3	60.35	158.257	.849	.780	.978
D4	60.46	154.040	.905	.842	.977
D5	60.31	156.236	.868	.813	.978
D6	60.41	154.243	.917	.855	.977
D7	60.47	154.207	.869	.797	.978
D8	60.41	154.696	.895	.833	.977
D9	60.38	156.710	.901	.834	.977
D10	60.45	155.133	.877	.787	.977
D11	60.52	155.229	.856	.781	.978
D12	60.53	153.358	.903	.845	.977
D13	60.51	153.308	.900	.838	.977

## 4.3.4 Reliability analysis of the Ethical Climate Questionnaire (ECQ)

The ECQ consists of 19 items reflecting the four described domains of Ethical Climates. The four domains are reflected by four subscales, namely Caring, Law and Code, Rules, and Independence. Item analysis was performed on each subscale.

#### 4.3.4.1 Reliability results: Caring

The 7-item Caring subscale of the ECQ resulted in a good Cronbach alpha value of .879. All items furthermore presented satisfactory item-total correlations above .30, as seen in Table 4.13. Hence, no items were flagged as poor.

**Table 4.13**  
**Reliability and Item-Total statistics of the Caring subscale**

<b>Reliability Statistics</b>					
Cronbach's Alpha					
Based on					
Standardised					
Cronbach's Alpha	Items	N of Items			
.879	.875	7			

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ETHC1	27.99	28.816	.813	.811	.841
ETHC2	27.99	28.837	.811	.838	.841
ETHC3	28.23	29.319	.778	.740	.846
ETHC4	28.25	29.005	.694	.517	.859
ETHC5	27.28	36.370	.439	.294	.886
ETHC6	27.88	31.036	.628	.451	.867
ETHC7	27.35	35.628	.484	.384	.882

#### 4.3.4.2 Reliability results: Law and Code

The Law and Code subscale consists of four items and resulted in a Cronbach's alpha value of .889. This falls in the good range of above .80 (Pallant, 2010). Item-total correlations further reflect all items as showing strong correlations with the overall test score as they were above .30, as can be seen in Table 4.14. Therefore, no items were flagged as poor.

**Table 4.14****Reliability and Item-Total statistics of the Law and Code subscale**

<b>Reliability Statistics</b>		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.889	.893	4

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ETHC8	15.10	8.249	.801	.646	.845
ETHC9	15.28	7.700	.766	.601	.853
ETHC10	15.19	7.934	.762	.589	.855
ETHC11	15.39	7.484	.715	.515	.877

*4.3.4.3 Reliability results: Rules*

The Rules subscale consists of four items and resulted in a Cronbach alpha value of .845. This falls in the good range. Item-total correlations further indicate that all items reflect strong correlations with the overall test score as all were above .30, as can be seen in Table 4.15. Therefore, no items were flagged as problematic.

**Table 4.15****Reliability and Item-Total statistics of the Rules subscale**

<b>Reliability Statistics</b>		
Cronbach's Alpha		
Based on		
Standardised		
Cronbach's Alpha	Items	N of Items
.845	.856	4

**Table 4.15 (Continued)**

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ETHC12	14.21	9.714	.707	.631	.806
ETHC13	14.30	8.916	.677	.621	.805
ETHC14	14.94	7.295	.696	.547	.808
ETHC15	14.85	8.164	.704	.544	.793

#### 4.3.4.4 Reliability results: Independence

The 4-item Independence subscale resulted in an excellent Cronbach alpha of .908. All items further indicated strong item-total correlations of above .30, as seen in Table 4.16. No problematic items were identified.

**Table 4.16**

#### **Reliability and Item-Total statistics of the Independence subscale**

<b>Reliability Statistics</b>		
Cronbach's Alpha Based on Standardised		
Cronbach's Alpha	Items	N of Items
.908	.908	4

<b>Item-Total Statistics</b>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ETHC16	12.20	15.631	.731	.537	.902
ETHC17	12.49	13.611	.806	.662	.877
ETHC18	12.59	13.430	.833	.701	.866
ETHC19	12.40	14.507	.806	.652	.876

#### 4.3.5 Summary of the item analysis results

Deduced from the above, the item analyses conducted on the respective scales and subscales indicated strong item reliability and quality, as all the Cronbach alpha values exceeded the satisfactory cut-off value of .70. Furthermore, all the items presented high item-total correlations exceeding the .30 cut-off score. Because of this, no poor items were deleted following the item analyses process. It is therefore evident that each of the scales and subscales used had acceptable internal consistency coefficients and were therefore reliable.

These results are summarised and detailed below in Table 4.17.

**Table 4.17**  
**Summary of the results of item analyses**

Scale	Mean	Std deviation	Cronbach's alpha	Number of items deleted	Number of items retained
EIT: Behavioural Consistency	39.44	6.939	.929	0	10
EIT: Righteousness	55.04	10.183	.963	0	14
EIT: Frankness	55.93	9.880	.956	0	14
EIT: Credibility	58.57	10.467	.944	0	15
EIT: Fairness	50.02	9.931	.955	0	13
SLBS: Voluntary Subordination	27.24	5.528	.928	0	7
SLBS: Authentic Self	22.97	4.865	.906	0	6
SLBS: Covenantal Relationship	23.65	4.858	.933	0	6
SLBS: Responsible Morality	19.31	3.993	.928	0	5
SLBS: Transcendental Spirituality	15.18	3.265	.879	0	4
SLBS: Transforming Influence	26.94	6.000	.948	0	7
LTS: Trust in leaders	65.47	13.494	.979	0	13



**Table 4.17 (Continued)**

ECQ: Caring	32.50	6.461	.879	0	7
ECQ: Law and Code	20.32	3.666	.889	0	4
ECQ: Rules	19.43	3.795	.845	0	4
ECQ: Independence	16.56	4.966	.908	0	4

#### 4.4 Evaluating the measurement models

In order to test the fit between the obtained data and the theorised measurement models, the measurement models in this study were subjected to Confirmatory Factor Analysis (CFA). CFA is a statistical technique used to verify construct validity or the factor structure of a set of variables (Theron, 2013). LISREL 8.80 was used in this study to perform the CFA and was conducted on all the scales and subscales of the respective measurements.

In terms of its process, CFA allows for the testing of hypothesised relationships between observed variables and their underlying latent constructs (Theron, 2013).

CFA is used to investigate the “the goodness-of-fit” between the measurement models and the obtained data, by means of testing the hypotheses of exact fit ( $H_{01}$ : RMSEA = 0) and close fit ( $H_{02}$ :  $RMSEA \leq 0.05$ ). CFA therefore illustrates which variables load onto which factor.

In terms of interpreting the results of the CFA, the initial index of Root Mean Square Error of Approximation (RMSEA) was first examined to illustrate whether the model fit was acceptable. RMSEA is an index which ranges from 0 to 1 and examines the discrepancies between the hypothesised model and the population covariance matrix. The smaller the RMSEA value the better the model fit, whereby a good fit is indicated by an RMSEA of  $< 0.05$ , while values between .05 and .08 indicate reasonable model fit and those above .80 indicate poor model fit (Diamantopoulos & Siguaw, 2000).

Together with the measurements of good fit, the factor loadings on the latent variables were measured via the LAMBDA-X matrices. Sufficient item loading on the latent variable in this regard is indicated by obtaining values above 0.50.

The process of further evaluating the models proceeded through different steps depending on the initial good or poor fit results. If found poor, modification indices were examined to explore possibilities of improving the model fit.

#### 4.4.1 Evaluating the Measurement Model Fit of the EIT

The EIT was used to measure the five dimensions of Integrity. The five dimensions were included in the CFA.

The results of the initial goodness of fit index, the RMSEA (0.0669), indicated that the EIT measurement model showed acceptable fit with the data.

An overall examination of the fit indices also indicated that the EIT measurement model had obtained reasonably good fit. This is illustrated in Table 4.22 and explained briefly below.

The  $\chi^2/df$  value of 2.245 fell between the desired ranges of 2 to 5, suggesting a good model fit was achieved. The p-value for Close Fit (0.000) did not indicate a close fit (< .05). Both the RMR value of 0.0379 (< 0.08), and Standardised RMR of 0.0476 (< 0.05) further indicated good fit. The Goodness-of-Fit Index value of 0.580, however, fell below the cut-off value of 0.90 for good fit. In the light of this, although the indices for absolute fit were generally achieved, it is said that the EIT measurement model only presented reasonable fit.

The incremental fit indices – Normed Fit Index (NFI) (0.978), Non-Normed Fit Index (NNFI) (0.987), Comparative Fit Index (CFI) (0.988), Incremental Fit Index (IFI) (0.988), and Relative Fit Index (RFI) (0.978) – indicated a good fit with the measurement model as all the indices were above 0.95.

The majority of the fit indices therefore support the premise that the overall measurement model provided an acceptable explanation for the observed covariance matrix.

The values illustrated in the Completely Standardised LAMBDA-X matrix below represent the regression slopes of the regression of the standardised indicator variables on the standardised latent variable. All the items except INT 3 (0.442) and INT 64 (0.447) loaded satisfactorily above 0.50 according to the matrix. However, the

unstandardised LAMBDA-X matrix indicated that all the items significantly ( $t > 1.96$ ) represented the dimensions they meant to reflect.

**Table 4.18**

***Completely standardised LAMBDA-X matrix for the EIT***

LAMBDA-X					
EIT Items	Behavioural Consistency	Credibility	Fairness	Frankness	Righteousness
INT 1	--	--	--	--	0.743
INT 2	--	--	--	0.817	--
INT 3	--	0.442	--	--	--
INT 4	--	--	0.769	--	--
INT 5	0.821	--	--	--	--
INT 6	--	--	--	--	0.855
INT 7	--	--	--	0.817	--
INT 8	--	0.785	--	--	--
INT 9	--	--	0.831	--	--
INT 10	--	--	--	--	0.829
INT 11	--	--	--	0.826	--
INT 12	--	0.821	--	--	--
INT 13	--	--	0.750	--	--
INT 14	0.739	--	--	--	--
INT 15	--	--	--	--	0.693
INT 16	--	--	--	0.798	--
INT 17	--	0.829	--	--	--
INT 18	--	--	0.841	--	--
INT 19	0.842	--	--	--	--
INT 20	--	--	--	--	0.797

Table 4.18 (Continued)					
INT 21	--	--	--	0.901	--
INT 22	--	0.801	--	--	--
INT 23	--	--	0.827	--	--
INT 24	0.777	--	--	--	--
INT 25	--	--	--	--	0.688
INT 26	--	--	--	0.802	--
INT 27	--	0.516	--	--	--
INT 28	--	--	0.768	--	--
INT 29	0.876	--	--	--	--
INT 30	--	--	--	--	0.698
INT 31	--	--	--	0.887	--
INT 32	--	0.793	--	--	--
INT 33	--	--	0.750	--	--
INT 34	0.876	--	--	--	--
INT 35	--	--	--	--	0.906
INT 36	--	--	--	0.853	--
INT 37	--	0.826	--	--	--
INT 38	--	--	0.816	--	--
INT 39	0.836	--	--	--	--
INT 40	--	--	--	--	0.813
INT 41	--	--	--	0.499	--
INT 42	--	0.856	--	--	--
INT 43	--	--	0.541	--	--
INT 44	0.560	--	--	--	--
INT 45	--	--	--	--	0.880
INT 46	--	--	--	0.588	--

<b>Table 4.18 (Continued)</b>					
INT 47	--	0.828	--	--	--
INT 48	--	--	0.853	--	--
INT 49	0.626	--	--	--	--
INT 50	--	--	--	--	0.882
INT 51	--	--	--	0.842	--
INT 52	--	0.882	--	--	--
INT 53	--	--	0.879	--	--
INT 54	0.607	--	--	--	--
INT 55	--	--	--	--	0.883
INT 56	--	--	--	0.849	--
INT 57	--	0.754	--	--	--
INT 58	--	--	0.842	--	--
INT 59	--	--	--	--	0.825
INT 60	--	--	--	0.799	--
INT 61	--	0.714	--	--	--
INT 62	--	--	0.833	--	--
INT 63	--	--	--	--	0.838
INT 64	--	0.447	--	--	--
INT 65	--	--	--	0.714	--
INT 66	--	0.844	--	--	--

#### 4.4.2 Evaluation of the Measurement model of the SLBS

The Servant Leadership Behavioural Scale and all six of its dimensions were subjected to CFA in order to evaluate the fit of the measurement model.

In terms of the RMSEA (0.0608), the SLBS measurement model appeared to obtain acceptable fit.

In terms of the absolute fit indices illustrated in Table 4.22, the measurement model of the SLBS indicated reasonable fit. The p-value for Close Fit (0.000367) fell below the close fit criterion (< 0.05). Therefore, the  $H_0$  for close fit can be rejected, indicating that the measurement model did not obtain close fit. The  $\chi^2/df$  value of 2.208 fell within the desired range, as did the RMR of 0.0317 (< 0.08) and the Standardised RMR of 0.0356 (< 0.05). The GFI of 0.725 (< 0.90) missed the cut-off value of good fit. Therefore, the overall absolute fit indices indicated a reasonable fit.

The incremental fit indices (NFI, NNFI, CFI, IFI and RFI) were all above 0.95, representing good fit. Therefore, the overall fit indices demonstrated that the measurement model provided an acceptable explanation for the observed covariance matrix, reflecting a reasonable fit with the data.

In terms of the factor loadings, the LAMBDA-X matrix illustrated below reflects that all items in the SLBS loaded substantially and significantly on the corresponding sub-dimension. Therefore, no items were removed as all the items measured the dimensions of servant leadership sufficiently.

**Table 4.19**  
**Completely standardised LAMBDA-X matrix for the SLBS**

LAMBDA-X						
SLBS Items	Voluntary Subordination	Authentic Self	Covenantal Relationship	Transcendental Spirituality	Responsible Morality	Transforming Influence
C 1	0.816	--	--	--	--	--
C 2	--	0.795	--	--	--	--
C 3	--	--	0.797	--	--	--
C 4	--	--	--	0.723	--	--
C 5	--	--	--	--	0.816	--
C 6	--	--	--	--	--	0.779
C 7	0.791	--	--	--	--	--
C 8	--	0.763	--	--	--	--

Table 4.19 (Continued)						
C 9	--	--	0.844	--	--	--
C 10	--	--	--	0.841	--	--
C 11	--	--	--	--	0.859	--
C 12	--	--	--	--	--	0.859
C 13	0.742	--	--	--	--	--
C 14	--	0.824	--	--	--	--
C 15	--	--	0.853	--	--	--
C 16	--	--	--	0.801	--	--
C 17	--	--	--	--	0.825	--
C 18	--	--	--	--	--	0.861
C 19	0.769	--	--	--	--	--
C 20	--	0.722	--	--	--	--
C 21	--	--	0.812	--	--	--
C 22	--	--	--	0.857	--	--
C 23	--	--	--	--	0.860	--
C 24	--	--	--	--	--	0.804
C 25	0.863	--	--	--	--	--
C 26	--	0.756	--	--	--	--
C 27	--	--	0.837	--	--	--
C 28	--	--	--	--	0.901	--
C 29	--	--	--	--	--	0.887
C 30	0.830	--	--	--	--	--
C 31	--	0.869	--	--	--	--
C 32	--	--	0.844	--	--	--
C 33	--	--	--	--	--	0.890
C 34	0.853	--	--	--	--	--

C 35	--	--	--	--	--	0.869
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#### 4.4.3 Evaluation of the Measurement model of the LTS

The Leader Trust Scale, designed as a unidimensional scale, was subjected to CFA. In order to evaluate the fit of the measurement model, CFA was conducted on the model with all items loading on the one factor of trust in leaders.

The initial measurement model showed reasonable fit (RMSEA = 0.0562).

The absolute fit indices of the LTS are illustrated in Table 4.22. The  $\chi^2/df$  value of 1.879 fell outside the desired range of good fit. The p-value for Close Fit (0.240) indicated good fit ( $> 0.05$ ), as did the RMR of 0.0305 ( $< 0.08$ ), and the Standardised RMR of 0.0231 ( $< 0.05$ ). However, the GFI of 0.875 ( $< 0.90$ ) missed the cut-off value of good fit. Overall, the absolute fit indices were acceptable.

All the incremental fit indices were above 0.95, representing good fit. The overall measurement model therefore provides a reasonable explanation of the observed covariance matrix.

In terms of the Completely Standardised LAMBDA-X matrix below, all the items loaded satisfactorily above 0.50. The unstandardised LAMBDA-X matrix indicated that all the items significantly represented the dimensions they meant to reflect.

**Table 4.20**

***Completely standardised LAMBDA-X matrix for the LTS***

LAMBDA-X	
LTS Items	
D1	0.819
D2	0.819
D3	0.849
D4	0.906
D5	0.874
D6	0.916
D7	0.884
D8	0.901
D9	0.900
D10	0.890
D11	0.862



D12	0.914
D13	0.910

#### 4.4.4 Evaluation of the Measurement model of the ECQ

The Ethical Climate Questionnaire with all four its dimensions were submitted to CFA to evaluate measurement model fit. The initial index indicated a poor measurement model fit with the data (RMSEA = 0.0986).

An investigation into the LAMBDA-X matrices indicated problematic items (ETHC5, ETHC7 and ETHC14) which were loading on more than one sub-dimension simultaneously. This indicated low discriminant validity on the items and thus their removal was required. After deleting the three items, improved fit for the measurement model was found, whereby RMSEA marginally missed the 0.05 cut-off for good fit but achieved satisfactory fit (RMSEA = 0.0557) (see Table 4.22).

The  $\chi^2/df$  value of 1.860, the RMR of 0.129 (> 0.08) and the Standardised RMR of 0.0839 (> 0.05) fell outside the desired ranges. The p-value for Close Fit (0.221) indicated close fit (> 0.05). The GFI of 0.882 (< 0.90) marginally missed the cut-off value of good fit. Thus, overall the absolute fit indices were acceptable.

The incremental fit indices (NFI, NNFI, CFI, IFI and RFI) were all above 0.95, representing good fit. The overall fit indices therefore demonstrated that the measurement model provided an acceptable explanation for the observed covariance matrix, reflecting reasonable fit with the data.

According to the unstandardised LAMBDA-X matrix, all of the indicator variables of the revised ECQ loaded significantly on the corresponding sub-dimensions with t-values  $\geq |1.96|$ . Therefore, no further items were removed.

**Table 4.21**

***Completely standardised LAMBDA-X matrix for the revised ECQ***

LAMBDA-X				
ECQ Items	Caring	Law and Code	Rules	Responsible Independence
ETHC1	0.919	--	--	--
ETHC2	0.935	--	--	--
ETHC3	0.888	--	--	--
ETHC4	0.702	--	--	--
ETHC6	0.601	--	--	--
ETHC8	--	0.861	--	--

ETHC9	--	0.860	--	--
ETHC10	--	0.855	--	--
ETHC11	--	0.787	--	--
ETHC12	--	--	0.928	--
ETHC13	--	--	0.861	--
ETHC15	--	--	0.603	--
ETHC16	--	--	--	0.791
ETHC17	--	--	--	0.864
ETHC18	--	--	--	0.908
ETHC19	--	--	--	0.865

**Table 4.22***Fit indices for the measurement models for the four measurement scales*

Indices	EIT	SLBS	LTS	ECQ
<b>Absolute Fit measures</b>				
Satorra-Bentler Scaled Chi-Square	4645.360 (p < 0.05)	1105.078 (p < 0.05)	122.157 (p < 0.05)	182.384 (p < 0.05)
Degrees of Freedom (df)	2069	545	65	98
$\chi^2/df$	2.245	2.208	1.879	1.861
Root Mean Square Error of Approximation (RMSEA)	0.0669	0.0608	0.0562	0.0557
P-Value for Test of Close Fit (RMSEA < 0.05)	0.000	0.000367	0.240	0.221
Root Mean Square Residual (RMR)	0.0379	0.0317	0.0305	0.129
Standardised RMR	0.0476	0.0356	0.0231	0.0839
Goodness-of-Fit Index (GFI)	0.580	0.725	0.875	0.882
<b>Incremental Fit Measures</b>				
Normed Fit Index (NFI)	0.978	0.985	0.991	0.976
Non-Normed Fit Index (NNFI)	0.987	0.992	0.995	0.986
Comparative Fit Index (CFI)	0.988	0.992	0.996	0.989
Incremental Fit Index (IFI)	0.988	0.992	0.996	0.989

Relative Fit Index (RFI)	0.978	0.984	0.989	0.971
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#### 4.5 Fitting the overall Measurement Model

The overall measurement model was fitted using robust maximum likelihood estimation and item parcelling. Random parcelling was used for the LTS, and the subscales were used as parcels for the EIT, SLBS and the ECQ.

While the RMSEA for reasonable fit was not met because it marginally missed the stringent RMSEA cut-off value of 0.08 applied thus far in this study (Diamantopoulos & Siguaw, 2000), a RMSEA 0.0826 can still be regarded as mediocre fit according to the cut-off standard set by MacCallum, Browne and Sugawara (1996).

The Satorra-Bentler Scaled Chi-Square of 327.332 ( $p < 0.01$ ), indicated a rejection of the null hypothesis of exact fit ( $H_{08}$ : RMSEA = 0). The  $\chi^2/df$  ratio, calculated by dividing the Satorra-Bentler Scaled Chi-Square with the degrees of freedom, resulted in a ratio of 2.8967, which fell within the desired range of 2 to 5 for good fit.

The p-value for Close fit (0.000) indicated the close model fit had not been achieved. This suggested the rejection of the null hypothesis of close fit ( $H_{09}$ : RMSEA < 0.05).

The RMR of the overall measurement model was found to be 0.0307. Values below 0.05 indicate a good fit (Kelloway, 1998). The standardised RMR of 0.0312 further indicated good fit. The GFI value of 0.842 for the measurement model fell marginally below the value for good fit.

The incremental fit indices; NFI (0.982), NNFI (.986), CFI (.988), IFI (.988) and RFI (.978); were all above the good fit cut-off value of .95. Thus, the overall measurement model achieved good incremental fit with the data.

Deduced from the above, and with the philosophy that the indices should be viewed as a collective in a mind, from a basket of evidence perspective (Theron, 2013), an examination of the overall goodness-of-fit indices suggests a reasonable model fit with the data. This is illustrated in Table 4.23 below.

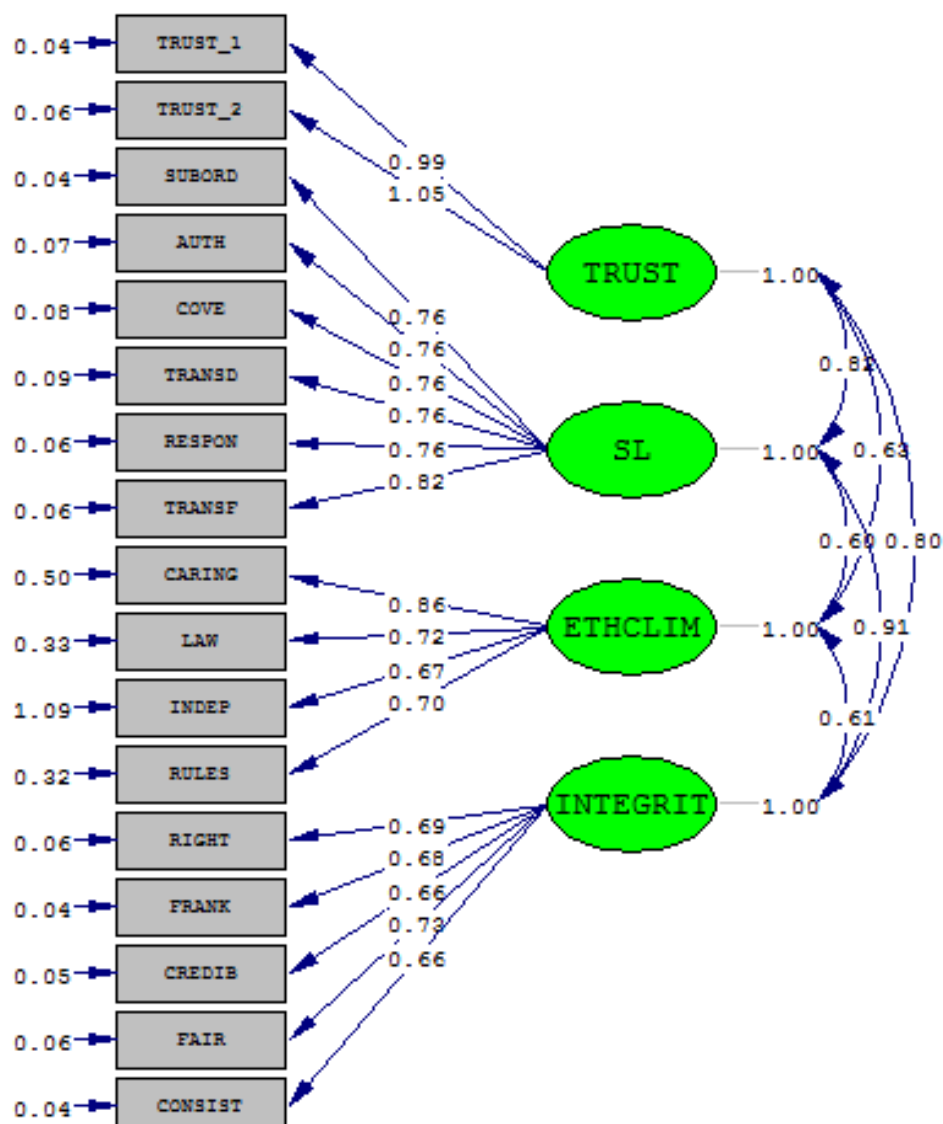
The overall refined measurement model path diagram is illustrated by. This graphically illustrates that all scale and subscale parcels utilised in this study appear to load significantly on their respective latent variables.

**Table 4.23:**

***Fit statistics for the revised overall Measurement Model***

<b>Indices</b>	
<b>Absolute Fit measures</b>	
Satorra-Bentler Scaled Chi-Square	327.332 (p<0.05)
Degrees of Freedom (df)	113
$\chi^2/df$	2.8967
Root Mean Square Error of Approximation (RMSEA)	0.0826
P-Value for Test of Close Fit (RMSEA < 0.05)	0.000
Root Mean Square Residual (RMR)	0.0307
Standardised RMR	0.0312
Goodness of Fit Index (GFI)	0.842
<b>Incremental Fit Measures</b>	
Normed Fit Index (NFI)	0.982
Non-Normed Fit Index (NNFI)	0.986
Comparative Fit Index (CFI)	0.988
Incremental Fit Index (IFI)	0.988
Relative Fit Index (RFI)	0.978

Figure 4.1: Path diagram for the overall refined measurement model



Chi-Square=327.33, df=113, P-value=0.00000, RMSEA=0.083

#### 4.6 The structural model fit

Jöreskog and Sörbom (1996, p. 171) describe the overall model as a “combination of a structural equation system among latent variables  $\eta$ 's and  $\xi$ 's and measurement models for observed  $y$ 's and  $x$ 's where all variables, observed and latent, are assumed measured in deviations from their means”. The structural model thus presents the relationships between the described latent variables, as well as an indication of the unexplained variance. In examining the structural model, relationships between the exogenous and endogenous variables are of specific focus, with the purpose being to obtain a fit between the hypothesised relationships and said data.

The fit statistics of the structural model is illustrated in Table 4.24 below.

The RMSEA value of this structural model resulted in 0.0829, marginally missing the reasonable fit criterion according to Diamantopoulos and Siguaaw (2000), but reached the more lenient cut-off value for mediocre fit according to MacCallum et al. (1996). Despite the p-value for Close fit ( $p = 0.000$ ) indicating the rejection of the null hypothesis of close fit ( $H_{02}: RMSEA < 0.05$ ), taking the RMSEA and other fit indices into account the model still presented reasonable overall fit.

The Satorra-Bentler Scaled Chi-Square of 331.692 ( $p < 0.01$ ), indicated a rejection of the null hypothesis of exact fit ( $H_{01}: RMSEA = 0$ ). The  $\chi^2/df$  ratio of 2.9096 fell within the desired good fit range of 2 to 5.

The RMR of the structural model was found to be 0.0318. Values below 0.05 indicate good fit (Kelloway, 1998). The standardised RMR of 0.0329 further indicated good fit. The GFI value of 0.841 for the structural model fell marginally below the criterion for good fit.

The incremental fit indices – NFI (.982), NNFI (.985), CFI (.988), IFI (.988) and RFI (.978) – were all above the good fit cut-off value of .95.

An overall analysis of the fit indices indicates a reasonable fit between the structural model and data. The path diagram, Figure 4.2, illustrates the structural model.

**Table 4.24*****Fit statistics for the structural model***

<b>Indices</b>	
<b>Absolute Fit measures</b>	
Satorra-Bentler Scaled Chi-Square	331.962 (p < 0.05)
Degrees of Freedom (df)	114
$\chi^2/df$	2.9096
Root Mean Square Error of Approximation (RMSEA)	0.0829
P-Value for Test of Close Fit (RMSEA < 0.05)	0.000
Root Mean Square Residual (RMR)	0.0318
Standardised RMR	0.0329
Goodness of Fit Index (GFI)	0.841
<b>Incremental Fit Measures</b>	
Normed Fit Index (NFI)	0.982
Non-Normed Fit Index (NNFI)	0.985
Comparative Fit Index (CFI)	0.988
Incremental Fit Index (IFI)	0.988
Relative Fit Index (RFI)	0.978

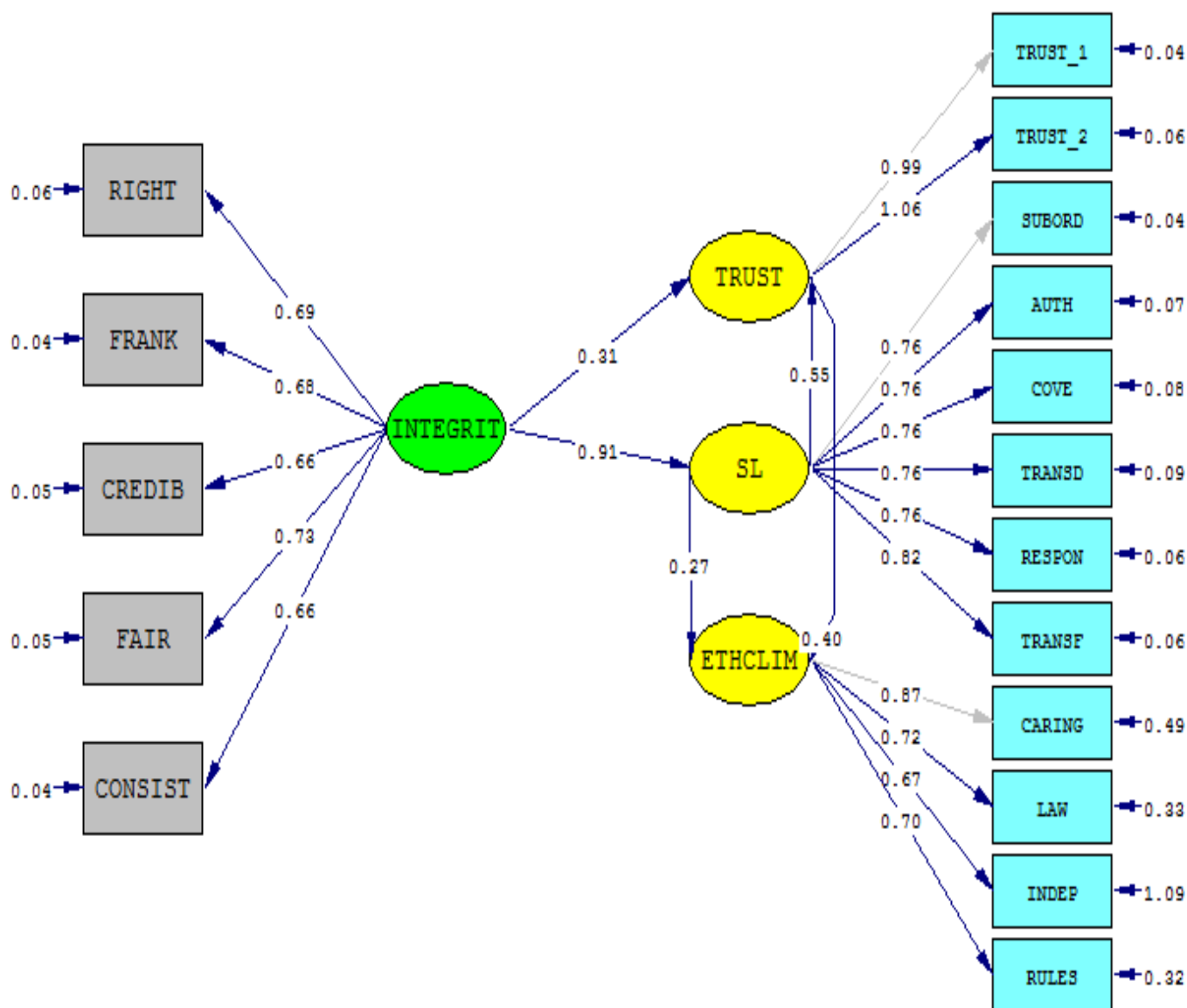


Figure 4.2: Path diagram for the refined structural model



#### 4.7 Relationships between the variables

Once a reasonable fit between the structural model and data was obtained, the hypothesised links between the latent variables needed to be examined. This necessitated an investigation into the described relationships between the endogenous and exogenous latent variables (Diamantopoulos & Siguaaw, 2000).

Three considerations or points of reference need to be addressed when assessing the dynamics of the relationships. The first is to confirm the direction of the hypothesised relationships. This is illustrated by investigating the parameter paths between the latent variables. The second is to comprehend the strength of the relationships, through an examination of the estimated parameter magnitudes. Thirdly, consideration is required to determine what amount of variance in the endogenous variable is explained by its linked latent variable. This is indicated by the squared multiple correlations ( $R^2$ ) (Diamantopoulos & Siguaaw, 2000).

**Table 4.25**

***Unstandardised GAMMA ( $\Gamma$ ) Matrix***

<b>GAMMA</b>	
	<b>Integrity</b>
<b>Trust in Leaders</b>	0.308 (0.098) <b>3.155</b>
<b>Servant Leadership</b>	0.906 (0.046) <b>19.494</b>
	--

Table 4.25 presents the unstandardised gamma matrix and hypothesis relating to the exogenous latent variables. Integrity is the only exogenous latent variable, the only hypotheses relevant to the gamma matrix are hypothesis 3 ( $H_{03}$ ), the relationship

between integrity and servant leadership, and hypothesis 4 (H<sub>04</sub>), the relationship between integrity and trust in leaders.

Table 4.26 presents the unstandardised beta ( $\beta$ ) matrix, which describes the relationships between the endogenous variables and reflects the slope of the regression in  $\eta_i$  and  $\eta_j$ . The unstandardised beta matrix is used to assess the hypothesised relationships between the endogenous variables in the structural model, as stated by hypothesis 5 (H<sub>05</sub>), hypothesis 6 (H<sub>06</sub>), and hypothesis 7 (H<sub>07</sub>). According to Diamantopoulos and Sigauw (2000), unstandardised  $\beta_{ij}$  estimates are also significant ( $p < 0.05$ ) if the t values are  $> |1.644|$ . A significant  $\beta$  estimate would result in the rejection of the relevant H<sub>0</sub>-hypothesis in favour of the relevant H<sub>a</sub>-hypothesis.

**Table 4.26**

***Unstandardised BETA (B) Matrix***

BETA		
	Trust in Leader	Servant Leadership
<b>Trust in Leaders</b>		0.545 (0.096) <b>5.702</b>
<b>Ethical Culture</b>	0.401 (0.098) <b>4.089</b>	0.273 (0.097) <b>2.823</b>

#### 4.7.1 The relationship between Integrity and Trust in Leaders

Deduced from the gamma matrix (Table 4.25) above, a significantly positive relationship was confirmed between Integrity ( $\xi_1$ ) and Trust in Leaders ( $\eta_2$ ), with the t value of  $3.155 > 1.644$ .

Therefore, hypothesis 4 (H<sub>04</sub>) is rejected in favour of H<sub>a4</sub>:  $\gamma_{21} > 0$ , as the proposed relationship between the two latent variable is supported.

#### 4.7.2 The relationship between Integrity and Servant Leadership

The gamma matrix further confirms a significantly positive relationship between Integrity ( $\xi_1$ ) and Servant Leadership ( $\eta_1$ ), with the t value of 19.494 > 1.644.

Therefore, hypothesis 3 ( $H_{03}$ ) was rejected in favour of  $H_{a3}$ :  $\gamma_{11} > 0$ , as the proposed relationship between the two latent variable was supported.

#### 4.7.3 The relationship between Servant Leadership on Trust in Leader

As reflected by the beta matrix (Table 4.26) the t value of 5.702 (> 1.644) indicated a significantly positive relationship between Servant leadership ( $\eta_1$ ) and Trust in Leaders ( $\eta_2$ ). The null hypothesis 5 ( $H_{05}$ :  $\beta_{21} = 0$ ) was therefore rejected in favour of the alternative hypothesis 5 ( $H_{a5}$ :  $\beta_{21} > 0$ ), which suggested support for the proposed relationship.

#### 4.7.4 The relationship Servant Leadership and Ethical Culture

As reflected by the beta matrix (Table 4.26) the t value of 2.823 (> 1.644) indicated a significant positive relationship between Servant leadership ( $\eta_1$ ) and Ethical Culture ( $\eta_3$ ). The null hypothesis 6 ( $H_{06}$ :  $\beta_{31} = 0$ ) was therefore rejected in favour of the alternative hypothesis 6 ( $H_{a6}$ :  $\beta_{31} > 0$ ) which suggests support for the proposed relationship.

#### 4.7.5 The relationship between Trust in Leaders and Ethical Culture

According to the beta matrix (Table 4.26), the t value of 4.089 (> 1.644) indicated a significant positive relationship between Trust in Leaders ( $\eta_2$ ) and Ethical Culture ( $\eta_3$ ). The null hypothesis 7 ( $H_{07}$ :  $\beta_{32} = 0$ ) was therefore rejected in favour of the alternative hypothesis 7 ( $H_{a7}$ :  $\beta_{32} > 0$ ), which suggested support for the proposed relationship.

### 4.8 Structural model modification indices

A final examination of the model is required to determine the existence of missed parameters. Modification indices (MI) are used in this regard to measure whether any improvement in the model fit would have been achieved if other path relationships had been included in the study. In terms of the process, misfit parameters in the model are identified by specification indices so as to determine the extent to which the structural model successfully explained the covariance among apparent variables.

MI would be indicated by the minimum decrease in the model's chi-square, once a previously fixed parameter is set free and the model is re-estimated (Jöreskog & Sörbom, 1993).

The LISREL outputs in this study indicated no large ( $> 6.64$ ) MI for the gamma or beta matrices, therefore, there are no additional paths to improve the structural model fit between the latent variables.

#### 4.9 Summary

The purpose of chapter 4 was to illustrate the results obtained from this study. The chapter commenced with an investigation and refinement of the measuring instruments used. The statistical outcome of the hypothesised relationships was also determined.

Chapter 4 therefore concludes by confirming positive relationships existed between Integrity and Trust in Leaders, Integrity and Servant Leadership, Servant Leadership and Trust in Leaders, Servant Leadership and Ethical Culture, as well as between Trust in Leaders and Ethical Culture.

Chapter 5 will formulate an in depth discussion of these results as well as recommendations for further research and managerial implications.

## Chapter 5

### Discussion of results, conclusion and recommendations for future research

#### 5.1 Introduction

After a detailed discussion of the constructs of integrity, servant leadership, trust in leaders and ethical culture in Chapter 2, Chapter 3 followed with an explanation of the techniques that were used to analyse the data and that produced the results. Chapter 4 provided a comprehensive description of the results obtained from the statistical analysis, as well as answers for the hypotheses formulated in Chapter 2 and that were discussed in Chapter 3.

This chapter now provides further discussion regarding these results, with specific reference to the significance of the results for business practitioners. The chapter includes conclusions, limitations and recommendations for further research as well as managerial implications that are worth considering. Chapter 5 will thus examine how to address the research question proposed in Chapter 1: How does servant leadership influence organisational ethical culture.

#### 5.2 Motivation for the study

Business ethics, specifically within the South African context, has had significant impact on the sustainability of modern organisations and therefore it is an issue, which needs to be addressed. The following research-initiating question was put forward in this study: Why does variance exist in the ethical culture of organisations, with specific reference to the role that integrity, servant leadership, and trust in leaders, play in this regard, and not excluding other potential organisational factors. The motivation for the study thus was derived from an attempt to better understand the relationship between integrity, servant leadership, trust in leaders and ethical culture, as well as to make further contributions to the existing body of research in this regard.

Notwithstanding the common acceptance of the core role that leadership play in setting the ethical tone of the workplace (Ncube & Wasburn, 2006), proportionately less is known about the ethical dimension of leadership in relation to other domains (Brown et al., 2005). Thus, the study further aimed to make progress in this regard and provide direction for further research.

From the results obtained in Chapter 4 of this study, support was found for the proposed relationships. This corroborated the theoretical arguments that servant leaders who exhibit characteristics of integrity and who were perceived as trustworthy will have a significantly positive effect on the ethical culture of an organisation.

### 5.3 Summary of the findings

Theoretical arguments were put forward in Chapter 2 in response to the research-initiating question that was posed in Chapter 1. This culminated in a theoretical model, as well as hypothesised relationships among the described concepts. Measurement scales were used to test the respective concepts and to validate the hypothesised relationships.

The research objective was therefore to ensure the construct validity and internal reliability of the utilised measurement scales. Item analysis (via SPSS) was conducted on the four measurement scales to ensure the quality and internal reliability of the items in each measure, as well as to identify poor items that were not representative of the described latent variable. Confirmatory Factor Analysis (CFA) was further used to determine the best match between the obtained data and the theorised measurement models.

Chapter 3 describes the statistical analysis process and Chapter 4 describes the results thereof.

#### 5.3.1 Reliability analysis conclusion and CFA

Using Cronbach's alpha, the reliability coefficients were determined to ensure that the respective items accurately reflected the latent variable they intended to measure (Henning et al., 2004). The acceptable minimum coefficient for Cronbach's alpha was set at 0.70 to prove the reliability of the scale (Kerlinger & Lee, 2000). Therefore, this was used as the standard for satisfactory reliability in this study, whereby scales below 0.70 were considered for exclusion from subsequent analyses. The "Corrected Item-Total Correlation" which indicated the correlation between the individual item score and the overall scale score was further examined. In this regard, values of less than 0.30 were to be considered for removal (Pallant, 2010).

In terms of the set guidelines, all the scales in this study reached the prescribed Cronbach's alpha as well as Corrected Item-Total Correlation cut-offs, indicating

satisfactory reliability and an accurate reflection of the latent variable they intended to measure.

In terms of interpreting the results of the CFA, the initial index of Root Mean Square Error of Approximation (RMSEA) was first examined to illustrate acceptable model fit. RMSEA is an index, which ranges from 0 to 1 and it examines the discrepancies between the hypothesised model and the population covariance matrix (Diamantopoulos & Siguaw, 2000). The result of this therefore indicates whether the model achieved an acceptable fit (RMSEA < 0.08). Together with the measurements of a good fit, the factor loadings on the latent variables were measured via the LAMBDA-X matrices. Sufficient item loading on the latent variable in this regard is indicated by obtaining values above 0.50.

Therefore, all measurement models were deemed reliable for measuring information on the stated hypotheses.

#### 5.4 Evaluation of the structural model

Once the construct validity and internal reliability had been confirmed for each measurement instrument, it was necessary to test the structural model fit. This provided insight into the nature of the relationships among the latent variables and the significance of the hypothesised paths. Structural equation modelling was used in this regard.

The research objective as stated previously, was to examine the relationships among integrity, servant leadership, trust in leaders and ethical culture.

The goodness-of-fit indices for the structural model are illustrated in Table 4.24. A comprehensive analysis of the respective fit indices indicates a reasonable fit between the structural model and obtained data.

The Satorra-Bentler Scaled Chi-Square ratio ( $\chi^2/df$ ) of 2.9096 suggested a good model fit, falling within the desired range (2 – 5). The RMSEA value of this structural model was 0.0829, which indicates a mediocre fit (MacCallum et al., 1996). The p-value for Close fit ( $p = 0.000$ ) indicates the rejection of the null hypothesis for close fit.

The RMR of the structural model was found to be 0.0318. Values below 0.08 indicate a good fit (Kelloway, 1998). The standardised RMR of 0.0329 further indicated a good fit (< 0.05). The GFI value of 0.841 for the structural model fell marginally below the criterion for a good fit.

The incremental fit indices NFI (0.982), NNFI (0.985), CFI (0.988), IFI (0.988) and RFI (0.978), were all above the good fit cut-off value of 0.95.

An overall analysis of the fit indices indicates a reasonable fit between the structural model and the data.

For a comprehensive evaluation of the structural model, it was also necessary to investigate the existence of missed paths, by evaluating the modification indices (MI). The MI evaluation suggested no existence of additional paths between any of the latent variables. This confirmed that the structural model was able to explain the covariance among apparent variables successfully.

Further analyses indicated that investigations into the theoretical linkages between the exogenous and endogenous variables were necessary. This is illustrated by the gamma and beta matrices. The following section refers to the interpretation of these results.

#### 5.4.1 Gamma matrix

The unstandardised gamma matrix represents the relationships between the exogenous and endogenous variables and it is used to assess the strength of the respective estimated path coefficients. This is illustrated in Table 4.25.

#### **The relationship between Integrity and Trust in Leader**

A statistically significant positive relationship was hypothesised between integrity ( $\xi_1$ ) and trust in leaders ( $\eta_2$ ). Deduced from the gamma matrix (Table 4.25), this relationship was confirmed by the SEM statistical analysis, represented by a t-value of 3.155 ( $>1.644$ ). As a significant path was found between the constructs, hypothesis 4 ( $H_{04}$ ) was rejected in favour of  $H_{a4}$ :  $\gamma_{21} > 0$ , as it supported the proposed relationship between the two latent variables.

The link between the two constructs is supported by literature – both theoretically (Simons, 2002) and empirically (Colquitt, et al., 2007), whereby leader integrity correlates strongly with follower trust. Leaders who display integrity, exhibit higher trustworthiness among followers (Simons et al., 2007). Once a leader is perceived by followers to be consistent, honest and fair– all described aspects of integrity – trust will occur (Morgan & Hunt, 1994).



The rationale behind this relationship is that behaviour which is consistent, highly predictable, exhibits a genuine concern for others, and is ethical in nature, instils trustworthiness. These factors therefore serve as buffers mitigating the perceived risks involved in followers by making themselves vulnerable to leaders or placing themselves in situations of uncertainty.

The Mayer et al. (1995) model of trust introduced previously in this study illustrates the nature of this proposed link between the two variables further. Although not used in the context of this leadership theory, integrity is described as a significant predictor of trust in a leader (Moorman & Grover, 2009).

The integrity of the leaders therefore plays a significant role in influencing the thought process of followers, and it is the basis upon which decisions are made and trust is formed, since a strong relationship between both variables was clearly illustrated (Engelbrecht & Cloete, 2000). The study supports previous research, illustrating a significant positive relationship. It can therefore be concluded that integrity of leaders positively affects trust in leaders.

### **The relationship between Integrity and Servant Leadership**

A statistically significant positive relationship was hypothesised between integrity ( $\xi_1$ ) and servant leadership ( $\eta_2$ ). By means of the SEM statistical analysis, illustrated by the gamma matrix (Table 4.25), this hypothesised relationship was supported by a t- value of 5.702 ( $>1.644$ ). As a significant path was found between the constructs, hypothesis 3 ( $H_{03}$ ) is rejected in favour of  $H_{a3}$ :  $\gamma_{11} > 0$ , as it supported the proposed relationship between the two latent variables.

The relationship between integrity and servant leadership is reflected in numerous servant leadership measurements (Mittal & Dorfman, 2012; Sendjaya et al., 2008; Wong & Page, 2003), where the two concepts run a seemingly parallel course. Integrity is therefore proposed to be a vital requirement for this style of leadership. Integrity has further shown to enhance a leader's ability to influence the behaviour of others towards desired organisational goals (Jacobs, 2004).

The relationship between the two concepts is explained by the strong emphasis servant leadership places on being true to oneself and one's own moral principles, open exchanges between leaders and followers, the ability of leaders to display genuine concern for others, as well as leaders' steadfastness not to compromise

ethical principles (Sendjaya & Pekerti, 2010). These are all characteristics which depend upon the integrity of a leader.

The positive significant relationship found between integrity and servant leadership in this study is corroborated by theoretical discussions arguing the reliance of integrity in displaying characteristics of servant leadership. It can therefore be concluded that integrity of leaders is a prerequisite for servant leaders.

#### 5.4.2 Beta matrix

The unstandardised beta ( $\beta$ ) matrix illustrated in Table 4.26, examined the hypothesised relationships between the endogenous variables in the structural model. The beta matrix reflects the slope of the regression of  $\eta_i$  and  $\eta_j$ .

#### **The relationship between Servant Leadership and Trust in Leaders**

A statistically significant positive relationship was hypothesised between servant leadership ( $\eta_1$ ) and trust in leaders ( $\eta_2$ ). Deduced from the beta matrix (Table 4.26), this relationship was confirmed by the SEM statistical analyses, represented by a t-value of 5.702 ( $>1.644$ ). As a significant path was found between the constructs, hypothesis 5 ( $H_{05}$ ) is rejected in favour of  $H_{a5}$ :  $\beta_{21} > 0$ , as it supported the proposed relationship between the two latent variables.

Trust is extremely important for the effective operation of teams, as a lack of trust will result in failed communication; ineffective delegation and empowerment; and reduced work quality (Owen, as cited by Erdem & Ozen, 2003). Leader effectiveness and the ability leaders have to influence their followers, is dependent on the degree to which they win their followers' trust (Burke et al., 2007). The adoption of servant leadership principles is argued to play a significant role in follower trust in leaders, as a focus on leader behaviours which promote empowerment, involvement, participation in decision making process, as well as a collective sharing process, have shown to enhance employees' trust (Erkutlu & Chafra, 2013).

Deduced from the above arguments as well as a positive significant relationship confirmed in this study, it could be concluded that servant leadership plays an important role in leader trust.

#### **The relationship between Servant Leadership and Ethical Culture**

A statistically significant positive relationship was hypothesised between servant leadership ( $\eta_1$ ) and ethical culture ( $\eta_3$ ). Deduced from the beta matrix (Table 4.26), this

relationship was confirmed by the SEM statistical analyses, represented by a t-value of 2.823 (>1.644). As a significant path was found between the constructs, hypothesis 6 ( $H_{06}$ ) was rejected in favour of  $H_{a6}$ :  $\beta_{31} > 0$ , as it supported the proposed relationship between the two latent variables.

The general relationship between leadership and ethics is widely accepted, as addressing ethical issues ultimately depends on the establishment of moral, ethical and competent leadership (Van Aswegen & Engelbrecht, 2009). Servant leadership as a value-laden style of leadership focuses on the ethical domain of leadership and therefore it is believed to have a positive impact on the ethical culture of organisations. Theoretical support for this is found in that servant leaderships' focus on addressing and satisfying the developmental needs and core values of followers, is argued to mobilize followers to become subservient themselves towards these organisational objectives.

The approach of influence argues that the adoption of ethical principles is created from a strategic positioning, with desired goals being achieved in a more sustainable, healthy and growth orientated manner. Servant leaderships' influence on ethics therefore relates rather closer to the cultural perspective than to the compliance-based approach (Sendjaya & Pekerti, 2010).

In the current study it was confirmed that servant leadership has a positive influence on ethical culture.

### **The relationship between Trust in Leaders and Ethical Culture**

The hypothesised relationship between trust in leaders ( $\eta_2$ ) and ethical culture ( $\eta_3$ ), has been confirmed through SEM analysis, with a t-value of 4.089 (>1.644). The null hypothesis 7 ( $H_{07}$ ) was thus rejected in favour of  $H_{a7}$ :  $\beta_{32} > 0$ , as it supported the proposed relationship between the two latent variables.

A strong ethical focus is prominent within the description of trust (Mayer et al., 1995). Trust in leaders furthermore enhances greater collective efforts towards organisational goals (Brower et al., 2009). Within the scope of creating and nurturing an ethical culture, such leader enhancing characteristics would naturally carry over to mobilizing individuals to accept and practice shared norms of behaviour. Therefore, with the goal of an ethical culture in mind, leader trustworthiness would enhance such collective efforts.

A lack of trust will furthermore be detrimental to the creation of an ethical culture. Employees who feel mistreated, or exhibit distrust with the organisation, are more likely to act contrary to the desired behaviours of the organisation, making it difficult to attain compliance with ethical culture (Tyler & Blader, 2005).

The positive significant relationship found between servant leadership and ethical culture in this study is therefore corroborated by a reviewed literature on the two constructs. It can therefore be concluded that servant leadership has a positive influence on ethical culture.

### 5.5 Limitations and suggestions for future research

While this study provided valuable insight into the constructs of integrity, servant leadership, trust in leaders, and ethical culture, certain limitations need to be acknowledged and considered in the interest of improving future research.

A first limitation relates to the chosen sampling method used. Non-probability sampling procedure increases the chance of bias and reduces the confidence with which results can be transferred to the general population. It was however seen as the most appropriate method for this study due to cost limitations and practicality.

The second limitation is that the instruments focused only on individuals' responses and subordinates' impressions of the leader with respect to integrity and servant leadership, as well as subordinates' own perceptions of the ethical culture of the organisation and their trust in their leader. It was therefore a single source study, as attention was not given to other sources. Expanding this to include multiple sources of data collecting, such as peer evaluations or leader self-assessments, could be considered to improve future studies.

A third limitation was the demographics of the sample group that did not reflect the true demographics of the South African population. As South Africa is a diverse country with a wide variety of cultural groups, it is not prudent to assume to obtain the same results across cultural groups.

The fourth limitation is that while the constructs investigated in this study conceptualised the core elements of the relationship between integrity, servant leadership, trust in leaders and ethical culture, capturing the exact nature of the elements and their respective relationships is not as straightforward. Further research

is therefore required to create support for the conceptualisations and hypothesised relationships, as the nature of the network put forward is not fully comprehended. Possible variables that could have been included in the model in future research are organisational commitment, psychological well-being, empowerment, job performance, counterproductive work behaviour and organisational citizenship behaviour.

Furthermore, it is recommended for future research that the equivalence of the structural model be tested across ethnic and gender groups to address potential item bias.

### 5.6 Implications for organisational managers

The scope of the research study was widespread, and therefore it has numerous implications for managers in organisations.

As a result of growing concerns with organisational ethics, combined with widespread perceptions of self-serving corporate leaders, a study into ethical culture and leadership initiatives aimed at creating such a culture, is regarded as very important and relevant to South African organisations.

To address unethical behaviour in organisations, a significant number of researchers and practitioners have turned to the concept of servant leadership as a viable business strategy and leadership principle (Parris & Peachey, 2013). This was the approach that this study followed, whereby the role of servant leadership in creating an ethical culture in organisations was supported by both a comprehensive study into existing literature, and quantitative results obtained in this study.

Ethical culture consists of the shared values and beliefs, which guide individuals in areas such as moral issues, business practices and procedures, as well as other areas with an ethical content (Van Aswegen & Engelbrecht, 2009). The manifestation of specific cultures as well as the type of culture, which presents itself in an organisation, is dependent on the commitment of the leader in the organisation to moral principles (Van Aswegen & Engelbrecht, 2009). Therefore, a value-laden ethical approach to leadership effectively lends itself to the creation of an ethical culture. Integrity and trust

in leaders were further confirmed as relevant constructs to the relationship between servant leadership and ethical culture.

Since significant relationships were confirmed to exist between the respective constructs, a focus on the elements, which make up these constructs, is deemed relevant to business managers. Organisations should actively pursue initiatives that aim to enhance these constructs, to draw the benefits from the desirable outcome of an effective ethical culture. To promote an ethical culture, recruitment should aim at selecting individuals who exhibit these behaviours, as well as training and coaching interventions to further develop such qualities.

The study therefore proved useful in confirming the positive effect servant leadership has on creating an ethical culture in an organisation.

## 5.7 Conclusion

Chapter 5 provides a conclusion to this study as well as recommendations based on the results obtained from the sample and statistical analyses presented in Chapter 4.

Significant positive relationships were confirmed between Integrity and Trust in Leaders, Integrity and Servant Leadership, Servant Leadership and Trust in Leaders, Servant Leadership and Ethical Culture, as well as between Trust in Leaders and Ethical Culture.

The comprehensive study of existing literature, the description of the results obtained from the statistical analysis, as well as recommendations put forward in this chapter, provide a thorough understanding of the role that the constructs play in creating an ethical culture.

The intention of the study was therefore to contribute to the existing body of research, in further understanding the relationship between leadership and ethics and specifically the effect of servant leadership on business ethics. These contributions and the empirical results obtained from the research could provide practical value to businesses on a managerial level, which could be of value to the human resource management. The research study thus intends to provide a useful strategy to address the problem of unethical behaviour in the workplace.

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